

Developing a Framework for Effective Audio Feedback: A Case Study

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Abstract

The increase in the use of technology enhanced learning in higher education has included a growing interest in new approaches to enhance the quality of feedback given to students. Audio feedback is one method that has become more popular, yet evaluating its role in feedback delivery is still an emerging area for research. This paper is based on a small-scale study which examined the perceptions of first and final year undergraduates who received feedback from tutors in audio form and considers the impact of this method of feedback delivery as a formative process. The paper examines the extent to which students respond to and engage with audio feedback and how the method might facilitate a better understanding of the role of feedback amongst teachers and students alike. The two cohorts in the study express differences, but also commonalities in what they require from audio feedback. A conceptual framework is developed from the study's findings which highlights best practice and guides practitioners in their effective utilisation of this form of feedback.

Key words: audio feedback; higher education; formative feedback; student feedback.

Introduction

The study of feedback in higher education is not new and there is a fairly substantial body of research and writing that examines the purpose and function of providing both formative and summative feedback on assessment to undergraduate students (e.g. Bryan and Clegg, 2006; Race and Pickford, 2010). Light et al (2009: 120) offer a succinct definition of formative and summative assessment: 'formative assessment concerns development, improvement and learning, while summative assessment concerns accountability and performance'. Providing feedback is an integral part of the teaching and learning process (Price et al, 2010) and can be utilised by students to enhance their future academic performance (Hepplestone et al, 2011). Hattie and Timperley (2007) suggest that delivering useful feedback which impacts upon learning is a critical aspect of a successful assessment strategy. They propose the main purpose of feedback is to reduce discrepancies between a student's current academic understandings and achieving an academic goal. Essentially effective feedback needs to explain what progress is being made towards the goal or objective, how has the student performed and provide advice to help the student improve. Academic staff therefore needs to provide effective feedback which is timely, precise, thorough and constructive. In practice, and typically, this is in the form of written text and is often no longer than 200 words. Evidence suggests, however, that it can be difficult to provide feedback which is interpreted

by students as the marker intended and processed by students in a way which provides clarity and guidance. Some studies (e.g. Higgins et al, 2002) have shown the extent to which students value and appreciate good quality feedback in terms of its usefulness and effectiveness. Others (e.g. Hounsell, 1987; Lea and Street, 2000; Nesbit and Burton, 2006; Price et al, 2010) provide evidence which illustrates the discrepancies between the perceptions of academic staff and their students. Handley et al (2007) and Higgins et al (2002) have also demonstrated the unproductive nature of feedback. This includes the confusion that can arise for students when they receive conflicting advice or ambiguous comments from markers; or when tutors' comments are written in a style of language and academic vocabulary they cannot readily comprehend. As a consequence, students may come to devalue feedback, may not read it or even collect it.

The purpose of this study, therefore, was to investigate the extent to which students respond to and engage with feedback and, specifically, to explore students' experiences when receiving audio feedback. The research sought to examine students' perceptions of this method as a formative process in order to facilitate a better understanding of audio feedback.

The Use of Audio Feedback

Hepplestone et al's (2011) literature review indicates a growing use of technology to assist the assessment process in HE. They indicate the use of electronic or online tools is impacting upon the nature and communication of feedback as well as how students receive it. Audio feedback may be defined as a digital sound file containing formative or summative, verbal feedback given by the tutor. There is a growing body of literature on the use of emerging technologies. The research studies are typically small-scale and therefore their findings are indicative rather than generalisable. Nevertheless, they provide useful guidance and recommendations for practice which serve to address some of the known 'problems' (as identified above) in feedback delivery. Findings from studies which explore audio feedback illustrate how the use of technologies can improve the student experience of receiving feedback (Merry and Orsmond 2008) and deliver it in a more personalised form (King et al. 2008; Lunt and Curran 2010). Some researchers suggest audio feedback has the potential for time efficiencies (timely and quickly) as well as it being relatively cheap (no reprographic/printing costs). It can also be applicable to a range of assessment types, it can be tailored to individual or group needs and, typically, students are well-acquainted with the kind of technology used (e.g. Rodway-Dyer et al, 2011). Some research also indicates that the use of technology can, in certain circumstances, save staff time in delivering feedback (e.g. Cooper 2008). This point has been keenly debated in the literature as initially the use of audio feedback can take longer to deliver feedback, although, as Rotheram (2009a) suggests this time can be reduced with continued use of the method and practice. The literature posits that

students are favourably disposed towards audio feedback (Merry and Orsmond, 2008; Rotheram, 2009a). However, Macgregor et al (2011) point out that while most studies report that students perceive audio feedback as constituting ‘good’ or ‘quality’ feedback, researchers rarely attempt to understand more comprehensively audio feedback efficacy or measure resultant student learning.

Rotheram’s (2009b) study of audio feedback across four case-study institutions provides very useful findings and guidelines for practice relating to the amount of time spent (speaking the feedback rather than writing/typing it) and the quality of the feedback provided (speech being regarded as “a richer medium than plain text” p9). The question remains, however, as to the role of audio feedback and where it can be most appropriately used within a student career. Rodway-Dyer et al (2011) used audio feedback to deliver summative feedback to first year Geography students on the first piece of coursework submitted at university. Results indicated that this may not have been the optimum time to use audio feedback whilst students were shaping their understanding of university study. When students received audio feedback in their first year of study they were more likely to comment that these experiences were ‘harsh’ (pp. 221, 222) and ‘negative’ (pp. 220, 221, 222).

The literature above indicates a growing realisation by academics of the merits of audio feedback. The literature highlights the limitations of written feedback and the opportunities provided by new technologies for providing more creative and effective ways of feeding back to students. It also indicates the need for greater understanding of enhancing new ways of students’ experiences of receiving, interpretation and implementing feedback. Previous studies suggest the need for timely feedback, attention to length of feedback, tone of voice and language used. This study is informed by previous research and aims to suggest ways which novices of this method could be guided. It also compares differences between first year and final year undergraduate cohorts in their experiences of receiving audio feedback, which is an under-researched area in the literature. The study examines where audio feedback can be utilised and formalises the process by suggesting a framework for guiding best practice.

The Research Study

The research on which this paper is based is a small-scale study which examined the perceptions of first and final year undergraduates who received feedback in the audio form. The research examined the use of audio feedback by two tutors as a medium for providing formative feedback. The study comprised two sets of students (see Table 1): a small cohort of

Education Studies and Early Childhood Studies students undertaking an independent research project (dissertation) in their final year; and a larger cohort of first year students undertaking a compulsory module in Early Childhood Studies. Both cohorts were given the opportunity for formative feedback which was provided in an audio style via an MP3 file and emailed to each student individually. The two cohorts of students differed in terms of the year (level) of study and in the nature of the modules where audio feedback was being provided.

Table 1: Student cohorts.

	Programme of Study (BA Hons)	Year of Study	Module
Tutor 1	Education Studies Early Childhood Studies	Final year	Independent research project (dissertation)
Tutor 2	Early Childhood Studies	First year	Sociology of Childhood

The original motivations of the tutors involved were fairly similar. Tutor 1's role was as a (dissertation) supervisor and the feedback to students was initially in the form of formative comments on a draft literature review chapter (1500-2000 words). A fairly quick turnaround was required on the draft work in order to enable students to improve their writing, attend to any gaps in their review and have sufficient time to redraft their chapter before moving on with their research project. The previous practice of Tutor 1 had been to offer face-to-face feedback, usually with some annotations on their draft work. However, on this occasion meeting each student in person was not possible. Audio feedback was thus perceived by Tutor 1 as a feasible means of providing timely, detailed feedback. Once this method had been used by Tutor 1 and was received favourably by students, it became a regular mechanism for providing feedback on other draft chapters. Tutor 2 was seeking to support students in their first year of undergraduate study (particularly those who were feeling insecure of their learning) by providing a formative assessment opportunity (draft essay, 1500 words) for an early forthcoming assignment for a compulsory module. This was initially perceived as potentially time-saving for providing formative feedback for a large cohort. We acknowledge, however, that it may be unrealistic to provide such detailed comments paragraph by paragraph on longer pieces of work and with larger cohorts.

The focus of the enquiry centred on one research question:

How can audio feedback be best utilised in the delivery of formative feedback to different undergraduate year groups?

Further aims were to also seek ways to make the provision of feedback more efficient and, ultimately, develop a framework for guiding the effective use of audio feedback as a means of enhancing feedback practices.

Methodology

Mixed method research was carried out in order to examine students' experiences of receiving audio feedback using a questionnaire and focus groups in order that methods triangulation could be achieved. The aim of this as Denzin (1978) suggests is to strengthen the validity of data and allow for the cross referencing of data. The questionnaire was given to 90 students with 80% being returned (n=72). The questionnaire contained both closed and open ended responses. Three focus groups were also conducted. The members of these were randomly selected from a number of students who had volunteered to take part. These were semi structured in their design. The focus groups were digitally recorded and their contents transcribed. This paper is based only on the qualitative data obtained from the questionnaires and focus groups.

A qualitative approach was adopted as suggested by Mason (2002). This involved using cross sectional-indexing. A systematic indexing system was applied to the data and index categories form a series of sub headings which help to categorise the data. This method was also then used to analyse and categorise the focus group data.

Findings and Discussion

Considerations for staff providing audio feedback

The questionnaire responses and focus groups revealed students' expectations of feedback. Primarily they were anticipating comments to be in accessible language which would be timely and would provide an indication of the quality of their work. Whilst it was appreciated that other methods of feedback could meet student expectations in this area, it was acknowledged that audio feedback had certain advantages over written feedback. Audio feedback is able to use clear and effective, often less technical, language in order to convey its message. Where specific subject-related vocabulary is used this can be explained in a more conversational style or uncomplicated manner than it could be in the written format. Audio feedback is often more nuanced than a written piece with meaning being derived from not only the spoken words, but also the tone of voice which could also be used to convey an overall impression of the piece.

Moreover, providing audio feedback entails a number of practical considerations. The first of these is the need for a quiet space for tutors to generate feedback and complete the process. Unlike written feedback which can be carried out in a multiplicity of places, delivering audio feedback needs a silent space with little background noise and minimal disturbances otherwise the feedback can be disjointed and lacking in appropriate audibility for students to hear. This necessity resulted in one tutor having to record all of the feedback out of standard working hours as having a shared office made it almost impossible to carry out the feedback process effectively on the university premises.

A further consideration when delivering audio feedback is technological. This consideration is twofold and is both for staff delivering and students receiving feedback. In this study, tutors used digitised recorders to record feedback, then downloading them to Windows Media Player. The files were sent individually to students via email which quickly filled up their email storage space. Whilst other methods of recording and delivering audio to students are available (for example functions in Virtual Learning Environments (VLE) such as Blackboard), the method of using a digitised recording had the advantage of being of varied length and did not rely on a tutor learning further technology to deliver the feedback.

There is also a presumption that when giving audio feedback that students will be aware of, and have access to, the appropriate technology to listen to such feedback. Nortcliffe and Middleton (2011) report no technical difficulties in delivering audio feedback in their study with computing and engineering students. However, the results of our research indicated that technical difficulties are often apparent when delivering feedback in this format. We discovered that some students lacked access to headphones to listen to the feedback or were simply baffled by what they should do with an audio file when it was sent to them by email. Others experienced unexplained problems in opening the audio file which prevented them listening to the feedback, probably due to inconsistent devices and software on their receiving end of communication. Problems with technology were serious enough for this to negatively influence some students' opinion of receiving audio feedback. Technology issues were easily remedied with good I.T. support provided by the university, but such problems did cause concern for both tutors and students as using this as a reliable method of feedback and must be considered when giving feedback in this manner.

Giving and Receiving Audio Feedback

Feedback was given by tutors in a linear fashion and in response to each paragraph of the student's work (rather than summarized points at the end of the document). Students indicated they found this a very useful feature of the audio recording and were more inclined to look again at their initial piece of work: reading their draft whilst listening to their tutor

voicing comments on their work. Students divulged they were likely to listen more than once to formative audio feedback. This compared to written feedback particularly, summative coursework they were likely to read the feedback only once, with this not always re-examined again after the initial look at the mark and/or feedback. Audio feedback, a richer form of feedback, provides tutors with the space to acknowledge the wider context in which suggested developments are made and the scope to explain what areas should be prioritised.

Tutors gave feedback in a straightforward manner, deliberately choosing and using uncomplicated vocabulary. Students commented that this made the feedback far more understandable and overcame the problems which could be encountered when written feedback seemed to be in complex academic language, or vague and unfamiliar vocabulary or hard to read handwriting. It was generally acknowledged that students regarded audio feedback as a personalised method of addressing issues in their individual piece of work. Written feedback, they felt, typically tends to contain standard comments which lack sufficient detail about a student's individual submission. Indeed Sadler (2010) states the repetitive nature of standard written feedback is ineffective. It was clear that students wanted more detailed feedback which they believed they did not always receive in written forms of feedback. For example, two students highlighted the differences between written and audio feedback when discussing feedback about Harvard referencing:

Student 1: Instead of just saying 'good referencing' it goes into a bit more detail.

Student 2: Yeah, it gave examples.

Student 1: And you know why you have done good referencing, and it points out what you have done wrong and what you have done right and how to correct that (First year students).

Many of the features of audio feedback that students liked and wanted were not unique to this method. Students preferred feedback that was more detailed and considered all the sections that they had written not just generic or summarized comments. More detailed feedback on a written piece of work could, arguably, be delivered through track changes or other functions of electronic feedback. However, what enhances the value of audio feedback for students is the level of appreciation they experienced by being 'spoken to'. Students considered the feedback was unique and bespoke and this was evidence that the tutors commenting on and/or marking the work had clearly read the submission and appreciated their efforts. This confirms the findings of previous research (Ice et al, 2007; Rotheram, 2009a) which suggest that audio feedback generates for students a perception that tutors really care about them and their work.

Giving constructive formative feedback involves tutors identifying and highlighting areas in the work that are weak and underdeveloped and making suggestions for improvement. It seems however, that some students often perceive this as receiving negative feedback and it is problematic for them. Some did not necessarily want to receive formative feedback that then required them to carry out fairly extensive further work, as this final year student commented:

I feel that bad feedback means I have to take a few steps back in order to improve my work (Final year student).

In general, however, final year students seemed to place less emphasis on formative feedback as mere positive affirmation that their work is developing along the right lines. Rather, a number of them focused on the greater clarity of explanation that audio feedback offers:

I have a better understanding of what is meant (Final year student)

I found it easier to interpret than written feedback (Final year student).

It made me realise how to strengthen my work in its weaker areas. (Final year student).

Because it was specific it was like they were talking to you personally. I think on those forms (feedback sheets) there are generic things that tutors can write... when it is done like that (audio) it is personal to your work (First year student).

Evidence from this research suggests final year undergraduates had greater resilience to being given constructive, but critical remarks and are more proficient in utilising tutors' comments to improve their work. This contrasts with the first year students who typically yearn for positive comments on their work and they do not accept constructive criticism so readily.

Notions of Displaced and Enhanced Tutor Presence

As has been outlined above, providing timely, precise, thorough and constructive feedback is an integral part of the teaching and learning process. Formative feedback, which is tailored to students' needs and understanding, can be beneficial in supporting and scaffolding learning. Overall, students who participated in this study perceived audio formative feedback as valuable. However, there are notable differences between undergraduates in their first year of study and those in their final year. First year students were in the early stages of their degree and arguably in that transitional phase from sixth form or further education to higher education whereby they are adjusting to a different learning environment and potentially

becoming accustomed to a more independent (and often unfamiliar) style of learning. We typically found that as part of this transitional process the first year cohort of students was more inclined to depend on tutors to ‘check’ their work. So, while formative feedback might be a very good strategy to support students with a comprehensive analysis of their early writing. However, questions remain about whether this creates dependant learners who are simply learning to correct work according to the detailed instructions provided by tutors. This is certainly a critical concern for tutors who aspire to offer the best possible feedback for students, but still want to encourage and foster learner independence. During this transitional period new undergraduates are often acclimatising to degree-level study and ascertaining the ground rules regarding how much support they can expect to receive from tutors.

Inevitably, students’ expectations can sometimes place unrealistic demands on tutors’ time and workload constraints and also out of sync with what tutors consider are appropriate levels of support. Tutors, nonetheless, are typically intent on facilitating a transitional shift towards greater self-directed learning; the gradual and continuous process of moving the new undergraduate student towards being a self-assured independent learner. Tutor-student relationships are also in their infancy in the first year of undergraduate study. Some students may feel uncomfortable, shy and/or insecure in approaching a tutor for help and there may also be great uncertainty around proper protocol, yet at the same time they need assurance from tutors on their progress. We have found that audio feedback goes a long way towards resolving these kinds of issues. Students reported feeling more comfortable listening to a tutor commenting on their work because this was received at a distance and not face-to-face. It was thus perceived as more congenial and less ominous to embrace oral formative feedback in this way.

Rodway-Dyer et al (2011) suggest that one of the reasons why first year undergraduates may struggle with dealing with any less favourable comments on their work is due to their difficulty in adjusting to university life and living away from home. Any criticism they receive in the early stages of their academic studies makes the transition from home to university all the more difficult. Nevertheless Mellen and Sommers (2003: 25) suggest audio feedback is “both personal yet not too personal and provide[s] a safer distance for students to hear critiques of their work”. Thus students receive feedback, while not actually in the tutor’s presence. Ice et al (2007) embrace the notion of ‘teaching presence’ and the extent to which presence can be projected through various media. Though the tutor is not physically present when the recording is replayed, the social presence of the tutor is more apparent in

the medium of audio feedback compared to written feedback. Students in this research commented about this idea of tutor presence:

When the feedback is audio it feels like the feedback is just for you and it's like you're having an individual meeting with the tutor and no one else is around (First year student).

Sometimes when you don't understand a point in a lecture you go to see the lecturer because the point is explained just for you. Audio feedback is like that; it is personal for you, solely from the lecturer like a meeting. It's not like having things explained in a group (First year student).

As such, we have conceptualised the situation with the first year students as tutors having a 'displaced presence' whereby the spoken words of the tutor via audio feedback can evoke a sense of presence and yet the recording providing a 'safety barrier' (Mellen and Sommers, 2003: 25)

Final year students who were in the latter stages of their studies are more accustomed to the learning environment of higher education, have greater understandings of teacher-learner roles and more experience of academic expectations at undergraduate level. What we found was final year students tended to respond more positively and audio feedback facilitated the opening up of greater opportunities for dialogue between the tutor/supervisor and student. There was often a notable shift towards greater collaboration in the student-supervisor relationship. Any subsequent face-to-face supervision sessions were noticeably much more fruitful from then onwards. Final year students reported that the listening and re-listening to their tutor's/supervisor's voice enabled them to better evaluate and reflect on the formative feedback as they had more time to 'absorb information'. 'Hearing' the spoken words of their tutor often prompted them to read more widely in order to address deficiencies in their work or to consider certain areas of their work more critically, as recommended. They generally appreciated their supervisor's time and effort in formulating their feedback which could contain more depth beyond simply stating a problem with the draft work. Students usually welcomed the specific and generic suggestions provided, albeit with the (sometimes reluctant) acceptance that further work was required on their part to progress certain areas of their writing. This situation we have conceptualised as tutors having an 'enhanced presence' whereby audio feedback typically decreased social distance, augmented the tutor-student relationship and expedited student confidence so much so that, in subsequent face-to-face

supervision sessions and in response to audio feedback, students felt more comfortable to challenge, ignore and argue as applicable.

A Dual Approach to Providing Feedback

The practice of providing audio feedback and the research we have conducted as a result indicated a general consensus from students that audio feedback is preferable to feedback which is delivered in a written format. The comment below from one student highlights this opinion well:

I think it (audio feedback) is more helpful than written feedback and easier to understand...I would like to see other tutors using this method of feedback (First year student).

However, a few students expressed their preference for receiving feedback in a written format. This sentiment is summed up by one who stated:

I wouldn't want to receive audio feedback again; I would prefer written feedback so that I can refer back to it at a later date. If it's written I can take it in better and if it is written down I would see it as a list to improve on (First year student).

With certain cohorts it is likely that using audio and written feedback could be undertaken and this might be an excellent example of best practice so students have a very clear indication of how to improve their work. Indeed Bloxham and West (2007) suggest that, in order to assist students to understand the nature of their academic work, students should be given the opportunity for dialogue in its preparation stages. A combined or dual method of audio feedback with written feedback might offer a greater opportunity to provide such detail. However, tutors should judge whether this approach is realistic bearing in mind the size of the cohort and time and resources available. Using the method of audio and written feedback together could prove a successful approach to allow students to truly engage with understanding the requirements of an academic task, help students to understand what is conceptually needed and provide firm foundations for their studies. This research illustrated how a dual approach (providing written and audio feedback) could be most effective when used in the provision of formative feedback. This might be more likely in dissertation-style assessments where the ratio of staff to students is likely to be lower. In such modules academic staff may have more time for individualised feedback and there is more opportunity for open dialogue between student and tutor. Even so the time needed for both written and verbal feedback may still be less than offering individual tutorials.

Suggestions for Best Practice when Using Audio Feedback

[Figure 1 near here]

Figure 1 is a framework of best practice for using audio feedback with a clear outline of how practitioners can use the method to best effect. This is not a prescriptive list that has to be adhered to, rather it identifies a number of aspects to consider prior to embarking upon this method. Captured in the oval shape of the framework are eight generic constituents for providing effective feedback. These are delineated in the literature, but also stem from the data. They derive from students' perceived needs, expectations and their experiences of feedback. Arguably all the constituents provide a strong foundation for effective feedback. The timeliness of feedback is crucial and it should be thorough, constructive and supportive, offering guidance and encouragement (so, also, feeding forward). It should be reflective and also encourage reflection. Finally, clarity is really important and tutors should use uncomplicated vocabulary.

The central 'spine' of the framework describes the manner in which teaching staff need to approach using audio feedback and a suggested structure for delivering feedback to the student. It highlights that staff will have different requirements when carrying out audio as opposed to written feedback. A quiet space for staff to record the feedback is important simply because of the practicalities of recording multiple pieces of feedback. The framework also takes into account the technological considerations that need to be made. The results of this research indicated that there is no one best solution to approaching how the feedback itself is recorded. Multiple methods are available to record and deliver to students but this has to be decided by the individual tutor. This research indicated that choosing a method of feedback with which the tutor felt comfortable was critical.

Our findings suggest that audio feedback should be delivered and structured in a particular way. Especially when commenting on formative work, students appreciated some positive remarks to acknowledge that they had, at least, submitted some work for formative consideration. Thus opening statements of audio feedback could be to thank students for submission, regardless of the quality or content of the work they have submitted. In time perhaps thanking students could become formulaic. Nevertheless this approach was received well by first year students in particular who were nervous about receiving any formative feedback. Moreover, tone of voice in the delivery of the content should also be considered. With an audio recording one needs to consider not just the content of the feedback, but also the way it is spoken. The tone of voice can impact on the overall impression of the feedback and it is particularly important that a negative tone does not influence how the audio recording is framed.

The content of the formative feedback needs to suggest ideas for ‘feeding forward’ including how the work can be changed in order to improve the content and the quality of analysis needed to achieve a higher grade when it is submitted as a summative piece. Thus content needs to be appropriate to the level, as those in a final year of a degree may need different direction to those initially embarking on university study. Whilst the feedback for all groups of students may explain and clarify gaps in the works content or understanding, for those at first year level the audio feedback is more likely to signal advice on content or structuring the work. This contrasts with students in their final year whose ideas might need to be challenged to help them develop more critical analysis.

As noted earlier, the role of the tutor in providing audio feedback is different for both first and final year students. The tutor has either a displaced or an enhanced presence, thus illustrating the type of feedback and the role of the tutor plays in delivering the audio feedback is different for the two levels. There remains a debate as to whether best practice should be to offer both written and audio feedback. Whilst some students seem to prefer a dual approach, it would be unlikely that many staff (particularly those with large cohorts) would have sufficient time or supporting resources to enable them to provide feedback in this manner.

Despite the different roles for the tutor for different year cohorts, there are various commonalities which all students express they wanted from audio feedback (as highlighted by the key words around the diagram). These need to be taken into account when delivering feedback in this manner to all students and include feedback being returned in a timely fashion, it being supportive and encouraging, and guiding students on how to improve the quality of their work. Students need to be given enough time to absorb the suggestions in the feedback and amend their work accordingly. The structure of the feedback needs to be clear and thorough.

Conclusion

This paper has put forward a conceptual framework which brings together and consolidates areas of the literature with our own findings. It identifies the generic constituents for providing effective feedback. We acknowledge this is a small scale study. However the framework can be embraced by novices and also those who are seeking to examine and improve their practice of providing audio feedback. We are not suggesting this will work in every feedback situation, but is one of many ways to successfully feedback comments to undergraduates at different levels of study.

The results from this research indicate that audio feedback can be successfully executed to enhance the student experience when receiving formative feedback. It is evident that there are certain principles that need to be considered in order that the students gain a positive learning experience from this method of feedback. The practical considerations in using audio feedback may indeed mean that some tutors rule out this method as inappropriate for a particular cohort because of the technological demands, or even because of the basic consideration of needing a quiet space to complete the recording.

There are clear ways in which students at first and final years used the audio feedback and these need to be accounted for in the delivery of feedback which might influence and impact on how feedback is phrased and how it is used to support learning. First year students who are more likely to accept tutor feedback and see receiving audio feedback as a method to help them correct their work to the type of work that they perceive the tutor may want. The level of detail supplied by audio feedback allows students to use the feedback as a set of instructions for corrections. This, initially, might be useful and helpful in shaping academic work in the beginning of university study. This, however, will generate debate about how this type of feedback could result in dependant learners who are only able to 'correct' their work according to instructions. Nevertheless, there can be advantages to this method. If students engage with the feedback on a conceptual rather than superficial level then there is the potential for them to scaffold learn, resulting in better academic writing skills. By their final year students are able to see how such feedback can be used to create an academic dialogue between tutors and students. The audio feedback has assists students to take risks in their academic work, challenge and create a dialogue with concepts which can be discussed in face to face meetings with tutors. Thus we can conclude from this research that audio feedback can be used successfully in both first and final year levels of degree study if certain adaptations are made for the content and style of the feedback dependant on the level of study.

Despite the considerations needed when using the method of audio feedback, students are very positive about its use. Audio feedback therefore has a number of important roles. Firstly it can assist students to develop academically as well as offering an extra method of support from students from staff. Secondly, and perhaps more importantly, audio feedback can also help improve the student experience of academic learning. Academic staff are increasingly being judged on the quality of the student experience, so providing good quality audio feedback can play an important role in achieving this.

References

Bloxham, S. and West, A. 2007 “Learning to write in higher education: students’ perceptions of an intervention in developing understanding of assessment criteria”. *Teaching in Higher Education*, 12, (1), 77-89.

Bryan, C. and Clegg, K. eds. 2006 *Innovative Assessment in Higher Education*. London: Routledge.

Cooper, S. 2008 “Delivering student feedback in higher education: the role of podcasting”. *Journal of Music, Technology and Education*, 1 (2-3), 153-162.

Denzin, N.K. 1978. *The Research Act: A theoretical introduction to sociological methods*. New York: McGraw-Hill.

Handley, K., Szwelnik, A., Ujma, D., Lawrence, L., Millar, J. and Price, M. 2007 “When less is more: Students’ experiences of assessment feedback”. Paper presented at the Higher Education Academy Annual Conference, July. Available at: <<http://www.heacademy.ac.uk/assets/York/documents/events/conference/E5.doc>> (Retrieved 26 July 2012)

Hattie, J. and Timperley, H. 2007 “The power of feedback”. *Review of Educational Research*, 77 (1), 81–112.

Hepplestone, S., Holder, G., Irwen, B., Parkin, H. and Thorpe, L. 2011 “Using technology to encourage student engagement with feedback: a literature review”, *Research in Learning Technology*, 19 (2), 117-127.

Higgins, R., Hartley, P. and Skelton, A. 2002 “The conscientious consumer: reconsidering the role of assessment feedback in student learning”. *Studies in Higher Education*, 27 (1), 53-64.

Hounsell, D. 1987 Essay writing and the quality of feedback, in J.T.E. Richardson, M.W. Eysenck and D. Warren-Piper (Eds.) *Student Learning: Research in Education and Cognitive Psychology*, Milton Keynes: Open University Press and Society for Research into Higher Education.

Ice, P., C. Reagan, P. Perry, and J. Wells. 2007 “Using asynchronous audio feedback to enhance teaching presence and students’ sense of community”. *Journal of Asynchronous Learning Networks* 11, no. 2: 3–25.

King, D., McGugan, S. and Bunyan, N. 2008 “Does it makes a difference? Replacing text with audio feedback”. *Practice and Evidence of the Scholarship of Teaching and Learning in Higher Education*, 3 (2), 145-163.

Lea, M. R. and Street, B. V. 2000 “Student writing and staff feedback in higher education: An academic literacies approach”, in: Lea, M. and Stierer, B. eds. *Students writing in Higher Education: New Contexts*, Buckingham: The Society for Research into Higher Education and Open University.

- Light, G., Cox, R. and Calkins, S. 2009 *Learning and Teaching in Higher Education. The Reflective Professional* (2nd Edn.), London: SAGE.
- Lunt, T. and Curran, J. 2010 “‘Are you listening please?’ The advantages of electronic audio feedback compared to written feedback”, *Assessment and Evaluation in Higher Education*, 35 (7), 759-769.
- Macgregor, G., Spiers, A. and Taylor, C. 2011 “Exploratory evaluation of audio email technology in formative assessment feedback”, *Research in Learning Technology*, 19 (1), 39-59.
- Mason, J. 2002 *Qualitative Researching* London: Sage
- Mellen, C. & Sommers, J. 2003 “Audiotaped response and the 2-year-campus writing classroom: The two-sided desk, the guy with the ax,' and the chirping birds.” *Teaching English in the Two-year College*, 31(1), 25-39.
- Merry, S. and Orsmond, P. (2008) “Students’ Attitudes to and Usage of Academic Feedback Provided Via Audio Files.” *Bioscience Education ejournal*, 11, 1-11. Available at: <<http://www.bioscience.heacademy.ac.uk/journal/vol11/beej-11-3.aspx>> (Retrieved 8 August, 2012).
- Nesbit, P. and Burton, S. 2006 “Student justice perceptions following assignment feedback,” *Assessment & Evaluation in Higher Education*, 31 (6), 655-670.
- Nortcliffe, A. and Middleton, A. 2011 “Smartphone feedback: using an iPhone to improve the distribution of audio feedback,” *International Journal of Electrical Engineering*, 48 (3), 280-294.
- Price, M., Handley, K., Millar, J. and O’Donovan, B. 2010 “Feedback: all that effort, but for what effect?” *Assessment and Evaluation in Higher Education*, 35 (3), 277-289.
- Race, P. and Pickford, R. 2010 *Engaging with Feedback in Higher Education: The Complete Guide*. London: Routledge.
- Rodway-Dyer, S., Knight, J. and Dunne, E. 2011 “A case study of audio feedback with Geography undergraduates,” *Journal of Geography in Higher Education*, 35 (2), 217-231.
- Rotheram, B. 2009a “Sounds good: Quicker, better assessment using audio feedback”. Final Report-Version 1-26 March. Available at: <<http://www.jisc.ac.uk/publications/reports/2009/soundsgoodfinalreport.aspx#downloads>>(Retrieved 8 August, 2012).
- Rotheram, B. 2009b “‘It wasn’t me guv!’” *Educational Developments*, 10, (1), 8-10.
- Sadler, D. 2010 “Beyond feedback: developing student capability in complex appraisal,” *Assessment & Evaluation in Higher Education*, 35, (5), 535-550.

[Figure 1]

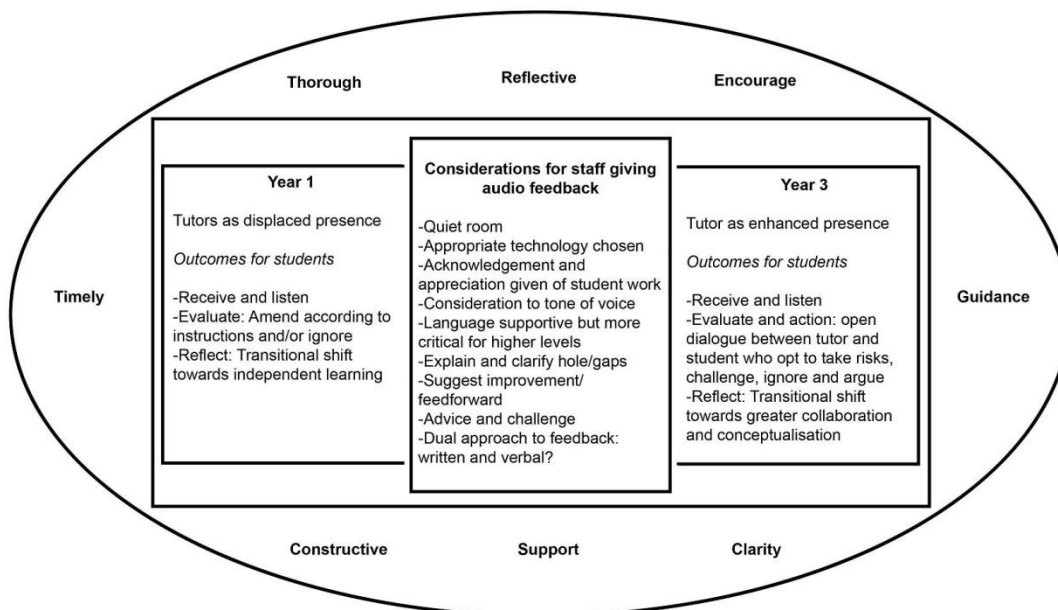


Figure 1: Framework for effective audio feedback at first and third year undergraduate level