‘It was all in your voice’ - Tertiary student perceptions of alternative feedback modes (audio, video, podcast, and screencast): A qualitative literature review

Abstract

Background
Feedback is an integral part of teaching and learning with written comments being one of the most widely used methods of providing student feedback. From the student perspective, written feedback has been seen as limited in terms of its quality, vague nature and lack of clear examples with feedforward. Alternative feedback modes (including audio, video, podcasts, and screencast feedback) have been suggested as a means of enhancing feedback.

Objective
The purpose of this qualitative literature review is to synthesise the views of tertiary students on alternative feedback modes.

Review methods
Searches were carried out in five online scientific databases (ERIC, Education Source, PsycINFO, Teacher Reference Center, and CINAHL Complete). Potentially relevant studies were screened against the inclusion/exclusion criteria. Data were extracted using customised data extraction forms. The qualitative findings section of each included study underwent thematic synthesis.

Results
A total of 450 studies were identified through the search strategy. Ten studies met the inclusion criteria. Five themes were identified: belonging; greater comprehension from non-verbal aspects of communication; individualised and personal; technical/practical technology aspects; and circumstances and context.

Conclusion
Alternative feedback modes help students achieve a greater level of comprehension of feedback, with feedback that was more personalised. The alternative feedback modes promote a sense of belonging in relation to the programme of study and in relation to teaching staff. Educators should consider the use of innovative media approaches which could enhance and improve the quality of the student feedback experience.

Key words
Feedback; audio; video; podcast; screencast; qualitative; review; tertiary students
Introduction

Providing students with feedback is an integral part of teaching and can have a powerful influence on student learning (Hattie and Timperley, 2007; Dowden et al., 2013). However, the results of the National Student Survey, which seeks to understand the student experience of final-year undergraduates in the United Kingdom, has shown that feedback is often rated lower than other aspects of teaching and learning (Quality Assurance Agency 2012). The potential learning benefits of feedback may be limited by a mismatch between the feedback provided by the tutor and the student either not valuing or not understanding the feedback (King et al., 2008; Orsmond and Merry, 2011).

Written feedback to students has been one of the most widely used feedback methods (McCarthy 2015), but has been criticised by students for its poor quality. Such criticisms include the vague nature of comments and a lack of clear examples of constructive feed-forward, leaving the student unclear on how to improve their work (Duncan, 2007). In response to these criticisms, alternative feedback modes such as audio feedback (individual audio and group podcasts) and video feedback have been explored (McCarthy, 2015). These alternative feedback modes may offer richer feedback and also have the benefit of being more personalised by addressing the individual needs, strengths and weaknesses of the students (Race, 2004).

Limited review articles have been published addressing the use of alternative feedback modes. Those that have been published have focused on the use of technology to encourage student engagement with feedback (Hepplestone et al., 2011) or with specific consideration of the role of audio feedback (Dixon, 2015). Arguably the most critical aspect of alternative feedback modes are the views of the students who are exposed to these modes, and neither of these review articles used qualitative methods to synthesise the student perspective. A gap in the literature was thus identified around understanding the perspective of tertiary students which indicates the need for further qualitative exploration in this area. The aim of this qualitative literature review was therefore to synthesise the views of tertiary students on alternative feedback modes for feedback on assignments.

For the purposes of this qualitative review, the concept of feedback is based on Hattie and Timperley (2007, p. 81) and refers to “information provided by an agent (e.g., teacher, peer, book, parent, self, experience) regarding aspects of one’s performance or understanding”. The focus in this review is on feedback specifically provided by the teacher or educator.

Methods

Search strategy

A search was carried out on five online scientific databases (ERIC, Education Source, PsycINFO, Teacher Reference Center, and CINAHL Complete) from January 2010 to April 2017 to identify relevant primary studies. Reference lists of articles which met the inclusion criteria were hand
searched. A Boolean search strategy and phrase searching was employed to search the databases using key concepts and their alternatives (see table 1).

[Table 1: Search Terms Applied and Sample Strategy near here]

**Inclusion criteria**

Since the aim of this review was to understand the views of students on alternative feedback modes, qualitative studies or mixed-methods studies were sought. Where mixed-methods studies were identified, only the qualitative aspect of the study was included in the synthesis.

Papers were reviewed using the inclusion and exclusion criteria outlined in Table 2. Included papers were peer-reviewed, published in English, from 2010. Papers were initially screened for eligibility using their title and abstract. Where it was difficult to assess whether papers met the inclusion criteria based on title and abstract, they underwent full text screening.

Studies were included if they contained participants who were involved in tertiary education, and reported on their views in relation to non-text student feedback methods (including individual audio, group podcast, video, screencasts). A podcast is a digital audio file which students are able to download to a computer or mobile device (McSwiggan and Campbell, 2017). “Screencast” refers to technology which enables digital recording of the computer screen where the submitted assignment is displayed with the addition of audio comments by the marker (Marriott and Teoh, 2012). Table 1 provides a full list of the feedback modes included in the search strategy.

[Table 2: Inclusion/Exclusion Criteria for the Selection of Articles for this Review near here]

**Data extraction and synthesis**

Data extraction was carried out by the lead author (CK) using customised data extraction forms. These forms included the following information: study aims, study design, sample characteristics, instruments for data collection, data analysis, ethical approval, intervention, and outcomes.

The qualitative findings section of each study which met the inclusion criteria was copied into a Microsoft Word file and then imported into QSR International’s NVivo 10 qualitative data analysis software. Here the findings sections from each study underwent thematic synthesis (Thomas and Harden, 2008). Text was initially coded line-by-line in the first phase of open coding. These open codes were then developed into descriptive themes which sought to group the initial codes based on similarities and differences between the codes. These initial phases sought to stay as close to the primary studies as possible before moving to the third phase of the development of analytical themes. This final stage was more interpretative, in that the authors were seeking to move beyond the primary studies to produce new constructs and explanations in answer to the research question (Thomas and
Harden, 2008). Data were initially coded by the lead author before the other members of the research team (JW and OA) independently cross checked sections of the data analysis by comparing the codes and themes generated to the text. This process of cross checking generated valuable discussions which helped in refining the interpretation of the data (Barbour, 2001).

Results

Included studies
A total of 450 studies were identified through the search strategy and were screened against the inclusion/exclusion criteria. Ten studies met the inclusion criteria: one qualitative and nine mixed-methods study designs. Figure 1 shows the process of study selection as adapted from Preferred Reporting Items for Systematic Reviews and Meta-Analyses (Liberati et al., 2009). Table 3 presents the main study characteristics for each included study.

[Figure 1: Flow chart of study selection near here]

[Table 3: Study characteristics of included qualitative studies near here]

Qualitative synthesis
The included studies approached data collection using a range of methods. These included: focus groups; semi-structured interviews; email; discussion post forums; documents; videos; and observations. Methods of data analysis consisted of: thematic analysis; constant comparison; content analysis; structural analysis; framework approach; and document analysis.

Sample sizes ranged from 5 to 126 participants, and age range and gender were not consistently reported by the included studies. For those studies which did report age, participants were between 18 and 49 years of age (MacGregor et al., 2011; McSwiggan and Campbell, 2017). Four studies reported on gender, totalling 22 males and 37 females (Sipple, 2007; MacGregor et al., 2011; Cavanaugh and Song, 2014; McSwiggan and Campbell, 2017). All participants were enrolled in tertiary education. Geographically, one study was located in Australia (Henderson and Phillips, 2015), four in North America (Ice et al., 2007; Sipple, 2007; Borup et al., 2014; Cavanaugh and Song, 2014) and five in the United Kingdom (MacGregor et al., 2011; Marriott and Teoh, 2012; Gould and Day, 2013; McSwiggan and Campbell, 2017).

One study reported on the use of podcasts as a means of group feedback (McSwiggan and Campbell, 2017) and one study reported on individual screencast (Marriott and Teoh, 2012). Two studies reported on the use of individual videos (Borup et al., 2014; Henderson and Phillips, 2015). The remaining six studies reported on individual audio feedback (Ice et al., 2007; Sipple, 2007; MacGregor et al., 2011; Rodway-Dyer et al., 2011; Gould and Day, 2013; Cavanaugh and Song, 2014). At the time of searching, no studies were identified on the use of face-to-face feedback.
Two of the included studies were focused on online courses (Ice et al., 2007; Cavanaugh and Song, 2014), with the remaining being face-to-face taught programmes. Most programmes involved undergraduate students, whilst two considered postgraduate students (Ice et al., 2007; Gould and Day, 2013) and one considered both undergraduate and postgraduate students (Henderson and Phillips, 2015).

Thematic synthesis of the included studies led to five themes which were important from the perspective of tertiary students in regards to alternative feedback modes. These themes were: belonging, greater comprehension from non-verbal aspects of communication, individualised and personal, technical / practical technology aspects, circumstances and are discussed more fully below.

**Belonging**

The theme of belonging is composed of two sub-themes: belonging to the course / programme, and the role of the lecturer.

*Belonging – to the course / programme*

The theme of belonging to the course / programme was noted as being a key element of assessment feedback. The alternative modes meant that participants felt more included, and involved in their course / programme as a result of the way that feedback was delivered:

“The audio, well, I also like it because it makes me feel like a real part of the class. You don’t feel like a number when you get that.” (Ice et al., 2007, audio feedback, p. 15)

This also added to how valued the participants felt:

“…makes you feel valued as a student, makes me feel like I’m an individual and not just a name on the enrolment list” (Henderson and Phillips, 2015, video feedback, p. 59)

This may have been in part related to the less formal nature of the feedback, since text feedback was described as being like a wall:

“Dallin explained that while she recognized some emotional expressions in text feedback, she could not ‘see as much’ because it felt as if her instructor was ‘behind a wall’” (Borup et al., 2014, video feedback, p. 243)

Feedback in these alternative modes was said to increase confidence and be more motivating for students. This was largely due to the additional praise they perceived through the audio and video feedback:
“…students said that the audio comments, much more than written ones, increased their confidence as writers specifically because of the perception that they provided more genuine and frequent praise. In turn, they said that the praise made them work harder on their revisions, in part because they wanted more praise and were willing to work harder in order to get it.” (Sipple, 2007, audio feedback, p. 24)

**Belonging – the role of the lecturer**

The sense of belonging was closely linked to a participant’s relationships with their lecturers. The alternative modes added a greater perceived connection with their lecturers:

“Margie added that the closeness she felt to her instructor made her feel ‘more accountable’ and ‘included’”. (Borup et al., 2014, video feedback, p. 244)

This was aided by the way that the alternative modes lessened the social distance between student and lecturer, and the way that it allowed the personality of the lecturer to come through. The lecturer was seen as being more human, authentic, present, and approachable. As such, participants felt that the lecturer cared for them and the process of giving and receiving feedback was a caring, supportive response:

“…interviewees asserted that the bond was strengthened by the use of audio comments because they revealed the professor's personality and emotions in ways handwritten comments did not and that their enhanced attitude toward the professor positively affected their effort in the class.” (Sipple, 2007, audio feedback, p. 26)

Furthermore, in relation to the use of video feedback, the contextual environment in which the lecturer delivered the feedback and the insight this gave the student helped them understand the humanity of the lecturer:

“It was like Welcome to Bill’s life!…In the background there were toys on the ground and some of his home stuff and he was kind of just chilling in his chair. I was like, He has a life. Weird!” (Borup et al., 2014, video feedback, p. 244)

This helped the participants understand that the lecturer was a person rather than words. The overflow of this understanding was that participants felt less frustrated with the teaching staff:

“I think the video [feedback comments] are helpful in dealing with that because then [the instructor] is a person—not just words…It makes it harder to be frustrated at the teacher because the teacher is a person and you are actually interacting with them.” (Borup et al., 2014, video feedback, p. 244)
The alternative modes thus appeared to inform a greater sense of belonging, which may not have been apparent with text feedback.

**Greater comprehension from non-verbal aspects of communication**

Non-verbal communication in the context of participant experiences of feedback refers to the information they received based factors including body language, tone of voice, and inflection. Whilst the modes of feedback delivery may have been through audio or video and involved verbal communication through the use of words, it was the non-verbal aspects of the audio and visual communication which allowed participants to understand the feedback more comprehensively:

“Now, when I first heard the audio feedback I was like wow! I get what he is saying to me. It was all in your voice and I understood when you were saying something like well this is good, but...I understood then that you really liked what I was doing but were trying to tell me to add a little more, but in a good way. Now, in the first time we got feedback it was written and you said some things that were kind of the same but I thought you were really trying to bust me for not doing a good enough, you know, job.” (Ice et al., 2007, audio feedback, p. 13)

The use of screencast feedback was helpful since this combined audio comment with an on-screen view of the student’s assignment:

“…because you actually heard him [the tutor] talking to you, and you saw him like going through your essay and saying [...] oh this you did wrong here, but I can see why you've done that, and he's actually like addressing the problem that you've done, and the fact that you can hear him saying it, you can see him going through. This really helps with my understanding.” (Marriott and Teoh, 2012, screencast, p. 593)

Some participants reported finding these alternative feedback modes more gentle than written feedback. This made it easier to hear what they perceived to be negative feedback, in that the audio ‘cushions the blow a bit’ (McSwiggen and Campbell, 2017, group podcasts):

“It's not kinder [participant's emphasis] when they say it, but if you read it it's like, You failed at this, you were crap at this...this was absolutely awful. Whereas if they'd said, Oh you did really well on this but you just need to do a little bit more and that will make it better. So tone of voice can be a big help.” (McSwiggen and Campbell, 2017, group podcasts, p. 119)

It should be stipulated that this was dependent upon the lecturer, since some participants felt that their lecturer had a harsh tone of voice which led to more distress with listening to comments (Rodway-Dyer et al., 2011).
Notably, participants with additional learning needs commented that it was easier for them to comprehend feedback through screencast:

“I'd want the screencast because I find it a lot easier. I think it's due to my dyslexia, the writing is a lot harder to read but hearing it is a lot better for me.” (Marriott and Teoh, 2012, screencast, p. 592)

**Individualised and personal**

Participants commented on the individual and personal nature of the feedback which was viewed as being more like a mini, one-to-one tutorial (Gould and Day, 2013; Borup et al., 2014):

“…it was like he was having a conversation with me even though I wasn’t responding. He was talking to me as if I was right there in front of him.” (Borup et al., 2014, video feedback, p. 243)

Through this they were provided with more detail and greater individualised explanation than they perceived they would receive through text feedback. This helped them have greater insight into any mistakes they had made which was clearer and more specific, and meant they felt they had learned more which enabled them to see where they needed to focus:

“What I love most from video feedback is that it is really personalised. I mean... If the feedback is in written form, a student can be sceptical of the content (because s/he might think that some elements of the feedback might also appear in their peers' feedback).... But in video feedback, it seems that you really talk to me, and give me some feedback on my writing.” (Henderson and Phillips, 2015, video feedback, p. 59)

**Technical / Practical Technology Aspects**

This theme related to the more technical and practical aspects of the use of media to provide student feedback. Positive and negative aspects were identified by participants. Some participants commented that they found the technology to be user-friendly and easy to connect with (Sipple, 2007; MacGregor et al., 2011). The audio and visual means of communication meant that they could absorb the information more effectively and found this quicker than reading text feedback (MacGregor et al., 2011). There was an appreciation for the way participants could repeatedly watch or listen to the feedback in privacy (Sipple, 2007; MacGregor et al., 2011; Marriott and Teoh, 2012).

Conversely, other participants disliked the fact that they felt they needed to find somewhere private to listen to or watch the feedback, which limited them from accessing this in public places such as the library (MacGregor et al., 2011; Henderson and Phillips, 2015). Technical problems were cited by some participants as a challenge (Henderson and Phillips, 2015), and challenges were also evident in
terms of locating where the feedback applied since the nature of the audio and visual feedback was it that it tended to address more general aspects of the work (Cavanaugh and Song, 2014; Henderson and Phillips, 2015). As such some participants felt they missed out on the micro level of comments they would have normally received in relation to grammar, which led some participants to request written comments to support the audio or visual information:

“The only thing I preferred with the written comments over the oral comments was it pointed out simple grammatical errors ... on the oral, things like that weren't caught and it did cause a few points deducted for the grammatical errors.” (Cavanaugh and Song, 2014, audio feedback, p. 127)

After listening to the feedback, some participants would have liked to have been able to respond. Interestingly, if they did wish to respond participants felt this should be mirrored by responding in the same format to which feedback was delivered in (such as audio or video).

**Circumstances and context**

There was some anxiety around participants initially accessing the feedback. Being aware of the grade before accessing the feedback helped. Understandably, some individuals still ‘felt nervous’ (Henderson and Phillips, 2015, video feedback). Others found it stressful and stated that repeated listening was unhelpful in allaying anxiety; repeated listening in fact made them feel worse (Gould and Day, 2013).

There were examples of participants expressing past negative experiences of written feedback in regards to quality. This meant they struggled to understand how feedback podcasts may be of benefit to them:

“It shouldn't be ‘airy fairy’ feedback. Things like, ‘You need to apply more synthesis’. I don't know what that means!...and the guidance for the feedback from one essay doesn't actually help you with another one that much because the assessments are quite different.” (McSwiggen and Campbell, 2017, group podcast, p. 118)

The broader context of circumstances also impacted on how feedback may have been perceived:

“One student stated that it was their first essay at a time when they were trying to adjust to living away from home and making new friends, and that this made any negative feedback more difficult to cope with.” (Rodway-Dyer et al., 2011, audio feedback, p. 222)

Thus, the context and individualised circumstances in which feedback is delivered is important.
Discussion

Student feedback is a complex phenomenon and is multi-dimensional in nature (Poulos and Mahony, 2008). This study has three main contributions to make to this complex phenomenon in relation to the education literature around alternative modes of delivering student feedback. Firstly, no matter what the alternative feedback mode students perceived a greater level of comprehension than with traditional feedback (Ice et al., 2007; Sipple, 2007; MacGregor et al., 2011; Marriott and Teoh, 2012; Gould and Day, 2013; Borup et al., 2014; Henderson and Phillips, 2015). Students did not appear to receive the same level of insight with text; they needed the non-verbal information such as tone of voice, pace, facial expressions and gestures through body language to understand what was being said.

It cannot be assumed that the overall positive student perceptions were purely because of the alternative feedback modes; the content of the feedback must also be considered. As with text feedback, the feedback is only as good as the person giving it. For example, Gould and Day (2013) reported the length of audio feedback varied from 5 – 30 minutes depending on the lecturer. This inconsistency between lecturers with feedback length and quality was of concern to students and must be considered when utilising alternative feedback modes. A review of the use of technology to encourage student engagement with feedback reported that audio feedback provides more detailed feedback than traditional written methods (Hepplestone et al., 2011). Detailed comments are one of the most effective forms of feedback (Lipnevich and Smith, 2009). Henderson and Phillips (2015) reported that a typical five-minute video containing approximately 625 words was reported to be substantially more content than text-based feedback.

It has been proposed that students often require guidance in how to use feedback, regardless of the mode of delivery (Rodway-Dyer et al., 2011). This is supported by Carless (2006) who suggests that there is a role for assessment dialogue between students and staff, i.e. discussions related to the concept of the assessment process including: the marking process, understanding related to the assessment criteria, and moderation procedures. This would help in promoting feedback literacy, as well as challenging the lecturers to consider what is useful for students in terms of feedback. This dialogue in relation to feedback is important in helping students engage with feedback. It is entirely possible that this is especially true for novel modes of feedback. It may be that alternative, richer media modes of providing feedback have the potential to add depth and comprehension for students; however this may be lost without the necessary dialogue or guidance on gaining richer feedback.

Part of this dialogue needs to be centred upon what students wish to have feedback on. For example, some students felt that they missed out on text comments related to grammatical errors and thus requested written comments to support the audio (Cavanaugh and Song, 2014). This would place a heavier burden on the lecturer, making the potential feedback process more time consuming. It also
raises the question of what type of feedback the lecturer should be providing; is the role of the lecturer to offer advice on grammar? For feedback to be useable, students have asked to be told “what they had got wrong, and why and how to do it better” and “things to work on or watch out for in future assignments” (Walker, 2009, p. 75). Final year students tended to share a broader understanding of what constitutes effective feedback (Pokorny and Pickford, 2010). Students hold heterogeneous views on what is classed as effective feedback which has “implications for educating students on how to recognize feedback as feedback, as well as how to use it” (Poulos and Mahony, 2008, p. 145). Thus there is a process of learning about feedback which may be said to take place.

The second contribution this study makes to the feedback literature is the role of these alternative feedback modes in supporting the student’s sense of belonging. The impact of the increased sense of belonging cannot be underestimated. In the wider context of student retention, alternative feedback modes may offer a more humanised approach which helps students belong. As illustrated in the thematic schema below, this links to the individualised and personal nature of feedback. This was seen to be important for students, and it is perhaps not merely the mode of delivery but also the perceived extra humanity which students perceive through the feedback. This sense of belonging may be of particular importance in the first year of tertiary studies given that feedback is more than the information needed to improve assignments; feedback can also be influential in providing the emotional support needed to adjust to university life (Poulos and Mahony, 2008). Indeed, in other narrative literature reviews, it has been suggested that the use of audio feedback may even serve a pastoral role in fostering a sense of care between teaching staff and students (Dixon, 2015).

The findings in this current study suggest that alternative, richer media modes of feedback delivery serve to enhance the student-lecturer relationship through a greater sense of belonging which could impact on the quality of the feedback experience. This has similarly been reported by Pokorny and Pickford (2010) where students highlighted the importance of the quality of the student-lecturer relationship in the role of feedback. They noted that lecturers who helped students feel more comfortable, who were more flexible, or who showed empathy were important in helping students access feedback (Pokorny and Pickford, 2010). Alternative, richer media modes of feedback may serve to increase the credibility of the lecturer, and ultimately this change in the perception of the lecturer could positively impact upon the UK National Student Survey scores.

The third contribution made by this literature review is the presentation of the synthesis of views of tertiary students in the form of a thematic schema. Whilst reported on as discrete themes above, it must be noted that the reality is far more complex and overlapping in nature. The thematic schema below (Figure 2) is presented to illustrate some of this complexity.
The sense of belonging, the greater comprehension from non-verbal communication, and the individualised and personal nature of feedback are presented at the core of the schema. This serves to highlight the centrality of these themes in relation to feedback, and appeared to be what set these alternative feedback modes apart from text feedback. At the base of the schema are the technical/practical technology aspects. These were viewed as being foundational, since without access to the technology in a user-friendly way it was difficult for students to access the feedback. The circumstances or context in which any feedback is delivered must be considered as this has the potential to impact on the sense of belonging, comprehension and view of individual or personalised feedback. This is displayed using a dotted line to indicate the permeable nature of how circumstances can influence the core themes. Although it must be remembered that circumstances and context are important when considering feedback in general, not only with alternative feedback modes.

These alternative feedback modes have been shown to have been well received by students. However, the golden question remains – do these alternative modes of feedback impact on student performance? Understanding whether performance is enhanced by such methods remains outside the scope of this literature review but should be considered in future work.

**Limitations of this review**

Limitations of this study include the fact that the synthesis does not address whether the various modes of feedback alter student performance, the quality of feedback content, or the time taken to construct the feedback. These are all important factors to consider in relation to alternative feedback modes but were outside the scope of this review.

**Conclusions and recommendations**

This review sought to gain a deeper understanding of the student perspective on the role of alternative feedback modes in seeking to improve the quality of feedback. Student views on these alternative modes were noted to be complex. Based on the findings of this review, there is some evidence to suggest that these alternative modes are important in helping students achieve a greater level of comprehension of the feedback they received. The richer media modes also supported the student’s sense of belonging in the course or programme. As such, those individuals involved in providing feedback to students should consider exploring the use of richer media modes which may help to increase the quality of the student feedback experience. Further research is needed to understand whether students have any specific preferences between the various alternative feedback modes. In addition to feedback mode, the student perspective on feedback content must also be considered.
References


NVivo Qualitative Data Analysis Software; QSR International Pty Ltd. Version 10, 2012.


