Screencasting, a tool to facilitate engagement with formative feedback?

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Abstract

The feedback that students receive on their work is a problematic area in Higher Education. Lecturers are concerned by a lack of student engagement with feedback, and students report a lack of feedback being provided, a lack of clarity in the feedback, or being provided too late to apply. It is widely agreed though that feedback can narrow the gap between current and desired performance, and can contribute in a positive manner to the student learning experience.

This small scale mixed methods study, using an online survey and focus group seeks to evaluate screencasting as a means of enhancing the formative assessment process for students, and to develop guidelines for practitioners wishing to adopt its use. The study is based on formative feedback provided to second year students on a multi-stage assessment at a Higher Education Institution in the Republic of Ireland.

Data analysis indicates that students engage with screencast feedback in a number of ways. Students watch the screencast feedback multiple times. They can pause and rewind if necessary, apply the suggestions for improvement from the lecturer, and they can access it anywhere that has an internet connection.

In conclusion these findings indicate that screencasting is an effective medium to communicate formative feedback to students. This study will contribute to the development of best practice by suggesting a framework for screencast feedback.

Keywords: Student engagement, formative feedback, screencasting.

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1. Rationale and Introduction

The role that feedback plays in the student learning experience cannot be underestimated. For many commentators it lies at the very heart of the student learning experience, being seen as one of the most powerful influences on student achievement. For students who are unsure of what they need to do in order to progress, feedback can help close the gap between current and desired performance (Black and William, 1998; Gibbs and Simpson, 2004; Nicol and McFarlane Dick, 2006 Bloxham and Boyd 2007; Hattie, 2008; Orsmond et al. 2013). For staff, feedback can aid them in addressing elements of their teaching and better constructively align their assessment to make it more student centred. (Biggs, 1999; Gibbs, 2010).

Lecturing staff devote much time and effort in producing assessment feedback; it seems however that quite a lot of this effort is wasted. Student feedback surveys in Ireland and the UK indicate consistently that students are dissatisfied with the traditional feedback methods as being deficient in a number of aspects. Results cite a lack of feedback being provided, lack of clarity, illegibility, or feedback being delivered too late for students to apply. (ISSE, 2014; NUS, 2015). Academics frequently mention that students either skip directly to the grade, fail to act or engage with the feedback or even to collect it at all (Bloxham and Boyd, 2007; Nicol, 2010; Orsmond and Merry, 2011).

Whilst these are two very conflicting areas of debate, the common unifier is engagement; or lack of engagement with feedback. The challenge therefore is how to get our students to engage with feedback when it is provided to them? One possible way to facilitate engagement may be to use a technology which appeals to the everyday communication tools that students are using outside of the Third level environment. Students are engaging with multimedia (YouTube) on a daily basis for pleasure. One technology which shares similar characteristics to video is screencasting.

1.1 What is Screencasting?

"Screencasting is a method of capturing the actions performed on a computer including mouse movements and clicks on web browser links, in the form of a video. Using online screencasting tools, the video can be shared via e-mail attachment or a weblink, or be uploaded to a server for continual use" (Carr and Ly, 2009, p.409).

A key benefit of this tool is that feedback provided by screencast combines the two major senses for learning: visual and auditory input (Mayer, 2003). The resultant video files provide the students with online access (once they have an internet connection) to their feedback which they can access at a time and place of their own choosing (Haxton and McGarvey, 2011). This study reports on the use of this tool to provide formative feedback to second year students at the Dundalk Institute of Technology on drafts of their work.

1.2 Placing feedback in context

In her thematic analysis on assessment feedback in Higher Education, Carol Evans states that "there is no agreed definition of assessment feedback" (Evans, 2013, p.71). Feedback it seems is an elastic term that can cover a myriad of contexts and there are different perceptions of it (Blair et al. 2013). For some authors, it is seen as an end product as a consequence of performance against set criteria. For others, assessment feedback is seen as an integral part of the learning process (Cramp, 2011) and as a "supported sequential process rather than a series of unrelated events" (Archer, 2010, p.101).

Feedback can serve different functions depending on the learning perspective, needs of the learner, task being performed and the feedback paradigm being adopted (Knight and Yorke, 2003). Traditionally feedback has been seen as being conceived and delivered by a lecturer to a student. This primarily took place at the end of a period of learning and took the form of graded assignments (Nicol, 2010; Yang and Carless, 2013). This is effectively a 'knowledge transmission' process, the responsibility for which lies with the teacher (Nicol and McFarlane-Dick, 2006; Boud and Molloy, 2013).

This is at odds with most contemporary approaches to feedback which have reconceptualised this approach. Feedback is now seen as being more student centred, sustainable and dialogic. The teacher is no longer the sole provider of feedback, instead feedback is now seen to be generated by peers, and ultimately the student themselves. Self-regulation is seen as being at the heart of good feedback practice. (Nicol and McFarlane-Dick, 2006; Yang and Carless, 2013; Nicol, et al. 2014; O'Regan et al. 2016).

1.3 Why use screencasting?

Engaging the visual and auditory senses has been demonstrated to enhance student learning (Mayer and Moreno, 2003). Richard Mayer (2003) in his work on "dual coding" indicates that information is passed through two main channels; the ears and the eyes. Mayer has shown that that the combination of both the aural and visual channels produces the "deepest learning" (especially if the information from the two channels complements each other).

This method is unlike traditional audio feedback. With traditional audio there is a separation between the assignment and feedback, which makes it difficult for students to identify the point in their work being discussed (Ribchester, et al. 2007; Rodway et al. 2009). Screencasting overcomes this as students can see and hear specifically what the lecturer is referring to. Provision of feedback via screencasts has potential to generate a number of practical and pedagogical benefits for students and teaching staff. These include: supporting feedback comprehension and student engagement with feedback; provision of richer feedback; improvements in relation to access and flexibility; and potential for time saving.

1.4 Potential affordances and benefits

Several studies have indicated that the personalised and conversational nature of audio-visual feedback can support students' comprehension of, and engagement with, feedback. Students are often frustrated or confused by cursory and oblique written feedback, or by unfamiliar academic terminology (Bailey and Garner, 2010; Nicol, 2010). The use of the tutor's voice can help to convey meaning in a less formal, and more conversational way than written communication, and the use of tone, expression, and emphasis allows the nuance often lost in written feedback to be retained and transmitted, thus supporting students to better understand, and engage with, feedback (Ice et al. 2007; Merry and Orsmond, 2007; King et al. 2008; Middleton et al. 2009; Rotheram, 2009; Hennessy and Forrester, 2014). Furthermore, a number of studies have shown that simply referring to students by name during feedback allows them to experience a greater personal connection to the tutor (Ice et al. 2007, Gould and Day, 2013, Knauf 2015).

It is frequently reported that students do not collect traditional paper-based written feedback (Lunt and Curran, 2010; O'Regan et al. 2016). Lunt and Curran (2010) used audio feedback with undergraduate students (n=60) and found that they were up to ten times more likely to download an audio file online than they were to collect written feedback in person.

1.4.1 Richer feedback

Various studies have reported that students perceive audio and audio-visual feedback to be of a better quality than written feedback. For example, Merry and Orsmond (2008) stated that students in their study perceived audio feedback to be of higher quality because it helped them to better understand what tutors were trying to convey:

Chalmers et al. (2014) conducted a comparative analysis between audio and written feedback with two groups of 30 first year science degree students. They concluded that the audio feedback was perceived by students to be much 'richer'. Screencast feedback in particular can add an additional important dimension to the provision of feedback, since it can include demonstrations and resources that visually demonstrate how to improve future work (Jones, et al. 2012).

1.4.2 Access and Flexibility

The use of audio and audio-visual files can support students to access their feedback at a time and place of their choosing (Lunt and Curran, 2010). Students can also pause and replay the feedback as necessary (Carr and Ly, 2009; Haxton and McGarvey, 2011; Jones et al. 2012). This ability to pause and repeat a screencast may be particularly beneficial for students for whom English is a second language (Jones at al. 2012).

1.4.3 Potential for Time Saving

It is generally agreed that giving feedback is time-consuming (Rodway-Dyer et al. 2011; Yang and Carless, 2013). Audio-visual feedback may offer potential for generating economies of scale in the context of provision of generic feedback to large groups (Cann, 2007; Crook et al. 2012). Reporting on the outcomes of the multi-institutional 'Sounds Good Project' Bob Rotheram provides a pragmatic viewpoint derived from experiences garnered from the use of audio feedback across four HEIs, and notes that audio feedback can save tutors time in the following circumstances:

a) when "the assessor is comfortable with the technology"; b) if "the assessor writes or types slowly but records their speech quickly"; c) where "a substantial amount of feedback is given"; and d) if "a quick and easy method of delivering the audio file to the student is available" (Rotheram, 2009, p.2).

1.5 Challenges

Notwithstanding the potential benefits of screencast feedback, there are some practical and pedagogical challenges associated with these approaches that may need to be taken into account, including: students' emotional responses to audio-visual feedback; differences in learning preferences and needs; and issues in relation to logistics and technology.

1.5.1 Emotional Responses to Audio and Audio-visual Feedback

A number of studies have pointed to the need to consider the emotional impact of audio-visual feedback. The students in Voelkel and Mello's study (2014) reported that although it was not easy to read critical comments, this was considered less painful than having to listen to them. Frustration (at a poor attempt) or weariness (after correcting large numbers) may come across in a tutor's tone of voice, and could be particularly demotivating (King et al. 2008).

1.5.2 Diversity in Students' Learning Preferences and Needs

The affordances of audio and audio-visual feedback may not be the same for all learners, particularly for those who have hearing impairments or who are visually impaired (Lunt and Curran, 2010; McCarthy, 2015). A student's learning style may also impact on their preference for audio, audio-visual, or written feedback (Gould and Day, 2013; Chalmers et al. 2014; Johnson and Cooke, 2015).

1.5.3 Logistics and Technology

Finding a quiet location to record the feedback was reported as a difficulty for some tutors, thus provision of audio feedback may necessitate out of hours work (Hennessy & Forrester, 2014). Additionally, in one study tutors reported that the inability to edit the audio files was a drawback (Munro and Hollingworth, 2014). Staff in some of the studies reviewed were also concerned that their audio feedback could end up in the public domain on social media e.g. Facebook or YouTube. (King et al. 2008; Gould and Day 2013).

2. Implementation and Evaluation

2.1 Aim of the project

This research project seeks to evaluate screencasting as a means of enhancing the formative assessment process for students, and to provide guidance to practitioners wishing to adopt its use.

2.2 Project Objectives

- To explore the extent of student engagement with feedback provided by screencasting.
- To investigate student perceptions of screencasting as a feedback medium.
- To create guidelines for practitioners wishing to adopt screencasting as a mode of delivering feedback to students.

2.3 Context of the module used

The research was undertaken in Dundalk Institute of Technology (DkIT) with students in the second year of the BA in Sport Exercise and Enterprise. The module (Leading the Active Adolescent) has been chosen as students are assessed on the creation of an e-portfolio using Mahara, which details their taught experiences in semester 1 2015-2016.

The module runs over two semesters with summative module marks being awarded at the end of semester 2. The module is weighted 60% Continuous Assessment (CA) and 40% Exam.

Students are given the opportunity to submit for formative feedback mid-way through semester 1 with a proportion of the module marks 25% being awarded for the end of semester 1. Students complete a final end of year portfolio detailing their semester two activities which is submitted on week 12 of semester 2 and this is worth 35%.

The group comprises 31 students, 5 female and 26 males. No student is under 18 and for all of the class, English is their first language.

2.4 Methods chosen

In this small-scale study, a mixed methods research approach that combined both quantitative and qualitative techniques was selected (Johnson and Onwuegbuzie, 2004). Advocates of mixed methods research mention that it yields 'real' answers to 'real' questions, and that is useful in the 'real world' (Cohen et al. 2011). It is also recognised as having the advantage of methodological triangulation and enhancing validity in education research (Collins, et al. 2006; Weaver, 2006; Cohen et al. 2009; Marriott and Teoh, 2012).

2.4.1 Online survey

All students who submitted work for formative feedback were invited to participate in an anonymous online survey. The survey consisting of 9 questions was delivered using Survey Monkey was a combination of quantitative (closed questions, Likert rating scale) and qualitative (open) questions.

The survey was made available to students though the Institutes VLE, Moodle.

2.4.2 Focus Group

In an attempt to understand how the students perceived, the feedback medium and how the students applied the feedback provided, a qualitative approach using a focus group of 6-8 volunteers who freely agreed to participate was selected. This took place after grades for semester 1 had been released to students.

To eliminate researcher bias and to obtain reliable data, the focus group was managed and undertaken by a colleague who does not teach the students and who is from a different school within the Dundalk Institute of Technology (DkIT). Approval to conduct the study was gained in advance, from the Institutes Research Ethics Commitee (IREC) at Dundalk Institute of Technology. The research was conducted in compliance with the DkIT ethical guidelines. The focus group was recorded and transcribed. Thematic analysis was used to analyse the data. (Cohen, et al. 2009).

2.5 Description of the approach used

- 1. Students create a series of e-portfolio pages that are placed into a collection.
- 2. Once created, students upload their e-portfolios to the assignment submission section of the VLE.

- 3. Lecturer logs onto the VLE, views the student work, records the feedback using screencapture software.
- 4. The lecturer records between 3-6 minutes of good quality, detailed formative feedback. This feedback, based on the assessment criteria, signposts elements of good work, indicates what improvements need to be made, and suggests how these can be made See Appendix One.
- 5. Once finished marking, the lecturer generates a hyperlink to the student's work that is pasted into the assignment comments section on the student's assignment submission page.
- 6. The student receives a notification email to inform them that they have feedback on their work.
- 7. The student logs on to Moodle and views the feedback.

2.6 Results

2.6.1 Online Survey

Of the 31 students in the class, 28 submitted drafts of their portfolios and received formative screencast feedback, whilst 22 completed the online survey. This yielded a response rate of 78.5%

Table 1 Student perceptions of screencasting as a feedback medium. (n = 22)						
Questions	Strongly Agree	Agree	Neither agree nor Disagree	Disagree	Strongly Disagree	
The screencast feedback was clear and easy to follow.	16 (72.73%)	4 (18.18%)	2 (9.09%)	0	0	
I found the screencast feedback more personal than written feedback.	15 (68.18%)	5 (22.73%)	2 (9.09%)	0	0	
I found it easy to access the screencast feedback.	10 (45.45%)	9 (40.91%)	3 (13.64%)	0	0	
It is an efficient and innovative way to receive feedback.	11 (50.00%)	10 (45.45%)	1 (4.54%)	0	0	
I would like to receive screencast feedback for other modules on my programme.	17 (77.27%)	4 (18.18%)	1 (4.54%)	0	0	
I am happy with the amount of screencast feedback that I received.	12 (54.55%)	9 (40.90%)	0	1 (4.54%)	0	

Five – point Likert Scale (5 = Strongly agree; 1 = Strongly disagree)

Volume 8, Number 3 (Autumn 2016)

29110

In all cases it can be seen that students are in favour of this medium to communicate feedback to them. Responses indicate a high level of satisfaction with screencasting as a feedback medium.

Table 2 Facilitating engagement with feedback (n = 22)						
Questions	Strongly Agree.	Agree.	Neither agree nor Disagree.	Disagree.	Strongly Disagree.	
The screencast feedback clarified the areas where I had done well and which should be repeated.	9 (40.91%)	13 (59.09%)	0	0	0	
The screencast feedback clarified the areas where I went wrong, and need to improve.	11 (50.00%)	10 (45.45%)	1 (4.54%)	0	0	
Receiving screencast feedback on my draft submissions enabled me to improve the quality of my work.	13 (59.09%)	9 (40.91%)	0	0	0	
I found the screencast feedback on my coursework helpful.	15 (68.18%)	7 (31.82%)	0	0	0	
I felt it easier to act on screencast feedback compared to written feedback.	12 (54.55%)	10 (45.45%)	0	0	0	
I will watch the feedback again closer to my final submission date.	15 (68.18%)	6 (27.27%)	1 (4.54%)	0	0	

Five – point Likert Scale (5 = Strongly agree; 1 = Strongly disagree).

Responses indicate that there was a high level of engagement with feedback provided by screencast.

2.6.1.1 Accessing and engaging with feedback

A question asking how and where students are accessing their feedback found that students access their feedback at home (95.5%) or within the college (36.4%). They used their laptops or PC (59.1%) and their SMART devices (36.4%) to view their feedback. On average students viewed their feedback three times. It should be noted that that all of the students viewed their screencast at least once





"Well once again you will always get on your paper that this is good, very good or incorrect, I'm scratching head wondering what's good, very good, or how am I meant to correct it, tell me what's good about it" **Student A**.

"What frustrates me is where the lecturer writes 'this needs to be fixed'...more often than not I'm wondering what needs to be fixed? I don't understand their comments. Then to be honest, I forget about it". **Student B.**

There was a general consensus that if the students didn't understand the feedback they wouldn't engage with it.

"If I don't understand what the lecturer is referring to (feedback) more often than not I'II walk away from the assignment and just let it be" **Student C.**

The respondents clearly found the screencast feedback helpful. In virtually all cases,

respondents indicated that, they could clearly see the areas that they should improve.

"It is very specific to you. It is something like a one to one meeting with a laptop but it is not really. If that makes sense". **Student C.**

Some respondents valued the opportunity to watch and re-watch the feedback.

"You go back on it again and then start correcting mistakes, pause it, play it again, pause it and play, in total I'd say I watched and re-watched the sccreencast four times. **Student D.**

Theme 2: Formative Feedback is more useful than summative feedback.

There is an overarching preference for formative feedback over summative end of module feedback. There was a consensus that unless there is a direct link between modules on a programme the students will not take on board the end of module feedback and will instead focus on the summative grade.

"With some of the subjects, you are going to get a mark and you look at the mark and that is it, you are not going to see why you went wrong, what you did right, it is just going to be a mark....It is final, that is it. It's a mark". Student E.

Students made alterations to their work based on the formative feedback from the lecturer. In all cases students believed that the formative feedback enabled them to strengthen their subsequent submission.

"The opportunity to submit for formative feedback was helpful. I was not sure if I was on track, but after watching the screencast I was shown what I did well and more importantly where I could get back on track. This set my mind at ease". **Student F.**

Theme 3: Students engage with formative screencast feedback.

Students engage with feedback provided by screencast. Students appreciated that they can access their feedback at a time and place of their choosing once they have an internet connection.

"It's very accessible, that is with the touch of a few buttons you are in. You know where it is (VLE) and once you've the internet you can access it anywhere. With my written feedback sheets I either loose, or I'll shove the feedback sheet in my bag, it ends up being crumpled and illegible". **Student F.**

There is a preference for the conversational nature that comes through strongly in feedback provided by screencast.

"With the mouse you can see the areas that he (lecturer) is referring to. He highlights or draws under words paragraphs and says perhaps you may wish to consider making this change" **Student A.**

Typically the students viewed their screencast three times. Some of the group indicated that they watched it up to seven times. The general view was that they watch the screencast in its entirety, then open their work and make their amendments based on the suggestions from the lecturer.

"When I'm watching it, I'll watch it the whole way through. Then I'll have two tabs open, going over and back playing and pausing and making the corrections as I go". **Student C.**

Students access their feedback using a laptop or PC in their homes. When pressed on this the group agreed with the following commentary.

"You can get distracted with a smart device, because you've got messages coming through, on Snapchat or WhatsApp, you can go off topic so with the Laptop I'm focused on my work" **Student C.**

3. Discussion

3.1 Valuing formative feedback – making improvements

Many students revealed that they valued the opportunity to submit for formative feedback. A key point to emerge was that students applied their feedback. Here they methodically work their way through the feedback, toggling between the screencast and their work, pausing, listening, then making and applying changes as they go along, and possibly closing the feedback loop.

This strongly supports the work of (Black and William, 1998; Yorke and Longden, 2004; Sadler, 2010; Blair et al. 2013) who remark that formative feedback has the capacity to aid students to make improvements on their work for future summative submissions.





3.2 Ease of access encourages engagement by students

The results of this study suggest that students are engaging with feedback provided by screencast. By placing their feedback within the VLE, students can access it once they have an internet connection. Seminal authors on audio-visual feedback further underpin this finding. If students can access their feedback in a place and at a time that is convenient to them, the likelihood is they will listen to/watch it (Rotheram, 2009; Marriott and Teoh, 2012; Gould and Day, 2013). All students watched their feedback at least once with the average being three times. This also correlates with King et al. (2008) and Lunt and Curran (2009) who found that students had accessed their feedback up to 3-4 times.

3.3 Devices used to view screencast feedback

The devices used to view the screencasts came as a surprise. Initially I felt that owing to the saturation of smart devices amongst the student group, this would be the tool of choice to view their feedback. This was not the case. The majority of students used a laptop or PC to watch their feedback, doing so at home. When pressed on this, students cited too many distractions with social media on their smartphones for them to concentrate properly on engaging with their work. A recent blog from Wonkhe (2016) further supports this, with the claim that student use of their smartphones is a threat to their academic performance due to too many distractions which are non-academic. From this one could surmise that the students view their laptops as being used for academic 'work', their smart devices for 'leisure'.

3.4 Mapping feedback to their work – avoiding confusion

The respondents clearly found the feedback contained within the screencast helpful. In virtually all cases students indicated that they could clearly see the areas that they should improve. This is one of the key strengths of screencasting. Students are able to map their feedback against their work (Ribchester et al. 2007; Rodway et al. (2009). This is important, as the students suggested that where they did not understand their feedback they would disengage from it and not seek clarity from their lecturer.

Students commented positively on the feedback message contained within their screencasts. Some suggested that it was close to a one to one meeting between lecturer and student. Students indicated a preference for the depth, richness and conversational manner of the feedback provided. This is common with other research on audio and audio visual feedback (Merry and Orsmond, 2008, Lunt and Curran, 2010; Jones at al. 2012). It also is a close fit with contemporary approaches to feedback which encourage feedback to be dialogic (Yang and Carless, 2013).

3.5 Closing the gap between current and desired performance – providing a clear message

The student cohort agreed with this where they mentioned that their feedback helped them to make improvements. They were shown where to improve and a possible suggestion was offered on how they could do so. Where students did well, this was also communicated to them. These points are strongly aligned with other pertinent research in this area (Black and William, 1998; Nicol and McFarlane-Dick, 2006; Merry and Orsmond, 2007; Rotheram 2009; Race, 2010; Carless, 2011; Nicol 2011).

3.6 Overall experience of receiving feedback by screencast

The freetext opportunity to elicit the students' opinions of receiving feedback via screencast was largely positive. Students like the ease of use, personalisation and clarity associated with it. These results concur with the research of (Brealey and Cullen, 2012; Marriott and Teoh, 2012; Robinson et al. 2015).

4. Conclusion and Recommendations

The results of this study suggests how a technology such as screencasting can be used to enhance the learning process for students and for academics also. The use of screencasting to provide feedback is an effective medium that engages students. Students reported that they can access their feedback anytime, or in any place that has internet access. Students are engaging with the feedback, pausing, listening and applying the feedback to make changes to their work. More importantly this research suggests that they are applying the feedback to their summative submissions, effectively closing the feedback loop.

The medium however is only as effective as the message contained within it (Cranny, 2016). The structure of the feedback is crucial. If we really wish to develop deep learning with our students our feedback must clearly point students in the right direction leading them towards successful learning (Sadler, 2010). Students need to be able to understand and act on the feedback provided. Where they need to improve suggestions should be offered on how to do so. Likewise where they have done well they need to be told where their work is good, and how they possibly may improve this further.

This is a small scale mixed methods research project. The author recognises that the participant numbers are small but he believes that the findings from this research underpin and illustrate good practice in the production and delivery of formative feedback to students using screencasting. Further research into the language of feedback from the perspective of the student would enable academics to further examine the effect of feedback on student achievement.

5. Appendices

Appendix One – Guidelines for practitioners

- 1. Open the screen recording software. Use a good quality microphone/headset to capture your voice. It is important that the students can clearly hear your feedback.
- 2. Students are not expecting you to be a professional broadcaster. Be yourself and be genuine when recording (Jones et al. 2012).
- 3. Say Hi (student name), thank the students for submitting.
- 4. State which assignment you are giving feedback on (Rotheram, 2009).
- 5. Keep your recordings short. The recommended time for recording is between 3-6 minutes. Any more than that and you can overload the students.
- 6. Should you have further information to communicate, invite the students to seek further guidance by contacting the lecturer directly (Cann, 2014; Carless, 2015).
- 7. Always address the assessment criteria.
- 8. Always try to be positive, and give praise for good aspects of the work (Merry and Orsmond, 2008)
- 9. Offer a few, reasonably attainable, suggestions for improvement (scaffold the feedback), even if the work is excellent (Mosston and Ashworth, 2002, Rotheram, 2009, Race, 2001, Brown, 2004).
- 10. Provide the grade band that the work is in (for formative submissions).
- 11. Round things off in a friendly way (Rotheram, 2009).
- 12. Generate hyperlink to screencast, this will ensure students can download it, (audio visual files can be difficult to download)
- 13. Use VLE (moodle) assignment section to circulate feedback back to the student.

Appendix Two- Choice of Screencast Technology

In this study the researcher decided to use Screencastomatic. Screencastomatic is a free screen and webcam recorder that can be downloaded or accessed directly through (<u>www.screencast-o-matic.com</u>). Screencastomatic can be used to create screencasts, add notes and captions to the video which can then be saved to video file, uploaded to YouTube or shared on Screencast-O-Matic.com. This application records all the activity taking place on the computer screen, along with the user's voice for a maximum of fifteen minutes. When the screencast ends the programme will prompt the user to create a video file, upload to YouTube, or send to the cloud-based server affiliated to screencastomatic.

Whilst there a numerous other freely available screencast programmes, Screencastomatic was chosen because of its ease of use and how fast one can activate it. Although there are more sophisticated programmes such as Camtasia from TechSmith that allow users to edit and have an unlimited time frame for recordings. Screencastomatic is free and is easy to use, which may encourage practitioners to adopt its use in providing formative feedback to students.

Appendix Three – Survey 1. Please indicate your level of agreement with each of the following statements:

	Strongly agree.	Agree.	Neither agree nor Disagree.	Disagree.	Strongly Disagree.
The Screencast feedback was clear and easy to follow					
I found the screencast feedback more personal than written feedback					
I found it easy to access the feedback					
It is an efficient and innovative way to receive feedback.					
I would like to receive screencast feedback for other modules on my programme.					
I am happy with the amount of screencast feedback that I received.					

2. Please indicate your level of agreement with each of the following statements:

	Strongly agree.	Agree.	Neither agree nor Disagree.	Disagree.	Strongly Disagree
The screencast feedback clarified the areas where I had done well and which should be repeated.					
The screencast feedback clarified the areas where I went wrong, and need to improve.					
Receiving screencast feedback on my draft submissions enabled me to improve the quality of my work.					
I found the screencast feedback on my coursework helpful.					
I felt it easier to act on screencast feedback compared to written feedback.					
I will watch the feedback again closer to my final submission date.					

3. Please indicate the ways in which you found the audio-visual feedback helpful or unhelpful, if any.



4. What device did you use to watch your feedback? (Please tick all that apply).

- Tablet
- □ Smartphone
- PC in College
- Laptop in College
- At home using my own device
- Wasn't able to open it.
- 5. How many times did you listen/watch the feedback?
- Once
- Twice
- □ Three times
- Four times
- More than four times
- □ I only watched portions of the screencast
- □ I didn't watch the screencast.
- Other (please specify)



- 6. Where did you watch the screencast feedback? (Please tick all that apply)
- In DKIT
- At home
- At work
- During my commute

Other (please specify)



7. Did you stop or pause the screencast at any time?

- □ Yes
- No

8. If you answered "yes" to the last question, please indicate the reasons for pausing the screencast. (Please tick all that apply).

□ I couldn't understand what the lecturer was saying.

I wanted to hear the comments again for my own understanding.

I was distracted.

I wanted to amend and make changes to my document based on the feedback provided.

Other (please specify)



9. Please write down 2-3 words to describe your experience of receiving screencast feedback.

Word 1	4	× ×
Word 2	<	*
		<u>^</u>

Word 3

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