Understanding how students process and use feedback to support their learning

Practitioner Research
In Higher Education

Vol 8 (1) pages 41-53

Stuart Hepplestone* and Gladson Chikwa**
Sheffield Hallam University*
Nottingham Trent University**
gladson.chikwa@ntu.ac.uk

Abstract
This paper presents the results of a small-scale qualitative study conducted at a UK university in which a sample of undergraduate students were asked to reflect on the (often subconscious) processes they use to engage with, act upon, store and recall feedback. Through the use of micro-blogging, weekly diaries and semi-structured interviews, the study found that students understand what feedback is and how it should be used. Students recognise the impact of technology in enhancing the feedback process, especially in supporting dialogue around feedback. However, the study highlighted that students often struggle to make connections between the feedback that they receive and future assignments, and it is recommended that further investigation is required into how tutors construct the feedback given and how students deconstruct that feedback, along with the role that technology might play in enabling students to make sense of all feedback that they receive.

Key words
Feedback; student engagement; Technology; Research.

Introduction

The importance of providing good quality feedback in supporting students' learning is universally acknowledged (e.g. Hattie, 1987; Black and Wiliam, 1998) and underpinned by a collection of principles, models and conditions (e.g. Gibbs and Simpson, 2004; Nicol and MacFarlane-Dick, 2006; Beaumont et al., 2011). Students are presented with a range of different types of feedback (Scott et al., 2011), but do we know what they do with the feedback that they receive and the impact of this on their future learning? Duncan (2007) reports that studies have indicated that students are not effectively engaging with the feedback they are given, whilst Sadler (2010:535) raises an important issue: 'for many students, feedback seems to have little or no impact, despite the considerable time and effort put into its production'.

A research project undertaken to explore the impact of learning technology upon students' engagement with feedback (Parkin et al., 2012) found that many students will read and engage with feedback in some way, however it is not understood what processes students use or whether engagement leads to action. It was clear that many students viewed feedback as the end-product of the assessment process and did not see connections between assignments, modules, years of study and employment. This is reflected in the literature with reports that modularisation limits the scope for feedback that can feed forward into future assessments (Price et al., 2010).

Citation
Hepplestone, S., Chikwa, G. (2014) Understanding how students process and use feedback to support their learning, *Practitioner Research in Higher Education Journal*, 8(1), January, 41-53.

The study presented in this paper further investigated student practices in using their feedback effectively for future learning and how this may be influenced by the variety of media used to produce and deliver feedback. During the study, evidence was gathered about the (often subconscious) processes that students use to engage with, act upon, store and recall feedback, including the strategies that they use to feed forward into future learning. Evidence was also gathered to identify differences in how students interact with feedback delivered using existing technologies and different media in use at the selected university. The study attempted to better understand this phenomenon in order to move forward with the promotion of feedback as a learning tool.

Method

The study used qualitative methods and worked in partnership with 7 self-selecting full-time, on campus, undergraduate students between December 2011 and May 2012. The participants represented different levels (years) of study and represented three of the four faculties at the university studying a diverse range of subjects and disciplines. The five Level 4 (first year undergraduate) participants were drawn from Creative Art, Electronic Electrical Engineering, Film Media Production, Law, and Mathematics. The Level 5 (second year undergraduate) participant studied Technical Computing, and the Level 6 (final year undergraduate) participant studied Biology.

Using a range of data collection methods (micro-blogging, weekly online diaries, optional reflective activities, and semi-structured student interviews), the participants were encouraged to articulate:

- the processes used to engage with feedback
- the strategies used to feed-forward into future learning, and
- how technology might help effective use of feedback.

Via micro-blogging using *Twitter*, the participants were asked to capture every instance of interaction with feedback; that is when they received, made use of, or referred to feedback. As discussed by Aspden and Thorpe (2009), the use of *Twitter* had the advantage of enabling participants to 'provide real-time information [which] offers valuable behavioural insights in context, rather than relying on information recall'.

In addition, each participant kept a weekly diary using the private blog tool available within the institution's Virtual Learning Environment (VLE). The diaries provided each participant with a private online space to capture a detailed account of the nature of, usefulness of, applicability of, and individual reflections on, feedback. Mid-way through the study participants were asked to complete optional reflective questions about the feedback that they have previously received and record this in their weekly diaries. This was introduced to maintain momentum and participant interest during periods where they had no opportunities to make meaningful use of feedback.

Towards the end of the study, each participant was invited to attend an individual hour long semi-structured interview during which the research team had an opportunity to work closely with each individual participant to unpack their understanding of their own experiences and to analyse the differences in how they interacted with different forms of feedback. Semi-structured interviews allow interviewees 'to say what they think and to do so with a greater richness and spontaneity' (Oppenheim, 1992:81). Participants were

encouraged to articulate their experiences using an 'interview plus' approach, a term coined by the JISC LEX project (Creanor et al., 2006). Using the 'interview plus' approach, the interviews were accompanied by artefacts, which on this occasion were the micro-blogs submitted throughout the duration of the project and extracts from their diaries and optional reflective activities.
Data captured from all four methods (as discussed above) were analysed using a thematic analysis approach facilitated by the use of *NVivo* software Thematic analysis enables the identification, analysis and reporting of patterns within data (Braun and Clarke, 2006).

The study recognised that using a self-selecting sample can cause a bias in the participants' characteristics and those who volunteer to participate are more likely to be scholarly and reflective in their learning. This sampling method is therefore a limitation of the study as is the small-scale nature of the study. It is difficult to make generalisations from a small number of participants, but it does raise some useful findings to discuss and explore.

Permission to carry out the study was sought and granted by Sheffield Hallam University's Research Ethics Committee. Consent was obtained from all participants, who were fully informed about the nature of the study and were made aware of their right to withdraw. Given that assessment and feedback can be a sensitive subject for students, all participants were debriefed and provided with information about how to access education guidance and counselling services available at the University.

Findings from the study
During the thematic analysis of the data captured from the various data collection methods employed in the study, six main themes were identified:

- identifying and purpose of feedback
- student expectations from feedback
- student preferences for type of feedback
- strategies for internalising feedback
- application of feedback
- how technology can help.

Identifying and purpose of feedback
The findings revealed that the participants were able to identify and recognise feedback. Their understanding of feedback is evident in the definition proffered by one of the students:

> 'Anything that a lecturer tells you about [the] work you have submitted or how well you're doing on some lab sessions. That's feedback. Whether it is written on a piece of paper, on an assignment cover or if it's verbal.'

The recognition by students of what feedback is and how it should be used appeared to contradict earlier studies (e.g. Poulos and Mahony, 2008) that often claimed that students need educating on how to recognise feedback. The study showed that students understood the purpose of feedback as being the ability to improve their assignments and grades and their understanding of the subject:

> 'To give a criticism of work, either positive or negative, that could then give you an idea of how to proceed in the future, and how to build upon your experience.'

Despite the participants clearly identifying the different range of feedback that students receive, the participants' tweets and diary entries throughout the study tended to focus mainly on assignment feedback. The participants queried what type of feedback they should refer to throughout the duration of the project, asking about the appropriateness of referring to feedback from peers, discussions with tutors, as well as assignment-based feedback. It was anticipated that the participants would therefore refer to and make use of a wide range of feedback over the course of the research. However, beyond an initial surge of activity (micro-blogging and substantial diary entries), it was noted that the number of micro-blogs reduced significantly and many diary entries reflected that the participants were not receiving nor having an opportunity to refer to and apply feedback. This was in contrast to the participants claiming that they receive feedback from many sources at different times. Participants were referring only to assignment feedback and that they receive feedback at certain periods of time rather than on an on-going basis. Although there was an expectation that participants would contribute a weekly diary entry, this was not compulsory as we anticipated a variation in the opportunities that the participants would have to interact with feedback on a week-by-week basis, regardless of their level of study and their discipline. To maintain participant interest in the study at times when they had no meaningful opportunities to interact with feedback, weekly optional reflective activities were introduced mid-study, in lieu of their regular diary entries. This gave the participants an opportunity to think about and articulate on their previous interactions with, or their opinions about, feedback, ensuring that participants felt that they could continue to contribute meaningful data to the study. There was no attempt to counter the diminishing number of micro-blogs as the sole purpose of this method was to capture in real-time the student participant interactions with feedback.

Student expectations from feedback

The study found that students have clear expectations about the feedback that they receive. This resonates with what was previously indicated by Handley et al. (2011:553) who argue that 'students have expectations about what they need from feedback; expectations about what feedback 'should' do (and what tutors 'should' provide)'. For instance, students had mixed views about the amount of feedback received during the period of the study:

> 'I have felt unhappy about the amount of feedback received. This is my final year and feedback should be the most important thing when receiving back work as I would like to know why I received the grade I did.'

> 'I feel that the amount of feedback received was enough to provide some idea of where students stood.'

It is worth noting that the amount of feedback that participants received depended on their current level of study, particularly with level 6 (final year) students focussing only on their final projects as all other modules were finished. In this situation, one student stated that:

> 'There is not many opportunities to get feedback as the project is mainly independent research and I only see my supervisor once a week.'

All participants were critical of the large gaps between periods of receiving feedback. However the amount of feedback and gaps between periods of feedback depended on the programme or course of study:

> 'There did exist large gaps in which no or little feedback was received, and the result of this was that some projects were carried out with more information than others.'

Despite the criticism of receiving feedback in such periods, the participants were generally happy with feedback turnaround. They appreciated that it can take a while to turn around lengthy assignments or where there are large numbers to mark:

> 'Some have it [feedback] returned within the week, or the following week, whereas some assignments can take a while to come back, obviously that's the amount that they've got to mark.'

In spite of the somewhat dissatisfaction with the amount of, and when they received feedback, it was noted that the participants appeared to wait to receive feedback rather than put effort in to try to get feedback. The project further revealed that the participants have a set of clear expectations of how feedback should be structured. The participants highlighted six main issues stating that feedback should:

- be helpful, encouraging and provide direction:
  'I expect the tutor to identify where I might be going wrong, and where I was going well, and how I can improve and push myself further, or maybe identify some techniques that might be useful.'

- be consistent and aligned to criteria:
  'I feel that a more structured way of giving and receiving marks should be implemented, so that each student is marked by the exact same criteria and tutors don't allow their opinions to influence their decisions too strongly.'

- include a mark breakdown:
  'Received a very detailed document describing the mark breakdown…The document fully explained the different aspects of how the work was marked with written feedback for each point […] The document is a perfect example of what I believe feedback should be.'

- be critical:
  'Feedback should be critical, really, highlighting things more what you did wrong that what you did right. Obviously a certain amount of things that you did right, but I kind of, no matter what grade or percentage you get in a piece of work I think there's always areas you can improve, and I think that should be highlighted in feedback.'

- support transition:
  'I think that with being in first year personal feedback and interaction is really useful as that little bit of reassurance from your tutors can be all you need just so you know that you're doing the right thing and not worrying along with all the other stresses moving to uni causes.'

- be legible:
  'When you've got illegible writing, there's just no point really. You make out one word, and then you have to go to the next word and make that out, and you can't read it at all.'

Student preferences for type of feedback

This study echoed findings from previous studies (e.g. Orsmond et al., 2005; Yang and Carless, 2013) which revealed students' preference for written feedback. Most participants

reported that written comments was the most useful type of feedback, as it tended to be more structured and easy to retain:

> 'In particular that [written feedback] which gives a detailed outline of the strengths and weakness of my work, and highlights specific areas for improvement'

However, written feedback was seen as most effective, when it is typed, legible and easy to read, and when it is presented in context of the original work. Although the participants expressed a lesser preference for feedback returned verbally, it was still valued. There had to be some effort on the part of the student to record the spoken feedback in some way as well as evaluating and making sense of the verbal commentary:

> 'Pay attention if it's verbal, assess the validity of the points expressed and try to keep it in mind when you're doing something similar.'

Overall, the participants' preferred method of receiving feedback was to receive it individually by their tutors, enabling a dialogue about that feedback to take place that can facilitate negotiation of meaning and clarify confusions promptly (Yang and Carless, 2013):

> 'I think that I prefer being shown where I have done well or gone wrong on a piece of paper and face-to-face with a tutor and then be able to discuss that, because it enables me to see my own mistakes on the piece of paper and then to talk about it and think of ways and discuss it with the tutor – ways of how I can improve on that and how I can maintain something that has gone well.'

On the other hand, generic feedback was reported as the least helpful feedback. This confirmed findings by Mory (2004) which showed that students preferred specific rather than general feedback. This was mainly because the participants felt that the feedback did not apply to them, or that they did not know how to make use of generic comments:

> 'The generic feedback in lectures afterwards might not specifically cater to what you did, because it's general, it's for all the students. So you might have not done the same mistakes as everyone else. So that's the least useful. It's not personalised.'

Where the participants attempted to make sense of generic feedback, their use of the feedback was to check on progress and see where they were in terms of the cohort:

> 'The only way that I probably used it was to see whether I was sort of ahead of the field.'

However, there were participants who did attempt to make sense of generic feedback and see how it could be applied to their work. These participants did want opportunities to learn from and follow-up on the feedback:

> 'I could make use of it to some extent, but I always wanted to ask questions afterwards. Questions that went specifically back to things that I'd noticed with my own work.'

Strategies for internalising feedback

The study provided evidence that participants employed different strategies for internalising feedback for future use depending on whether the feedback was returned to students in a hard-copy format (e.g. written on their work or printed) or given to them verbally.

All participants respected the feedback that they received in a hard-copy format, choosing to read the feedback (often several times) in order to identify connections to future work. Once they had read the feedback, the participants organised and stored this along with all other work for future reference:

> 'Stored with all the other previous assignments where they can be viewed and used to help with other assignments.'

The participants explicitly reported that after reading the feedback they often reattempted or fully reviewed the work for which the feedback related in order to remember it again in the future:

> 'I tried to go through my work again and see the mistakes and sometimes I do the problem again to get the correct answer […] I try to remember those things so I can do better next time.'

Similarly, the participants valued feedback given to them verbally, despite conveying a lesser preference for this particular format. The participants either made notes from verbal feedback for following up later, or recorded the feedback for listening back to immediately or to retain for future reference.

> 'I prefer it if I can record it [the feedback], because I always like to be able to go back to refer to it.'

It also emerged that students look for and value opportunities to internalise and remember feedback by discussing the feedback that they receive with others in a 'trusting atmosphere' (Yang and Carless, 2013:290), including their peers, tutors or parents:

> 'When I'm talking about it to maybe my mum or my sister or one of my peers in my class, it's easier to remember because we will mention it a few times and I try and put any feedback that I've got into use straight away, because if it's put in to use straight away you're less likely to forget it.'

Application of feedback

The main finding from the study is that the participants made use of feedback where obvious connections can be made between the feedback received and future work or learning. This confirmed previous studies that identified the applicability of the feedback to be important (e.g. Price et al., 2010) and the notion that students are often frustrated when they cannot see connections between modules (Pokorny and Pickford, 2010). The connections highlighted by the participants included:

- making use of skills-specific feedback, such as time management, working as a group or structuring work:
  'Previous feedback did help us to understand how we could better plan our time, where, which areas needed more time spent on them, and also because we worked in small groups in a similar way in each one, we were able to understand how better

> to work with our peers in order to divide roles more effectively, and produce more effective work'

- making use of feedback specific to a particular assignment type, such as presentations or report writing:
  'One of the first projects we did since starting this [research study] was a report, and I think I got in the 80s for that […] there was feedback in that specifically about the content of that report, but there was feedback on it as well about reports in general, and since then because we've done a lot of other report writing, a lot of those points have been relevant, and the grades have been higher.'

- where feedback on a draft submission feeds into the final submission:
  'In completing a 2500 word essay as part of one module, I was able to draw upon feedback from a previous assignment; that assignment involved research which leads onto the current one.'

- when preparing portfolios:
  'whilst […] selecting what work to use, I have been referring to the feedback […] and making sure I only include the best work.'

- where regular tasks are set:
  'There's assignments [sic] every other week to do, there's lab sessions to attend, so it just builds up on itself. You get to apply the things you have learned in the following sessions.'

As identified by Hattie and Timperley (2007) the study made it clear that any feedback that was module-, content or assignment-specific was difficult to use and could not easily be fed forward into future work or learning:

> 'Once you do a certain type of assignment sometime you don't do that again, so once you've got feedback on that you can't really put that in to use if it's specifically for that type of feedback, that type of assessment.'

However, one participant did indicate that there is always something that can be taken from feedback regardless of whether the feedback is specific to the individual assignment or obvious connections to future work can be immediately identified:

> 'I think that there's always something you can draw from feedback, whether you realise it at first or not, I think you can always look back at reading, have a look back and read through something and you'll always think oh yeah, that'll be what it is and then, so yeah I think there's always a use for feedback.'

Interestingly, the majority of participants felt that feedback provided by peers, usually in relation to a specific task, was quite valuable and they felt quite able to apply this feedback to future work or learning. This gave them a richer and more varied source of feedback, than by the tutor alone:

> 'It's been interesting to hear verbal feedback from peers rather than tutors. This feedback along with written feedback from tutors helped me to gain a wider perspective of way I can improve with my assignments.'

This resonates with findings by Falchikov (2005) who stated that students sometimes receive more feedback from their peers compared to their tutors. However, for one participant, peer feedback given verbally did not offer a valuable feedback experience:

> 'The least helpful was the verbal feedback from students, simply because it was unstructured and therefore vague.'

How technology can help

The participants recognised that technology can support the feedback process, both in terms of receiving feedback and enabling them to learn from their feedback. The importance of technology has been identified elsewhere. For example, Rae and Cochrane (2008) argue that use of electronic media can be best suited to meet student needs while Nicol and MacFarlane-Dick (2006) state that technology facilitates online dialogues and these can be more effective than conventional verbal and written feedback. Where the institution's Virtual Learning Environment (VLE), *Blackboard*, has been used for publishing feedback to students, the participants reported on the logistical benefits of quick and easy access to feedback:

> '[*Blackboard*] means you don't have to come into university to pick it up […] but there is effort which could be missed out with technology by using *Blackboard*, which also is a better way of giving feedback.'

The participants highlighted learning benefits resulting from feedback being returned electronically via the VLE, including the ability to check on progress and, most importantly, opportunities to respond to feedback and have a personal dialogue with tutors:

> 'I prefer it to be online […] if it's emailed or online, there's a record of it and you can reply to it.'

The participants were critical where marks were returned online via the VLE without the feedback, and recommended that this situation be improved:

> 'We've received provisional percentages for the marks, to tell us how well we've done, in advance of actually receiving the written feedback. Other than that, I was quite disappointed to find that *Blackboard* wasn't really used, and we have to rely on waiting for print outs from [...] Reception.'

One participant discussed explicitly how the institution's VLE could be better used to enable students to identify the connections between feedback and future work:

> 'I think if tutors could put everything on *Blackboard* […] where you can view all your assignments that you've handed in, and the grade, and the feedback, then that is the best way that you can use it […] *Blackboard* is designed to be a unified centre where everything could be kept.'

In addition, the participants reported on the usefulness of mobile technologies and associated applications (e.g. the institution's mobile application for the VLE) for accessing their feedback. Like with the VLE, using mobile technologies gave students quick and easy access to feedback:

> 'I think using online is good because it gives it to you there and then, you can access it, near enough everyone can access it on their phone these days […] rather than having to be in uni.'

The participants also reported that accessing feedback on via mobile technologies, enriched their engagement with and learning from feedback. It gave them greater opportunities to have a personal dialogue with their tutors about the feedback received, as well as enabling them to set targets and action plan:

> 'I might use my calendar for example and say that this needs to be done and it stays on my phone or my computer and so I can look at that and say okay, that's my target date, that's what I have to do and you can send reminders and you can email yourself and stuff like that, so then in ways like that it can be quite helpful.'

The participants indicated that they made use of technology, in particular the use of social media, to gain early formative feedback and to facilitate dialogue amongst their peers:

> 'I also discussed ideas for one of our practical assignments – an interactive animation – with one of the other students in my class via Facebook messages.'

Conclusions

This study has explored the subconscious processes that students use to engage with, act upon, store and recall feedback, in order to inform and evaluate how technology can support deliberate actions as a result of receiving feedback. The study concludes that the participants involved clearly understood the concept of feedback, recognised the wide variety of feedback that they received, and had clear expectations about feedback in terms of its usefulness, consistency and supportiveness, and frequency and distribution over the duration of their study. Surprisingly, students did not highlight issues with feedback turnaround time, only to indicate that they understood that it takes longer to mark lengthy assignments or where there are large numbers to mark.

The study also found that the participants valued the feedback that they received, choosing to internalise and store the feedback for future use. Students demonstrated different strategies for making use of feedback depending on its format. Written feedback would often be read several times or used to help students reattempt work, before being stored along with all previous assignments and feedback for future reference. Students varied their approaches to internalising verbal feedback. Many participants took written notes during the discussion while others made an audio recording using their own mobile devices, both of which could be followed up later and stored for future use. Some students simply committed verbal feedback to memory, choosing to have discussions with peers, tutors and family members to reinforce and internalise this information.

Students' use of feedback in future learning was facilitated where explicit connections could be made between previous feedback and current learning. Connections that students highlighted tended to be superficial or 'future gap altering' (e.g. similar assignment type, making use of the same skills, where feedback on draft work fed into the final submission, and when selecting the best work for portfolios), and students appeared frustrated where such links were not evident and they could not make use of feedback that they had internalised for future use. There was no clear indication that students attempted to make deeper connections between feedback and future learning, simply to articulate that feedback relating specifically to the content or the assignment was difficult to use.

Students recognised that technology can support the feedback process, primarily in the logistical aspects of turning around feedback quickly, giving convenient access and storage of feedback, and providing typed and legible feedback. The process was further enhanced by being able to use mobile devices to access their feedback and use the technology to have a personal dialogue about feedback with their tutors regardless of location. Currently, the technology used does not easily enable students to make connections between feedback and future learning. However, students are making use of social media to discuss and share ideas about assignments with peers, in order to feed-forward these ideas into their final submission. This illustrates that students are using technology to have a dialogue about feedback with people they trust and looking for options to use early feedback when completing final drafts. This is consistent with the 'feedback triangle' proposed by Ming and Carless (2013: 292) in which:

> 'students actively making use of feedback from peers and tutors to self-regulate their own performance (cognitive dimension) can be facilitated by trusting relationships between participants (social-affective dimension) and the strategy of using a multi-stage assignment (structural dimension) which enables students to use evidence from the first stage in improving the next one.'

Even though it is difficult to make generalisations from working with such a small number of participants, it does raise interesting ideas for further exploration and debate around why staff choose particular types of feedback and what students actually do with that feedback, which is still, according to many sources, a rather under researched field (e.g. Poulos and Mahony, 2008; Walker, 2009). Further investigation into how tutors construct the feedback given and how students deconstruct that feedback and see the connections between feedback received and future assessments would be beneficial to understanding how to encourage students to apply their feedback to future learning, and the role that technology might play in enabling this.

Recommendations

It is difficult to make generalisations from such a small number of participants, but a number of recommendations for how feedback can be structured and delivered, and student engagement with feedback supported, can be inferred from the findings of the study reported in this paper:

- Create opportunities for giving regular feedback in order that students can use this information to inform future learning.

- Provide students with feedback that is helpful, encouraging, aligned to criteria, and legible; at level 4 (first year undergraduate) this should support students with their transition, becoming increasingly critical as they progress through their studies.

- All tutors should have an awareness of all assessment on the course. Find out what future assignments students will be required to do in other modules and write forward-looking statements with these in mind in order than students can make use of and apply the feedback received.

- Support, but avoid controlling, the informal peer-feedback process that students engage with when completing assignments, and appreciate the richer and more varied feedback that this can provide.

- Embrace the logistical benefits that technology provides when returning feedback online, including convenience of access and storage of feedback for students and for immediate dialogue around that feedback.
- Provide marks and feedback simultaneously. If marks are published ahead of the feedback, less value is placed on the feedback provided later.

References

Aspden, E. J. and Thorpe, L. P. (2009) 'Where Do You Learn?' Tweeting to Inform Learning Space Development, *Educause Quarterly,* 32(1).

Beaumont, C., O'Doherty, M. and Shannon, L. (2011) Reconceptualising assessment feedback: a key to improving student learning? *Studies in Higher Education,* 36(6), 671-687.

Black, P. and William, D. (1998) Assessment and classroom learning. *Assessment in Education,* 5(1), 7-74.

Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology, *Qualitative research in psychology,* 3(2), 72-101.

Creanor, L., Trinder, K., Gowan, D. and Howells, C. (2006) Who's learning and how? Researching the learner experience, in Markauskaite, L., Goodyear, P. and Reimann, P. (eds.) *Proceedings of the 23rd annual conference of the Australasian Society for Computers in Learning in Tertiary Education: Who's learning? Whose technology?* 3-6 December, Sydney: Sydney University Press.

Duncan, N. (2007) Feed-forward: Improving students' use of tutors' comments. *Assessment & Evaluation in Higher Education,* 32(3), 271-283.

Gibbs, G. and Simpson, C. (2004) Conditions under which assessment supports students' learning, *Learning and Teaching in Higher Education,* 1, 3-31.

Handley, K., Price, M. and Millar, J. (2011) Beyond 'doing time': investigating the concept of student engagement with feedback, *Oxford Review of Education,* 37(4), 543-560.

Hattie, J. A. (1987) Identifying the salient facets of a model student learning: a synthesis of meta-analyses, *International Journal of Education Research,* 11, 187-212.

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

Mory, E. H. (2004) Feedback research revisited, in Jonassen, D.H. (ed.) *Handbook of Research on Educational Communications and Technology.* New Jersey: Lawrence Erlbaum Associates Publishers, 745-783.

Nicol, D.J. and Macfarlane-Dick, D. (2006) Formative assessment and self-regulated learning: a model and seven principles of good feedback practice, *Studies in Higher Education,* 31(2), 199-218.

Parkin, H.J., Hepplestone, S., Holden, G., Irwin, B. and Thorpe, L. (2012) A role for technology in enhancing students' engagement with feedback, *Assessment and Evaluation in Higher Education, 37(8), 963-973.*

Oppenheim, A.N. (1992) *Questionnaire design, interviewing and attitude measurement.* London: Pinter.

Orsmond, P.S., Merry, S. and Reiling, K. (2005) Biology students 'utilisation of tutors' formative feedback: a qualitative interview study, *Assessment and Evaluation in Higher Education,* 30(4), 369-386.

Poulos, A. and Mahony, M.J. (2008) Effectiveness of feedback: the students' perspective, *Assessment & Evaluation in Higher Education,* 33(2),143-154.

Pokorny, H. and Pickford, P. (2010) Complexity, cues and relationships: student perceptions of feedback, *Active learning in Higher Education,* 11(1), 21-30.

Price, M., Handley, K., Millar, J. and O'Donovan, B. (2010) Feedback all that effort but what is the effect? *Assessment & Evaluation in Higher Education,* 35(3), 277-289.

Rae, A.M. and Cochrane, D.K. (2008) Listening to students: How to make written assessment feedback useful, *Active Learning in Higher Education, 9*(3), 217-230.

Sadler, D.R. (2010) Beyond feedback: developing student capability in complex appraisal. *Assessment & Evaluation in Higher Education,* 35(5), 535-550.

Scott, J., Shields, C., Gardner, J., Hancock, A. and Nutt, A. (2011) Student Engagement with Feedback, *Bioscience Education e-Journal,* 18. Available at: http://www.bioscience.heacademy.ac.uk/journal/vol18/beej-18-5SE.aspx (Accessed: 03 January 2014).

Walker, M. (2009) An investigation into written comments on assignments: do students find them usable? *Assessment & Evaluation in Higher Education,* 34(1), 67-78.

Yang, M., and Carless, D. (2013) The feedback triangle and the enhancement of dialogic feedback processes, *Teaching in Higher Education,* 18(3), pokorny, 285-297.