Not Seeing the Wood for the Trees: developing a feedback analysis tool to explore feed forward in modularised programmes

Dr Gwyneth Hughes
Reader in Higher Education
Department of Lifelong and Comparative Education
Institute of Education
20 Bedford Way
London, WC1H 0AL
Tel. 020 7911 5308
Email g.hughes@ioe.ac.uk

Dr Holly Smith
Department of Lifelong and Comparative Education
Institute of Education
20 Bedford Way
London, WC1H 0AL

Brian Creese
Department of Lifelong and Comparative Education
Institute of Education
20 Bedford Way
London, WC1H 0AL

This work was supported by the Joint Information Systems Committee under the Assessment and Feedback Programme.

Abstract

This paper considers feedback in the context of modularised programmes in higher education in the UK. It is argued that the self-contained nature of modular assessment may limit feedback dialogue between staff and students to assignment specific issues, and may impede student progress towards holistic programme level aims and outcomes.

A feedback profiling tool was developed to categorise feedback on draft and final work. The analysis of feedback on 63 samples of draft work and 154 samples of final work showed different patterns. There were more feedback comments on draft work, and the feedback comments were dominated by advice and critique, while the feedback comments on the final work were overwhelmingly dominated by praise. This pattern of feedback is problematised in terms of feed forward from one module to the next as students work towards the development of programme level outcomes. Ipsative feedback (on progress) and feed forward in terms of disciplinary specific skills and programme level outcomes are recommended to enable students to act on feedback on end-of-module work, and develop students' capacity to recontextualise disciplinary specific skills throughout a programme. Some developmental applications for the feedback profiling tool are also suggested.

Keywords: feedback analysis; feedback dialogue; feed forward; disciplinary skills; modularisation; assessment; higher education;

Introduction

It has become widely accepted that in all levels of education feedback is an essential requirement for learning. Feedback in higher education has been increasingly put under the microscope resulting in numerous articles, books, principles and guidelines on effective feedback practice. However, ensuring that feedback is developmental for students raises many challenges about student interpretation of feedback (Price *et al.,* 2010), the balance between immediacy and future orientation of feedback (Boud & Falchikov, 2007), whether generic feedback can be used in a new context (Street & Lea, 2000) as well as the tricky issue of how to engage students in a feedback dialogue (Nicol & Macfarlane-Dick, 2006).

Much feedback in higher education occurs in a context of modular programmes, but the effects of modularisation on feedback practice have been little explored. There has been interest in taking a programme level approach to feedback to ensure that module outcomes feed into broader programme level outcomes. Assessment designs can encourage student to work at the programme level such as the use of synoptic assessments which build on modular assessments by drawing together themes and overarching skills (Programme Assessment Strategies, 2012). But, taking a holistic approach to assessment such as this has implications for developmental feedback – or feed forward practice. This paper suggests that programme level learning is easily lost in modularisation when the focus of feedback is on well articulated module goals.

Schemes and guidelines have been developed that distinguish between feedback and feed forward (Hattie & Timperley, 2007), between categories and purposes of feedback such as praise, critique or development (Orsmond & Merry, 2011) and good practice principles consider the level of correction, explanation and dialogue that the feedback addresses (Brown & Glover, 2006). The purpose and therefore the style of feedback may also be influenced by the assessment task and whether the main aim is formative or summative or both. The challenges of categorising and analysing feedback are explored in depth in the paper through the development of a feedback profiling tool and its application. Five empirically and theoretically derived categories of feedback are presented: praise, ipsative (comments on progress), critique, advice and questioning. Results from a study applying the tool to written feedback on both formative and summative assessment for five postgraduate programmes at a research intensive institution are then discussed. The findings indicate that in these modular programmes, feedback closure occurs through detailed corrections and feed forward limited to the current assignment that does not open up a dialogue to continue from one module to the next within a programme. This raises the question about what feed forward for programme level aims could look like, enabling learners to progress towards these goals.

Feedback in modular programmes

Theorising feedback

Contemporary writing and guidance on feedback heralds a shift from viewing feedback as a product that is ‘given' to students to viewing feedback as a process in which students play an active role (Askew & Lodge, 2000; Nicol, 2010; Price, et al., 2011). Feedback is more than “information provided by an agent (e.g. teacher, peer, book, parent, self, experience) regarding aspects of one’s performance” (Hattie & Timperley 2007, p. 81), but enables

students to appreciate the standards they are aiming for and to make improvements in their work:

> Feedback is a process whereby learners obtain information about their work in order to appreciate the similarities and differences between the appropriate standards for any given work, and the qualities of the work itself, in order to generate improved work. (Boud & Molloy, 2013, p. 6)

In other words feedback is not feedback unless it produces a future change - in this case improved work to close a 'gap' between current performance and expected standards (Sadler, 1989; Black & Wiliam, 2009). However, students may not have the same understanding of the standards, criteria, expectations and the terminology used in feedback as their assessors and may strongly link feedback with grades (Carless, 2006; Price, *et al.,* 2011). Assessment is a highly emotional process and low grades or large quantities of critique may de-motivate learners (Falchikov & Boud 2007; Lizzio & Wilson 2008), especially if the feedback gap is wide.

If learners are to make meaning out of feedback information and turn this into productive action, then the feedback process requires some form of dialogue-either between student and assessor or between student and peers (Nicol & Macfarlane-Dick, 2006). Reflection and dialogue that enable progress require that students can self-review or can be supported in developing the skills for self-review and self-regulation over time. Such a social constructivist approach to assessment can be contrasted with a teacher-centric feedback approach (Nicol, 2010) where assumptions are made that students will readily learn from corrective feedback and prescriptive guidance.

Therefore we consider what types of feedback are helpful to students and encourage reflection and dialogue about assessment and what types of feedback tend to close off dialogue.

Categorising feedback

There are different methods of categorising feedback, but the present study initially followed Orsmond & Merry's (2011) categorisation of feedback according to its purposes. Orsmond & Merry drew on the work of Brown, Gibbs & Glover (2003) who generated a complete set of theoretically possible purposes of feedback, and applied them empirically to real feedback. Orsmond & Merry's small study of feedback to 19 biology students used the following categories:

- Identifying errors
- Giving praise
- Correcting errors
- Explaining misunderstandings
- Demonstrating correct practice
- Engaging students in thinking
- Suggesting further study
- Justifying marks
- Suggesting approaches to future assignments

They identified ‘giving praise’ as the most common category with ‘suggesting further study’ and ‘suggesting approaches for future assignments’ minimally represented and very little evidence of ‘engaging students in thinking’. Assessors framed the feedback in relation to the piece of work rather than in terms of learning to be a biologist. Students also viewed the feedback from the perspective of the current piece of work and not for future learning. A lack of feedback dialogue meant that students were not aware how the feedback could contribute to their longer-term learning and tutors were not aware of how students made use of feedback.

The most common category of ‘giving praise’ is not helpful for learners unless it is clear what exactly was done well, so that students know what actions to continue (Hattie & Timperley, 2007). A common device used to motivate learners is the ‘feedback sandwich’ where praise is used to make critique easier to swallow. But there are drawbacks to this approach. Praise may be distracting and draw attention away from the important ‘filling’ of the feedback sandwich (Molloy, Borrell-Carrio, & Epstein, 2013).

Hughes (2011; 2014) has proposed that ipsative or self-referential feedback is an alternative to praise to both motivate learners and enable them to self-monitor their learning. Ipsative feedback focuses on the progress the learner has made rather than attainment and so can be positive for all learners and not only the high fliers:

> An ipsative formative assessment activity allows a learner to demonstrate progress and change through repeating activities or through comparing activities that address comparable knowledges and skills. Ipsative feedback then informs the learner of how s/he has progressed, or not, since a previous assessment. (Hughes, 2014, p. 75)

Ipsative feedback is not usually a part of formally recorded assessment in higher education although it may be more common in unrecorded verbal feedback such as in tutorials and supervision sessions or in classrooms. This is because formal summative assessments focus on the learner’s attainment of standards rather than progress towards standards (Hughes, 2011).

Students also report that developmental feedback or feed forward that makes suggestions or provides information that can be used in a future assignment is helpful (Walker 2009, Hattie & Timperley 2007). Conversely, retrospective critique that suggests what a student could have done to obtain a better grade is not useful and is perhaps better presented as future-orientated (Boud & Falchikov, 2007).

Feed forward across a programme

Feed forward is problematic for two reasons. Firstly, in the UK, Australian and many other HE systems over the last two decades there has been a drive towards modular programmes to offer students greater flexibility and choice of pathways (Gellert, 1999; Morris, 2000). Following the rapid expansion in the proportion of those participating in higher education, there was a perception that assessment was not transparent to learners, and that greater fairness and clarity could be achieved by introducing explicit assessment criteria and detailed programme and module specifications. These goals have largely been achieved, but in the modularisation process the broader, holistic, developmental goals of programmes may have been lost. By making teaching, learning and assessment discrete and self-contained units, it may be that modularisation limits the opportunities for feed forward into

other modules. This is particularly so when each module only contains one assessment and feedback cycle. We suggest that modularisation might encourage formative feedback to focus on correction and detailed content specific advice while missing opportunities for feed forward that address longer term programme level goals.

Secondly, feed forward is inherently more difficult for assessors to write than feedback that is contextualised in the content of a particular assignment. This is because feed forward requires assessors to have some knowledge about what sorts of subject content will be covered next and in what ways it will be assessed, and most importantly a clear view of the programme level aims and outcomes. Walker (2009) argues that content specific advice is often not helpful unless the student is to repeat the assignment and that feed forward that addresses generic skills that can be applied in future will more useful. However, Walker does not elaborate on what these generic skills might be and if they are limited to superficial matters such as punctuation, spelling or numeracy then feed forward will be of limited value. The higher order disciplinary skills that a learner needs to develop such as 'critically evaluating the literature' are extremely difficult to decontextualise; the critical evaluation is always of a particular literature. Simply exhorting students to be more critical next time is unlikely to be helpful.

A more fruitful way of conceptualising feed forward may be in terms of the disciplinary specific programme level aims and outcomes that students are working towards. This draws on an academic literacies approach (Lea & Street, 1998) that has demonstrated that the form of an argument, what counts as evidence, structure and research vary considerably between disciplines. However, in a programme within a single discipline it could be expected that a key programme level aim and outcome is to develop participants capacity for disciplinary thinking; to ‘think like a historian’ to 'define problems like an engineer or' 'to apply educational theory to professional practice'. Therefore feed forward might usefully focus on those practices or approaches which are characteristic to the discipline. However, a clear finding of academic literacies research as defined by Lea & Street (1998) and Lillis & Scott (2007) is that academics within a discipline find it extremely difficult to articulate these qualities and can simply see student failure to achieve them as incompetence, rather than competence in another genre which needs to be realigned.

Similarly, research about graduateness and transferable skills suggests that skills are not generic and transferable, and the capacity to transfer what is learnt in one context to another is in fact so challenging it might be characterised as an extremely high level skill in itself (Bridges, 1993).

Therefore the nature of feed forward in the context of developing disciplinary specific skills across a programme is worth exploring in more depth, but to do this feed forward needs to be identified and categorised. The study presented in this paper sought to develop a feedback profiling tool in order to empirically examine feedback and feed forward on a number of fully modularised curricula within a higher education institution specialising in Education and related disciplines. In the study formative feedback on draft work produced during the module was compared with feedback on graded final assignments produced after the module had ended to explore any differences.

Developing a feedback profiling tool

Rationale for the categories

For this study Hattie & Timperley's (2007) distinction between feedback and feed forward was combined with Orsmond & Merry's (2011) feedback categories to develop a new feedback profiling tool which could be used to categorise feedback on a large scale in a social science context. Initially, two researchers used Orsmond & Merry's categories, to distinguish feedback and feed forward, but found them to be problematic with the actual feedback examples collected, particularly as their framework was designed for analysing in-text comments and the bulk of the feedback that we was analysed consisted of longer comments written on a feedback form. While some categories were clear, such as 'giving praise' for example, the demarcation between categories such as 'explaining misunderstandings' 'demonstrating correct practice' and 'engaging students in thinking' were hard to establish.

Therefore an alternative, empirical approach was taken where researchers started from the feedback and categorised the comments into as small a number of categories as possible. Coders tried to view the feedback from the student reader's perspective rather than trying to infer the marker's intentions. A category of 'ipsative feedback' was added in addition to 'praise' to provide a distinction between reward for progress and reward for outcome. 'Engaging students in thinking' was replaced by 'requesting clarification and questioning' because this is also an invitation for dialogue whereas 'critique' and 'advice' might provoke student thinking, but not necessarily initiate dialogue. 'Justifying marks' was omitted because feedback in this category could be classified as 'praise' or 'critique' and in any case there was little evidence of this practice in the samples being analysed.

The categories of 'critique' and 'advice' are complex because errors can be corrected or highlighted and because feedback can be highly specific to the current assignment or applied more generally as feed forward. Advice about a current assignment could also be feed forward when the current assignment is in draft form and/or will be resubmitted. By asking researchers to apply these criteria to real examples, a subdivision of the 'Critique' and 'Advice' categories was developed (see Table 1).

Table 1 Feedback profiling tool categories and examples

		Examples
P1 Praise	Praise is thought to be motivating for students, but if used indiscriminately it can appear insincere.	*'You demonstrate a good understanding of learning theory...'* *'Your discussion is consistently reflective and the argument unfolds convincingly' 'Your description of existing literature was excellent'.*
P2 Recognising Progress (i.e. ipsative feedback).	Acknowledging progress can be motivating and informs students about their learning. Lack of progress also serves as an early warning that action is needed.	*'You have responded to previous feedback with a thoughtful essay' 'this represents a considerable improvement on previous drafts...'.*
C Critique.	Students need to know how their work falls short of expectations or criteria, however, criticism can be discouraging especially when not accompanied by information on how to improve.	
C1	Correction of errors – numerical or verbal mistakes, referencing errors, spelling etc.	*Correction of errors (C1) may be actual corrections of spelling or grammar written or typed onto a script, or comments about correct procedures for referencing*
C2	Factual critiques (of content)	*'It is not quite true that all sampling aims to be representative...'* *'Your opening paragraph says that you are going to examine mechanisms of how poverty impacts on cognition, which cannot be correct since none thus far was able to do so...'* *'Grounded theory is actually a research design...'.*
C3	Critique of approach (structure and argument)	*'By putting the research approach before the outline discussion, readers would have been provided with a more focussed outline of how these issues are applied to exploring the 'Accent Method' school experience and theory need to be interwoven and equal in balance'*
A Advice.	Important when the main purpose of feedback is to help students take future action to improve.	

A1	Advice specific to current assignment content	*'More could have been written about quantitative analysis...'* *'...try to bring some of the specific research references to your research context into the main discussion.'* *'you could add something here about social constructionism...'*
A2	General points that refer to the current assignment	*'When you talk about different studies you need to be more consistent in providing more details (methods used, participant details).'* *'Broader reading around the topic and of studies that employ the approach would have helped create a more nuanced discussion.'*
A3	General points for future learning and future assignments	*'In future, if you talk about previous studies, you need to give more details...* *'In your next assignment you should flag up something like this at the beginning....'*
Q Clarification requests or queries	Asking learners to think more deeply about their work and generate actions themselves can be achieved through questioning and dialogue.	*'Not sure what this means – influence in what ways?'* *'I am not clear what assumptions you refer to...'* *'Why are you only looking at women in this analysis?'*
O Unclassified statements	Neutral comments, for example that describe the piece of work but do not make any judgement, are unclassified.	

A particularly difficult issue in categorisation was that sometimes criticisms were phrased as questions. For instance comments such as '*What happened? What did you observe?'* could be categorised as asking for further thought and opening a dialogue, but also as a critique of omissions in the assignment. Such statements were categorised where possible, but the 'clarification requests or queries' category (Q) was used where another category could not be determined.

Scoring for each category

The default unit for analysis is the sentence, however, where a sentence contains clauses that make distinct points, it was split into separate clauses that were classified separately. So, for example, in the feedback: "*When you mention Y's model you do so uncritically, but you have responded to feedback on your draft and now mention the limitations of applying model Z to your design"* the first section is a critique while the second part of the sentence is a reference to making progress. This would therefore be scored as 1 point for C2 and 1 point for P2.

However, where a sentence does not stand on its own, but only makes sense in relation to the prior unit, it was incorporated into that prior unit. So in this example: "*You need to be critical of assumptions made in the literature. For example, you could explore what is meant by "institutional values" and who holds these values"* the second sentence illustrates the first sentence so this section be given a score of 1 point for A1 not 2 points. The score is the number of times a category appeared in the feedback.

For the analysis, coders categorised samples by the programme title and whether it was feedback on drafts or final feedback. Every comment of feedback in the scripts was coded according to the categories (P1, P2, C1 etc) and totals given for each category. The categories were ranked for each course; so if *Praise* (P1) received the most 'scores' in a course it was ranked as 1, with the category for which there were least scores ranked 10 (although low rankings are probably not very meaningful). Finally the total number of feedback comments scored for all the scripts analysed were totalled and a mean given.

To test for inter-rater reliability an analysis of the same feedback sample was tested by four different researchers and the results compared. Although as expected there were minor differences in the total scoring for each category, the ranking of the categories to give the overall profile was identical for the four researchers in a tool that was reasonably straightforward and fast to use.

Sampling and data collection strategy

All tutors on each of five programmes were asked to provide a complete set of tutor feedback on draft assignments and feedback on final assignments for a randomly chosen modular assignment during the academic year 2011-12. The programmes were all postgraduate programmes at a small specialist research intensive institution. As participation was voluntary, not all tutors responded to the request. The programmes varied considerably in size so there was not a comparable number of samples from each, and for one large

programme (more than 200 students) assignments were randomly selected with an aim of approximately 30 samples. Feedback on drafts was not centrally stored and was much more difficult to obtain than feedback on final work; only 3 of the 5 programmes provided feedback samples on draft work.

In using the feedback profiling tool both summary feedback and in text comments were analysed. The types of coursework assignments varied from 3000 to 5000 word assignments. Formative drafts were ungraded but summative assignments were blind double marked and received an A-D grade according to generic institutional grade descriptors.

There was also a difference in the number of markers involved in the samples, ranging from all marking done by just one person up to 10 different markers on the large programmes. Results are not reported for different tutors but aggregated by programme as the current interest was primarily in the disciplinary and institutional feedback profiles.

Analysing feedback profiles

Feedback on drafts

Although feedback received on drafts is generally considered formative while feedback on final assignments is viewed as summative, it may be more accurate to note that both these types of feedback are made up of differing amounts of both formative and summative style feedback. To avoid any confusion, therefore, we will refer to 'feedback on drafts' and 'feedback on final work'.

Examples of feedback on drafts were received from three postgraduate programmes:

- Professional Education (20 samples)
- PGCE (21 samples)
- Health (22 samples)
- Total (63 samples)

The feedback was received in a variety of formats, including comments inserted in essays, separate feedback sheets and emails.

Table 2 Feedback profiles for draft work for 3 programmes

	Comments for Prof Ed	**Comments for PGCE**	**Comments for Health**	**Total comments**	**Overall Rank**
category					
P1 Praise	75	**104**	29	208	4
P2 Progress	0	0	0	0	10
C1 Critique - corrections	88	13	**230**	331	2
C2 Critique – factual	17	6	92	115	5

C3 Critique - approach	22	23	4	49	7
A1 Advice – specific	**135**	98	192	**425**	1
A2 Advice – general	42	48	15	105	6
A3 Advice – future	2	0	1	3	9
Q Query	41	14	160*	215	3
Other	2	2	0	4	8
Total Comments	424	308	723	1455	
Average no. comments per script	21.2	14.7	32.9	23.1	

*160 queries but just 4 scripts account for 70 of the questions and 6 scripts account for 87 questions. Marker comments were a combination of inserted comment boxes and text inserted into the main essay script.

There was a broadly similar pattern in all the feedback on drafts analysed. In the Primary PGCE course *Praise* (P1) was the most used type of feedback, in Health and Development *Correction of errors* (C1) was the most used and in Professional Education it was S*pecific advice for current assignments* (A1). However, A1 was the second most used response for PGCE and Health and Development and for Professional Education *Correction of errors* (C1) was the second most used and *Praise* (P1) the third most. When added together these three categories were dominant, with *Specific advice* (n=425) being the most frequent response in all feedback on drafts and C*orrection of errors* (n=331) the second. The next most frequent categories were *Questions* (n= 215) and *Praise* (n=208), although the questions category was skewed by the high numbers of question in a minority of the health scripts. All other categories were rarely used.

Feedback on final work

Feedback on final work was received from five programmes:

- PGCE (36 samples)
- Professional Education (50 samples)
- Health (25 samples)
- Psychology (10 samples)
- Research (33 samples)
- Total (154 samples)

Table 3 Feedback profiles for final work for 5 programmes

	Prof Ed	PGCE	Health	Research	Psychology	Total	Rank
Category							
P1 Praise	**292**	**103**	**143**	**104**	**39**	**681**	1
P2 Progress	4	0	0	0	0	4	10
C1 Critique - corrections	32	10	7	5	8	62	7
C2 Critique – factual	36	1	48	29	11	125	4
C3 Critique - approach	66	50	32	77	7	232	2
A1 Advice – specific	66	2	41	28	7	144	3
A2 Advice – general	36	3	13	46	22	120	5
A3 Advice – future	16	0	6	3	0	25	8
Q Query	3	0	3	7	0	13	9
Other	62	3	0	0	1	66	6
Total comments	613	172	293	299	95	1472	
Average no. comments per script	12.3	4.8	11.7	5.9	9.5	9.6	

Across all feedback on final work the most frequent response for all five courses was *Praise* (P1). Health and PGCE had *Factual critique* (C2) as the second most frequent. Professional Education had the same number of C*ritique of approach* (C3) and *Specific advice* (A1) responses, and A1 was also third for Health. The other categories used a great deal in feedback on final work were C*ritique of content* (C2) and *General advice* (A2). When added together, P1 was by some margin the most used response (n=681) followed by C3 (n=232) and A1 (n=144). However C2 (n= 125) and A2 (n=120) were used in similar numbers.

Comparison between feedback on drafts and on final work

From table 4 we can see that *Praise* (P1) is the most common type of feedback for final work, with almost three times as many examples as the next most common type of feedback, *Critique of approach* (C3). By contrast, for feedback on drafts, S*pecific advice* (A1) is the most common type of feedback followed by *Correction of errors* (C1).

Table 4 Comparison of combined feedback profiles on drafts and feedback on final work

	Feedback on drafts			Feedback on final work	
Category	**Number of comments**	**Rank**		**Number of comments**	**Rank**
Praise	208	4		681	1
Progress	0	10		4	10
Critique - corrections	331	2		62	7
Critique - factual	115	5		125	4
Critique - approach	49	7		232	2
Advice - specific	425	1		144	3
Advice - general	105	6		120	5
Advice - future	3	9		25	8
Query	215	3		13	9
Other	4	8		66	6
Total Comments	1455			1472	
Average no. comments per script	23.1			9.5	

From these profiles we see that feedback on drafts tends to deal with specific criticisms or corrections (e.g. correcting referencing) and specific advice for that assignment, while feedback on final work is likely to praise the effort put in and give more general advice or critique of the assignment as a whole. We may also note that there are 215 examples of questions arising from the draft feedback and just 13 from finished work, although the anomaly in the Health results has exaggerated the difference

There are some other stark contrasts when the data is aggregated. Ipsative feedback is almost absent: we find that there are 889 examples of *praise* (P1), but only four which *recognise progress* (P2). Similarly although there are 794 examples where advice is given on the current assignment, there are only 28 examples of advice for ongoing work (A3).

There is a discrepancy between the volume of feedback in terms of categorisable feedback comments that we record and that recorded by Orsmond & Merry (2011) who coded between 17-50 items of feedback per sample compared to our range from 5-33. There is also variability in volume of feedback between individuals and programme teams in the present study. This might be explained by the variation in feedback practices in using summary feedback, or marginal comments and in text corrections which may produce a larger number of comments, and there may be disciplinary differences.

However, the number of comments made per script is much higher for feedback on drafts than on final work. The figures include many minor corrections of detail, but it does raise the

issue as to whether there can be too much feedback or if there is an optimum level of feedback.

Discussion

The feedback profiling tool has enabled some comparison of written feedback profiles on draft work, where the assessor intends that students should act on the feedback and has a purpose that is clearly formative, with feedback on final work where the intention of the assessor is less clear: this could be formative, summative or a combination of the two. The feedback on drafts gives us insight into the developmental aspects of feedback that the assessors have in their repertoire, while the feedback on final work provides us with information about how the assessors view the purpose of feedback that is accompanied by a grade.

A comparison between the two sets of feedback shows some similarities. For the feedback on draft work it is to be expected that the categories of critique and advice that concern the current assignment will be highly represented because the students are expected to revise the draft in the short-term. Praise was also a strong feature of all three programmes, possibly used to balance the critique in a feedback 'sandwich' approach. Feedback on final work also followed this profile of praise, critique of current work and some retrospective advice concerning the current work within the module. However, looking at the detail, there are also some differences: there is a discernible shift in the nature of critique towards *structure and approach* (C3) rather than *error correction* (C1) and or *critique of content* (C2) in the feedback on final work, perhaps because the assessor has more of a sense of the whole piece in the final assignment. Critique as error correction is also less a feature of feedback on final work, perhaps because at the end of a module there is considered to be little point in correcting errors as the student will not resubmit the piece (unless it fails).

There were also subtle differences in developmental feedback or advice. When reviewing draft work assessors gave feed forward that referred to the current assignment. Not surprisingly, this category (A1) was less evident in the feedback on final work as it would be too late and not very helpful for students. More generic advice on the current work (A2) was a relatively minor feature of both sets of feedback. We might, however, expect there to be more generic comments for future assignments (A3) in the feedback on final work – perhaps linking to programme level requirements - but this category representation was little different in overall ranking from the feedback on drafts. It seems that the assessors are not thinking of future learning when they write feedback, they are thinking specifically about how a particular piece of work could be improved rather than identifying disciplinary areas for development. This suggests that there is a form of closure particularly arising from modularisation: if the student is expected to build on generic feedback to develop disciplinary specific skills in future assignments then this is not made explicit, and it will be left to the individual student to identify these skills largely unaided.

Feedback closure

The prevalence of questioning (Q) provides further insight into the difficulty of building up feedback across a programme. There was much more questioning in drafts, especially for

the Health programme, but questioning was almost entirely absent from in the final work for all programmes. It appears assessors know how to use questions to invite dialogue as part of formative feedback, but do not appear to consider that the dialogue might continue beyond the module or particular piece of work. It could be argued that questions are context specific and the examples given in table 1 would suggest that this is largely the case. Dialogue set up in feedback on the final work would need to address higher order learning that goes beyond the module such as self-regulatory skills such as 'how could you avoid future misunderstandings?' Lack of this broader questioning mirrors the absence of feed forward on the more disciplinary specific expectations. Thus, the lack of dialogue in end of module feedback again suggests that feedback closure may be a feature of modularisation: the message is that students are not expected to build on the piece of work in future modules.

Another indication of a tendency towards feedback closure is the lack of ipsative feedback on final work. Feedback on progress indicates that the feedback provider views learning as cumulative over time with learners expected to make progress towards longer term goals in a holistic curriculum (Hughes, 2014). A fragmented curriculum in which there are discrete modules or topics which do not clearly align to development of programme level goals means that tracking learner progress over time is not easy and may not be considered important.

A final indicator of closure in end-of–module feedback is the number of comments. There were significantly fewer comments on final work compared to the draft work. Staff are not given any different allocation of time for marking draft and final work and there are no guidelines at the institution over length of feedback. This suggests that in-module feedback is considered to be more important by assessors for student development than end-of-module feedback. However, there must be caution over any assumption that more feedback is necessarily more helpful feedback as giving students quantities of feedback does not necessarily encourage students to take action or to self-regulate their learning.

Developing student self-regulation

Brown & Glover (2006) identify three levels of feedback: that which provides information about a performance; that which provides explanation of expected standards; that which enables learners to self-regulate future performances. Hattie & Timperley (2007) also distinguish the level of supporting student self-regulation as being important. Here, feedback that is 'given' to students, whether as praise, critique, advice or questioning, provides one step and further dialogic processes are required for the explanation and self-regulation stages which could include tutorials, discussion of feedback with peers or self-reflection (Nicol, 2010) perhaps with the use of other written or digital resources (Luckin, 2010) or engaging with exemplar work from previous students (Hendry, 2013).

It could be argued that none of the categories of the feedback profiling tool: praise, ipsative feedback, critique, future advice or query, necessarily engages learners directly: learners will need continued dialogue or comparative self-reflection if they are to digest the information and turn it into action. But, different feedback profiles might open up or close future dialogue with students across their programme of study. While praise and error correction tend to close down dialogue - convergent feedback (Torrance & Pryor, 1998) guidance for future

learning (feed forward), ipsative feedback and inviting students to think using questioning techniques might open up dialogue and encourage divergent feedback processes that operate at the self-regulatory level over time.

Moving towards feedback for programme level development

These results suggest that sustained feedback dialogue in a highly modularised system is likely to be problematic. Dialogue over current assignment only has limited learning value if it tends to focus on the detail of improving a draft assignment rather than helping students self-correct in the longer term. But, feedback at end of the module or topic need not be the final word and the feedback profile could be much more like that of the drafts in this study. This would mean replacing praise with more advice and questioning, particularly that which points towards future learning. This might mean challenging the popular 'feedback sandwich' approach. Critique would also need to be couched in terms of learning disciplinary specific skills so that it can be understood out of context. To achieve this there is a need for articulated and agreed programme level goals so that feed forward can be framed by these goals and be transferrable from one module to the next.

Applications of the feedback profiling tool

The feedback profiling tool provides a general profile of feedback which can form the basis for curriculum development. As it has been described in this paper, the FPT can serve multiple purposes in developing assessment and feedback practices within programmes:

- enable staff or programme teams to reflect on the purposes of feedback they provide
- enable staff or programme teams to consider changing feedback profiles
- enable comparisons of feedback profiles before and after an intervention so that any changes can be made visible
- enable institution-wide changes in feedback practice to be monitored in response to other changes in practice.

Conclusions and implications for practice

This paper has identified that while feed forward is widely supported by both teachers and students, the nature of that feed forward is not always clear: while it is straightforward to develop essential skills through error correction in context, the higher order learning attributes may be difficult to address through feed forward especially in modularised systems where longer term goals and progress towards these goals are not transparent. Moreover to learn from critique, students must engage through questioning and dialogue and not passively receive instructions on what to do next from assessors. To explore the problem of feed forward, a feedback profiling tool was developed using samples of written feedback. The tool was used to compare feedback on draft work that is formative and feedback on final work that could be both formative and summative, and it distinguished between feedback specifically on the current piece of work and feed forward that could apply to future learning. Sub-division of critique and feed forward (advice) categories has shown us that assessors construct feedback in the immediate context of a modular assignment rather than as a means towards developing skills and attributes for future disciplinary learning - they do not see the wood for the trees. Lack of ipsative feedback and the use of questioning as confined

mainly to draft work further support our claim that modularisation readily encourages feedback closure.

We propose that the tendency towards feedback closure might be reduced if students engage with feed forward that addresses generic disciplinary requirements as well as highly contextualised feed forward. For example in end-of-module assessment, increased use of questioning to prompt future dialogue and ipsative feedback to signal progression may also encourage cumulative learning across a programme. However, modular feedback closure may be symptomatic of underlying problems with curriculum design that also need to be addressed.

Use of a simple feedback profiling tool such as this can make explicit the underlying assumptions behind an assessment system and help to identify ways in which feedback practice can be enhanced. Further work is needed to explore how students interpret and act on feed forward across a programme, and how far providing explanation and detail via written teacher feedback alone is useful.

References

Askew, S. & Lodge, C. (2000). Gifts, ping-pong and loop-linking feedback and learning. In S. Askew (Ed) *Feedback for Learning*. London: RoutledgeFalmer.

Black, P. & Wiliam D. (2009). Developing the theory of formative assessment, *Educational Assessment, Evaluation and Accountability,* **21**(1), 5-31.

Boud, D. & Molloy, E. (2013). What is the problem with feedback? In D. Boud & E. Molloy (eds.) *Feedback in Higher and Professional Education: Understanding it and doing it well*. London: Routledge.

Boud, D. & Falchikov, N. (2007). Aligning assessment with long-term learning, *Assessment & Evaluation in Higher Education*, **31**(4): 399-413.

Bridges, D. (1993). Transferable skills: A philosophical perspective. *Studies in Higher Education*, **18**(1), 43-51.

Brown, E., & Glover, C. (2006). Evaluating written feedback. In C. Bryan & K. Clegg (Eds.), *Innovative assessment in higher education*. London: Routledge.

Brown, E., Gibbs, G. & Glover, C. (2003). Evaluation tools for investigating the impact of assessment regimes on student learning. *Bioscience Education*, 2, available online at http://journals.heacademy.ac.uk/doi/abs/10.3108/beej.2003.02000006

Carless, D. (2006). Differing perceptions of the feedback process. *Studies in Higher Education,* **31**(2), 219-233.

Falchikov, N. & Boud, D. (2007). Assessment and emotion: the impact of being assessed. In D. Boud & N. Falchikov (Eds) *Rethinking Assessment for Higher Education: learning for the longer term*. Abingdon: Routledge.

Gellert, C. (1999). 'The Changing Conditions of teaching and Learning in European Higher Education' in C. Gellert, (ed.) *Innovation and Adaptation in Higher Education: The Changing Conditions of Advanced Teaching and Learning in Europe.* London: Jessica Kingsley Publishers.

Hattie, J. & Timperley, H. (2007). The Power of Feedback. *Review of Educational Research*, **77**(1): 81-112.

Hendry, G. (2013). Integrating feedback with classroom teaching: using exemplars to scaffold learning. In S. Merry, M, Price, D, Carless & M. Taras (Eds). (2013) *Reconceptualising Feedback in Higher Education: Developing Dialogue with Students*. Abingdon: Routledge.

Hughes, G. (2011). Aiming for Personal Best: a Case for Introducing Ipsative Assessment in Higher Education. *Studies in Higher Education*, **36**(3), 353 – 367.

Hughes, G. (2014). *Ipsative Assessment: Motivation through marking progress.* Basingstoke: Palgrave Macmillan.

Lea, M. R. & Street, B. V. (1998). Student writing in higher education: An academic literacies approach. *Studies in Higher Education*, **23**(2), 157-172.

Street, B., & Lea, M. R. (2000). Student writing and staff feedback in higher education: an academic literacies approach. In Lea, M. R., & Stierer, B. (Eds.), Student writing in higher education: new contexts. (pp. 32 - 46). Buckingham: The Society for Research into Higher Education & Open University Press.

Lillis, T. and Scott, M. (2007) Defining academic literacies research: issues of epistemology, ideology and strategy. *Journal of Applied Linguistics*. **4**(1) 5-32.

Lizzio, A., & Wilson K. (2008). Feedback on assessment: Students' perceptions of quality and effectiveness. *Assessment & Evaluation in Higher Education,* **33**(3), 263–75.

Luckin. R. (2010). *Redesigning Learning Contexts: Technology-rich, learner-centred ecologies*. London: Routledge.

Molloy, E., Borrell-Carrio, F. & Epstein, R. (2013). 'The impact of emotions in feedback' in D. Boud & E. Molloy (eds.) *Feedback in Higher and Professional Education: Understanding it and doing it well* (London: Routledge) pp. 50-71.)

Morris, H. (2000). The Origins, Forms and Effects of Modularisation and Semesterisation in Ten UK-Based Business Schools. *Higher Education Quarterly,* **54**(3), 239 –258.

Nicol, D. & 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.

Nicol, D. (2010). From monologue to dialogue: improving written feedback processes in mass higher education. *Assessment and Evaluation in Higher Education*, **3**(5), 501-517.

Orsmond, P. & Merry, S. (2011). Feedback alignment: effective and ineffective links between tutors' and students' understanding of coursework feedback. *Assessment & Evaluation in Higher Education,* **36**(2): 125-126.

Programme Assessment Strategies PASS (2012) *The case for Programme Focused Assessment: PASS Position Paper*, published online http://www.pass.brad.ac.uk/position-paper.pdf

Price, M., Carroll, J., O'Donovan B. & Rust, C. (2011) If I was going there I wouldn't start from here: a critical commentary on current assessment practice. *Assessment and Evaluation in Higher Education*, **36**(4), 479-492

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

Sadler. D. R. (1989). Formative assessment and the design of instructional systems. *Instructional Science,* **18**, 119-144.

Torrance, H. & Pryor,J. (1998). *Investigating Formative Assessment: Teaching, Learning and Assessment in the Classroom.* Maidenhead: Open University Press.

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