A scholarly approach to solving the feedback dilemma in practice

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Abstract

It is clear from the literature that feedback is potentially the most powerful and potent part of the assessment cycle when it comes to improving further student learning. However, for some time, there has been a growing amount of research evidence that much feedback practice does not fulfil this potential to influence future student learning because it fails in a host of different ways. This dilemma of the disjuncture between theory and practice has been increasingly highlighted by the UK National Student Survey results. This paper uses a model of the assessment process cycle to frame understandings drawn from the literature, and argues that the problem with much current practice resides largely in a failure to effectively engage students with feedback. The paper goes on to explore how best to effectively engage students with assessment feedback, with evidenced examples of feedback strategies that have successfully overcome this problem.

Introduction

The literature on learning and teaching in higher education is clear about the central importance of assessment, especially its influence on student behaviour and how students approach their learning (e.g. Brown and Knight 1994; Brown, Bull and Pendlebury 1997; Gibbs 1992; Gibbs and Dunbar-Godet 2007; Gibbs and Simpson 2002; Ramsden 1992, etc.). And when considering the assessment cycle, from the setting of a learning task, through its undertaking and production, marking, and return to the student, the literature is equally clear that *potentially* the most powerful and potent part of that system when it comes to improving the future learning of the student is the feedback the student receives (Black and Wiliam 1998; Carless et al. 2011; Hattie 1987). Hattie (1987) reports (in an extensive review synthesising over 80 meta-analyses) that feedback is the most powerful single influence that makes a difference to student achievement. Black and Wiliam (1998), in their own comprehensive literature review, came to a very similar conclusion - namely, that feedback can have extraordinarily large and consistently positive effects on learning when compared with other aspects of teaching or other interventions designed to improve learning.

Consequently, it is perhaps no surprise that out of the eleven conditions under which assessment supports learning identified by Gibbs and Simpson (2002) seven focus on feedback. Indeed, many authorities only regard feedback as functioning as 'feedback' if it *does* enable the gap between a learner's assessed performance and the learning goal to be bridged (Evans 2013; Wiliam 2011).

It is therefore unfortunate, to say the least, that there is also a considerable body of research evidence that suggests this is the part of the assessment cycle that, as a sector, we generally appear to be worst at delivering, with little practical evidence of any impact on student learning (Carless et al. 2011; Higgins 2000; Perara et al. 2008; Price et al. 2010; Scoles, Huxham, and McArthur 2012); despite an increasing emphasis on feedback in higher education learning and teaching strategies (Brown 2010). Whilst there is evidence that students both appreciate and want good feedback (Higgins, Hartley, and Skelton 2002; O'Donovan, Price, and Rust 2001), many report that they don't find the feedback helpful (Maclellan 2001). Perhaps this is not surprising if they find it vague (Higgins 2000; Weaver 2006) and either don't understand it (Lea and Street1998) or misunderstand it (Carless 2006; Scoles, Huxham, and McArthur 2012). It would also explain why students often don't even bother to read it (Hounsell 1987). Another compounding factor is that the feedback frequently comes back too late and is perceived by the student, rightly or wrongly, to be no longer relevant (Price et al. 2010). Other studies have revealed further problems with feedback. Wotjas (1998) has shown that, when the emphasis of the marking is on the mark or grade, it may be perceived to relate to the student's personal ability or worth as a person, rather than just to the individual piece of work, and in such situations poor marks can damage the student's 'self-efficacy'. While Fritz et al. (2000) have shown that passively transmitted feedback can actually have no effect at all. When asked to repeat a task, students largely repeated the task as they did it before, including the same mistakes despite having received feedback on their first attempt.

Higher education is therefore faced with a dilemma when it comes to feedback – why is there this gap between the theoretical potential and our actual practice? Particularly as, in the UK,

since 2005, the National Student Survey (NSS) has publicly highlighted this disjuncture, showing feedback as the facet of the student experience with the lowest satisfaction scores relative to other aspects across the sector.

The social-constructivist assessment process model

In 2005, we proposed (Rust, O'Donovan, and Price) a model of the assessment cycle based on a social constructivist view of learning (Bruner, 1986, 1990; Vygotsky, 1962, 1978). We argued that the acquisition of "knowledge and understanding of assessment processes, criteria and standards needs the same kind of active engagement and participation as learning about anything else" (Rust, O'Donovan, and Price 2005, 232). In spite of all the claims about the potency of feedback on learning, it is our contention that the fundamental failing in current practices (apart from the poor quality and lack or absence of feedback in some cases) is that social constructivist processes are generally not being applied, and there continues to be little emphasis on the agency and activity of students in feedback processes (with a few notable exceptions, e.g. Orsmond, Merry, and Handley 2013; Sambell 2013). A consequence of this is a failure to *engage* students with the feedback that they are given (Price et al. 2010), with little focus on assuring that it is received, *attended to and acted upon*. A secondary failing is that, in order for students to effectively engage with feedback they need to be adequately prepared to know how to deal with the feedback, and what to do with it, and this is not happening sufficiently either. As Nicol and MacFarlane-Dick (2006) observe - approaches to assessment and feedback have remained obstinately transmission-focused, even in contexts where there is general acceptance of more student-centred and participatory teaching practices.

Method

Clearly recommendations for practice benefit from substantive underpinning evidence for conviction. However, much educational research is qualitative and as such interpretative and situational. Indeed, educational research has been criticized for its lack of generalizability and policy and practice relevance (Hammersley, 2001; Hillage et al. 1998). But here we move cautiously beyond the case-specific, and have firstly drawn from the published literature key

concepts and practices generally derived from inductive, empirical research and then expounded and reviewed these over the past ten years in more than 80 multidisciplinary workshops across the UK and Australia with higher education practitioners. This analytic induction process means that the following recommendations have been intensively evaluated and honed by practitioners working within varied higher education contexts, involving the 'public readjustment of concepts and practices' (Johnson 2004, 165).

In a previous paper (Rust, O'Donovan and, Price 2005), we made some practical suggestions of ways that student engagement with feedback could be achieved. Now, ten years on, based on further exploration of the literature and review by workshop participants, we build on those previous examples and offer a more comprehensive and up-to-date set of scholarly approaches to improving feedback in practice. This set of approaches we hope will be of particular use and relevance to the many colleagues struggling to enhance feedback in terms of both learning effectiveness and student satisfaction within an increasingly demanding and resource-constrained higher education environment. These approaches together form a process cycle in which feedback is not viewed as an isolated product 'gifted' to passive students (Askew and Lodge 2000), but as a coherent process in which students prepare for, engage with, and subsequently act upon feedback.

Enabling student to engage – the need for assessment literacy

In order for students to be able to attend to feedback and act on it, they need to be prepared both to be able to understand it and to know what to do with it, and this is likely to be especially useful in the first year of study (Handley, Price, and Millar 2008). Experts suggest that students should be trained in how to interpret feedback, how to make connections between the feedback and the characteristics of the work they produce, and how they can improve their work in the future. It cannot simply be assumed that when students receive feedback they will know what to do with it (Sadler 1989). This links to a wider notion of the importance of 'assessment literacy' in not only enhancing the potential of students to learn from assessment feedback, but also to understand the process they have engaged in as well as their satisfaction with provision. Here it should be noted that assessment literate students are more likely to understand that in part the effectiveness of even good quality feedback and

thereby the value of their experience will depend on their level of engagement (Price et al. 2012). Price et al. (2012) suggest that students who are assessment literate are familiar with assessment and feedback approaches, concepts, purposes and techniques, understand the nature, meaning and level of assessment criteria and standards, interpret assessment expectations and tasks in the same way as their tutors, and can evaluate their own work and that of their peers, and thereby are more effective learners.

Aligning expectations (of staff & students, & between teams of markers)

It is evident that there is often a mismatch of expectations about the purpose of feedback on a given assessment task, and this can be a mismatch between the expectations of the tutor and the student and/or between different tutors on a course (Perera et al. 2008; Price et al. 2010). For example, is the feedback primarily intended to correct errors, give advice for the future, diagnose general problems, comment specifically only on that piece of work, or something else? These mismatches can occur frequently, with no particular pattern about who holds which view or perspective but problems arise when the two don't coincide. It is arguably essential therefore that the nature and purpose of any given piece of feedback is explicitly identified and explained (Price et al.2010), and as the purpose of feedback may vary from assignment to assignment it may need to be clarified each time (Freeman and Lewis 1998). Further, it can enhance student satisfaction and engagement with feedback to move beyond tutor-led selection and explanation to processes that enhance student agency and buy-in through student involvement in negotiated decisions on how limited resources are deployed in terms of when, where and how feedback is orchestrated (Price et al. 2012)

Identifying all feedback available

Anecdotally, it is also evident that students frequently do not recognise as feedback interactions that staff consider to be feedback, especially when given informally, and/or in passing. A conversation during a laboratory experiment, comments during a studio session or a chat with the whole class may all be seen as feedback by the tutor but not recognized as such by the students. Clearly there can be a conflation between that considered as dialogic teaching and feedback on classroom learning activities. One simple answer favoured by

some to address this confusion is that staff make clear when, how and what feedback is given in each unit of study.

Model the application of feedback

Just like learning anything else, students can be helped by having the process modeled for them. So to model the application of feedback an exercise can be undertaken using previously-marked assignments to show how feedback on one was subsequently used to improve a later assignment (Price et al. 2010)

Encourage the application of feedback

In a subsequent piece of work, *require* the student to show how they have used prior feedback to try to improve their work. In unitised or modular courses where work may often be returned after the student has moved on to a different unit with a different tutor, requiring this through the use of a programme-wide (and agreed) proforma (similar to those proposed by Race in his guidance to students "Building on feedback", see http://phil-race.co.uk/students/) that is submitted with the next piece of work can be effective. Such a scheme can provide a way of addressing the problem of how to ensure that students do attend to and make use of the previous feedback given.

Develop the student's ability to self-assess

There is a growing body of research that has shown that through engaging in assessment exercises (Rust, Price, and O'Donovan 2003) and the assessment process (O'Donovan, Price, and Rust 2008), by assessing the work of peers (e.g. Carless et al. 2011; Forbes and Spence 1991; Hughes 1995; Rust 2001), or through the specific and focused development of the skill to self-assess (e.g. Fisher, Cavanagh, and Bowles 2011; McDonald and Boud 2003) students self-assessment skills are developed over time, and they will go on to produce better work as a result. Indeed, we would agree with Sadler (1989) that an *indispensible condition* for students to improve their academic performance is for them to hold the same conceptions of quality and standards as held by their tutors. "The main benefits of involving students in assessment reside in the potential for improving learning and stimulating personal and

academic development" (Falchikov 2005, 189). And as part of this engagement in the assessment process, it is also important to help the students develop a sense of personal responsibility for their work and its quality. "It is the interaction between both believing in self-responsibility and using assessment formatively that leads to greater educational achievements" (Brown and Hirschfeld 2008, 13). Additionally, in a more employment-focused higher education context, Boud and Falchikov (2006) posit that the ability to assess one's own work and the work of others is a key graduate attribute and employability skill.

If students are to engage with feedback it must be both relevant and fit for purpose

Once students are sufficiently prepared to be able to engage with feedback and make use of it, the second challenge is to motivate students to engage with the feedback because of its relevancy and usefulness. Shute (2008) summarises this very succinctly by arguing we must, like the detective seeking a murder suspect, ensure that the students have MOM - motive, opportunity, and means. In other words, they need to see a reason why addressing the feedback would be useful (e.g. a clear linkage to future work to be undertaken), an opportunity to put what they learn from the feedback into practice, and the necessary support and skills development to enable them to address the weaknesses identified. This may be addressed in a number of practical ways:

Draft-plus-rework

Instead of the student simply producing a 'finished' product, where it may be hard to see any potential link between this piece of work and the next to be undertaken, and in fact the feedback may in some cases be received after the unit has ended and the student has started another, providing feedback on work in progress can enhance student learning (Carless et al. 2011). And whilst there is evidence that without encouragement or compulsion a significant number of students may *not* take up drafting opportunities (Fisher, Cavanagh, and Bowles 2011), a two-stage process *requiring* a first draft, which receives feedback, and then a redraft in the light of that feedback can be effective (Price et al. 2012). Not only is this closer to writing development processes, in particular academic writing, it clearly provides both motive to engage with the feedback and opportunity to make use of it. And this need not require

much more work on the part of tutors. The feedback effort already put in by the tutor is simply moved to the draft stage, and possibly a summative grade only given as feedback for the final submission, which is already effectively the case when it comes to most examinations.

Improve the linkage of assessment strategies across programmes and between modules/units

Beyond the draft-plus-rework model a more coordinated approach could be adopted. A programme view of the assessment strategies used in different units or modules can promote clear links between the various assessment tasks. It is then also possible to implement programme-wide approaches that underpin a coherent 'feed-forward' approach to feedback.

Increase student engagement and understanding through dialogue and 'relational feedback'.
It is a fundamental tenet of the social-constructivist process model that knowledge is shaped and evolves through increasing participation (Rust, O'Donovan, and Price 2005) and central to that participation must be dialogue. However, within the massified context of higher education in the 21st century, opportunities for dialogue have been diminished (Nicol 2010). Consequently, dialogue requires support, and structures need to be in place to encourage it. Activities such as in-class discussion of exemplars, peer-review discussions supported by tutors, learning-sets, etc. can engage students in dialogue and thereby develop self-evaluation and self-regulatory practices (Carless et al. 2011). Handley, Price, and Millar (2008) further emphasise the value of dialogue, pointing to the importance of students knowing their assessors in promoting their engagement with feedback. This challenges anonymous marking processes, increasingly being followed by many institutions in the laudable pursuit of reducing discriminatory bias in marking. However, Handley, Price, and Millar (2008, 28) argue that "a policy of anonymous marking creates a break in relationships which means that staff cannot write tailored feedback to suit the developmental needs of the student". One possible resolution to this apparent impasse is to first attribute marks to anonymised assignments and scripts before revealing the students' names, allowing personalized feedback to then be given.

Identify what is feasible in a given assessment context – and do no more!

Perhaps provocatively, we would suggest that much staff effort regarding feedback may be wasted simply by trying to do too much, and sometimes key messages may be obscured as a result. Written feedback can often do little more than 'diagnose' development issues and it may not be sensible to go any further trying to put right all the problems identified. Rather, it may be more useful in the feedback to simply direct students to other resources, including exemplars of 'good' work (e.g. examples of good analysis or synthesis in de-identified 'A' graded assignments) and formal sources of student help and support, such as provided by academic skills and writing centres. Here, a note of caution, the naïve student may have overly optimistic expectations of feedback, and assume that by itself it should be sufficient to clarify and bring about improved performance.

Ensure feedback is timely

Much has been said in the literature about the need for prompt feedback to the point that it is one of Chickering and Gamson's (1987) seven principles of good practice. Arguably, however, what may be considered 'prompt' varies across assessment contexts. Although Price et al. (2010) assert that in some contexts students consider feedback to be useful and relevant over a much shorter duration than staff assume. There are useful examples of ways that prompt feedback can be achieved within resource constraints. Feedback on a first draft has already been suggested (above). Another answer may be to go for the 'quick and dirty' solution of generic feedback. Evidence suggests that generic feedback on the work of the whole class (e.g. Rust 2001) created by sampling an appropriate number of pieces of work and returned within a very short period of time is likely to be effective. Indeed, more effective than individualized feedback that comes too late to be useful to the student, particularly when students are required to engage with the feedback and relate it to their own piece of work. There is also evidence that computer-generated feedback, utilized to provide immediate feedback, can enhance student learning in large class contexts and potentially engender student engagement and better study habits (e.g. Catley 2005; Nicol 2008). Although Evans (2013) advises caution in assuming this will hold true in all contexts, pointing to variability in terms of the impact on student learning in her review of 100 studies on e-assessment

feedback.

Consider the role of marks - they obscure feedback

It has been shown that giving marks changes students' views of the learning task and obscures feedback (Dahlgren et al. 2009) and that just writing feedback comments on students' work and not giving any grade can result in more learning (Black and Wiliam, 1998). Could more courses therefore benefit from being pass/fail? Even if marks do have to be given, perhaps they can be initially withheld in order to encourage the students to spend more time reading and making sense of the feedback, and perhaps only released after the student has been asked to identify what they think their mark may be based on what the feedback comments say. A variation of this approach involves students in reflective self-assessment immediately prior to the return of the assessed work (Ramsey et al., 2002).

Reduce over-emphasis on written feedback - oral can be more effective

Studies have shown that oral feedback can be more effective than written feedback (e.g. King, McGugan, and Bunyan 2008; McCune 2004), and that it is possible for the tutor to say more orally than it would be possible to write in the same amount of time. Individual face-to-face oral feedback might be the most desirable but can obviously be resource intensive, although not in all cases. For example, 'quick and dirty' 'instant' laboratory reports assessed in a one-to one with the tutor before the student leaves the room may actually be a more efficient use of the tutor's time, particularly when compared with writing feedback on formal laboratory reports handed in some time after the lab. This also has been shown to provide more effective feedback (Gibbs, Gregory, and Moore 1997). However, oral feedback can also be provided in other ways and with ever evolving technology there are a growing number of potential ways to provide this.

Review resource allocations and manage resources strategically

We have tried to demonstrate that giving better quality feedback and engaging students with it may not necessarily require more time from staff. However, we would also suggest that there is a need for a serious consideration of resource allocations in universities and the question

as to whether, given its acknowledged importance both by higher education institutions and in the literature, and the current dilemma of this compared with our existing flawed practice, feedback and assessment generally should receive a greater share.

However, even if more resources are allocated to assessment and feedback, they are likely to be limited, and whilst resource efficiencies can be realised in feedback practice, they are less attainable than in other aspects of learning and teaching (Gibbs, Gregory, and Moore 1997). Here, a more strategic approach may be effective, in which enhanced resource is given at specific, critical 'feedback moments' when students find learning development particularly challenging (O'Donovan 2010) and when resource-intensive dialogic feedback potentially will have the most learning impact. Such moments may involve 'troublesome knowledge', epistemological jumps and points where there are changes in the level of support and autonomy (Meyer and Land 2005; O'Donovan 2010).

Cost-effective feedback on examinations

The common, current practice of not providing feedback on examinations but stating (while usually not promoting) that students who want feedback can ask for it, is arguably insufficient and likely to be increasingly seen as unacceptable by students. But to give feedback on all examinations to all students would need a substantial increase in resources, and be of questionable value given the importance of feedback 'utility' – in many cases, it is unlikely students would see how and when they would be able to apply the feedback. However, judicious use of cost-effective practices is becoming increasingly prevalent across the higher education sector and is to be welcomed. Good examples include: anticipatory feedback through feedback on mock examination questions, or the provision of previous examination papers with commentary on interpretation of questions and the common strengths and weaknesses of students' responses; post examination generic feedback, or timetabled feedback at the start of a common subsequent module the following semester, and; dialogic feedback to particular targeted groups of students (e.g. those requiring to resit examinations or with unexpected results).

Conclusion

The dilemma of the difference between the theoretical benefit and the practical failure of many of our current feedback practices is more than disappointing, and arguably reflects the limited and fragmented impact of pedagogic research on practice (Gibbs, 2003). But as has been argued previously (Bryan and Clegg 2006; Merry et al. 2013; Rust, 2007), if we take a scholarly and evidence-based approach, and adopt and apply a social-constructivist process model of assessment and feedback, there are examples in the literature of demonstrably effective methods and processes which can go some way to resolving the feedback dilemma. Such an approach would be enhanced by the development of assessment literacy in both students and staff. And whilst this paper focuses on achievable ways to enhance feedback processes by the individual academic practitioner, arguably it is those institutions brave enough to adopt evidence-based and theoretically sound approaches to assessment feedback, likely to involve fundamental changes to rules, processes and resource allocations, which will potentially gain the most in an era where student satisfaction has become increasingly important.

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