

Feedback: all that effort, but what is the effect?

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Constraints in resourcing and student dissatisfaction with assessment feedback mean that the effectiveness of our feedback practices has never been so important. Drawing on findings from a three-year study focused on student engagement with feedback, this paper reveals the limited extent to which effectiveness can be accurately measured and challenges many of the assumptions and beliefs about effectiveness of feedback practices. Difficulties relating to multiple purposes of feedback, its temporal nature and the capabilities of evaluators reveal that measuring effectiveness is fraught with difficulty. The paper argues that the learner is in the best position to judge the effectiveness of feedback, but may not always recognise the benefits it provides. Therefore, the pedagogic literacy of students is key to evaluation of feedback and feedback processes.

Keywords: feedback; evaluation; feedback effectiveness; pedagogic literacy

Introduction

Much staff time and effort goes into producing assessment feedback, but very little effort is made to examine its effectiveness. However, as resource constraints in higher education impact on the student experience, the importance of the effectiveness of our practices is brought into sharp focus. This is particularly true for assessment feedback which is arguably the most important part of the assessment process. However, the feedback process is considered limited in its effectiveness because, despite evidence of students' thirst for feedback (Hyland 2000; O'Donovan, Price, and Rust 2001), students do not necessarily read their feedback (Hounsell 1987) or, if they do, they may not understand or use it (Gibbs and Simpson 2004; Lea and Street 1998; McCune 2004). The extent of student dissatisfaction with the feedback processes is currently being revealed, for example, in the UK, by the National Student Survey (NSS 2005–2009; <http://www.unistats.com/>). This paper draws on findings from a three-year project addressing student engagement with assessment feedback to show that the objective measurement of feedback effectiveness is fraught with difficulties. The paper argues that given the complexity of the feedback process, particularly its temporal dimensions, measuring effectiveness with simplistic approaches can only provide proxy measures and a partial picture. The learner may be in the best position to judge the effectiveness of feedback but, on the other hand, may not always recognise the benefits it provides. Therefore, the assessment literacy of students is key to evaluation of feedback and feedback processes.

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Purpose, measurement and engagement

Measuring ‘effectiveness’ requires clarity about the purpose of feedback. Unless it is clear what feedback is trying to achieve, its success cannot be judged. Method and timing of measurement will be dependent on purpose but may not be straightforward. Similarly, a key factor in measuring effectiveness is who makes the judgement. If staff define the purpose and students make the judgement but hold a different view of purpose, how useful is the measure? Within the feedback process, clarity of purpose must be shared by all parties to enable evaluation to be useful. In this section, the purposes of feedback and the implications for measurement will be explored before considering who should play a part in evaluation.

What is it for?

Although a frequently used term, feedback does not have clarity of meaning. It is a generic term which disguises multiple purposes which are often not explicitly acknowledged. The roles attributed to feedback fall broadly into five, but not entirely delineated discrete, categories: *correction*, *reinforcement*, *forensic diagnosis*, *benchmarking* and *longitudinal development* (feed-forward), the latter being differentiated by a temporal dimension of being forward-looking rather than concerned with work already carried out. These categories act as a nested hierarchy, each building on information provided by the previous category.

Correction is central to the traditional definition of feedback, derived from cognitive science and closed-systems thinking, where the role of feedback is to ‘put things right’ by taking a corrective action. This implies clarity of direction in the feedback and an unambiguous corrective action which does not exemplify most educational feedback particularly in higher education. A reinforcement role was advocated by behaviourists such as Skinner (1968), who regarded feedback as a strong external stimulus providing positive or negative reinforcement to behaviour.

These two purposes are limited in many ways. Assessment in higher education requires performances that are multi-dimensional (Yorke 2003) and therefore, in response, the feedback must match that complexity. However, feedback is provided as part of an assessment process that uses both partially explicated criteria and professional judgement (O’Donovan, Price, and Rust 2008). This leads to an inevitable lack of clarity of assessment standards and therefore the potential for ambiguity in the giving, receiving and interpretation of feedback. Consequently, feedback in higher education has limited scope to ‘correct’ complex work.

Sadler (1989) acknowledges that feedback must include identification of errors or misunderstanding, but highlights the forensic role of feedback, diagnosing problems with the work. This links with the benchmarking role where feedback identifies a gap between what is understood/has been demonstrated and the standard of performance expected. The extent to which feedback can help to fill that gap rather than merely identify it may depend on the nature of the gap. Where the gap relates to the curriculum content, the feedback may be able to specify the knowledge that needs to be understood. However, where the gap identifies the need for development of, for example, academic or cognitive skills, feedback may not be able to be specific in its remedy for filling the gap due to the slowly learnt nature of knowledge needed to address the gap. As Kulhavy et al. (1985) has argued, ‘more’ feedback does not always equal ‘more’ learning. Staff perspectives are important here. Fundamental beliefs about learning and the learning process will strongly influence how they see the role of

feedback. With a content focus, the teacher may be acting as an expert providing further ‘knowledge’, whereas with a facilitation focus, the feedback is more likely to be concerned with development of the meta-cognitive skills and the learning process.

Feedback in higher education must be concerned with developing new ways of knowing (Lea and Street 1998) and, increasingly, the popular view is that feedback must explicitly address future activity, that is, feed-forward rather than feedback (Gibbs and Simpson 2004; Torrance 1993). This puts the focus on longitudinal development not only including feedback directed at supporting improvements in the next assignment but also providing advice and guidance that supports slowly learnt literacies (Knight and York 2004) and coming to understand threshold concepts (Meyer and Land 2006).

When and how?

There is a considerable difference between correction and future development, and consequently measures of effectiveness for each of these purposes will be different. For example, if the feedback is merely to inform the student about errors in their work, then ensuring receipt of the feedback maybe a sufficient measure of effectiveness. However, if the purpose of the feedback is to encourage the student not to repeat those errors and to develop their understanding, then the method of evaluation becomes more complex and is likely to involve measurement of the impact of feedback on future learning. However, attempting to isolate the causal effects of feedback makes evaluation very difficult, if not misleading (Salomon 1992).

The temporal dimension of feedback places feedback at a critical point for the learner in the learning process. Boud’s (1995) concept of consequential validity confirms the importance of the *effect* of feedback rather than just its delivery. For example, Woodward-Kron (2004) points out that if the learner lacks the necessary understanding of the disciplinary context, comments such as ‘your style should be more academic’ are likely to have little meaning for the student. Feedback can only be effective when the learner understands the feedback and is willing and able to act on it. In higher education, the likelihood of feedback providing unambiguous, categorical feedback to the student about the exact standard of all aspects of their work or how to improve is very low indeed with most feedback requiring interpretation. The student’s ability or willingness to do this might depend on the emotional impact of feedback (Layder 1997), a student’s pedagogic intelligence (Hutchings 2005) or the student’s past experiences (Maclellan 2001). In an environment espousing a focus on the development of independent thinkers, feedback can only be positioned as advice rather than instruction. Students have a choice about whether to act on feedback. Their motives to do so or not may result from positive responses such as deep consideration of the feedback and reasoned rejection of it, or negative responses such as distrust of the feedback provider. The timing of the response also means that the temporal dimension of feedback exists not only in its purpose and delivery but also in its application. Recognition that feedback can be used immediately and/or over a longer timeframe means that its temporal dimension has a consequential impact on the measurement of effectiveness.

Similarly, the relational dimension of feedback is complex. Feedback provided can help to shape perceptions of a relational dimension while at the same time the relational dimension is a factor in the extent of engagement with feedback (Price, Handley, and O’Donovan 2008). Views about the tutor–student power relationship

(e.g. the assumption of expert–novice) and about the purpose of feedback in the learning process will be implicit in the content and communication of feedback, and the extent to which feedback must be accepted or can be debated thereby providing messages about the relationship between tutor and student. Mann (2001) points out that where assignments become mere outputs to be produced, alienation – rather than engagement – ensues. Students alienated from assignments which they see as a ‘finished product’ are hardly likely to be interested in the feedback, and similarly if the feedback is viewed as a product rather than part of a relational process, it is less likely to generate a response.

In their review of feedback’s role in contemporary learning theories, Askew and Lodge (2000) characterise the cognitivist, corrective view of feedback as a ‘gift’ from the teacher to the learner, where feedback is a one-way communication. In contrast, the socio-constructivist view sees learning as a process developing through loops of dialogue where feedback is a process taking part within a learning context (Askew and Lodge 2000).

Hattie and Timperley (2007) suggest that it is useful to consider a continuum between instruction and feedback with the points towards the centre where feedback and instruction become entwined. For example, tutor–student dialogue within a seminar might involve both feedback and instruction. Feedback provided at different points on the continuum is likely to serve different purposes and require different levels of support for students’ understanding and ability to act on that feedback.

Who and what?

The involvement of at least two major players in the feedback process suggests that their role in the evaluation of feedback is critical. However, staff are faced with high levels of complexity when seeking to measure effectiveness, and students can only make judgements about feedback in line with their own expectations which may not align with those of staff. In addition, outside observers are sometimes used for making judgements about quality (and thereby effectiveness) of feedback. However, their objectivity does not guarantee a complete view of the complex web of contextual factors that influence the effects of feedback.

Input measures such as the quantity or frequency of feedback – and sometimes subjective judgements about its quality – are used as proxies for effectiveness. Only the former are easy to measure. Real effectiveness can only be measured by looking at the impact. However, given the complex issues around feedback, is the impact of feedback measurable? If some form of measurement is possible how accurate can it be? How close can we get to evaluation? How hard should we try? This paper has used findings from a study of engagement with feedback to throw some light on the issues of effectiveness and its measurement.

Study of engagement with feedback

The three-year study was undertaken to investigate how to engage students more effectively with assessment feedback. Underpinning the research design was the premise that student engagement with assessment feedback is not entirely the responsibility of students. Engagement is part of (and influenced by) a wider process involving others inside and/or outside a community of practice. The interactions

between context, staff and students produce student (and staff) engagement. The study was undertaken in the business schools of three partner universities (one traditional and two 'new' universities) in the UK. In addition, the study involved a 'cascade phase' with research undertaken in a further five 'cascade partner' business schools. The participants in the study included undergraduate and postgraduate students and also the staff who taught across a range of disciplines of subjects within the different business schools. In order to elicit staff and student perspectives and experiences of feedback, a range of data were collected using four main techniques: first, 35 semi-structured interviews with students (no. 15) and staff (no. 20) to investigate their perspectives and experiences of feedback in a higher education context; second, seven case studies across the three partner institutions to investigate different feedback methods; third, 776 questionnaires completed by students to ascertain student evaluations of different forms of feedback; and fourth, a series of initiatives undertaken in the 'cascade partner' business schools aimed at investigating issues raised through initial findings based on the other data collection strands. This paper draws largely on data from the semi-structured interviews.

A self-selected sample of students and staff were interviewed by a project researcher at the institutions where they worked and studied. The purpose of the student interviews was to explore with participants how effective they found their feedback in helping them to understand what they did well and how they could do better. The interviews included questions about the type, comprehensibility and usefulness of feedback received. Staff, in turn, were asked about the purpose and effectiveness of the feedback they gave, with their views explored through questions such as 'What do you think is the impact of the feedback you give?' The data obtained from these interviews were then analysed thematically to draw out patterns of ideas and experiences among students and staff. The use of the proprietary software package, NVivo, enabled the research to proceed iteratively between data collection and analysis, using techniques of constant comparative method, memoing and deviant case analysis (Miles and Huberman 1994). The process of the analysis was validated through discussion of the raw data – and then the findings – with others inside and external to the project.

Findings

The findings describe the perspectives of students and staff on effectiveness of feedback and examine particular factors that participants identified as pertinent to effectiveness. Quotes from participants have been used to illustrate views that typify common perspectives, although occasional exceptional views are included and also identified as such.

Student views

Students were generally critical of the feedback they received. Echoing prior research they sometimes reported incidents of illegible writing or an overly negatively tone of feedback, but more often expressed uncertainty resulting from what they saw as vague, ambiguous feedback:

It just says presentation. You don't know if it is our presentation, the way we were dressed, or something, it could have been anything.

Students found it difficult to adjust their approach to dealing with feedback when it was less directive than they had been used to at school. They often felt that this was due to a lack of care from staff rather than the result of receiving a different type of developmental feedback appropriate in higher education:

Feedback is just some notes on a piece of paper and then your mark at the end and your teacher they just give it back to you but I don't always really understand what they have written.

The need for and the difficulty of interpreting feedback was highlighted even where staff had tried hard to make feedback clear to students (for example by writing copious notes). Students felt that interpretation could only be gained through dialogue or by comparing examples of good work, but this was rarely available:

I just think that if someone could spend a little time ...

Unfortunately, students often very keenly felt (perhaps wrongly) that staff did not care enough to spend time on the feedback, particularly where tick box feedback sheets had been used which students regarded as 'an insult'.

Perceived relevance or applicability of the feedback was particularly important for students. Utility was identified as a key factor in their engagement with feedback. Opportunity for immediate use was seen positively and where students had been given feedback on drafts, they felt motivated to engage with and use their feedback and they could make sure 'you haven't completely gone off the rails'. Students expressed frustration and dissatisfaction about feedback where the improvement they should make was not spelt out clearly or was not immediately applicable in subsequent work, indicating a sense of dependency on staff and an expectation of prescriptive feedback. Aligned with this were concerns about the timing of the feedback, confirming previous studies that identified it as an important issue:

You've moved onto the next bit and you think, well, I can't use that.

Staff views

Staff recognised the place of feedback in learning and had faith that it made a contribution to learning, believing it helps student to 'leapfrog to the next level'.

However, they lived with dissonance about its benefits and their beliefs about the limited extent of student engagement but rarely attempted to measure the effect of the feedback they provide:

I have no idea if students understand this.

Rather than focusing on output measures, some staff judged their contribution to effectiveness by the quantity (and therefore quality) of feedback provided:

I write pages and pages of feedback ... [while another] tutor [may] write two sentences.

A few did provide the opportunity to get feedback on draft work, realising the high level of engagement for this type of feedback. However, staff rarely set up any formal mechanisms to require students to show how they had applied feedback.

Staff recognised that their expectations of what feedback is for and what it can achieve sometimes differed from those of students:

I think there ought to be some agreement on expectations.

They acknowledged that differences caused confusion and increased the likelihood of unfulfilled expectations providing students with ‘evidence’ of ineffectiveness. Unquestioned assumptions were also mooted as a basis for ineffectiveness:

We just take it for granted that they instinctively know what to do with feedback and I think they could do with some guidance.

Similarly, staff assumptions – about the clarity of the feedback provided and the opportunity for application – were that they were generally trouble free. These were reinforced by students’ resilience and continued commitment to the feedback system.

Purpose of feedback

The interview data illustrated a high level of confusion over the purpose of feedback among, and between, staff and students. Beliefs around purpose ranged from correction to longitudinal development in both staff and student groups, but for staff there were other imperatives that influenced their approach to feedback. So while they acknowledged that feedback provided a ‘yardstick of performance’, played a role in learning and development and helped to move students in the right direction, they also saw its purpose was to ‘flag up why they got the mark’, or ‘to cover my back’. A focus on justification for a summative mark often overshadowed the usually accepted purposes of feedback. On the other hand, students were very clear about the distinction between the mark and the feedback, looking to feedback to provide something different. However, students’ beliefs showed a narrower range of purposes with a focus on how to improve:

Something that helps you do better in the next piece of work; giving you a push in the right direction.

Their wish for direct application suggests that their view of the temporal dimension of feedback had a shorter timescale than that of staff.

Despite the differences in beliefs between students and staff, there was also an interplay between the experience of the feedback process and the beliefs held, particularly for students. Students – unclear about the role of feedback in higher education – were influenced by the type of feedback they received. Consequently many had reluctantly changed their view from that of developmental to justification of the grade, whereby the feedback did what they expected but not what they hoped – arguably a lost opportunity for effectiveness.

Course structures and feedback

Staff commented that they provided feedback in the hope that it would support students in later stages of the course; however, students saw limited opportunities for feedback. Modularised programme structures provided a variety of assessment tasks and a succession of different tutors with different preferences providing perceived barriers to utility, and consequently feedback was not seen as useful in the long term:

This is just a one-off block – it's unrelated to everything else I do.

Resource constraints

Both staff and students identified ways in which the effectiveness of feedback could be diminished by resource constraints. 'Efficient' feedback methods were cited as problematic by both staff: tick box feedback sheets are 'just nonsense ultimately'; and students:

if you put five assignments together the feedback sheets are very similar ... and it is like well did they actually read [our work]?

Similarly time constraints were believed to impact on feedback effectiveness:

I can only spend 20 minutes reading assessing and feeding back on a script. (staff)
I don't have time to do it. (student)

Relationships and dialogue

There were strong indicators from both staff and students that what is needed to enhance effectiveness is recognition of the relational dimension to feedback. One member of staff asked:

How does telling students to be more analytical help them acquire the skill?

This suggests that there is more to feedback than diagnosis and confirms the view of some staff that 'relationships are key'. Written feedback without dialogue often created frustration and disengagement.

What does clarify your aims and objectives mean?. (student)

Most staff encouraged dialogue by offering opportunities to meet students outside class but not all students took up the offer, sometimes because of poor experiences in trying to talk to staff including two extreme examples where staff were asked to discuss feedback but refused to talk to a student – 'he wouldn't give me the time of day' – or told the student to email. Students indicated their hunger for more opportunities to have a dialogue with staff.

Discussion

Students and staff made clear that effective feedback depends upon a range of factors that lead to a relational dialogic process which impacts on the development of student understanding of their subject and their learning. Therefore, judgements about effectiveness may require the use of input, process and output measures. However, meaningful evaluation requires a common agreement on the purpose of feedback or at least dialogue about purpose among the key players.

Differing perspectives on purpose

The findings clearly show considerable confusion about the purpose of feedback and what it can achieve. Staff and students both expressed a belief in the longitudinal

developmental function of feedback, but reported practice seems to focus on feedback's benchmarking and forensic role. The coupling of formative and summative assessment appears to intensify this problem, with feedback increasingly interpreted as a justification of the mark awarded, thereby limiting its developmental effect. This was exacerbated by the use of 'efficient' tick-box feedback forms which focused on benchmarking and providing analytical justification of the mark awarded. The focus on justification of the grade seems to affect students' belief about the role of feedback. Some students saw a distinction between mark and feedback and disliked feedback that just provided justification of the grade. However, those unsure about the purpose of feedback had adjusted and limited their view to align with the grade justifying feedback they were receiving. Limiting feedback to justification of the grade also reinforced the belief among students that feedback has no feed-forward opportunity. Such limitations on feedback are usually blamed on students rather than the practice of staff.

Most students, even when they did see the feed-forward function of feedback, took a more short-termist view than staff of the timeframe in which they could apply the feedback. The consequence of this difference was that students often considered feedback from staff to be vague and ambiguous because they could not immediately apply it to another piece of work. Instead, students were often looking for explicit instructions about how to do better next time, and much feedback did not conform to this wish.

The discrepancy that exists between the intentions of staff who provide feedback and the expectations of the recipients means that miscommunication and dissatisfaction is inevitable. The resulting confusion renders evaluation almost meaningless.

Usefulness and application

Despite the spectrum of views on purpose, there was near consensus about when feedback is useful, that is when it can be and is applied. Students want to see applicability in the content and timing of the feedback provided; staff want to see the feedback applied in subsequent work. The problem arises because of varying interpretations of 'applicable'. Clear, unambiguous, instructional and directive feedback is generally welcomed by students; they know how to interpret it and apply it. Application of more open, interpretable feedback has higher risk if used in subsequent summative work given that their interpretation may not accord with that of staff. Consequently, students learn to value this type of feedback when they have the opportunity to discuss it and develop their understanding of its meaning. Staff want to give feedback to support students learning in the short and long term with the expectation that it will be applied by students in all subsequent works, not just the next draft. However, it is unlikely that they will be the recipients of all the students' subsequent works and therefore cannot gather evidence of the extent of application.

Relational dimension of feedback

Students and staff were clear that the relationship between student and assessor is at the heart of a successful feedback process. However, measuring the extent of the relational dimension cannot be reduced to observable inputs or outputs. Where there was no evidence of relational dimension, students found engagement with feedback difficult and staff had no means by which they could gauge the effect of the feedback provided. This crucial element can only be measured by the participants in the relational process.

Who should evaluate?

An evaluator's belief about purpose and about how the feedback process works will underpin their judgements about effectiveness. The range of purposes attributed to feedback by staff would suggest that in evaluating feedback, they would be looking for a range of effects. The findings suggest that, in practice, the evaluation of feedback relies more on faith than scientific investigation, but this seems to arise from the difficulty of determining effectiveness rather than a reluctance to measure what is assumed to be positive. Very few attempted to monitor the effect of the feedback they gave using a systematic or positivist approach but some sought to gain general impressions from fairly serendipitous interactions with students. These impressions were often derived from indicators of relationships that had developed and supported learning.

Although staff found difficulty in evaluating the effectiveness of the feedback they provided, students make judgements about its quality all the time. It is relatively easy for students to comment on the feedback 'service' that is provided – how much feedback? How often? How legible? How accessible? However, within the evaluation of the 'service', they are also making judgements about the reciprocity of staff and the relational dimension of feedback which, in turn, affects the level of engagement (Price, Handley, and O'Donovan 2008). Making judgements about the effectiveness of feedback in relation to their own learning is more difficult. They make personal judgements about whether to pay attention to the feedback provided, how they will use it and when and where to apply it. These judgements are dependent on a range of factors but students are at least in a position to know if and when they use feedback. However, for a student to evaluate their feedback they must be able to discern an impact on their actions and ideally on their learning. In order to be able to do this a student's ability to reflect on and have an understanding of the learning process must be reasonably well developed. As has already been noted, students generally have a limited or, at least, a more 'immediate' conceptualisation of feedback. Although they recognise its role in improving performance, they do not appreciate its contribution to the long-term development of learning and understanding. In order to evaluate such a complex process, and the role of feedback within it, students need to have some understanding of pedagogic concepts and processes. However, the extent of students' pedagogic literacy is generally too limited to enable them to provide meaningful evaluations.

Feedback is also evaluated by external 'observers'. External evaluators usually have a background in pedagogic practice and a developed pedagogic literacy enabling them to appreciate the multiple purposes of feedback and its temporal dimension. However, attempts to measure feedback effectiveness without being involved in the process brings dangers of treating feedback as a product (i.e. an observed output) rather than a process. In evaluating feedback with only limited knowledge of the relational dimension between staff and students, the expectations and engagement of students, and perspectives of staff, it is likely that any judgement will be based on assumptions rather than evidence of impact.

Consequently, we have a situation where students evaluate feedback with the benefit of first-hand experience of using feedback but without the pedagogic literacy to fully understand its role in learning processes. Staff usually better understand the role of feedback in the learning process but do not have the opportunity to follow the learners' development. Furthermore, staff operate in a system where external

observers evaluate feedback on the basis of ‘snapshots’ of a long and complex process. Those ‘snapshots’ may, in turn, have an unintended negative effect on the feedback being given when it is focused on justifying the grade, perhaps, for an observer such as an external examiner rather than the student.

Measures of effectiveness

Input measures such as timing, frequency, quantity or externally judged product quality can only indicate that some of the conditions for effective feedback are in place. They cannot prove that feedback is effective. The qualitative nature of process requires the engagement and judgement of the feedback participants. This is sometimes indicated by the proportion of feedback (as product) that is collected. However, where the process is relational, the effects of feedback are often seen within the process as discussion or action. Feedback is deemed to be ineffective if students do not act on it (Gibbs and Simpson 2004), suggesting that process outcomes are key. The effect of simple, corrective feedback processes would be easiest to ‘measure’ but this research, unsurprisingly, yielded few examples of straightforward and unambiguous feedback which just corrected errors and/or provided a clear direct future action. Most feedback had a level of complexity in terms of interpretation, and a temporal dimension which severely limited the possibility of isolating the effect of the feedback. Feedback in higher education often has a high level of ambiguity and is nebulous in nature, aimed at the long-term development of the student which means that how and when the student chooses to act on it is variable and not easily identifiable. Students respond to their feedback in different ways at different times which means that the point at which evaluation should be carried out is very difficult to identify. In addition, the problem of isolating the effect of feedback within the multifaceted learning environment means that causal relationships are difficult if not impossible to prove (Salomon 1992).

Measuring effectiveness and resourcing

Basing resourcing and quality decisions on what is ‘easy’ to measure is common in higher education (e.g. number of students in classes, number of assessment points, time limit for feedback return) but can result in effects that diminish rather than enhance the opportunities for effective learning. It is clear from the findings that the aspects of feedback that support development of the learner are not easily measured and must rely on less objective measures. Important input measures may include the efforts to develop student understanding of the learning process to enable them to make informed judgements about the effectiveness of feedback. Measures of resources such as time can indicate the facilitation of a relational feedback process but not its quality. Similarly, output measures must depend on the qualitative judgements of the learner and the subsequent assessors. It is likely that the allocation of resources will need to be reviewed in order to support an effective feedback process.

Conclusion

Accurate measurement of feedback effectiveness is difficult and perhaps impossible. Furthermore, the attempt to measure effectiveness using simple indicators – such as input measures or levels-of-service – runs the risk of producing information which is misleading or invalid and which may lead to inappropriate policy recommendations.

Students are dissatisfied and staff frustrated about the way the process is working, yet staff are reluctant to attempt to use crude measures of effectiveness because they recognise it to be a complex process. However, we cannot rely solely on responses to external reviews or surveys such as the NSS in the UK because they are either too distant from the dynamics of the feedback process or because the evaluators lack sufficient pedagogic literacy to go beyond mere judgement of feedback 'service'. Unfortunately, the confusion about the evaluation process cannot be resolved by new rules or methods alone.

Resolution requires a dialogue between players in the process in order to share understandings of the purposes of feedback which are most relevant in higher education, and how those can be met. Evaluation must rely on the parties involved in the feedback process which means there must be trust in the professional judgement of staff and confidence in students' ability to understand the role and practice of feedback. Further development of assessment literacy of the players, particularly students, in the feedback process offers the opportunity to harmonise views on purpose and process. A focus on the relational dimension of feedback will lead to increased engagement, provide staff with opportunities for monitoring feedback effectiveness and enable students to make informed judgements about the feedback process.

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