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Introduction

Feedback can be an important catalyst for improvement. Helpful comments which enable students to see issues from fresh perspectives are central in supporting the ongoing development of work in progress. In mass higher education, there is a variety of evidence from different contexts that students and teachers have misgivings about the ways in which feedback processes are currently handled (Boud and Molloy 2013). Students perceive that feedback often comes too late to be useful; it frequently fails to connect; and there are usually insufficient opportunities to act on the feedback received. Both teachers and students experience frustration with the limited positive impacts of how feedback processes are managed.

Given the centrality of feedback for learning, there is an urgent imperative for fresh ways of thinking about feedback processes and associated development of staff and student feedback literacy. The aim of this entry is to chart some prospects for feedback as dialogue: how students can take a more active role in seeking, generating, accessing, and using feedback. For feedback to be sustainable, students in higher education

cannot rely predominantly on the teacher to provide insights in that they need additional ways of developing their own capacity to make informed judgments (Carless et al. 2011).

At the outset, it is worth considering meanings of feedback. Central to my position is to view feedback as a process not as a product which is delivered to students. Feedback processes involve information which usually comes from a peer, a teacher, or oneself. They also involve sense making when students engage with and interpret comments they have received. Building on these strands, feedback is defined as follows:

Feedback involves dialogic processes whereby learners make sense of information from various sources and use it to enhance their work or learning strategies.

The notion of students using feedback is crucial because only then are feedback loops successfully closed. A problem with much current feedback practice is that it involves hopefully useful information that is not acted upon (Boud and Molloy 2013). Transmission forms of feedback are limited in analogous ways to transmission forms of pedagogy (Sadler 2010).

In the next section, feedback is contextualized within a wider set of influences, such as curriculum, pedagogy, and assessment. Then in the main section of the entry, five ways in which feedback processes can operate dialogically are analyzed. Some challenges for dialogic feedback and how

these might be tackled are then discussed. The conclusion sums up some key messages.

Contextualizing Feedback Processes

Feedback processes are more than about feedback per se; they are part of a wider network of factors which include curriculum, pedagogy, and assessment. Successful feedback exchanges are also reliant on positive relationships between participants: often a challenge in mass, sometimes impersonalized, higher education.

Feedback processes need to be seen as an integral part of the curriculum and certainly not just something that comes at its end. Feedback should be embedded within curriculum design to facilitate opportunities for students to engage with feedback and carry out productive dialogues about academic work.

In line with this perspective, there are also pedagogic dimensions to feedback which evolve from how teachers interpret their roles in the instructional process. A conception of teaching focused mainly on information transfer may lead to teacher-controlled forms of feedback, for example, correcting misconceptions. A constructivist view of teaching suggests a more active student role in feedback processes.

The way sequences of assessment tasks are designed is an important facilitating or inhibiting factor for dialogic feedback. When there is a cumulative series of tasks in a course, there is greater potential for feedback from one task to inform the next. With these kinds of assessment designs, students engage more actively with feedback messages because they can use them when it counts toward their course performance. Conversely, a one-off examination or end-of-semester essay may have some pragmatic or academic advantages, but these forms of assessment are unlikely to promote productive feedback processes.

The pedagogy of feedback processes also involves relational issues, such as care, trust, class atmosphere, and relationships between participants. Relational aspects of feedback are salient in that feedback is an aspect of interpersonal communication. These often lead to tensions between critical feedback which risks harming the self-esteem of the recipient and more encouraging feedback which may fail to stimulate desired improvements. Honest, constructive comments are more useful than empty praise, but it is a hard line to draw. One person's constructive critique may be another's wounding criticism. When providing searching commentary, it is useful to reiterate that the aim is to help the learner to grow. Trust develops when one perceives that an interlocutor has one's best interests at heart. Conversely, distrust can emerge from feedback providers who seem threatening, unapproachable, or dogmatic (Carless 2015).

Implementing Dialogic Feedback

Five ways in which feedback processes can operate dialogically are now discussed: integrated cycles of guidance and feedback, peer feedback, technologically facilitated feedback, internal feedback, and teacher-generated written feedback.

Guidance as Feedback

One of the main problems that students perceive with feedback is that it often comes too late for them to use, especially in relation to summative comments on end-of-semester assignments. This problem is exacerbated in that students find it difficult to use feedback from one course on another course taught by a different teacher.

A useful pedagogic strategy to tackle this problem is to provide integrated cycles of guidance and feedback within regular course scheduling (Hounsell et al. 2008). Students value guidelines about what is expected, support in understanding criteria, how they might tackle assignments, and preemptive hints based on teacher understanding of common problems students experience in the assignments being undertaken.

An important part of the guidance process is clarifying goals, expectations, and standards. A common strategy is to involve students in generating criteria or rubrics: such processes start to engage students with the characteristics of good performance. Probably even more useful from the

student perspective are samples of student work: exemplars of performance from previous or parallel cohorts. Exemplars are concrete manifestations of quality (Sadler 2010). The dialogic analysis of such samples can play an important role in students developing an appreciation of the nature of quality work.

A complementary strategy involves the use of "on-display assignments" (Hounsell et al. 2008) in which student work is openly visible to classmates rather than remaining private. Oral presentations, posters, and group projects carry visibility, thereby facilitating opportunities for dialogue, peer feedback, and clarification of standards. These act as guidance by enabling students to self-evaluate their performance against that of others.

Peer Feedback

Peer feedback or peer review involves students commenting on each other's work. Students gain a lot from examining their peers' assignments, identifying strengths, weaknesses, and areas for improvement. Such processes begin to sensitize students to what good performance looks like and differences between their work and that of others. There is also potential for peer feedback to be available more quickly and in greater quantity, in comparison with more authoritative but slower teacher input.

Students often resist peer assessment using marks because they do not feel comfortable awarding grades to their friends and classmates. This is why peer feedback is usually more effective than peer assessment. There is also sometimes student resistance to receiving comments from peers because they worry they are not sufficiently insightful or that some classmates do not take peer feedback seriously. An important counterargument is that the processes of peer review go beyond the usefulness of specific individual comments. Peer review opens our horizons to different ways of doing things and enables us to compare our approach to that of others. It can remind us what we are doing well and also sensitize us to key areas of improvement.

A key research finding is that the giving of peer feedback is often more beneficial than receiving comments because it is more cognitively engaging: involving higher-order processes, such as application of criteria, diagnosing problems, and suggesting solutions (Nicol et al. 2014). This is an important part of the rationale for peer feedback which needs to be communicated with students so that they are clear about the potential benefits of involvement in peer review. Student involvement in peer review processes should be a core component of course designs (Sadler 2010).

Technology-Facilitated Feedback

Technology has considerable potential to promote feedback dialogues, especially when it is pedagogy rather than technology which drives developments. Learning management systems (LMSs), such as Moodle, can be used to store feedback, and students might be required to show how they are using feedback from previous assignments to inform current submissions. Discussion forums on LMSs can enable students to involve themselves in dialogues around course content or work in progress. These are often more motivating for students when some kind of incentive is included, for example, assessed participation or online quizzes. Social media, such as Facebook or Twitter, are also increasingly being used for academic interaction.

Peer review can also be enabled through technology. For example, within the Turnitin suite of applications, PeerMark can be set up to allow students to read, review, and evaluate submissions from one or more of their classmates. Clickers or electronic voting systems can be used to collect students' views, promote peer discussion, and enable teachers to understand learning progress. These strategies relate to the pedagogic principles of peer review and integrated guidance and feedback as discussed above.

Electronic marking and feedback through tools, such as "Track Changes" or annotated PDF documents, seem popular with students, although still attracting some resistance from staff (Glover et al. 2015). Another recent trend is audio or video feedback, whereby teachers record verbal commentary on student work and then send the file electronically. This kind of feedback enhances students' perceptions of teacher concern

for their progress and seems to carry potential to enhance relationships between participants. An additional dimension involves student response to audio or video feedback comments, for example, through screencasts.

Internal Feedback

Internal feedback refers to the inner dialogue or self-monitoring in which students are engaged when they are tackling a task. All students are producing internal feedback as they work on tasks and assignments, but many students are not self-monitoring effectively. The development of students' capacities to monitor themselves is congruent with a key aim of feedback processes to enhance student abilities to self-evaluate their own work (Nicol and Macfarlane-Dick 2006).

Students refine their ability to self-evaluate their performance when they are involved in activities which involve them in making academic judgments, developing better understandings of what good work looks like and how it differs from their attempts, and strategizing to close the gap between the two. Peer feedback and the analysis of exemplars of student work are two processes discussed above which support these goals.

The student development of judgment needs to be embedded systematically across the duration of an undergraduate program. There is evidence that students can become more accurate in judging standards of their own performance when given extended opportunities to self-evaluate (Boud et al. 2015). Enhancing student capacity to make judgments and self-evaluate effectively is arguably one of the most useful things teachers can do.

Dialogic Written Feedback

Even within conventional marking of student written work, it is feasible to engineer some dialogue. On the cover page of their assignments, students can be asked to state those aspects on which they would most like to receive feedback (Nicol 2010). This prompts them to reflect on their work and starts to develop some partnership in assessment and marking. It may also save the marker time as they can focus their comments

more on the issues identified by students. Feedback is sometimes based too much on what the teacher wants to say, rather than on students' needs and interests.

Another variation would be for the cover page to include a summary of how students have addressed previous comments that they have received. In this way, students are being prompted to build a cumulative sense of the feedback they are engaging with and indicate how they are acting on feedback messages.

Written feedback which raises questions rather than setting up teacher comments as the final judgment also contains possibilities for developing dialogue. Such processes can be facilitated through iterative cycles of drafting, revising, and resubmitting when there is more potential for written feedback from teachers or peers to be acted upon. Students need to be encouraged and supported to close feedback loops. This is an important part of their feedback literacy.

Addressing Challenges for Dialogic Feedback

Various challenges for dialogic feedback and how these might be tackled at institutional, student, and teacher levels are now discussed.

An obvious institutional barrier relates to large class sizes which would impede teacher-intensive forms of feedback. An emphasis in this entry has been on peer review, student self-evaluation, and technology-enhanced feedback as practical tools which have potential to alleviate, if not fully overcome, the challenges of teaching large classes. Further institutional barriers include lack of time. resources, and incentives which are compounded by the need for many staff to prioritize research. An emerging trend in a number of British universities is an extension of teaching excellence awards to include other elements, such as "best feedback award." This provides recognition for good practice, stimulates the surfacing and dissemination of worthwhile feedback strategies, and reinforces the image of feedback as being an important issue, worthy of attention.

There are also various student-related barriers for effective feedback processes. In relation to

peer review and self-evaluation, not all students interact deeply with peers on academic matters and some may lack the motivation to do the hard work of reflecting on their performance. They may prefer to use social media and technology for leisure rather than academic work. These points relate to the thorny issue of student engagement. A potential way forward is to develop course climates in which norms include giving and receiving peer feedback and reflecting on progress. Teachers need to have faith in students to want to maximize their learning and be willing to generate and use feedback for their own improvement.

At the teacher level, a barrier is modest assessment and feedback literacy. Only a minority of teachers seem to have thought carefully about assessment task sequences and effective feedback designs. For some, feedback may equate to marking which is generally regarded as an unpleasant academic chore. Feedback as dialogue is best implemented through thoughtful, skillful, student-focused teaching. This is often not easy in view of the multiple demands of academic life. The assessment literate teacher involves students in communication and negotiation around feedback processes and scaffolds student assessment and feedback literacy, so that students become clearer about their active role in seeking, engaging with, and using feedback.

The practices discussed in this entry are intended to be workload neutral. Teachers need to focus their efforts on where guidance and feedback have most potential, spending less time on forms of end-of-semester marking which the literature indicates are unproductive. Teachers could include more in-class dialogic activities which support student development of evaluative capacities and less time on one-way transmission of comments after a course is completed. Effort invested on the development of student feedback literacy might in the long run achieve workload economies for teachers.

Conclusion

To sum up, effective feedback processes go beyond comments and marking in that they are the products of wider sets of influences which include curriculum design, assessment policy and practice, how teaching and learning are approached, and relationships between participants.

Feedback is a contextualized form of social communication in which care must be taken with blanket recipes. This caveat notwithstanding, promising practices in developing dialogic feedback processes mainly involve:

- Activating the student role in seeking, generating, and using feedback
- The integration of feedback, assessment task design, and the development of student capacities to make academic judgments
- Timely discussion of student work, including in-class guidance, peer feedback, and technology-enhanced dialogues
- Creating course climates which encourage and facilitate the above

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