

## Four recent papers on assessment and feedback with significant implications for practice

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### Introduction

This document draws attention to some fresh perspectives on assessment and feedback. It summarises four recent papers that raise important issues and that challenge current thinking and practice. They specifically focus on feedback for learning, which is a concern in higher education due to the findings of successive National Student Surveys, where students show least satisfaction with this aspect of course provision. Many universities are trying to address this through curriculum interventions. The following papers might inform such endeavours.

#### Paper 1

Sadler, D R (in press) Beyond feedback: Developing student capability in complex appraisal, *Assessment and Evaluation in Higher Education*.

#### Why is this paper important?

This paper challenges much conventional thinking underpinning feedback practices in higher education and offers a new model for practice that is truly learning-centred.

#### The premise

The premise of this paper is that formative assessment and feedback should empower students to become self-regulated learners, able to make their own appraisals of the work they produce, both during and after its production.

#### The issue

Sadler's concern is that 'telling' students about the quality of their work through the provision of teacher feedback will leave many students unprepared for life beyond the university. It will not develop high-level evaluative skills in complex learning domains, where students are expected to produce high-quality work on their own.

Sadler analyses what would be required for students to convert teacher feedback, often a one-way message, into action for improvement and highlights significant problems: relating the feedback to what they have produced; understanding the concepts and criteria behind the communication; lack of tacit knowledge to identify the feature of their work to which some part of the feedback refers; assimilating the feedback into their knowledge networks so that it can be drawn on and used to inform future work.

## **The solution**

Having outlined the issues, Sadler then analyses how teachers develop the ability to make complex appraisals of students' assignment productions, and proposes that students should be provided with appraisal experiences similar to those of their teachers. In brief, teachers acquire complex appraisal skills because they are exposed to a range of student productions with reference to the same assignment brief, they make hundreds of qualitative judgements routinely each year in relation to these assignments, and they provide explanations for those judgements making use of criteria.

Peer appraisal and feedback, according to Sadler, should be the main strategy for the development of students' evaluative skills. Students should be given regular opportunities to evaluate and provide feedback on each other's assignments and to provide explanations for these evaluative judgements. Obviously these peer designs will have to be carefully structured for maximum effect. Nonetheless, the overriding goal is that students' develop their ability in complex appraisal and, over time, an understanding of what constitutes quality similar to that possessed by their teachers.

## **Implications for practice**

Relying on detailed teacher feedback is an unproductive strategy for the development of complex learning in a complex world. In the 21st century, the curriculum will require that we:

...make intensive use of purposeful peer assessment as a pedagogic strategy, not just for assessment but also for the teaching of a substantive content of the course....if this process were to be entirely successful, the need for substantial reliance on feedback from the teacher would be obviated altogether (Sadler, 2010).

## **Paper 2**

Orsmond, P and Merry, S (2009) Processing tutor feedback: a consideration of qualitative differences in learning outcomes for high and non-high achieving students. Paper presented at the Fostering Communities of Learners, 13<sup>th</sup> EARLI Conference, Amsterdam, 25-29 August 2009.

## **Why is this paper important?**

It challenges the idea that all students react to teacher feedback in the same way. It suggests that some students are highly dependent on teacher feedback and that increasing its provision might increase their dependency on the teacher.

## **The premise**

To use feedback students need to engage in acts of self-regulation. They must pay attention to the feedback, internalise it and use it to make judgements about, and change, their work. This involves internal acts of comparison and assessment. There is little experimental evidence about how students regulate their learning from teacher feedback or about the balance between internal regulation and external tutor regulation.

## **A study**

Orsmond and Merry carried out an interview investigation across four universities of high and non-high achieving third-year biology students' perceptions of teacher feedback. Achievement was determined by the students' grade-histories. The interview schedule focused on how the students read tutor feedback, what actions were taken in response to feedback, the people students spoke to about their feedback, and how these discussions helped them understand it.

Interestingly, Orsmond and Merry found a consistent pattern across all four institutions. Non-high achieving students were much more focused on the surface features of feedback messages than high-achieving students, who sought the meaning behind the message. The non-high achieving students reported that they were often unable to relate comments to their work, trying to memorise what the tutor wrote, having concerns that different tutors gave different comments, and having difficulty translating

comments into actions. The high-achieving students reported trying to understand the essence of the feedback message and how it related to their work. They did not accept all feedback, sometimes challenging it and believing that tutors could be right or wrong. Most, believed that they could get by, even without teacher feedback. In contrast, non-high achieving students generally accepted the tutor's judgement and believed feedback was crucial to their success.

Importantly, high-achieving students had a higher purpose in mind when using tutor feedback related to their own self-constructed learning and career goals, whereas non-high achieving students had a narrower focus on the object of that specific learning episode. In this, and in many other ways, the low-achieving students showed a high-dependency on the teacher. They sought teacher feedback often with the sole intention of making incremental improvements in their work until they had produced what they believed the teacher was looking for. Orsmond and Merry conclude:

...students need to see the end point of feedback in terms of self rather than in terms of others. Changing the perception of tutor feedback in non-high achieving students could have a major impact on their learning. This cannot be done through tutors writing more detailed feedback, or even in tutors and students discussing feedback that has been given (Orsmond and Merry, 2009).

### **Implications for practice**

Feedback strategies must be designed to move students from teacher regulation to internal regulation. Otherwise there is a danger that students will get trapped in a dependency relationship.

### **Paper 3**

Chi, M T H, Roy, M and Hausmann, R G M (2008) Observing dialogues collaboratively: Insights about human tutoring effectiveness from vicarious learning, *Cognitive Science*, vol 32, pp 301-341.

### **Why is this paper important?**

It suggests a way of making one-to-one tutor-student dialogue, regarded as the most effective form of feedback, available to the benefit of many students. It offers a long-term strategy for solving some workload issues in mass higher education, where tutor numbers are small and student numbers are large.


### **The premise**

In traditional learning in higher education, face-to-face teacher-student tutoring is the gold standard. Many teachers believe this and research provides support for the proposition. However, one-to-one tutoring is difficult to achieve when numbers are large.

### **The study**

Chi, Roy and Hausmann were interested in how to leverage the benefits of human tutoring in environments where there are many students. In a controlled study, they investigated the benefits of the sharing of videotaped teacher-student tutorial dialogues. Specifically, they examined the learning that occurs when students engaged in dialogue in pairs while observing and consulting a pre-recorded videotape of a single student in a tutorial discussion with an experienced physics tutor. This condition was called 'observing collaboratively'. Collaborative observers were encouraged to discuss the videotape and their understanding of it at any time: they could stop, rewind, or fast-forward any section of the tape.

These researchers showed that students 'observing collaboratively' learned to solve complex physics problems just as effectively as students engaged in the direct one-to-one tutoring and more effectively than students collaborating (that is, interacting in dialogue and reading), or observing alone or studying alone. Their measure of learning was ability in solving different problems but in the same domain in a post-testing situation.



The amount of learning by the peer observers was shown to depend directly on how actively engaged they were in peer discussion and in constructing meaning. The benefits of this approach do not occur by passive watching of the videotape, and are only achieved if the recipe proposed by these researchers is followed. They refer to this as the **active/constructive/interactive/observing** method.

### **Implications for practice**

This research holds great promise for higher education in that it identifies a way in which the benefits of one-to-one tutor-student interaction might be made more cost-effective and scaled-up for the mass higher education.

## **Paper 4**

Nicol, D (in press) From monologue to dialogue: Improving written feedback processes in mass higher education, *Assessment and Evaluation in Higher Education*.

### **Why is this paper important?**

It challenges current approaches that set out to improve feedback quality by focusing only on the written feedback message. It offers an alternative framework where feedback is conceptualised as a dialogical process, and it provides examples of this in practice.

### **The premise**

The many diverse expressions of dissatisfaction with written feedback both by students and teachers can be interpreted as symptoms of impoverished and fractured dialogue. Mass higher education is squeezing out dialogue with the result that written feedback, which is essentially a monologue, has become the main locus for teacher-student interaction.

### **The Issue**

The findings of the National Student Survey indicate that students want more timely, detailed and clear feedback information from their teachers, and many higher education institutions are putting in place strategies to deliver better quality feedback. However, this focus only on improving the transmitted message is too narrow and is bound to have a limited impact. The delivered feedback message is only one component in a wider, ongoing and cyclical system, and its meaning is determined by its location within that system; it is not just a product delivered to the student at the completion of an assignment. Rather, it is part of a dialogical process wherein students as well as teachers must be active.

### **The Solution**

Nicol proposes that feedback interventions should take account of, and act on, the full range of components in the feedback cycle. They should enhance students' engagement in dialogue with teachers and with peers and they should trigger reflective processes. Proposed interventions illustrated in the paper embody a specific model for dialogue drawn from research. Examples include approaches that enhance dialogue around the assignment brief and that enrich teacher-student and peer dialogue during and after assignment production.

Nicol stresses the role of feedback production for the advancement of learning.

...in peer commenting and in collaborative authorship students produce feedback comments, they are not just receiving them. They analyse each other's writing, detect problems in understanding and they make suggestions for improvement (Nicol, 2010).

Producing feedback is cognitively more demanding than receiving it, as it involves higher levels of reflection and engagement. Nicol notes that producing feedback might be more effective for learning than responding to it. This is an area that merits further investigation.

### **Implications for practice**

Feedback strategies must be designed from a dialogical perspective. The model proposed here emphasises the active role of the students, the role of reflection and the importance of harnessing the unique power of peer interaction. Improving feedback dialogue would not involve increased workload; rather it calls for targeted redesign.

### **Accessing these papers**

**Paper 1:** Contact Royce Sadler ([r.sadler@griffith.edu.au](mailto:r.sadler@griffith.edu.au)) or David Nicol ([d.j.nicol@strath.ac.uk](mailto:d.j.nicol@strath.ac.uk)).

**Paper 2:** Unpublished but available at <http://www.psy.gla.ac.uk/~steve/rap/docs/orsmond09.pdf>

**Paper 3:** Published paper and available through your university library.

**Paper 4:** Contact David Nicol ([d.j.nicol@strath.ac.uk](mailto:d.j.nicol@strath.ac.uk)).

When requesting these papers from Royce or David put QAA as the first word in the subject line of your email. Note that both these papers will be available in the journal as a pre-print within the next few months.



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