

Providing quality feedback - Where to from here?

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***Abstract:** For students to progress, feedback is essential. Without feedback it is difficult for students to progress because they have little measure of their cognitive and skill development; in partnership with a facilitator or tutor it is easier. Within this partnership, however, some types of feedback are potentially more powerful than others. We argue that assessment tasks which provide a structure to encourage a feedback loop may provide the students and tutors with more opportunity for progression and performance at a higher level. For students to achieve the necessary cognitive and skill outcomes; they need to understand each of the steps they are taking along the way. If we can give students feedback that helps them reflect on their behaviour, they may progress more rapidly along this pathway and if we take our tutors with us on this journey then the learning outcomes we desire might be achieved.*

What is student feedback?

Feedback by educators to students is a key feature of formative assessment (Black and Wiliam 1998). Such assessment is specifically intended to provide feedback on performance to improve, accelerate and lead to a higher level of achievement in cognitive and skill outcomes (Sadler 1998; Hounsell 2003). Black and Wiliam (1998) suggest the word feedback be used in its least restrictive sense, to refer to any information that is provided to the performer of any action about that performance. The simplest form of feedback on a formative assessment task is often a grade or a mark which do not deliver as much formative effectiveness as tailored comments (Sadler 1998). Marks alone are perhaps even detrimental to students (Black and Wiliam 1998). Comments too may be limiting, with respect to affecting improvement in student performance, especially those which are focused on positive or negative aspects of a student's self image. Students may not know what to do with the feedback they receive (Sadler 1998). Concurrently, tutors may not know how to provide tailored comments which suggest alternative paths which could lead to improved performance (Sadler 1998). This may be one reason that they provide comments which contribute solely to the student's self image. In this paper, we offer preliminary observations on how students respond to different types of tutor feedback, as written on the first draft of an assignment. The aim of this paper is to describe this assessment task and feedback strategy which has been used to improve the feedback provided to students by tutors. In order to stimulate behavioural change by students, we give students an assignment where they are required to complete a task, submit a draft and resubmit the final attempt (for further marks) after they have received feedback from tutors. This provides a powerful incentive for students to try to understand the tutors' comments, in an effort to ensure that they actively try to improve their learning outcomes. Concomitantly, we describe our observations of some valuable aspects of the ongoing teaching development of members of our teaching team and the potentially significant process of peer dialogue among tutors to improve their feedback to students (Tronson 2002).

A case study

In a first year Biology unit at the University of Western Sydney, one assessment task requests that the students submit a report from a take home experiment where they test a hypothesis by designing an experiment and analysing the results. They subsequently resubmit the report after receiving feedback from a tutor. The students are provided with a proforma of assessment criteria, which was developed with the input of the tutors, and is accompanied by a detailed marking scheme. This helps both the students and tutors see that there is alignment of the assessment with the cognitive aims of Biology 1 (Biggs 2003). A series of workshops are held with the students on how to write a report and how to access information in the library. In the workshops, the students use the marking scheme



to assess reports from previous years (used with permission of former students). A separate workshop is held with the tutors where they assess the previous reports; and later the assessment techniques are reviewed using a selection of current reports. When the students submit their draft report, it is marked by tutors, who provide detailed advice on where the students can improve. Students use the feedback they receive from tutors to reflect on, review and make changes to their report for a final submission and assessment. It has been noted in other studies (Black and Wiliam 1998) that this is an effective way to ensure that students actively attempt to improve their learning outcomes. The assessment of the resubmitted final report is done rapidly, but, includes a review of the original draft and takes account of how well the students have noted the tutor's original comments. We have observed that the feedback provided by tutors differs in quality. Some of the feedback is in the form of short statements, serves to reinforce self image or questions the students (e.g., Where is xxx section? What could you do now? Table 1). We have observed that students who receive the higher level of feedback, which suggests 'ways to improve', are those who make the most adjustments to their original draft. We have found, that feedback which provides questions, comments or is directed to the students' self image, is not particularly helpful to students and usually does not elicit any behavioural change at the re submission of the assignment (Table 1). Indeed student's made several unsolicited comments (in student evaluation survey's) that there was a need for more 'consistency in marking from tutors to prevent biases in marking' and yet valued 'feedback which allowed a redesign of the assignment'. In recent times, the final re-assessment of these assignments has included tutors re-marking a variety of reports which were originally assessed by their fellow tutors. In the process, they read and reflect on the comments which the original marker has placed on the report. This reflection leads to questions and comments such as: 'these comments (by another tutor) do little to assist the student progress'. Further, tutors have noted that feedback which requests students to make a behavioural change is the type of feedback which is required to enable the students to progress to a higher cognitive level (Sadler 1998). Unfortunately, there are always some students who still do not make great leaps forward, no matter what the quality of their feedback. There are also some tutors who never quite see the relationship between quality feedback and student behaviour.

Table 1. The comments on reports of students from tutors marking the assignment

Comments from tutors which result in limited behavioural change from students	Comments from tutors which results in marked behavioural change from students
One more reference required here Add two more references Discussion too brief Where is the reference for this? Is this relevant? Check the literature, what did others do? Good description Well done Nicely done Very good OK , but not absolutely required Excellent effort Short, but OK	The introduction and discussion are too brief. You have been provided with a long list of references that would provide you with more information. Reading makes writing of introductions and discussion much easier and also helps with more in depth results interpretation. You need to discuss whether the findings in this experiment support or reject your hypothesis and why. Did this experiment support the current ideas in the area? Begin your discussion with a brief summary of your results. Then you need to discuss your results and state what they mean using the work done from other authors.
Which?	Please indicate in the text which treatment is relevant to include here.
Replicate results not indicated Title? Full title needed Cumulative total? What would you do differently next time? This bibliography does not follow a standard format	Your graph should be written as a sentence i.e. three heat-treated seed germinated representing 20% of the total of 15 seeds in this group. Good to show different aspects of the results in different ways. Put percentage of seeds accumulated into a graph. You need to plot the results so that they are a cumulative total of the number of seeds which germinated. This title needs to be more descriptive and include the date and the type of treatment Figure headings need to be descriptive

Where to go to from here?

Although ‘questioning students’ or a modification of the ‘Socratic’ technique is documented as being a powerful tool for effective tutoring (e.g., Lepper, Drake and O’Donnell-Johnson 1997 p. 133), it appears that it is not effective as a form of written comments because the tutor cannot coax the same responses as they would in face-to-face teaching, and the students are not yet sufficiently experienced or know how to respond to written questions of this type. There can, however, be considerable variation in the quality of feedback between individual tutors, even after attempts have been made through working with the tutors to standardise the types of written comments tutors make on student assignments. Perhaps this is because we assume that our tutors and other staff members will model their behaviour and comments on ours (Tronson and Ross 2004; Ross and Tronson 2004); but we have observed, as have others (e.g., Sadler 1998), that many tutors will provide feedback in the form of questions or by affirming or negating the student’s self image. As tutors gain experience, however, those who are empathetic realise that statements which suggest the direction or behavioural change that are required actually help the student to perform at a higher level (See also Sadler 1998; Hounsell 2003). Many (but not all) tutors can be encouraged to write comments on the reports which lead to a more in depth response of students more often when they have been asked to remark their reports, or after discussion with other tutors about the effects of feedback on student behaviour. It is clear from this preliminary study that feedback is more effective when the details are given about what is wrong with a piece of work, rather than simply indicating whether the student’s answer was correct or incorrect (Black and Wiliam 1998 and references within). Although these more complex forms of feedback take time they may provide students with an idea of where they should be headed and encourage reflection. There appear to be two strands to this process. The first is that the response made by the students who receive feedback is dependant on the quality of the feedback. In parallel, the effectiveness of the tutors’ feedback is dependent on where they are developmentally in their own understanding of how to provide effective feedback. For students to respond in a deep sense and achieve higher quality learning outcomes, requires a dialogic feedback, which is not unidirectional (*sensu* Sadler 1998). Even when we suggest a structure within which tutors can provide feedback in a way to encourage students to take further action, we have noted that our attempts can be limited. For tutors to provide quality feedback a dialogic process is also required. We provide opportunity for dialogue and discussion of pedagogy when our tutors review the feedback of their colleagues. In this way, a process of peer review of tutors’ comments is built into the whole assessment procedure, ultimately leading to a higher quality set comments written on student draft reports. Ultimately, the students benefit because they have more consistent (and well-reasoned) feedback on their performance, with guidelines as to how to proceed to a deeper understanding of how to improve both cognitive and behavioural aspects of the assignment task. By being aware that tutors vary in the feedback they provide and the subsequent response of the student to different types of feedback, and by communicating this to tutors, we have developed a distinctive form of written dialogue, which, we have observed, often precipitates a verbal dialogue between the students and the tutors during subsequent laboratory or tutorial sessions. This questioning, answering and probing provides the most powerful impetus for the students to change their cognitive behaviour (e.g., Lepper, Drake and O’Donnell-Johnson 1997). So far this study has found that this dialogue can be improved on if it is preceded by a dialogue between the tutors. Sadler states (1989), ‘it cannot simply be assumed that when students are given feedback they will know what to do with it’. We believe that it cannot simply be assumed that when tutors are asked to give feedback they will know how to do it. (Tronson and Ross 2004; Ross and Tronson 2004). Less experienced tutors sometimes are too generous with praise, only resulting in small gains (Lepper, Drake and O’Donnell-Johnson. 1997), or conversely are too harsh in their criticisms. Lepper, Drake and O’Donnell-Johnson (1997) states that the more effective tutors do not give effusive praise, but just get on with the next step/level, the students being able to distinguish when the praise is deserved and when it is not. We intend to continue to monitor the most effective ways of translating these two types of dialogic feedback (tutor-student and tutor-tutor) in relation to improvements in the written feedback provided by tutors to students, and concomitantly monitor the level of response in the students as they modify their draft reports for final assessment. We have observed that comments which request



a deep response from the students appear to be the most powerful in achieving higher level learning outcomes. By actively participating in the process, and by understanding the criteria for high quality performance, learners will subsequently incorporate these criteria and standards into their own thinking, and thereby become self-assessing performers in future learning and performing situations (University of Oklahoma 2002). If we consider that learners are our tutors and ourselves as well as our students then we can all progress together.

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