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Computer based feedback: friend or foe?

Trudy Hartford

The current ALT strategy stresses the value of feedback to students and encourages staff to make use of appropriate e-learning opportunities including e-feedback (ALT Strategy 1 and 2). It has long been recognised that the time between submitting an assessment and receiving feedback is critical with respect to facilitation of reflective practice (literature summarised by Gibbs and Simpson, 2004). As well as delivering timely feedback the comments need to be appropriate for the students' use (Rust, 2002). Several studies have shown that most students are aware of the purpose of feedback and that many read it (Higgins et al., 2002; Orsmond *et al*., 2002a; Weaver, 2006) but as recognised by Mutch (2003), there is little research on the proportion of students that use it. Some educators have raised concerns over the ability to produce formative feedback within modular courses and summative feedback alone may only be of benefit if linked to future work (Rust, 2001; Taras, 2006; Weaver, 2006). Significant benefits may be gained using electronic feedback for both summative and formative work by speeding up the delivery of effective feedback and also by focusing staff time (Peat and Franklin, 2002). As an added bonus electronic communication addresses one of the key complaints about feedback concerns, that of illegible handwriting (Higgins *et al*., 2002). Moreover, computer based feedback involving online quizzes can give rich rapid comments immediately to a student, but what about more complex pieces of work – group work or reports? The following case studies discuss how feedback can be effectively delivered to the student with a shorter turnaround time.

Mini Case Study 1: Giving summative and formative feedback on written work.

Infectious Diseases is a level 2 module which includes a report on an open ended mini-project. Students are requested to submit this electronically via WebCT. WebCT can be set up to allow students to submit one copy of their work or to allow multiple submissions. In the latter case the tutor would mark the report submitted closest to the assessment deadline. Allowing multiple submissions has several advantages, students can use this area of the WebCT module as a repository for work in progress, and students can 'try out' the submission process in advance of the deadline.

To encourage students to use this element of the course, students were offered formative feedback on their work if submitted in this way at least a week before the assessment deadline. Once the work was submitted both tutor and student could chose to receive an automated e-mailed receipt. Submitted work was zipped and saved onto a pen drive. Work was marked and feedback typed onto the script in coloured ink. To make this process simpler a cut and paste file was used. This consisted of a word file in blue font comprising common elements of feedback. The easiest way to develop a cut and paste file from scratch is to have the file open during marking and add comments in as you go. I find it best to include headers which are useful to organise your comments, but also to paste into the students' work (Figure 1). One comment I seemed to make frequently involved Harvard referencing, so it was useful to be able to paste a direct link into the relevant skills for learning website and also link to examples on the module's WebCT site.

This approach has allowed quicker turnaround of scripts, however if the tutor is not comfortable marking from a screen then this may not be the case. Once scripts have been marked electronically they were saved on the WebCT module for the students to retrieve. Feedback was given two thirds of the way through the module and then again at the end of the module, students were made aware how this feedback could be used to their advantage with specific subsequent modules in the course. Each year there have been a number of students who didn't bother to collect their feedback/work. Using electronic feedback, all students visited the WebCT module after the end of the final assessment and between 80-526 times each during the course of the module. Although it is not possible to say if they opened their assignment and used the feedback, I cannot think of another reason why they would visit the site! Of the 14% of students who did not submit electronically only one collected their marked script plus feedback. With this approach there is a greater potential to reach the entire cohort although there may be access issues for some students. On the other hand it may increase access for some, for example those who use a sight-reader. For dyslexic students it is possible to adapt the view so they can read the script against the background colour of their choice.

A final year module, Integrative Studies, involves a report written as a critical evaluation of a student conference. Electronic submission via WebCT is used but this time electronic feedback was simplified using a grid based on assessment criteria. This grid was not new to the students, but was the basis of a report writing workshop part way through the module. Key failings of feedback can be lack of specificity and unfamiliarity with academic language (Hartley and Chesworth, 2000; Higgins *et al*., 2002; Weaver, 2006). A workshop such as this aids understanding of assessment criteria or marking schemes aiding delivery of meaningful feedback (Orsmond *et al*., 2002b;) and can be used to develop a grid facilitating more rapid feedback. The grid was pasted at the end of each assignment and comments relevant to the student highlighted in yellow. Any additional or more personal comments were added below the table (Figure 2).

In addition to electronic feedback, both of these modules use 'feedforward' (Orsmond *et al*., 2002a) by including a 'Frequently Asked Questions' discussion board. Students are welcome to post queries to this section, but I also post queries that students have asked via email or in person (anonymously) with my response.

Mini Case Study 2: Formative and Summative Feedback on Group work via discussion facilities

The Integrative Studies module mentioned above involves a significant amount of group work which is peer and tutor assessed. To facilitate this WebCT discussion tools were used (Hartford, 2005). This allowed students to post up minutes of meetings or reflective logs of their groups efforts. Thus short bursts of feedback could be added by the tutor more regularly through the module. This also allows peer feedback on work in progress and encourages further tutor-student dialogue by providing a feeling of anonymity and approachability (Orsmond et al., 2002a). This approach allows the development of a feedback dialogue, rather than one way information delivery, recognised as one of the seven principles of good feedback practice (Juwah, et al., 2004; Nicol and Macfarlane-Dick, 2006). Final feedback on the product of group work was delivered in this way. Using the discussion board has the advantages of being able to see who has accessed the feedback and also feedback can be general (to whole cohort) or directed at a smaller group, or private. You can also use the cut and paste approach in many cases. (Figure 3).

In summary, electronic feedback can not only be used to give rapid feedback from automated quizzes but is also worth considering for written assignments and group

work. The key advantages include potential for improving the timing of feedback and incorporating direct links to websites offering support (e.g. WebCT pages or Skills for Learning). Additional bonuses are the removal of complaints about unreadable feedback and ease of collation of material for external examiners. On the down side you need to be comfortable reading electronically (or request hard copy submission as well) and need to mark at a computer. For group work or feedback using a discussion facility the benefits of the increased opportunity for feedback and the development of a dialogue between tutor and student is well worth considering.

Figure 1: Examples from a 'Cut and Paste' file.

Good results section because:
Good discussion because:

- shows logical structure
- You have really done a lot of (appropriate) research and this shows clearly
- Excellent reasoning, logical approach, included references, linked back to introduction.
- Limitations of the experiments discussed.
- Good reasoning evident

To improve:

- Further clarify the aims of the report either at the beginning or in the final paragraph.
- Start with a result, explain it and then link to the background – clearer than doing it the other way round.
- check through for typos and clarity
- A conclusion reminding the reader of the 4 final identifications would have improved this section
- http://www.lmu.ac.uk/lskills/open/sfl/content/harvard/index.html

Figure 2: Cut Paste and highlight Grid.

Quality:	1st	2(1)	2(2)	3rd	Fail
Structure and Introduction (20%) 13	Excellent introductory section, clear aims of the report. Develops a logical argument.	Very good introduction to the topic and to the report. Provides a coherent report	Introduction basic or overlong, aims not completely clear. Provides a fairly coherent report. Could be better organised	Minimal introduction, irrelevant information included, no aims. Some structure but requires more organising	Confusing or no introduction. Clarity of introduction and structure of report/arguments need improving
Analysis and evaluation (45%) 31.5	Appraises critically evidence in each area and provides their personal interpretation.	Appraises critically evidence in each area and links them in a coherent informed argument. Hints at their personal interpretation	Provides the evidence and reports views on it.	Provides evidence and reports views but does not structure them coherently	Insufficient or misinterpreted evidence and views.
Conclusions (20%) 12	Excellent concluding section rounding up all valid points	Good concluding section incorporating most of the valid points	Conclusions clear but perfunctory	Very little attempt at conclusion	no concluding section
Clarity/Grammar/ Spelling (10%) 8	Very clear and easy to read, spell checked no errors of grammar.	Very clear and easy to read, spell checked very few grammatical errors	Fairly clear sentences - some overlong or don't make sense. Occasional spelling errors	Difficult to follow in parts, many spelling errors, grammar needs urgent attention. Uses inappropriate tense.	Very hard to read or indecipherable. Far too many spelling errors. Uses present tense or mixes tense
References (5%) 4	References properly cited and listed Excellent selection.	References properly cited and listed Very good selection.	References not always properly cited and listed	Very few or no references cited and not properly listed	not referenced or very poorly referenced

Comments:
Well done: clear title, gives aims of report clearly, background section very clear and accurate, summaries clear
To improve: add background to the introduction. Link the summary of the presentation to the evaluation - you have evaluated the topic but not the content of the presentations.

Figure 3: Example of a Discussion Board.

leedsmet Integrativ Studies-Biosc+Hlten (Integrativ Studies-Biosc+Hlten - 50868)

myWebCT Check Browser Help
Resume Course Course Map

Control Panel | View | Designer Options

- Designer Links - | Homepage > Communications > Marks and Feedback > Discussions > **Prevention - Trudy's Group**

Discussion Messages: **Prevention - Trudy's Group**

Compose message | Update listing | Search | Mark all as read | Designer message options

Display: All | Unread | Threaded | Unthreaded | Select topic: Prevention - Trudy's Group | Go

Status	Subject
0/4	Minutes of the first meet...
	Minutes of the first meet...
	Re: Minutes of the first ...
	Re: Minutes of the first ...
	Re: Minutes of the first ...
0/1	Found something....
	Found something....
0/1	update
	update
0/1	Minutes of the second mee...
	Minutes of the second mee...
0/7	Research
	Research
	Re: Research
	Re: Research
	Re: Research
	Re: Research
	Re: Research
	Re: Research

Discussions - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Subject: Presentation Feedback

Message no. 319

Author: Trudy Hartford (50868)

Date: Wednesday, December 14, 2005 10:36am

Prevention

Feedback from Staff:

- Well structured well planned piece of work
- Level of research and depth – very good
- Clearly presented easy to follow

Feedback from Students:

- Well researched. Didn't mention anything about the liars scenario or relate to it.
- Too many people presenting therefore flow was interrupted
- Didn't mention how vaccination would address the LIARS
- very good extension of information provided by slides, good background given
- some slides a bit too bulky in content (text)
- overall presentation good
- well put together

Start | students work | Inbox - Microso... | Microsoft Power... | Integrativ Studi... | Discussions - ... | 14:07

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