## **Learning & Teaching Conference 2010**

Abstract 5A

## Selective targeting of feedback for best effect on learning

Presenter Steve Draper, Psychology Co- author Quintin Cutts, FIMS

Students and staff almost always take "feedback" to mean judgments on a finished product (e.g. an essay, or worked problem solution). Policy statements and NSS questions tend to assume that feedback should be evenly targeted. A range of evidence, including the success of some unusual course designs in this university, suggest that these and a number of other **assessment and feedback** prescriptions and presumptions may be wrong, and that outstanding results can be obtained by a highly selective allocation of feedback effort:

- Feedback on skills (e.g. how to write an essay) is more important than on conceptual knowledge (e.g. the content discussed in an essay).
- Feedback on learning skills (how to learn in this discipline) is even more important than on task skills.
- Feedforward is more important than feedback.

This paper offers a theoretical argument that draws on a variety of apparently disparate pieces of evidence. Changes to a first year programming course emphasise how students can help themselves learn. This is motivated, not only by how experienced programmers work, but by the consideration that in a typical week's work on the course a single student might have perhaps 50 queries each of which must be answered before proceeding to the next. Waiting for a weekly tutorial cannot possibly serve this need: to learn programming, students must be able to help themselves.

The NSS results in 2009 for the psychology department gave it the rank of 3rd best overall out of 107 psychology departments (as measured by the single question asking about overall student satisfaction) yet it had rank 104 on the feedback item "I received detailed comments on my work". However students did receive a lot of feedforward: advice during the production of major pieces of work (but none afterwards), just as PhD students do. The tutor support is not associated with any of the regular "content" modules but is targeted only at a few major pieces of work. That this is so effective may be because the real difficulty for learners is to acquire a good grasp of the deep assessment criteria (Sadler, 1989): not things like word length, but what "critical thinking" means. If they do not understand these well, they get poor marks in all courses; if they do, then they can perform well in all. Much course design is thought of in terms of first the content to be covered, then the assessments by which to test the acquisition of content (this is called "alignment"), then feedback and tuition spread across all assessment tasks. Many (perhaps all) disciplines in fact have a single core of such criteria that apply across most assessments, but grasping them is as big a barrier for many students as so-called "threshold concepts" are said to be for "content". This line of thinking leads to varying assessment tasks to direct attention to what is common across superficially different tasks while keeping the same "deep criteria"; whether "critical thinking" in psychology, "historical argumentation", or "sociological imagination".

More details: http://www.psy.gla.ac.uk/~steve/talks/ltc10c.html