REAP International Online Conference 2007 - Great Designs for Assessment: Planned or Emergent Strategy

Susan M Ogden, Alec Wersun
Glasgow Caledonian University
S.Ogden@gcal.ac.uk, A.Wersun@gcal.ac.uk

OVERVIEW

There is a widely-held assumption in higher education circles that best practice is a linear and rational process that stems from a carefully thought through planning and implementation process. Higher education publications are replete with "steps" and "principles" of best practice that serve as "recipes" for best assessment practice and "great design" (Freeman and Lewis, 1998). While we value such work and accept the need for examples of best practice and guidelines to promote best practice, we nevertheless feel that such recipes focus too much on the "what" and not enough on the "how", the process of assessment design. In particular, how do individual academics and members of large teaching teams go about re-engineering assessment practice? Can great designs be the result of emergent (Mintzberg, 1987), rather than planned strategies? In this paper we conclude that emergent strategies certainly have the potential to produce great designs, and that a practice akin to co-operative enquiry (Reason and Heron, 1995) can be a productive way of pursuing the "Great Assessment Design".

INFORMATION ABOUT THE CLASS, MODULE OR PROGRAMME

This case study relates to processes and outcomes of re-engineering assessment and feedback practices on an undergraduate strategic management module taken by over 700 Level III undergraduate students at Glasgow Caledonian Business School. The size of the module demands a large teaching team, and in the period of this research the teaching team oscillated between eight and twelve staff, some full-time and some associate, part-time staff. The student cohort comes from a diverse range of management programmes, some of whom have been with the university since Level I and are accustomed to institutional assessment practices; and others who have entered Level III directly from further education colleges, for whom assessment practices in the institution are new.

At the start of the REAP project, there were three assessment instruments, consisting of a group presentation (Weeks 6-8), an individual report (Week 10) and finally an exam which takes place in the exam period (Weeks 13-15). The original assessment strategy was designed to enable students to use the presentation feedback provided by tutors and students via a private 'seminar' discussion board to "feed-forward" into the individual report. However, the module team faced a challenge in ensuring that feedback on the individual written report was given in an efficient and effective manner in order to feed into student preparation for the exam. Using traditional marking and feedback systems, the team had been unable to provide feedback to students before the Christmas vacation period (end of Week 12) to help students to gauge their level of understanding of the subject matter, and to use feedback to prepare for the examination. Experience from previous years suggested that the level of student engagement with feedback had been variable, evidenced by the fact that approximately 20% of students regularly failed to collect their feedback from the Undergraduate Programmes Office. The REAP project was used to start a process of re-engineering assessment which primarily aimed to improve student engagement with assessment criteria and feedback by improving the quality, consistency and timing of feedback.

DESCRIPTION OF THE CASE

With the aim of addressing these issues, electronic feedback software was rolled out in session 2006/07 following a short pilot study undertaken in the preceding session (see Ogden and Wersun, 2007). The electronic feedback software (EFS) used is designed by Phil Denton of Liverpool John Moores University (www.ljmu.ac.uk/cis/software/feedback.asp). It is based on a Microsoft Office application, that draws on Excel, and can be used to design, generate and email feedback letters directly to students. The feedback, while based on a standardised menu of comments developed by the module leaders, can be personally addressed to each student and markers can add their own personal feedback comments offering specific feedback on any aspect not covered by the pre-designed marking comments. As well as generating individual student feedback, the software can also be used to analyse the distribution of overall % marks and marks for each separate criteria for the whole cohort as well as for each individual marker. This can be used effectively for purposes of moderation, and for purposes of providing generic feedback to the student group.

Implementation Process for EFS Marking System, 2006-2007 (Rational Strategy)

Development and implementation of the EFS system can be mapped out in the following stages:

Stage 1 - Design Phase (pre semester)

- Commitment by the module leaders to roll out EFS, following reporting on the pilot trial via the Module Evaluation Report.
- Redesign of assessment and assessment criteria by module leaders - assessment criteria increased from 5 criteria to 7 criteria.
- Updating of module handbook highlighting to students the use of EFS and the importance of following the specified report structure and set marking criteria.

Stage 2 - Development Phase (Semester A - weeks 1-9)

- Development by module leaders of standard marking statements for grading within each of the 7 criteria. The option to develop standard 'normative' comments was not used in an attempt not to overcomplicate the marking process for tutors.
- Distribution of the first draft of standard marking statements to tutors for feedback;
- Finalisation of marking statements following feedback from tutors.
- Provision of tutor support and training on use EFS. A key challenge here was that the teaching team had changed considerably, increasing from 8 to 12, with only 5 of the new teaching team having participated in the training and piloting held earlier in the year. The team were offered:
    - A workshop run by author of the software, Phil Denton
    - Group sessions and one-to-one tutorials;
- Import of student details (names, emails, matriculation numbers) into EFS files

Stage 3 - Marking Process (Semester A – weeks 9-12)

- Student submission mid-week nine. Students were asked to confirm on the assignment cover sheet that they had read the marking criteria, and designed the report accordingly.
- A discussion board inside the MLE website (Blackboard) was opened to encourage students to discuss, clarify and raise issues related to the assignment.
- Tutor marking week took place in weeks 10 to 12. There was a need for ongoing one-to-one support of tutors to smooth over technical problems.
- Marking was completed on schedule by the end of week twelve.

- Approx 90% of students received their emailed feedback by end of week 12 with the remainder receiving their feedback late due to technical issues (e.g., sent emails not leaving outboxes, problems if sending emails from computers off-campus; difficulties in issue use of the software on Apple Macs).
- Most tutors (8 of 12) as well as applying the set criteria, typed in personal comments to offer added explanation in cases where students had done very poorly or very well.
- Students were informed that these marks were provisional, and subject to change following internal and external moderation.

Stage 4 - Moderation Process (Semester A – week 13 –15)

- The software allowed each marker to generate a spreadsheet of allocated marks that could be manipulated for analysis. The spreadsheet of marks was e-mailed to module leaders, and incorporated in to a master spreadsheet, allowing for comparisons (e.g. marking range, averages) between markers to be made. This had not been possible previously and proved to make the moderation process both more effective and efficient.

Stage 5 – Evaluation Process (ongoing)

- Student survey on view of the marking and feedback process
- Tutor feedback – qualitative survey completed by members of teaching team.

It can be seen from the above stages that a significant feature of the implementation process has been a need for getting team participation and buy-in. This is especially important on a large module with a large teaching team, where developing a shared view of any "plan" assumes enormous importance. The mechanisms used to try and achieve this, as indicated in the implementation schedule, were informal and formal discussions, workshops, one-to-one sessions and general peer support.

RATIONALE IN TERMS OF EDUCATIONAL IDEAS

The rationale for using electronic feedback software (EFS) was to improve feedback processes in the belief that effective feedback leads to significant learning gains (e.g. Hattie, 1987; Black and Williams, 1998). Hattie's 1987 meta-analyses of studies of what makes a difference to student achievement concluded that the most powerful single influence on student achievement was feedback. Black and William's 1998 review of formative assessment similarly claimed large and consistently positive effects that feedback had on learning compared with other aspects of teaching. Consequently, many authors have proposed a variety of models for improving feedback, often putting particular emphasis on formative aspects (e.g. Nicol and MacFarlane-Dick, 2005). These authors argue that good feedback practice:

- helps to clarify what good performance is (goals, criteria, expected standards);
- facilitates the development of self-assessment (reflection) in learning;
- delivers high quality information to students about their learning;
- encourages teacher and peer dialogue around learning;
- encourages positive motivational beliefs and self-esteem;
- provides opportunities to close the gap between current and desired performance;
- provides information to teachers that can be sued to help shape the teaching .

The module team supported the arguments underpinning these principles, as well as the principles themselves. Indeed, the principles helped the team in a number of ways. On the one hand they helped the team to challenge their own practices. On the other hand they helped the team to conceptualise more clearly how the how the use of EFS software might improve the team's feedback practice, particularly as that related to the quality (usefulness), consistency, speed and delivery of feedback to students directly on to their computer.

The plan in simple terms was that by supplying feedback to students three weeks earlier than had previously been the case, directly to their computer (instead of having to go and collect it in a programmes office), we could be more confident that absolutely everyone would:

1. **Receive** the feedback;
2. **Reflect** on the feedback; and
3. **React** to the feedback in ways to enhance their learning from the assignment and preparation for the forthcoming examination.

Some readers may smile wryly at the importance attached to "Receiving" and "Reading" feedback as these are often taken-for-granted assumptions. However our previous experience had shown us that many students did not even take the time to collect their written feedback, fuelling suspicion that many students are interested simply in the mark rather than in getting and using feedback.

While the educational rationale for the "**what**" of our re-design was informed by research evidence and principles of best practice (especially the importance of formative feedback), we would like to emphasise the importance of the basic principles of "**how**" we went about this, namely the process. This is an important feature, because as we will see later it could be argued that the "**how**" ultimately had a far greater impact on the "**what**" than we had anticipated. Namely, the "**how**" led to serious questioning of previously taken-for-granted assumptions and practice, and consequent radical re-design of the module beyond that which had been planned. The resultant radical re-design was not planned, but proved to be "emergent".

The principles applied to processes in this project can be thought of in terms of "Co-operative Inquiry" (Reason and Heron, 1995). This has been described by these authors as:

> " a way of working with other people who have similar concerns and interests to yourself, in order to understand your world, make sense of your life and develop new and creative ways of looking at things, learn how to act to change things you may want to change and find out how to do things better".

In reality, the overall REAP project provided the architecture for this co-operative approach, with multiple "co-operations" developing at different levels. For the authors, these levels were :

- At the level of the module (a teaching team that oscillated between 8 and 12 members)
- At the level of GCU business school (different modules, same programmes)
- At the level of university collaboration with Glasgow and Strathclyde Universities.

The range of meetings, workshops and discussions throughout the REAP project (see REAP website for details) in effect helped to shape not one, but several "communities of practice" (Lave and Wenger, 1991), that was conducive to a co-operative inquiry approach. In essence all members of the REAP project both contributed to ideas on redesigning assessment, and at the same time were part of the activity that was being re-designed. We would argue that a more conscious awareness of, and engagement in these processes (the "how") are of equal, if not greater importance than the "what" , when embarking on assessment design or re-design, especially on large modules with big teaching teams. One might wish to equate the suggestion to focus on both "what" and "how" to the "ying" and the "yang" , which are of course mutually reinforcing.

EVALUATION

Taking in to account what has been said in the previous section, we would like to summarise findings of two aspects of our assessment redesign – the "planned" aspect and the "emergent" aspect. The planned aspect relates directly to our experiences of implementation of electronic feedback software itself, focussing on student responses to getting feedback electronically by e-mail, rather than in hand-written format. The "emergent" aspect relates to a more radical module re-design that emerged from "co-operative inquiry" processes within the REAP project, something that we had not envisaged.

Evaluation of EFS

In order to evaluate the success of EFS, student views on the electronic mode of feedback were gathered via a self-administered questionnaire. A total of 303 questionnaires were completed, 299 of which were useable representing a 41% response rate across 18 programmes. The questionnaire focused on three sets of questions: (1) preferences for electronic email feedback over traditional 'hand-written/hand-collection' feedback system; (2) the degree to which the instructions for the assignment and marking criteria were clear and easy to follow; and (3) the extent to which the feedback was considered useful. The latter two topics were covered by means of a 5-point Likert scale.

The System Works - Students overwhelmingly report that they are happy to receive their feedback by email (90%), with only 17% stating a preference for 'normal' (handwritten) feedback and 69% stating that they would prefer to receive email feedback on assessment for *all* modules.

Findings demonstrate very high student satisfaction with the feedback, finding it "very clear and easy to read", with 75% of students agreeing. However, despite all students receiving feedback earlier than in previous years, 26% of students were unhappy with the time taken to return the feedback, while 53% felt the timing was acceptable (21% were unsure). This confirms that students have a strong preference for *quick* feedback.

The Marking Criteria are Clear - In relation to the assessment criteria, which had been redesigned and extended to facilitate EFS, two-thirds of students agreed that the assessment instructions were clear and easy to follow (66%), and that the marking criteria were also clear (64%), with 15% and 13% respectively offering a neutral response. The high score here may have been facilitated by requiring students to confirm that they had read and understood the marking criteria before submitting their work.

The Feedback is Valued, but more is expected - A slightly less positive response was received in relation to the content of the feedback. Although 59% of students were satisfied with the amount of feedback they received, some students (23%) expressed a desire for a greater amount of feedback, despite the fact that the quantity of feedback was much greater than usual. The desire for greater feedback appears to relate to a desire for more information on how they could close the gap between current and desired performance. For example, although over half of respondents felt the feedback helped them to understand what they could have done to improve their work, just over one-third (36%) of respondents felt that the feedback did *not* give them enough information on where they had gone wrong. In contrast only 19% thought that they had *not* been told what they had done well.

While some of this variance reported above may be due to differences in student expectations or student level of performance (*which was not asked for in the survey*), it is acknowledged that there were differences between markers in the way they used EFS, namely on whether they used the option to provide personal comments to student reports to complement standardised feedback across the bands. Feedback from tutors and analysis from the moderation process demonstrated that while one tutor entered personal comments on all scripts, six tutors only entered personal comments where students had

failed or had clear weaknesses or had performed exceptionally well. Such differences highlight tensions between a desire to "standardise" and a desire to provide feedback in a more flexible, "adaptive" way

CONCLUSION

Given that this was the team's first evaluation of feedback practice on this large module it is not possible to conclude with any certainty whether EFS helped to improve the team's feedback practice, especially in terms of helping students to improve their performance. What is clear, however, is that by using EFS, students were given feedback more quickly, more directly, and in a mode that improved chances of them reading the feedback, reflecting on it, and using it to improve future performance. The overwhelming number of students in favour of receiving all feedback electronically suggests that students see advantages in this method of feedback delivery, particularly in the speed of feedback, but accepting that this does not overcome any shortcomings in content of feedback.

This initial study inside CBS sets a benchmark for future studies on student expectations and perceptions of assessment feedback, an area previously unexplored. What can be clearly stated about the introduction of EFS – from pilot to full implementation – is that the process is unlikely to have been undertaken without the deliberate engagement with REAP. Furthermore the process of embarking on implementation of EFS has led to greater reflection amongst the teaching team on current assessment practices. This, in turn, has led in to a radical reengineering of the learning and teaching strategy (LTAS) for the module, which will be a topic of another paper, but which is summarised in Table I below. The important point to be made here is that the radical re-design shown below was an "unintended consequence" of piloting and then implementing the electronic feedback software under the REAP project. It emerged as the result of engagement in a naturally occurring community of practice that was facilitated by the REAP project. It is for this reason that the authors strongly recommend greater attention to be paid to process issues, over and above those paid to the "what" of content in assessment design.

Table 1 - Emergent Re-engineering of Module

WHAT TO CHANGE? TO ACHIEVE WHAT?	HOW?
Dependent to Independent (To re-design the module in attempt to move the student from dependent to independent learner)	• Reduce contact time *(36 ->27)* • Front-loading lectures • Self-managed teams (with reporting mechanisms) • Shift to Portfolio assessment • Self-assessment prior to submission [EFF criteria + Plato/'turn-it-in'] • Peer Learning & support
Learning: (How to re-design the module to deepen learning?)	• Reducing breadth of syllabus • Reduce number of formal assessments • Increase number of formative tasks • Self-reflection on formative tasks *(inc PDP)*
Put more emphasis on employability & PDP	• More emphasis on team working & leadership skills, • Write about presentation and communication skills. • Maintain usesof databases *(e.g., FAME, MINTEL, KEYNOTE)* & IT applications *(PowerPoint)*
Assure contextualisation for students from different degree programmes	• Provide student choice of industry sector & company in assessment, guided by tutors to programme context and/or vocational aspirations
Enhanced Use of BB – as a means of improving peer and tutor feedback	• Module wide discussion board *(topic-based, sector-based, industry-based)* + lecture e-moderation • 'private' seminar discussion boards to post & discuss formative presentation (peer support) + seminar tutor e-moderation/support • Drop-in boxes
Reengineering Assessment	**From:** • 2 integrated CW elements – team presentation, wk 6&7 (20%) + report (30%), wk9 *(incorporating evidence of seminar BB contributions)* + • exam (50%) **To:** • 1 Project Portfolio (100%) – incorporating report element + evidence of participation in team-working and bb peer support; + self-reflection on formative presentation, etc. (week 13) • Use of EFS & Turn-it-in (originality checking software) to engage student in reflection on assessment process and content.

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Re-Engineering Assessment Practices in Scottish Higher Education (REAP) is funded by the Scottish Funding Council under its e-Learning Transformation initiative. Further information about REAP can be found at http://www.reap.ac.uk