

Learning from the past and looking at the future. Closing the evaluation-revision-implementation cycle in an elearning module

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INTRODUCTION

This paper will outline the importance of implementing an instructional design model which incorporates a continuous cycle of evaluation, revision and implementation. The context is a case study of a distance learning module which was first presented in 1993 as an introductory module for students taking an Oscail BA programme. As the majority of Oscail students are adults returning to education after a long period of absence from formal education, providing learners with a supportive learning environment which would ease re-entering the educational world has always been one of Oscail's key goals. Between 1993 and 2002, the Introductory Module was offered in the traditional distance education format and was subject to regular evaluation and revision (Lorenzi, MacKeogh and Fox, 2004; MacKeogh and Lorenzi, 2005). By early 2000, the wider accessibility of technology encouraged Oscail to combine the need to prepare students for university study with the development of e-learning skills. In 2002 the Introductory Module was reconstituted as the SPEL (Student Passport for E-learning) module and was presented for three years. A review of the module in 2006 indicated shortfalls in what is described in the literature as the bolt-on 'skills approach' which makes use of 'a set of atomized skills – removed from subject specific domains' (Lea & Street, 1998: 158). This prompted a rethink of the overall approach to preparing students for study, and resulted in a decision to adopt an embedded approach to e-skills development. It was hoped that a task-based approach to applying skills to subject specific activities would improve the quality of the learning experience and ultimately result in better retention rates.

A review of the implementation of the embedded approach in the first year reveals that while students reported an increase in skills development over the module, and identified a number of positive features, the approach did not succeed in increasing retention. Detailed evaluation including surveys of tutors and students as well as online focus groups have identified a number of factors which militated against the achievement of some of the goals of the module. These included the scheduling of activities, workload, a shorter than usual academic year, insufficient tutor training and student induction, and administrative support.

This paper will start with a brief overview of instructional design systems and the models used by Oscail in developing its elearning programmes. We will then outline the way in which through a cycle of implementation, evaluation and revision, the original introductory module evolved into a full year-long module comprising an embedded portfolio of study skills tasks. We will describe the outcomes of the embedded SPEL programme and will outline the evaluation process that has led to further revisions. We will discuss the specific issues that have emerged from the evaluations and will show what measures have been put in place to overcome the difficulties

encountered. We will conclude with some observations on the changing roles of stakeholders in the context of new elearning approaches.

INSTRUCTIONAL DESIGN PRINCIPLES

Instructional design systems emerged from US defence forces training research in the 1940s (Molenda 2003), and a wide range of instructional design models have been adopted since then, based on different learning theories (Clayton, 2006). Almost all models are characterised by five features generally known as the ADDIE model: analysis of needs; design of the intervention/course; development of the course; implementation; and evaluation. According to Clayton (2006), the ADDIE model has evolved through four generations displaying increasing complexity and with the first three generations largely dominated by behaviourist theories, and more cognitive and constructivist theories being adopted in later generations. First generation instructional design was relatively simple and characterised by behaviourist approaches. The second generation introduced systems theory to control the increasing complexity of the instructional design process, but still from a behaviourist perspective. The third generation treated the ADDIE model as a process which could be entered at any stage, rather than the strictly linear approach adopted in earlier models, and some cognitive perspectives were introduced in addition to the traditional behaviourist approach. The fourth generation draws on increased understandings of how people learn and the introduction of educational technologies to develop even more complex instructional systems 'with a continuous evaluation and troubleshooting process' (Clayton, quoting Gagné, 2006).

In the later models, the role of evaluation increases in importance and is no longer seen as an add-on at the last stage to see if the intervention 'worked'. Instead, formative evaluation is seen as a central organising principle and is linked in with every phase from analysis, to design, development and implementation. This is the strategy adopted in developing Oscail's elearning programmes with a continuous cycle of implementation, evaluation, revision, evaluation of the revised approach, implementation of further revisions, evaluation and so on.

Of course, there are significant differences in the instructional design approaches required to develop training for specific tasks with clearly defined outcomes, and those required for the more complex and often less easily defined skills required of a graduate, such as higher order cognitive skills, collaboration, and research. Oscail has introduced a number of innovative pedagogical techniques designed to develop students' higher order cognitive skills, and evaluation has demonstrated the potential of these approaches which have become embedded in many of the modules on both the Bachelor of Arts and the BSc in Information Technology programmes (Fox and MacKeogh 2003). Other examples of Oscail's instructional design model include the development of strategies to assist students in developing the necessary skills to learn within specific disciplinary contexts which resulted in the development of the SPEL model (Student Passport to eLearning as outlined in Lorenzi, Fox and MacKeogh, 2004).

Oscail views the instructional design process, based on continuous evaluation at all stages, as an essential part of its quality improvement process. All aspects of modules and programmes are evaluated including tutor and student views, student performance and retention, technology, administration, and student support. Evaluation takes place at different stages in the year, using a range of questionnaires, group discussions, online forums, and monitoring. The outcomes of these evaluations identify the types of interventions or elements which require change either during the module, or in the next presentation. This paper will outline this process in the context of the SPEL model embedded in Foundation Modules on the Bachelor of Arts programme (see <http://www.oscail.ie> for details of this programme).

BACKGROUND TO THE SPEL MODEL

The Bachelor of Arts (BA) was introduced in 1993, and is accredited by six universities; the programme comprises five subject streams (History, Literature, Philosophy, Psychology and Sociology) with thirty modules in total. Almost 800 students are enrolled on the BA in 2007. Retention on the BA programme averages approximately 70% which is high compared with other distance education systems, but it has been an issue of continuing concern that the majority of students drop out in their first year, while taking foundation modules. Up to 2006, students were required to take a short Introductory Module designed to serve a three-fold purpose: assisting students to develop the study skills required for successful participation in higher education; exposing students to the experience of studying through distance education; and introducing students to the subjects offered at credit module level. Between 1993 and 2002, the Introductory Module was presented in the traditional distance education format comprising printed course materials and supplemented by three two-hour tutorials in study centres, and assessed by two assignments. By 2002, with increased access to PCs and the Internet and the increasing availability of learning resources online, including virtual learning environments and journal databases, the decision was made to re engineer the Introductory Module. This decision was also informed by evaluations which showed that the original Introductory Module format was only partially responding to the needs of our learners, and was not sufficient to prepare students for learning in the new elearning formats (MacKeogh and Lorenzi 2006).

The new format SPEL module which replaced the Introductory Module was presented for a number of years and engaged students in a series of tasks designed to enhance their elearning and study skills competences (Lorenzi et al 2004). However, while students gained these competences, further evaluation of their performance in degree level modules indicated that they had difficulty in transferring these generic skills to the specific disciplinary contexts, and it was decided that the time had come to review the degree modules, particularly the foundation modules to address these needs. The need to design a module to address elearning competence offered an opportunity to rethink how study skills should be taught. There is increasing criticism in the literature of what is described as the 'skills approach' which makes use of 'a set of atomized skills which students have to learn and which are then transferable to other contexts. The focus is on attempts to 'fix' problems with student learning, which are treated as a kind of pathology' (Lea & Street, 1998: 158). The 'skills approach' has also been described as 'bolt-on' (Bennett et al, 2000 cited in Wingate, 2006). This is a remedial approach which is based on the assumption that a de-contextualised set of skills can be developed and training offered to those who are less adequately prepared to engage in higher education learning activities.

In 2006, the SPEL approach was embedded in the foundation modules for the five subject areas in the programme. The modules were designed to include a series of study skills tasks which called on students to carry out literature searches, evaluate web resources, summarise and review academic journal articles, structure, draft and write essays, prepare examination questions, contribute to online discussions in Moodle, with all tasks being related to the subject under study. Thus, students could search for websites relevant to history; prepare a bibliography using the Harvard system in sociology, or the APA system in psychology; summarise journal articles linked to their course units in philosophy; participate in online debates related to topics in the course units.

The following is an account of the evaluation of the embedded SPEL modules and the way in which the modules were revised in the light of feedback from various stakeholders.

EVALUATION IN PRACTICE

It is important in evaluating outcomes to ensure that a range of methods are used in order to triangulate results. The embedded SPEL modules were evaluated using a combination of student questionnaires, online focus groups, tutor focus groups and non-participant observation of interactions online. It should be noted that the SPEL element was confined to the first ten weeks of a thirty week module and it was possible to evaluate the immediate responses to the module at the end of the ten weeks, and then via the end of module questionnaires, and the overall performance of students.

Student Feedback

In total, 326 students registered on a total of 533 foundation modules (an average of 1.6 modules per student). 99 students (30.4%) responded to an online evaluation survey which was posted at the end of January. One of the key findings from the evaluation is that there is a divide in response between new students and continuing students. Since the programme is modular, not all students are in their first year of the programme when taking foundation modules in another subject.

Students were asked to respond to a series of 24 likert statements relating to the modules (see Table 1). These statements covered course content and coverage; response to elearning methods; impact on learning skills; need for orientation and training; timing of the tasks; workload. Over four fifths (82.7%) agreed that the study skills component should be optional for continuing students while 60% agreed that they should be compulsory for new students. There was general agreement that there was too much overlap between the different modules in terms of the study skills tasks (57.3%). Generally, students were favourably disposed to elearning methods with over half (56.8%) agreeing that elearning technologies had improved their learning. Nevertheless, there is still some ambivalence towards technology with the majority (81.9%) favouring a blended solution with mixed face to face tutorials and online support, while almost two thirds (61.9%) expressed a preference for traditional methods (printed course materials and face to face tutorials). Most students found Moodle easy to access and use (66.3%). Over half (57.8%) enjoyed interacting with fellow students. Over half agreed that they had improved their learning skills (60.2%) and that preparing the assessment portfolio had enhanced their understanding of the course (51.9%).

While over half (53.2%) agreed that students should receive marks for online contributions over the year, just over one third (39.7%) agreed that SPEL tasks should be spread over the full academic year. According to one student:

I understand that a lot of the problems caused by time constraints were due to the realignment of the academic year so this should not be a problem for the future. If it were possible to spread the tasks out over a longer period I believe this would benefit. Also I think students who participated fully should be rewarded with more marks than those that didn't otherwise what's the point? I would suggest a base of 10% of available marks awarded to those students who fully participated in SPEL and submitted their portfolio on time.

The workload was of concern as almost 70% felt that the requirement to post two online contributions per week was too onerous, and only one third (33.7%) were able to manage the workload:

The workload should be spread over a longer period than just 8 weeks and there should definitely not be weekly deadlines to meet - it defeats the purpose of a course that you can supposedly do "in your own time and at your own pace".

	Agree %	Neither agree nor disagree %	Disagree %	N
Course content				
1. The study skills component of the SPEL modules should be optional for continuing students	82.7		11.1	6.2 81
2. The study skills component of the SPEL modules should be compulsory for new students	60.0		18.8	21.3 80
3. There was too much overlap in the tasks between the different SPEL modules	57.3		32.0	10.7 75
4. I found the integration of study skills and subject content worked well	46.8		11.4	41.8 79
Elearning				
5. I would like a mix of face to face tutorials with online support from tutors in Moodle	81.9		9.6	8.4 83
6. I welcome the support of elearning technologies	77.4		16.7	6.0 84
7. I was able to access and download articles in the DCU online databases without difficulty	69.5		7.3	23.2 82
8. I found it was easy to access and use Moodle	66.3		10.8	22.9 83
9. I prefer traditional methods (printed course texts face to face tutorials)	61.9		26.2	11.9 84
10. I enjoyed interacting with students/tutors on Moodle	57.8		25.3	16.9 83
11. Elearning technologies have improved my learning	56.8		19.8	23.5 81
12. I was reluctant/afraid to post contributions in the public forum on Moodle	34.1		13.4	52.4 82
13. I do not want to use a computer in my studies	8.8		15.0	76.3 80
14. I do not have the expertise to use the technology effectively	4.9		8.5	86.6 82
Effect on learning skills				
15. I improved my learning skills through studying the learning skills units	60.2		13.3	26.5 83
16. I found preparing the portfolio enhanced my understanding of the course content	51.9		8.9	39.2 79
17. I found preparing the portfolio enhanced my learning skills	47.5		15.0	37.5 80
Orientation/training				
18. I would like to have had more training on how to use Moodle before the Module started	48.2		15.7	36.1 83
19. The pre course information provided sufficient guidance on what to expect	39.8		4.8	55.4 83
Timing				
20. Students should receive marks for online contributions throughout the year	53.2		11.4	35.4 79
21. The SPEL tasks should be spread out over the full year	39.7		11.5	48.7 78
22. The duration of the SPEL phase of the modules (8-10 weeks) was too short	37.5		18.8	43.8 80
Workload				
23. I found two online contributions per week per module to be too onerous/time consuming	69.5		9.8	20.7 82

Table 1: Student evaluations of aspects of the SPEL Module

[...] Whilst the SPEL module was very helpful it was much too intensive. I felt I was always in a rush trying to complete tasks without really feeling like I had time to truly learn the topic or let it soak in. There was minimum 4-5 tasks to complete per week as well as needing to study and learn and as well as having to complete other modules - it was way too much. There should have been a 2 week period allowed before the course began so that students could have time to read about what was required of them. [...]

Over half (55.4%) found that the pre course information was insufficient to provide guidance and almost half (48.4%) would like to have had training on Moodle prior to the course.

Not surprisingly, continuing students tended to express more dissatisfaction with the SPEL elements, feeling that this was repeating what they already knew. Students were asked to rate their skills before and after the SPEL module phase. There was a significant difference in reported ratings of skills before the modules, with continuing students consistently rating their skills at a higher level than new students; post SPEL module there was no significant difference between new and continuing students. As Table 2 demonstrates, the average aggregate self-rating of proficiency in a range of study skills before SPEL was 2.36 for new students, compared with 2.83 for continuing students (where 0 = no skills and 4 = excellent skills). Post SPEL, while both groups reported an increase in overall skill levels, new students tended to rate their skills slightly higher (2.83 for new students compared with 2.80 for continuing students). Indeed 60.2% of all students agreed with the statement ‘I improved my learning skills through studying the learning skills units’ (see Table 1).

Study Skill:	New students				Continuing Students				All students			
	Before	N	After	N	Before	N	After	N	Before	N	After	N
Citing and referencing	1.63	51	2.57	49	2.44	32	2.71	28	1.94	83	2.62	77
Bibliographic database	1.67	52	2.72	50	2.50	32	2.75	28	1.99	84	2.73	78
Writing essays	2.43	51	2.84	50	2.50	32	2.86	28	2.46	83	2.85	78
Locating information	2.46	52	2.88	51	2.84	31	2.93	28	2.60	83	2.90	79
Time management	2.65	52	2.82	50	2.69	32	2.67	27	2.67	84	2.77	77
Recording information	2.69	50	2.88	50	2.84	31	2.75	28	2.75	83	2.83	78
Writing skills	2.98	52	3.16	50	2.97	32	2.96	28	2.98	83	3.09	78
Aggregate student skills	2.36	52	2.83	51	2.68	32	2.80	28	2.48	84	2.82	79

Table 2: Student ratings of skills before and after SPEL module (0 = none; 4 = excellent)

Student Performance

One of the intentions of embedding the SPEL module in the foundation modules had been to increase retention on the modules, however student performance at the end of the module showed that in fact, fewer students actually completed the modules (49% in 2006 compared with 62% in the previous year). Other factors affected the completion rate of modules, for example, Oscail was in the process of changing its academic year from a February to November pattern to the conventional September-May pattern. Because of this the normal academic year was

shortened from the normal 34 weeks to 30 weeks; the modules started in mid-October and much of the SPEL activity was scheduled in the weeks leading to Christmas which caused many pressures on students who are all mature adults with family and work responsibilities. Telephone exit interviews with 50 students who withdrew indicated that 54% had cited time pressures, 32% disliked online study methods, 8% had encountered health problems and 6% mentioned administrative problems (Delaney, 2007).

Tutor feedback

In order to elicit feedback from tutors a focus meeting was organised approximately six weeks after the conclusion of the embedded SPEL phase. In order to ensure that the meeting would lead to outcomes that would truly respond to the feedback received by tutors, it was preceded by an online brainstorming session via Moodle, the virtual learning environment that has been used for interaction with students. Out of the 27 tutors who were responsible for supporting students during the SPEL phase 16 contributed to the online brainstorming session and a total of 21 tutors took part in the meeting. Tutors from all subject areas took part in the evaluation.

The online and face-to-face discussions were moderated by the authors who coordinate the BA programme. The online session offered the opportunity to geographically dispersed tutors to freely share their views and offer advice over an extended period and facilitated the development of shared thinking as a result of the discussion. This was a particularly important aspect of this type of feedback. As the discussion had led to the emergence of clearly defined issues, it was possible for the course designers to present a structured plan for action at the face-to-face meeting with tutors.

In order to kick off the online discussion tutors were asked to provide feedback on five key areas. These areas had been identified by the course co-ordinators as possible areas of concern through virtual observation of the interaction between tutors during the online portfolio period.

- ❑ Structure of the module
- ❑ Scheduling of the activities and student/tutor workload
- ❑ Usefulness of individual tasks
- ❑ Problematic issues raised by students
- ❑ Interfacing of face to face tutorials with online interaction

The following section outlines the outcomes of the online and face-to-face discussion.

Online teaching and course structure

In terms of structure of the course a range of views were expressed by tutors. While there was agreement on the need for scheduling a face-to-face orientation session prior to the start of the online interaction, a range of contrasting suggestions was made in terms of what can be done to improve the structure of the module. There was a clear divide between tutors who had been involved in earlier versions of the module and new tutors. Tutors who had experienced earlier versions of the module were keen to return to the face-to-face tutorial based format and a clear demarcation between study skills and subject specific components. Bender (2003, p. 3), in her comparison between face-to-face and online interaction, affirms that in face to face environments there is "predictability in terms of environment", but it can be added that the predictability also encompasses how the relationship with students is built and maintained. Tutors who had been involved primarily in face-to-face tutoring felt uneasy about transferring their teaching skills to online environments and one tutor commented

“face to face interaction is more intimate; one can respond immediately; one can treat a student as a fellow human being rather than a disembodied entity”.

One tutor commented that as a result of the online course delivery the type of student who had traditionally enrolled for Oscail programmes had been alienated and that the new course format was more suited to a younger and more skilled student population. The issue of the digital divide and the difficulty with fulfilling Oscail’s brief to widen access to education through online delivery was raised as a serious issue.

New tutors were happy to keep the online format but felt that the combination of study skills with subject specific content was too demanding. However suggestions for overcoming this problem ranged from relegating the study skills component into a stand-alone module to achieving better integration of skills into subject-specific activities. One tutor commented that

“students had perceived the study skills emphasis as distracting from what they are assumed the course content would be about.”

All tutors expressed concern in relation to the in relation to scheduling of activities. The schedule was considered too intensive and according to one tutor, while it is

“well designed and well intentioned, appears to be designed for full-time students”.

The same tutor commented that the schedule had counteracted the aims of the course, and instead of increasing students’ confidence in their abilities had generated a high level of anxiety. Among the suggestions that had gained momentum among tutors was also the reduction of the demands on students’ time by diluting the schedule and spreading activities over a longer period of time. The tight scheduling had meant that students could not keep up with the course demands and eventually succumbed and dropped out. The timing of the module was also regarded unfavourably. Most of the tasks had to be completed during the period leading up to Christmas and many students had fallen behind due to other calls on their lives.

On the whole, however, it was acknowledged that the tasks were valuable and that the pressure was not due to the type of activity that students were asked to complete, but rather the tight scheduling had impinged on students’ ability to successfully complete them. Finally, as many students were taking more than one foundation module, there was a certain degree of repetition in the activities they were asked to complete and tutors had hoped that more emphasis on content specific activities would reduce the amount of overlap.

Comments on individual tasks

Specific tasks were almost unanimously targeted by tutors’ criticism. Students had been asked to keep a learning log to record the time spent on various activities. The log was entered in an Excel spreadsheet where formulas had been entered to calculate the overall study time distribution. The purpose of this task was that of raising students’ awareness of their study patterns and of themselves as learners. Furthermore, students taking the Sociology and Psychology Foundation Modules were also asked to produce a basic statistical report of the study patterns based on the learning log. This was a means of giving them some initial experience of the statistical analysis required for experimental research. However, tutors commented that this task had been carried out in a perfunctory fashion. The data had been entered retrospectively and inaccurately only for the purpose of the exercise and had failed to raise students’ self-awareness. The reason most commonly brought forward by tutors was that, due to the heavy workload, students had approached this task strategically and had only fulfilled

the minimum requirements. According to tutors, while this task was considered beneficial, it no longer appeared to fulfil its function. Similar comments were made in relation to the Learning Diary. Students were asked to keep a learning diary on a weekly basis. They were provided with specific headings for structuring their reflections on their learning experience and were asked to post their reflections on Moodle, as a way of sharing their thoughts on the course with other students and with the tutor. Accordingly to tutors, students were filling the form with comments showing little reflection and most of them eventually stopped filling their diary even if they had been made aware that non-completion would affect the overall evaluation of their portfolio.

Tutors also flagged their difficulties in eliciting online interaction that would show students' engagements with views expressed by classmates. One tutor commented:

"In terms of the discussions, many of them found it difficult to 'chat' about literary texts in an informal way, and I think this problem needs to be addressed. Though I constantly encouraged them not to write academic pieces of work in the discussion forum, many students continued to post essay-type answers"

Tutors found difficulty in achieving a balance between creating an informal and relaxed atmosphere which would create a sense of camaraderie and virtual presence, while still asking students to meet academic standards in terms of depth of analysis. The engagement with views presented by others appeared particularly difficult to address, as written analysis had been mainly associated with formal pieces of writing and, in many students' previous experience, had been a solitary enterprise.

For one of the tasks students were asked to carry out a brainstorming session on a set essay title. The essay was due to be completed after the SPEL phase. As a result of the brainstorming students were supposed to produce a spider-diagram and an essay outline. The purpose of this activity was to start to plan ahead for the essay and to receive feedback on the initial plan, prior to attempting writing the actual essay. Unfortunately, according to tutors, students failed to see the connection between this activity and the subsequent essay and did not capitalize on the feedback received from tutors. One tutor commented:

"I have found that in very many instances, the feedback which I gave for the assignment plans, and the advice I posted on Moodle was completely ignored! This also resulted in lowering students marks"

While poor engagement with tutor feedback can be observed for other modules this tutor felt that for this particular module the reason is to be found in the time pressure which had resulted in a superficial approach to most learning activities.

Interfacing of tutorials with online interaction

During the online interaction two face-to-face tutorials for each module were planned. The tutorials were supposed to be complementary to the online interaction and allow tutors to address additional subject specific topics. However, tutors reported that the face-to-face session had become trouble-shooting sessions for online interaction. Tutors felt that it was necessary to reassure students and to ease their anxiety and that it was necessary to respond to their students' needs by not only addressing subject specific content, but also investing time on the development of online learning competence.

RESPONDING TO THE EVALUATION

Based on feedback from students and tutors it appeared that the main problems arose from the front ending of the SPEL module into the first eight weeks of the course with consequences of work overload. In addition, students were unclear about the purpose of the tasks. Students perceived that they were repeating tasks in carrying out web searches in two or three different subjects, whereas the objective was not to develop technical skills per se, but to use these skills to locate and familiarise students with resources in the different disciplines.

Although I found the SPEL tasks themselves useful I don't think it was any benefit to me to do each of them three times. ... For instance doing three web searches and reviews was extremely time consuming and of very little use to me. I already search the internet several times a day and have never had any problem finding what I need before.

The content and pacing of the Foundation Modules were comprehensively revised in the light of the feedback from tutors, students and other staff in Oscail. Following this review, students were informed in April 2007 of the proposed changes which were aimed to clarify the objectives of the modules which were to:

- ❑ Familiarise students with the specific content, concerns, techniques, methods of enquiry and discourse typical of the subject
- ❑ Assist students in developing, or building on, the skills necessary to succeed in the subject (e.g. researching, sourcing, recording, analysing and interpreting information, writing essays, reviews and reports) as well as the more generic skills of time management and reflective practice
- ❑ Introduce students to the wide range of printed and online resources comprising the body of scholarship in the subject
- ❑ Facilitate independent and self-directed learning through the use of information and communications technologies (ICTs)
- ❑ Enable students to apply their skills and knowledge of the subject through a portfolio of assessment tasks including:
 - ❑ Producing notes on course units
 - ❑ Writing reports and evaluations of subject-related weblinks and databases
 - ❑ Preparing bibliographies and reference lists derived from searching library online catalogues, and using the appropriate subject specific referencing and citation systems
 - ❑ Summarising and reviewing research-based journal articles accessed through online databases
 - ❑ Analysing and interpreting primary sources relevant to the subject (e.g. historical documents, literary or philosophical texts, psychological or sociological data)
 - ❑ Preparing essay structures and plans
 - ❑ Writing essays using the writing conventions of the subject
 - ❑ Engaging in subject related discussions online in Moodle

To respond to the need for more flexible pacing and less workload the academic year was structured into three learning blocks, each assessed by a learning portfolio. The structure and set of assignment tasks is outlined in Table 3.

The feedback had demonstrated that students could not understand the purpose of the time management and self reflection exercises. The revised module made the time management and self reflection exercises voluntary but made the purpose more explicit. Students were informed:

The effective management of time is the key to successful study and ensures that deadlines are met. Students will be advised to prepare their study schedule at the beginning of Block 1 and to monitor and adapt their schedule throughout the Module. Study schedules will not be submitted for assessment, although students may discuss issues relating to time management on Moodle forums if they wish.

Reflection on the learning process and content is widely used in higher education to encourage students to learn effectively. Students will be advised to keep a reflective learning diary throughout the module, using the guidelines in the Study Skills manual. The reflective learning diaries will not be submitted for assessment, although students may share their reflections through Moodle forums if they wish.

Students were also advised of the technical and time requirements.

Block 1: Exploring the subject. Assignment Portfolio components:

- ❑ Contributions to online discussion (minimum 10 contributions – these can include reports on websites & article summary)
- ❑ Notes on Course Unit
- ❑ Report & Evaluation of subject-specific Websites
- ❑ Bibliography on course topic sourced from online library catalogue & databases, using subject appropriate referencing system
- ❑ Summary of academic journal article related to units in Block 1, downloaded from library online database (summaries will be posted on Moodle)

Block 2: Building Knowledge of the Subject. Assignment Portfolio components:

- ❑ Contributions to online discussion (minimum 6 contributions – these may include review of article & outline structure of essay)
- ❑ Analysis and interpretation of subject-related primary source (e.g. historical document, literary or philosophical text, psychological or sociological data)
- ❑ Review of academic journal article related to units in Block 2, downloaded from library online database
- ❑ Outline structure and spider diagram/mind map for essay to be prepared for Block 3 Assignment portfolio

Block 3: Applying Knowledge of the Subject. Assignment Portfolio components:

- ❑ Contributions to online discussion (minimum 6 contributions)
 - ❑ Essay on topic for which bibliography and structure prepared in Block 2 (2,000 words approximately)
 - ❑ Examination question (750 – 1000 words approximately)
-

Table 3: Foundation Modules 2007 - Revised Structure

INITIAL OBSERVATIONS FROM CURRENT IMPLEMENTATION

As this paper is being written, the new version of the foundation modules is entering the second month of interaction. New online behaviour patterns are already observable and appear to be directly linked to the changes in structure and presentation of the module. The following are the more noticeable changes that can be connected to the new module structure:

- ❑ Greater autonomy in student interaction – low key tutor involvement

- ❑ Course co-ordinators becoming process facilitators
- ❑ Social interaction positively affecting structured learning interaction

At the beginning of the course students can download a module workbook, which outlines all the portfolio activities and provides detailed guidelines on all tasks. In previous presentations, while students were informed that their online contributions to subject specific discussions were included in the assessed activities, the actual topics for discussion were decided by individual tutors who would post the topic at the beginning of each week. While most tutors were prompt in posting discussion topics, others were leaving their input to mid-week and this was creating confusion among students who were limited in their contribution time by late tutor postings. Furthermore, there was great variation in terms of quality and suitability of discussion topics. Tutors who had already been involved in online activities were more likely to post questions which would promote lively online discussions, whereas newcomers tended to be uncertain on how to transfer an interactive element to the written word. This often resulted in essay-type questions which were eliciting parallel monologues structured as mini-essays. The dependency on tutor input was interfering with students' willingness to interact with each other and was putting tutors under constant pressure to be "over-present" online. To overcome this problem, pre-set questions have been included in the workbook. So far no observable differences can be recorded between groups where the tutor has opted for active online involvement by posting an introduction and several reminders to stimulate discussion and those groups where tutors have taken a low key approach. One tutor has encountered technical difficulties in accessing the forum which are to this day still to be resolved. Yet a similar level of activity to that of other groups has been observed for this group (70% for this group compared to an average of 74% for all the other groups). This appears to indicate that students are no longer waiting for the tutor input to respond to the specified tasks and in general tend to ask each other questions rather than trying to reach for tutor's advice.

Tutor involvement in the online interaction has been greatly reduced. In the past the majority of tutors had reported that online interaction had been unexpectedly time-consuming and more demanding than face-to-face interaction. The demands on their time were excessive mainly due to student over-reliance on their support and expectation of instant replies. Also tutors had tended to engage in one-to-one replies rather than summarising queries in one message for the benefit of the whole group.

Face-to-face interaction is limited by time and space whereas in online interaction tutors can experience being "sucked in" and being unable to "close the door" (Bender, 2003, p.25). The new format appears to have resulted in greater freedom in terms of when tutors step in the online interaction and to give more scope for messages addressed to the group as a whole, rather than addressing queries by individual students. Also, to relieve tutors from overburdening, course co-ordinators are now taking a more active approach and are assuming some of the traditional online teaching roles (see Goodyear et al. 2001). Co-ordinators are stepping in as "process facilitators" and "advisors" and for instance relieve tutors from answering queries in relation to general course requirements or providing encouragement. This has narrowed the tutor role more to "content facilitators" and appears to have eased some of tutors' concerns with their own expertise for online teaching.

Wegerif (1998) suggests that a warm-up period with light-hearted activity aimed at getting students to know each other is very beneficial to the development of online communities. In the new format of the foundation modules week 1 was an orientation week. No activity or prescribed contribution was planned for this week, however students were encouraged to log on to familiarise themselves with the online medium and access the module workbook. The level of

activity in week 1 was unexpectedly high. A “virtual café” forum had been set up to encourage informal interaction among students and tutors were asked not to interfere with interaction within this forum.

The early informal online activity led to the formation of spontaneous study groups in 3 out of 5 of the foundation modules within the first week of the course. While it is too early to ascertain whether the formation of spontaneous online study groups will help in sustaining the interaction, it can be argued that early informal interaction has certainly helped in building a sense of community which appears to foster greater reliance on peer rather than on tutor support.

Wegerif maintains that “forming a sense of community, where people feel they will be treated sympathetically by their fellows, seems to be a necessary first step for collaborative learning. Without a feeling of community people are on their own, likely to be anxious, defensive and unwilling to take the risks involved in learning” (1998, p.48). While students have commented about the high volume of reading that studying for foundation modules requires, the comments do not appear to reveal the same level of anxiety which emerged from the previous year’s comments. While a more manageable study schedule is certainly one of the factors that appears to have eased the anxiety, it will also be interesting to further explore whether a stronger sense of belonging to an online community will contribute to greater persistence.

CONCLUSION

This paper has examined in some detail a case study of Oscail’s instructional design strategy which relies on a cycle of continuous improvement based on evaluation, revisions and implementation. Given changing circumstances and the changing nature of student and tutor needs, as well as changes in the technology, it is likely that the SPEL modules will undergo further revisions in the coming years. As we have seen, while the objective of change is to improve quality, sometimes unintended consequences occur causing anxiety and stress. However evaluation systems which are sufficiently sensitive to emerging problems and which can speedily address these issues should ensure that lessons from the past are used to improve the future.

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