University of Strathclyde
Principles of Marketing Case Study Report

Re-Engineering Assessment Practices (REAP) Evaluation Team
Mel McKendrick
Pippa Markham
University of Glasgow

With contributions from
Mercedes Douglas
Michael Harker
Sean Ennis
University of Strathclyde

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Overview/ About the class

The module *Principles of Marketing* aims to provide first year students with basic knowledge of marketing as a business / societal philosophy and a managerial function. The class is large with students drawn from a variety of disciplines, for many of whom this is a compulsory module. Prior to re-engineering, assessment consisted of report submissions and an end of year exam, with students who perform well in course work being exempt from the exam.

The first year class *Principles of Marketing* is a core, one-year long class delivered to approximately 520 students. Students are drawn from a variety of courses within Strathclyde Business School (approximately 350 students) and the Faculty of Law, Arts and Social Sciences (approximately 170 students). Some students will study marketing in subsequent years, others take the class only in first year as part of another degree course.

The class is designed to introduce students, many of whom may be unfamiliar with the subject, to the main principles of marketing and to develop students' study skills. The syllabus makes no assumption of prior knowledge. On completion of the class, students should be able to demonstrate a basic knowledge of marketing as a business and societal philosophy and as a managerial function. The class aims to familiarise students with the various contexts within which marketing professionals operate, the issues and variables that confront them in their many and varied roles, and the strategic and tactical tools that can be employed in addressing relevant challenges.

The main text book used in the class is by Jobber (2005, McGraw Hill). The book is primarily used for reading specific chapters related to class assignments and for case study analysis.

Students on the traditional course received feedback by means of a standard proforma which had been designed by the class coordinator, tutors and a Centre for Academic Practice member of staff and had been in use for 10 years.

Original Drivers for Change

Assessment practices in the *Principles of Marketing* class were re-designed in 2003 to reflect departmental concerns about staff workload and a perception that students were being 'over-assessed'. This re-design resulted in a reduction in the number of written assignments from five to two and the abolition of a multiple choice and short essay test in the first semester. Students achieving an average of 60% or over in the remaining two assignments are granted an exemption from the final class exam.

These changes resulted in a drop in the number of students (50%) receiving the required standard for exemption from the final class exam because fewer assignments meant fewer opportunities for students to receive feedback on their performance and consequently improve their overall coursework marks. There was a perception that students who received high marks in the two remaining assignments (and were therefore exempted from the class exam) did not engage with the other topics covered and many entered second year marketing classes with limited knowledge of the subject.

Although the number of written assignments had been reduced to two, the administrative burden of marking approximately 1040 student submissions and providing individualised feedback to students remained a difficulty for staff members. Although a paper-based feedback pro-forma had been introduced to support this process there was evidence that many students failed to collect written feedback from the department. This problem was exacerbated because students received their exam marks electronically via the institutional VLE.

Staff members were also concerned about poor student attendance at lectures and about retention and progression rates (only 40% of students enrolled in the *Principles of Marketing* class elected to study marketing in second year during the session 2005/06). A new member of staff, Dr Michael Harker, assumed the role of course leader in 2005 and undertook a comprehensive review of the course prior to the start of the 2005/06 academic session. This resulted in changes to the course content and in teaching arrangements: teaching in lectures is now delivered solely by Dr Harker and the remaining members of the teaching team are responsible for facilitating tutorial groups. Initial data suggests that these changes have resulted in a substantial increase in both retention and progression rates.

Phase 1 Pilot

Three technologies were introduced to the *Principles of Marketing* class during the academic session 2005/06:

WebCT
As part of a broader roll-out of the institutional VLE across the university, WebCT became the repository for class information and as an administrative tool. Supporting a re-design of the course materials to encourage greater student engagement, all notes and slides were made available prior to lectures, encouraging greater opportunities for dialogue and debate during face-to-face sessions. Interactive elements of WebCT including message boards and private messaging were also used by students and teaching staff involved in the class.

Online multiple choice question tests
In order to encourage greater student engagement with each class topic, provide opportunities for practice and self-testing and provide enhanced feedback opportunities for students, online multiple choice question tests were delivered via the institutional VLE (WebCT) during semester two, using approximately 1500 questions provided by publishers McGraw Hill to support the class textbook.

Online tests were used in two ways:

Formative testing: All students received a voluntary opportunity to self-test during two-week 'windows' associated with key topics. Individualised tests included 50 randomly-selected questions from the Kotler textbook question bank. Feedback comments incorporated in the publisher's materials were provided to students immediately on submission of the test. Additional feedback opportunities were offered subsequently at a tutorial meeting during which tutors and students discuss areas of weakness across the whole tutorial class based on tutor's analysis of test scores. Students were able to take the test as many times as they liked to 'close the loop' in their learning and self-correct their responses.

Summative testing: In addition to the two written summative assignments all students were required to take a summative online MCQ test undertaken as an 'open book' activity during one of the eight class tutorial sessions. Marks gained on this test counted towards exemption from the final written exam.

Online tutor feedback template
Students already received summative marks for each written assignment via the institutional VLE, WebCT and written feedback on a pro-forma developed in 1998 by the department in collaboration with the Centre for Academic Practice and Learning Enhancement.

During the pilot phase, teaching team members collaborated to devise an electronic version of this form. Initial plans were based on the work undertaken at the Oxford Centre for Staff and Learning Development at Oxford Brookes University (see **http://www.brookes.ac.uk/services/ocsd/**). However, the course leader was keen to ensure that the nature and tone of feedback comments was consistent with newly re-designed lectures

and course materials, so a bespoke databank of comments was developed. Delays in this process meant that that the feedback form was used only to mark the second written assignment during semester two and was not fully implemented by all members of the teaching team. Implementation was subject to further delay due to university-wide disruption in assessment activities as a result of industrial action.

About the technology:

Class course materials and online tests were delivered to students via the institutional VLE, WebCT (see: **http://www.strath.ac.uk/see/index.htm**).

Feedback template: The online tutor feedback template was created using visual basic scripts to create a drop-down menu of feedback comments for selection by tutors. After selection of comments, tutors are asked to click a button which converts the form into a word document which is then sent to students via email. The electronic feedback is used in combination with traditional class methods (lectures and tutorials) and seeks to improve its quantity, quality and timing. The electronic template contains general explicit comments which are used to generate a Word document which tutors are able edit and personalise.

Evaluation

Online MCQ tests: Student access to tests delivered via WebCT was monitored by the department's learning technologist. A questionnaire developed using 'SurveyMonkey' software was made available online to students during June 2006. However, technical difficulties meant that not all of the intended questions were distributed to students and response numbers were limited to 100. Disruption to assessment as a result of the AUT industrial action and subsequent timing problems precluded any qualitative data collection involving students. Staff members were not canvassed about their perception of the impact of the tests.

Student uptake of formative test opportunities was low (55%), however 64.9% of participating students canvassed agreed that the tests helped them to understand class topics all or some of the time. Uptake of the practice (or mock) MCQ test prior to the summative MQC class test was much higher (90%) and 44% of students repeated this practice test more than three times. 97.7% of students agreed that the opportunity to repeat the mock test helped them to gain confidence in their knowledge all or some of the time and 74.4% agreed that taking the mock test had improved their overall chances of success in the summative MCQ test.

Online tutor feedback template: Four of the ten members of the first year teaching team were interviewed by a member of the department, Dr Sean Ennis, about their experience in developing and using the template and about a number of other issues relating to the content of the course. AUT action prevented any research of student perceptions of the template and feedback process.

Staff members canvassed recognised that the level of detail and opportunity to customise comments were valuable aspects of the feedback template. The quantity of feedback supported by the comment bank could not have been provided manually without a significant increase in workload. Using WebCT this task took only a few minutes and readability of the comments was significantly enhanced for students.

In terms of the comments/criteria for marking and feedback, it was felt that the template was designed purely from the course leader's perspective (which was mainly due to lack of time to collaborate) and neither tutors nor students had been adequately involved in the process. This

meant that tutors had to spend time customising the template to suit their own style and what they thought it was the right level for first year students.

Staff members also identified some technical difficulties: accessing assignments was cumbersome for tutors because they had to identify their own students from the WebCT assignment box one by one in order to download documents for marking. Uploading the edited version was no problem. Technical changes meant that access to the template itself improved in the second semester after early difficulties. Selecting the relevant criteria boxes in the template was straightforward but if a mistake was made a new template had to be opened and the process had to be repeated once again. While using the template, all other functions were frozen so it was not possible to revert back to the original student's document for checking comments. One of the tutors indicated that she did not like marking online.

In spite of the time taken to download the assignments and customise the feedback form, the overall process of marking and returning feedback to students took as long as when it was done manually. The quality of the feedback is better and more accessible for students and if improvements are made on design and technology, quality and time could be reduced considerably.

The technologies and activities sponsored by REAP were introduced into the first year *Principles of Marketing* class during a period of significant change in the department and in the first year teaching team. The new lecturer, Dr Michael Harker, took responsibility for the class during the session 2005/06 and was mandated to address concerns about retention, progression and student engagement with course materials by re-designing both class content and class delivery. Primary responsibility for REAP project activities remained with a member of the first year teaching team. REAP activities were affected by other changes to the course. AUT strike action across the university sector contributed to delays in evaluation and in the delivery of some activities, particularly the implementation of the online feedback tool.

Phase 2 Pilot

Method

In order to address disappointing student uptake of formative tests, these were replaced by three 'low stakes' summative multiple choice on-line tests that began earlier in the class to provide more opportunities for students to improve learning and the overall weighting of MCQ tests rose to approximately 20% of the final mark. Although the feedback comments available to students within the publisher's materials had been described by staff members as merely 'adequate' it was recognised that to augment feedback attached to 1500 questions would represent an unacceptable workload burden and the department instead wrote to McGraw Hill to request that comments were revised. The team worked together to address some of the content-related and technical difficulties encountered in implementing the online marking procedure and feedback form and evaluated locally-developed software against alternative electronic feedback software developed by Phil Denton at Liverpool John Moore's University (**www.ljmu.ac.uk/cis/software/feedback.asp**). In light of this, the feedback template was refined.

The interventions introduced in phase 1 of the pilot in 2005-6 were expanded to the entire cohort in the 2006-7 session and in a change to the previous year, students were assigned to tutor groups on-line. The entire cohort submitted all written work on-line and simultaneously submitted written copies in tutorials in a change from two years ago when two written copies were submitted with no electronic submissions. Students were required to complete one report and an essay spread over the semester and three multiple choice tests. There was an exemption scheme for students who achieve 60% for 4 pieces of work Feedback was provided through templates for all written work, which comprised approximately 700 words of

feedback on a 1500 word essay. Three on-line multiple choice tests were introduced, the first of which is linked up to the 1st two pieces of written assessment in contrast with just one last year. Increased multimedia content was supplied this year by staff through the iPOM system and students were provided with increased opportunities to generate multi-media. Increased structure has been introduced into the bulleting boards on WebCT (the university's VLE) with separate sections being provided for course work and social discussion.

The class coordinator introduced an additional summative task on-line which had not been included in the original plan: the 'Joker'. This was a piece of work that had to be produced using multi-media and uploaded on the VLE. The aim of this task was to give those students who had missed the exemption by a narrow margin an opportunity to gain extra marks and get exempted. Only a handful of students took this opportunity and of those, the majority of them had already been exempted (thought they did not know it at the time the Joker was submitted)

Evaluation Methodology

Qualitative evidence was collated from course leader interviews, tutor and student focus groups, while quantitative data was collated from the **Assessment Feedback Experience Questionnaire** (AFEQ) and a class survey. Class grades averages and progression rates were compared across cohorts for sessions 2005-6 and 2006-7.

Course redesign in relation to David Nicol's 7 Principles of good feedback practice & Gibbs & Simpson's first 4 conditions of good assessment practice

Principle 1: Helps clarify what good performance is (goals, criteria, expected standards)

Explicit criteria

Criteria provision was based on an eight-stage, two-level model (student/staff interaction) which involved the shared opportunity to create and discuss criteria by staff, discussing this with the students, applying it and then obtaining evaluation to feed into the improvement of the criteria. The Department already had explicit printed criteria of a shopping-list type with boxes for tutors to write comments and was used for every class. For this project this list of criteria which included areas such as overall content, presentation standards, research, citation, content specific areas, conclusions and recommendations was reviewed. Initially criteria was developed from existing criteria in the proforma, this would then be reviewed by staff/student discussion. The results of the discussions then became the basis for the feedback template comments and these comments were then discussed with the students during tutorials. On assignment submissions, tutors would use these criteria to mark and generate generic and specific electronic feedback comments. On receipt of these comments, students had the opportunity to discuss the feedback comments during the subsequent tutorial. Students were also supplied with an exemplar in the form of sample report. In discussions of the provision of criteria, Sean noted,

> *I think this year we put more effort into the criteria and the basis on which they would be assessed.*

Mercedes added

> *Yes, we had a special session to discuss the criteria. Based on that discussion I did add a criteria list for the second assignment and I circulated it around to get feedback. .It was used by all the tutors and Michael as well either formally or*

> *informally. So on two occasions before the assignments the students are given the opportunity to discuss the criteria. The criteria we have given them this year has been more detailed and more specific to the assignment so it more or less reflected the kinds of phrases that were going to be used in the template.*

Additional guidance was also provided as Michael explained,

> *We did do something else. We provided a hints and tips document to get them started on writing their reports and their essays, just a three or four page word document.*

Expected standards

Expectations on the scope of reading material that students should be employing to support their assignments have been provided in the form of a 'points' incentive scheme, whereby students are encouraged to read more widely by being made aware that they will be rewarded for more extensive use of different types of sources. It was hoped that this would encourage students to go beyond the course remit in terms of their approach to studying and that it would enhance the standard of research and assignments.

Student and tutor perspective

One tutor in the tutor focus group claimed that although individual tutors tended to select their own criteria to focus on in marking the assignments, they also met as a group to review the marking sheet and agree on key aspects to be emphasised. These marking/feedback sheets were subsequently distributed to students in tutorials, along with contextual examples, and guidelines on expected standards for research and referencing. The individual feedback in the personalised box of the template and in tutorials is an additional vehicle cited by tutors as being a means to convey the criteria and standards for the following assignment. One tutor put the onus on the students during the tutorial to explain what they understood the expected standards to be by asking them, *'Do you know where you went wrong and how to improve next time?'*

There appeared to be some inconsistency in different tutor's approaches to how expected standards were conveyed to the students. One tutor had prepared an essay and report writing guide for students in his tutorial group. In addition, he had taken the students through a step by step referencing process via the classroom black board. He argued that it should be the responsibility of the department to communicate strong and clear expectations and standards to the students at an early point in the course so that the criteria and standards are built into the course. Other tutors countered that a competent tutor should be equally as effective in conveying these expectations.

The inconsistencies in individual tutor instructions and between tutorial group styles evident in the tutor focus group, were picked up by the students, who felt that they did not have a level playing field from which to approach their work. For example, students voiced frustration at both the inconsistency between the various tutorial groups and the lack of clarity of what was expected for the presentations, with remarks like,

> *It's different in your tutorial than for everyone, it's not standardised across the tutorials.*

However students were happy with the clarity of the structure of the course on the whole. Students found both the example report of the C2 assessment and the report cover sheet which had links to various websites very helpful in order to get started with writing the report. One student however commented,

I've never done a report before and the criteria could have been laid out a bit clearer.

The main complaint concerning the report was the lack of consistency regarding the instructions given to students. Some students had been told to disregard the instructions given in the course outline and to take directions from the tutor, as the tutor would be the marker of the assignment. Students also pointed out that peers in other tutorials had very different guidelines and instructions. Results from the AFEQ supported the themes emerging from the focus group suggesting that criteria would have been clearer had it been more standardised. 79% of students felt that they gained more understanding of how to do task by carrying them out themselves than from teaching staff (64%) or peers (56%) (*Figure 1A*). However 59% of students felt that it was clear to them what they should be doing in tasks compared to 13% who disagreed and 73% of students felt that the marking criteria had been clear in advance compared to just 12% who did not (*Figure 1B*).

Figure 1A: Student AFEQ responses to where their understanding of how to carry out tasks primarily came from

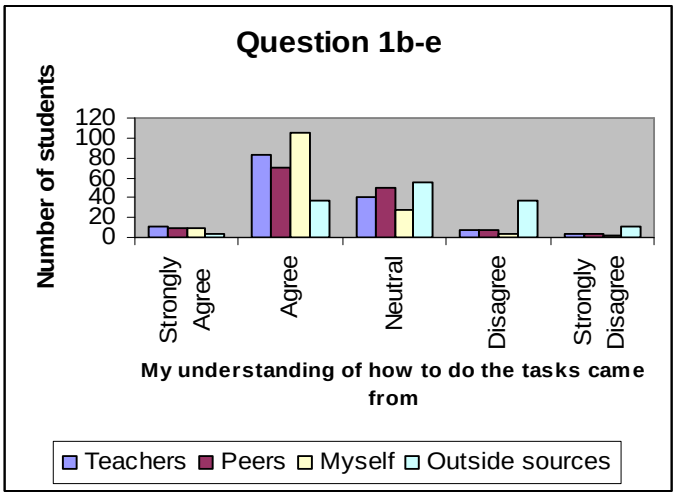
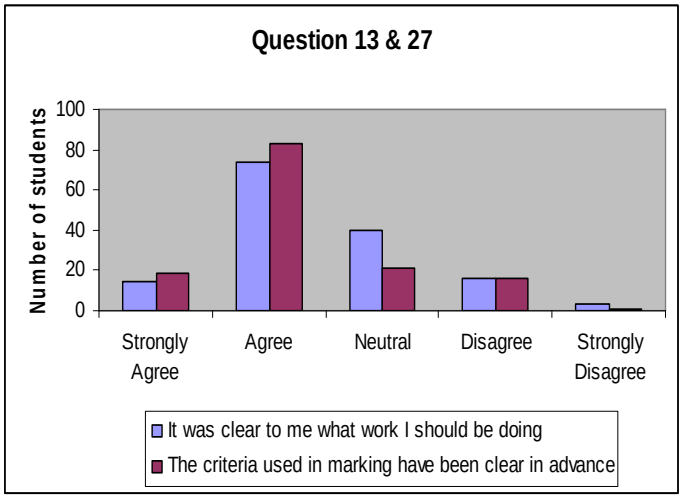


Figure 1B: Student AFEQ responses to how clear the tasks were to them and to the clarity of the criteria in advance



The quantitative data suggests that students did on the whole feel that they had been provided with clear criteria for tasks although individual tutor differences appear to have resulted in some variation across tutorial groups. From the results it appears that trial and error may have been the most useful method for students to understand how to progress their understanding of the tasks.

Principle 2: Facilitates the development of self-assessment (reflection in learning)

The practice multiple choice tests aimed to develop the student's ability for self-assessment and reflection. The feedback received in the summative tests helped students understand why they got the answer wrong (57%) and 70% indicated that they learnt from their own mistakes and helped them gain confidence in their knowledge (83.6)

Students received grades only for feedback for the summative tests as these were delivered over a period of two weeks and the correct answers were not released until after this period in order to avoid plagiarism. On receipt of their marks, students could reflect on their performance. Students could self-assess through on-line tests in a 2-week window of opportunity using the bank of on-line textbook questions. Feedback could be gained through self-correcting, and being able to take the test as often as they wanted to close the learning/performance loop. Students also participated in practice tests during tutorials.

Mercedes noted that on these occasions, they tended to work in pairs and discussed possible answers and explanations while Michael described how students could

> *..take it once, see how well they do, do some reading, do some preparation and come back again and take it a second or subsequent times and you see a very wide diversity of behaviours, you will see people who will just won't do it at all or will take it once and others that will do it 6 or 8 times.*

Sean highlighted the immediacy of the feedback in this process, which enabled them to pinpoint exactly where they are going wrong.

Mercedes added

> *They also have the peer review in the tutorial sessions in which they have a look at other people's work and they say whether they understand it and whether it deserved a certain mark and why it was better or worse than theirs.*

Students were also able to reflect on their performance in comparison to their peers as the range mean and standard deviation for the MCQ test grades were provided to them. The results and feedback for their reports and essays were uploaded on WebCt before the tutorial where these were going to be discussed providing another opportunity to reflect on what they had achieved and the strengths and weaknesses of their work.

Student/Tutor Perspective

Students generally found the online tests to be a useful tool for reflection and self-assessment. The practice tests were highlighted by students in the class survey as the major factor in their positive response to the tests. 75% of students indicated that they recognised the formative element of the test (open book) as being positive in terms of helping them to correct their own mistakes. One student mentioned that a number of items from the practice test came up in the assessed test, making the experience easier. Students found the time limit of the test generous, and a student pointed out that

> *If you organised yourself suitably prior to the test by marking the appropriate sections of the text book, it was quite simple to look up the correct answer.*

The students were happy with the number of multiple choice tests, as opposed to having one large test. As one student put it

> *Because it's three different tests, if you don't do very well in the first one, you know for the second to prepare better and you know what to expect.*

Another student explained

> *If the test is coming up and it tells you it's chapters 1, 2, 3 and 4, for example, you see that's something reasonably sized, so you sit down and actually read the chapters, you prepare yourself.*

70% of students in the class survey felt that they had learned from their own mistakes (*Figure 2A*). However while 54% indicated that after the tests, they had found out the correct answers for questions they had got wrong, 21% felt that they did not and 26% were unsure (*Figure 2B*). Some students in the focus group admitted that they had not looked at the feedback from the on-line tests but others had, with one student remarking that they would follow up on what they had got wrong by going back to the appropriate section in the text book. All the students said they hadn't discussed or compared results with other students after completing the tests.

The only suggestion for improvement on the online test was regarding feedback. Students were frustrated that they had to wait until all students had completed the test, which could be up to two weeks, in order to find out their results. Students pointed out a similar set up in another subject but unlike in marketing, they were able to receive their feedback as soon as they have finished the test.

Figure 2A: Class survey responses regarding reflection on online test performance.

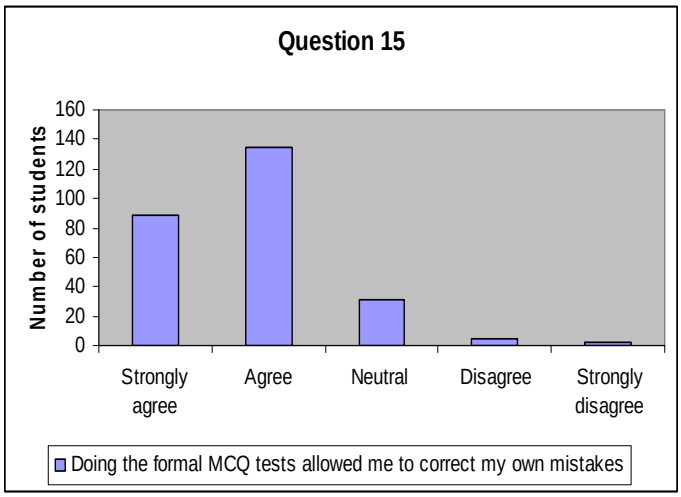
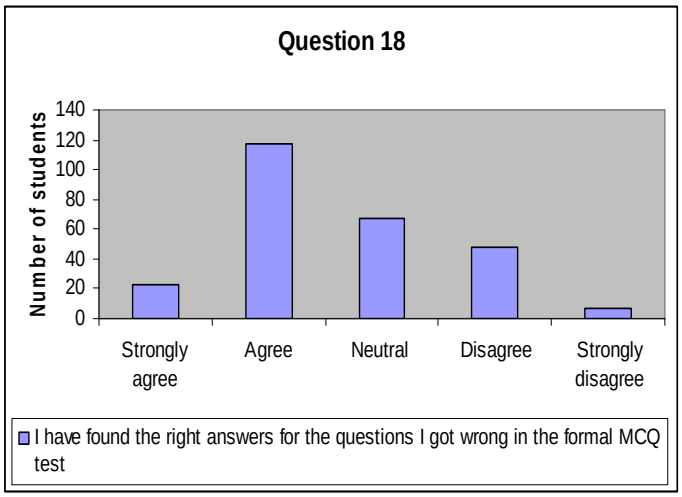


Figure 2B: Class survey responses regarding self correction for online tests.



Principle 3: Delivers high quality information to students about their learning

The use of formative tests to support summative tasks and the provision of improved feedback using the VLE has changed the nature and quality of the first year class. The class coordinator monitored the WebCT bulletin post two or three times daily, which provided the students with an opportunity to receive timely personalised lecturer feedback. The number of tutorials has not been reduced but students are being assessed and receiving improved feedback in a way that had not been done before. The use of electronic media has allowed for the provision of better quality of written feedback and information to the students.

Individual feedback is selected from drop-down menu template. The on-line tutor template was created using visual basic scripts to create a drop-down menu of feedback comments for selection by tutors. After selection of comments, tutors were asked to click a button which converts the form into a word document which was sent to students via e-mail. Comments on the feedback template in the first phase of the pilot had been revised by tutors in light of evaluations, which found it to be too vague and negative. Thus the feedback for the current session was adapted to be less negative and more specific in order to increase the quality of information given to students about their learning. Rather than focussing on what students had failed to achieve in their assignments or on areas that they had performed poorly, the revised template options included constructive guidance on how to employ different strategies for students to improve their performance as well as highlighting areas that students had performed to a satisfactory standard on. These changes were thought to be likely to improve student motivation and self-esteem.

Student/Tutor Perspective

The students felt very supported by the individual feedback provided by the lecturer on the discussion board. One student noted,

> *If you've got a question about something to do with marketing you can find an answer really quickly, because you've got your WebCT discussion board, you know that he's there to talk to, even though you can just look through the slides quite quickly.*

None of the students in the focus group had posted anything on the WebCT discussion board; although they had all read or browsed the site at some time during the semester. The main reason given for not posting a question was that generally the query had been pre-empted by another student, so the answer was already available. As one student put it

> *Usually the questions that you're going to ask have already been asked, so you've read it and found something out.*

Mercedes noted that the Word feedback document produced and delivered online on WebCt has been a success in terms of flexibility, readability and facilitating timeliness. Communication on the outcome of the assignments was prompt and reached students before the tutorial where the feedback was discussed. This should have added to the opportunity for reflection and learning.

Receiving online feedback has been positive and students commented on this in the qualitative research carried out by the tutors:

> *Prefer using the online submission and also preferred having marks online too.*

> *The WebCt feedback can be printed out and brought to tutorial if there are any further questions.*

However both students and tutors were unenthusiastic about the overly generic format of feedback templates, although some tutors saw some merit in the provision of generic on-line references. Tutors felt the need to write up more in the individual comments section than they had hoped to because of the overtly generic nature of the template options. There was a feeling that the options did not always reflect the comments that the tutors really had in mind in relation to a piece of work, so they have at times been forced to choose an option that they felt was slightly inappropriate. For example if a tutor selected the comment 'good' in relation to a particular section, they also prefer to be able say exactly what was good about it so that the student can build on this. Tutors suspected that many of the students did not read the generic comments in any case. One tutor advised students to *'really just focus on the additional comments'* because although some comments may be relevant to some students, the automated statements failed to direct the student to a strategy for improvement.

Tutors generally agreed that they would be happier providing more personalised on-line feedback so that while the typed format would make it easier for students to read their comments, the quality of the feedback would be enhanced and as one tutor commented,

> *It takes a longer time to even read what's been written than type in your own.*

One tutor had already been typing up feedback comments in the previous session format and had found this to be an easy process. However, tutors highlighted positive aspects of the generic feedback such as reference pointers to specific lectures, which are all available on WebCT.

Students in the focus group were generally disappointed with the generic feedback. One student was impressed by the length of the feedback, but after comparison of the feedback with peers, was upset to discover that the feedback was almost identical to that of his peers, and not personally tailored to that student (aside from one sentence). As he put it

> *I was very disappointed by it because it's not genuine*

A couple of the students felt the standardised feedback did not assist them in understanding where they lost marks or how to improve future assessments. This feeling was summed up by the comment,

> *It can maybe give a few more recommendations, but it doesn't specifically say what would improve your mark up to that level. It says it's very good, but if it was very good, wouldn't it be higher?*

Students also pointed out that they would read the feedback, but would not use it because they found it generic, and in their minds, this rendered the feedback of no use.

> *You wouldn't use it because it's standardised. It's just; it's useless because it's something someone's written without actually having a report. It just says, when you've got a mark between 60 and 70, obviously you've got a good understanding of the marketing mix, so the feedback says 'you have a very good understanding of the marketing mix'. You can't really use that.*

Responses to the open-ended items on the class survey also showed that some students would have preferred less generic feedback with comments such as,

> *The feedbacks were generic and not really specific in the feedback.*

> *Although feedback was given, it did not explain the mark very well and seemed to be generic*

> *The answers were too generic and didn't reflect on specific parts in each individuals own work. I received almost the same feed back sheet as someone in my tutor group*

> *I didn't get much feedback on my report on how I could improve it.*

> *The feedback was often to generic and was not specific to my report/essay*

However the majority of students disagreed and considered that the feedback given in the Marketing course had been more comprehensive than in their other subjects. Comments included the following selection,

> *Feedback from tutor was much more detailed from tutor than other classes.*

> *Other classes did also make a good effort in giving reasonable feedback in order for students to improve, although the marketing feedback was mostly better than all other classes.*

> *We got more feedback and was written down as well*

> *More comprehensive and detailed. word processed rather than handwritten so it was actually legible.*

> *The feedback given was in depth and informative. I found that I could use it to improve on the following assignments and for other classes.*

> *We got given a sheet which explained in detailed why the reports were given a certain mark. Whereas for the other classes i have we don't get feedback just the corrected assignment or nothing at all. On the other hand, one class does give back an evaluation form but the tutor simply ticks boxes ranging from poor to excellent. Marketing explains the evaluation in detail, which can only be more helpful.*
>
> *I found the feedback very helpful as it pin pointed areas of strength and weakness and allowed me to focus on any weaknesses and eliminate these for future assignments. I feel marketing provided more feedback than any of my other subjects.*
>
> *It was better as it was more comprehensive, with personal written feedback from the tutor, highlighting strengths and weaknesses with points on how to improve, other classes didn't provide this.*

There were many more comments of this nature than negative ones and quantitative results reinforced these comments by revealing that 69% of students in the class survey said that they received more feedback than for other classes, although a lower number of students indicated that this was better (54%) and 32% chose the neutral option (*Figure 3A*). 70 students provided reasons for these answers: 43 thought that they received better feedback than for other classes because this was more detailed, comprehensive and more in-depth. From the14 students who had chosen the neutral option, 7 indicated that they got the same feedback as for other classes, in most cases they specified that it was as good as for other classes. From these findings it can be concluded that overall the feedback given to students is better than for other classes. Moreover, 66% of AFEQ respondents felt that they had a clear idea of how they had performed on tasks compared to just 12% who disagreed (*Figure 3B*) and 76% indicated that their understanding of their performance on tests came from teaching staff compared to peers (40%), or their own judgement (56%) (*Figure 3C*). When asked what the information that they had received had told them, AFEQ response suggested that what students learned most from their feedback was how much effort they needed to put into the course (75%), what changes they had to make to their techniques to perform a particular task (68%) and what the strengths and weakness were in the work they produced (79%) (*Figure 3D*).

These results suggest that despite some misgivings about the overly generic nature of the feedback template that had been expressed by students in the focus group the majority of students did feel that the feedback was useful for their learning. Only 4 of the 14 students who gave specific comments in the class survey said that the feedback had been generic and this was reinforced by AFEQ responses, which indicated that 55% of students felt that they had received detailed comments on their work compared to 27% who disagreed (*Figure 3E*). However 72% of AFEQ respondents expressed their preference for more discussion of their feedback with tutors while 57% felt that they would have benefited from more peer discussion of their written feedback (*Figure 3F*) and only 50% felt that the feedback was prompt with 29% unsure and 21% disagreeing (*Figure 3G).*

Figure 3A: Class survey response to feedback for this class compared to other classes

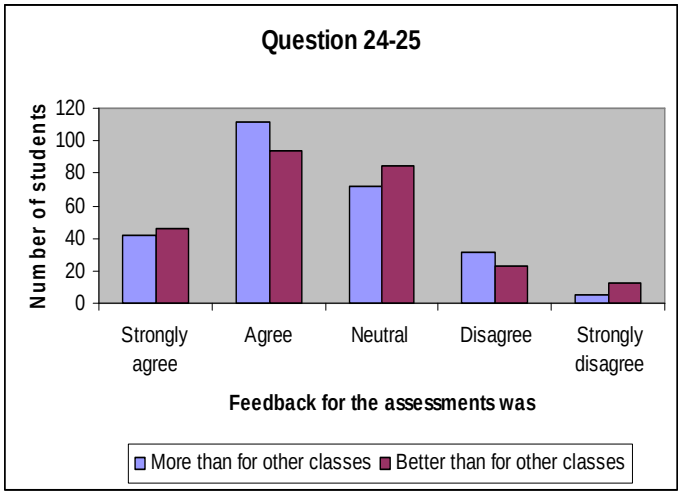


Figure 3B: Student AFEQ responses to how clear an idea they had on their performance on tasks

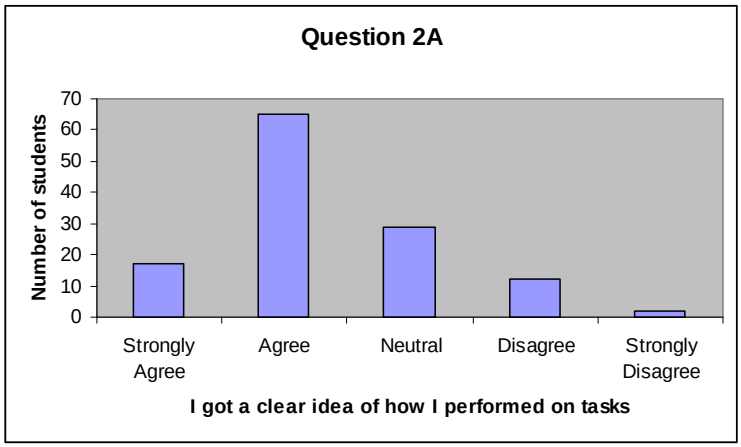


Figure 3C: Student AFEQ responses to where their understanding of their performance on tasks came from.

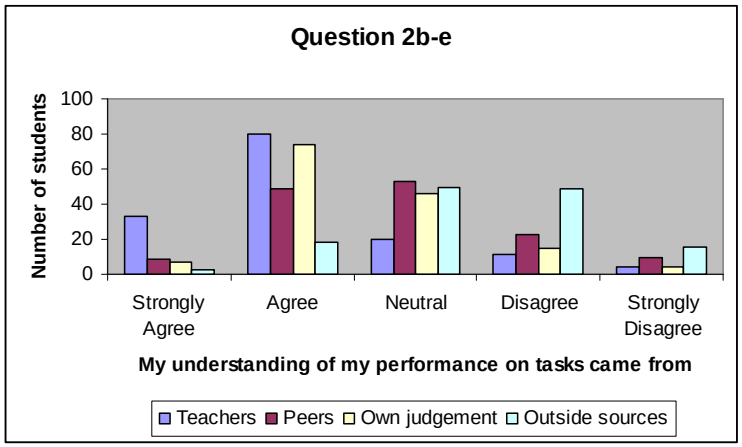


Figure 3D: Student AFEQ responses to what they learned from feedback

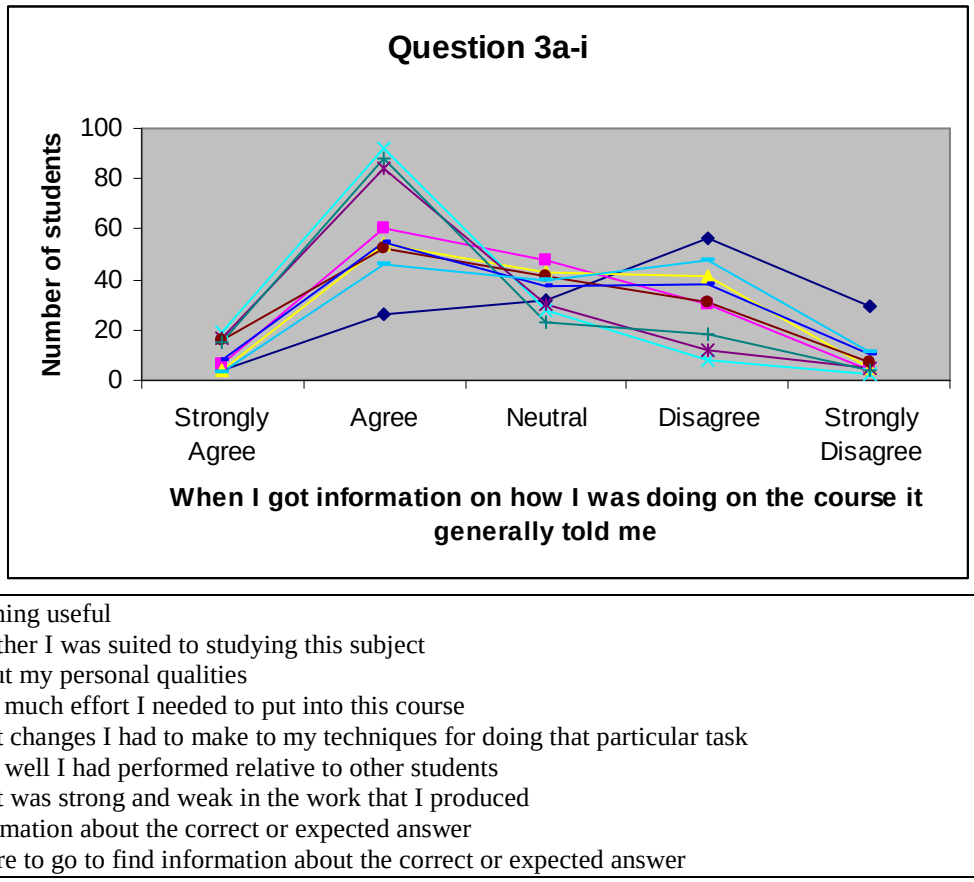


Figure 3E: Student AFEQ responses to the level of detail received on feedback

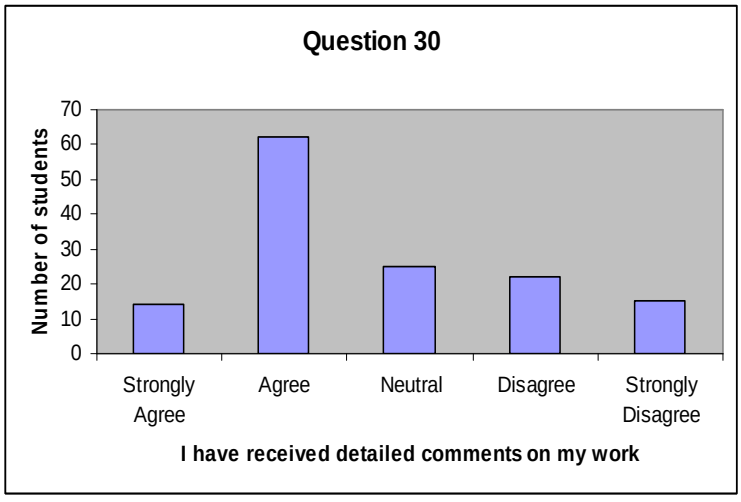


Figure 3F: Student AFEQ responses to whether discussion would useful along with written feedback

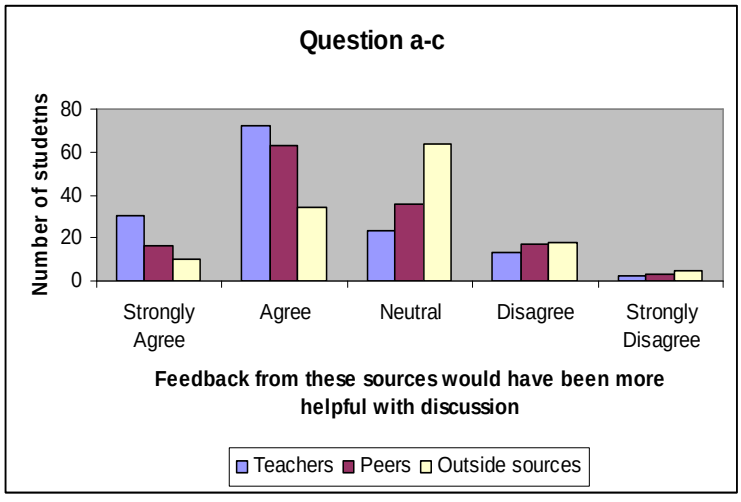
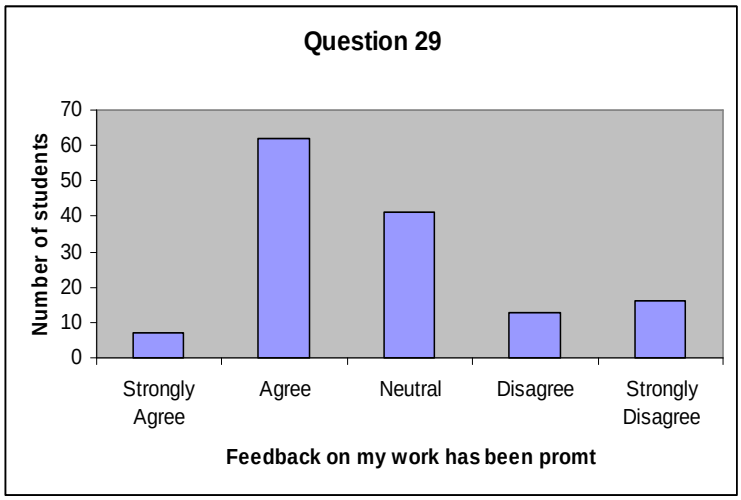


Figure 3G: Student AFEQ responses to the timeliness of feedback



Principle 4: Encourages teacher and peer dialogue around learning

Tutor/peer verbal feedback

The opportunity for peer discussion has been improved through the provision of social space on the VLE has led to an increase in students forming study groups, as Michael outlines,

> *They have formed some without prompting or organisation from us. I can say that because there are tracks on the bulletin board. The bulleting board had sections for each tutorial group so they can talk just to their small group as well as to the mass.*

The opportunity for tutor/student discussion has been enhanced by having opportunity to discuss assignment criteria built into the tutorials. This was done on two occasions before students had to submit assignments. Students were also encouraged to bring hard copies of their feedback after assignments to their tutorials in order to discuss their performance with their tutors and peers. Generic verbal feedback was gained during tutorial slots on class performance in the on-line tests.

Student/tutor perspective

Discussions from the student and tutor focus groups suggested that the intended process of enhanced tutor/peer dialogue in tutorials facilitated by students bringing hard copies of their feedback may not have worked as well as it could have because few students actually printed and brought the feedback with them. While a couple of students suggested that they pursued feedback on the on-line tests with their tutors during the tutorial sessions, tutors suggested that this was seldom the case and that the move towards technology had coincided with a reduction in dialogue with tutors.

Because the feedback was returned electronically, students often failed to bring a hard copy of the comments, which made it difficult for tutors to elaborate on the feedback comments during tutorials. One tutor suggested that having the feedback available electronically appeared to discourage students from seeking verbal feedback in addition. This effectively meant that students may have deprived themselves of the richer combination of both written and verbal feedback available. Tutors provided students with generic verbal feedback during tutorials based on key themes that had been extracted from marking the assignments but there

was no information shared between tutors or lecturers to this purpose. Students were however provided with the opportunity to ask specific questions.

While students strongly indicated their enjoyment of and high satisfaction with lectures, tutors felt that tutorials were largely disrupted by the lack of lecture content understanding, which they attributed primarily to poor attendance. Ironically, tutorials were the area that some students were most dissatisfied with as they felt that they were not related enough to the course. However others appreciated the opportunity to follow up feedback with questions and found that their particular tutorials to be suitably constructive to this process.

Peer feedback

Between tutorial group inconsistencies for peer feedback opportunities were evident from both focus groups, but despite strong opposition to the idea from some tutors, students who had experienced this appeared to be in favour of it and there was some disappointment expressed by those who were not offered the opportunity. A couple of students had been given sample reports by their tutor, which they discussed in small groups.

One tutor described their practice of asking students to comment on each other's assignments directly before their work was to be submitted for formal assessment. Students viewed this experience as fairly helpful in terms of gaining awareness about aspects or ideas that may not have been obvious to the student prior to that. Students pointed out that the pre tutorial slides had stated that students were to swap their assignments with a peer, but that it didn't occur in their classes. In contrast to the aforementioned tutor, another tutor expressed concerns that their students may be embarrassed by such an experience and a third postulated that only by second year were students likely to have enough confidence to undertake such an exercise. One particular student had noted that their tutor had consciously avoided the exercise of swapping reports as she was worried that students would be uncomfortable sharing their marks with peers.

An additional tutor adamantly felt that grades should not be discussed openly in any kind of comparative process after the return of assignments. One of the aforementioned tutors said that he had used the standard peer feedback sheet to elicit comments from students on their peers' work, but this was felt to be a slightly hollow exercise as the students tended to award similar marks to each other. He also noted that student's peer formative feedback comments were usually complimentary and basic. Other tutors agreed that students appear to be loath to genuinely critique their peers' work for fear of causing offence. A tutor also commented that competitive students may unwilling to share their work with peers but it was argued by another tutor that most students benefit from sharing work because even if the content of a student's work is good, it is often the structure or conclusion that lets them down, hence they will look for these aspects in other's work more than the content itself. However an additional tutor countered that even when students are given an exemplar, they often fail to emulate it.

When queried about group work in general, all students expressed relief that there was no required group work on the course. All students were involved with a lot of group work in other subjects.

However 55% of the students in the student survey indicated that they tended to consult peers for advice as a first line measure compared to just 30% who chose to consult tutors first, which contrasted with AFEQ responses, which suggested that 55% sought feedback from tutors compared to 45% who sought it from peers (*Figure 4A*). Despite this, class survey results indicated that 54.8% of students discussed MCQ test questions with peers compared to only 11.8% who discussed them with tutors (*Figure 4B*). These conflicting results may reflect the variability in feedback between tutor groups, which may in turn have led to diverse

patterns in students learning behaviour. They may also indicate differences between feedback-seeking behaviour for different types of assignments.

Figure 4A: Student AFEQ responses to what sources they seek feedback from

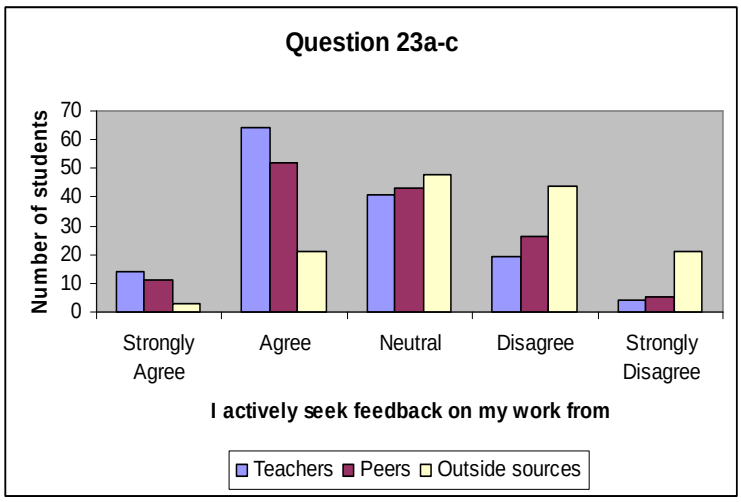
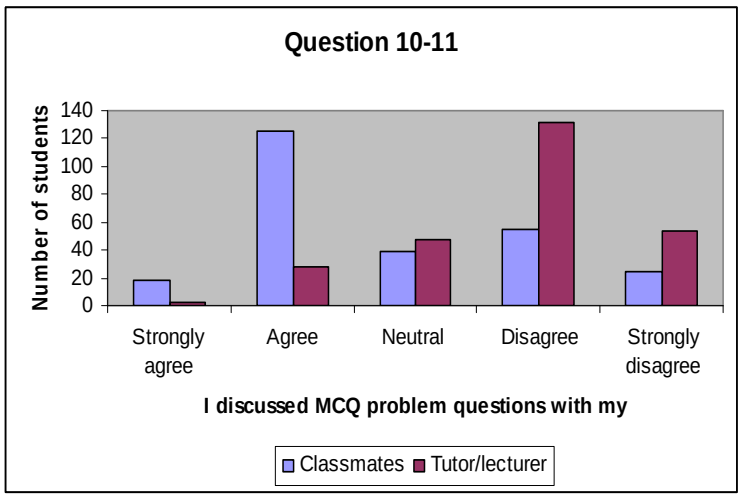


Figure 4B: Class survey results for who students tended to discuss MCQ online test questions with



Principle 5: Encourages positive motivational beliefs and self esteem

Course ownership

Students in this year's cohort had an increased opportunity for control over their time management and learning activities because of the increased flexibility with respect to the practice tests. As Michael explained,

> *They can manage their experience with regards to the MCQ tests, obviously they have a two week window so they can schedule it within that window at a time of their choosing and at a place of their choosing as long as it's on campus. Specifically with practice tests they can take them as many times as they like and it's up to them how many times they do it and whether or not they do it as part of a small group or whether they do it individually.*

Students were also strongly encouraged to supplement the course material with their own examples and an opportunity to do this has been built into this year's course. Michael elaborated on this process by explaining,

> *We are trying to encourage students to supply multi-media content and the mechanism that we have created is that they get exemptions for weighted coursework averages for 60% or more but if they reckon they are on track for say 58 or 59% and they voluntarily supply a piece of multi-media content, we will upgrade them if it meets some species criteria that we will be setting on the format. If it meets those criteria we will upgrade them from 58 or 59 to an exemption level mark.*

Social cohesion

The Principles in Marketing course was considered in the staff's opinion to have a central place within the business department in terms of social cohesion. This was partly thought to

be as a result of the implementation of the WebCT VLE. There was also encouragement from the class coordinator for students to see themselves as a cohesive unit, as he explained,

> *I have been deliberately trying to make a sense of community or society, that we are all in this together and you ought to stay with us next year.*

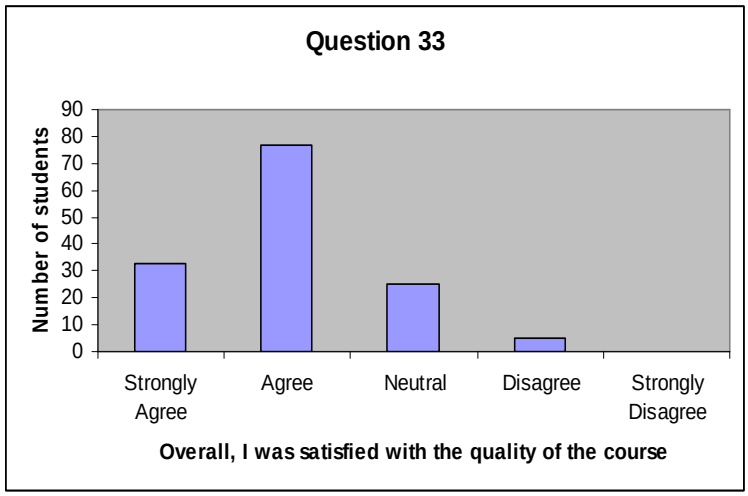
Student perspective

Whilst students felt a certain sense of belonging and involvement in the marketing course, there were various suggestions that either a social evening or a social space would be appreciated. The discussion board was seen as enhancing student interaction but students were keen to have more face to face interaction with other students. All students felt that face to face social interaction was very important to them. A couple of students pointed out that a social event may be up to the students to organise, but it was suggested that a social space within the department would be appreciated,

> *Just a place in the department where you could just sit, we have a social zone, if we could just say 'okay there's a microwave in there, a coffee machine and whatever, a few tables and a fridge and all that so we have a meeting point. That would be good.*

Students were very positive about their experience in lectures. They were pleased that lecture notes were put on the web well in advance of lectures and that the lecturer showed concern that students had the lecture notes with them in lectures. In terms of lecture style, students were engaged and entertained. They liked that the lecturer paused and gave the students time to digest the ideas, and they thoroughly enjoyed the everyday examples used to illustrate the content. Students really appreciated that the lecturer used straightforward language rather than jargon. One student pointed out that they never take notes in the lecture as they have never felt the need to. Students also drew attention to the patience and active involvement of the lecturer. They appreciated that the lecturer remained after class so that students could ask questions. Students valued the lecturer's input on the WebCT discussion board in answering questions and took this as evidence of the lecturer's interest in the class. The lecturer's effective use of technology was highlighted by a number of students. The use of PowerPoint in lectures held student's attention, and students appreciated that the slides were brief, colourful and often contained diagrams and images. AFEQ results showed that overall 79% students who responded indicated that they were satisfied with the overall quality of the course compared to only 4% who were not (*Figure 5*).

Figure 5: Student AFEQ responses to overall satisfaction with course



Principle 6: Provides opportunities to close the gap between current and desired performance

Students had repeated opportunity to practice between assessments and these practice tests were available to students to try as many times as they desired in order to facilitate opportunities for repeated learning cycles. Three multiple choice practice tests were delivered to all students. The first test was taken by 66% of the class, the second by 51% and the third by 59%. 62% of students did the practice tests three times or more with 15% doing it more than four times. The students who did it four times or more increased from 7% for the first test to 27% for the last.

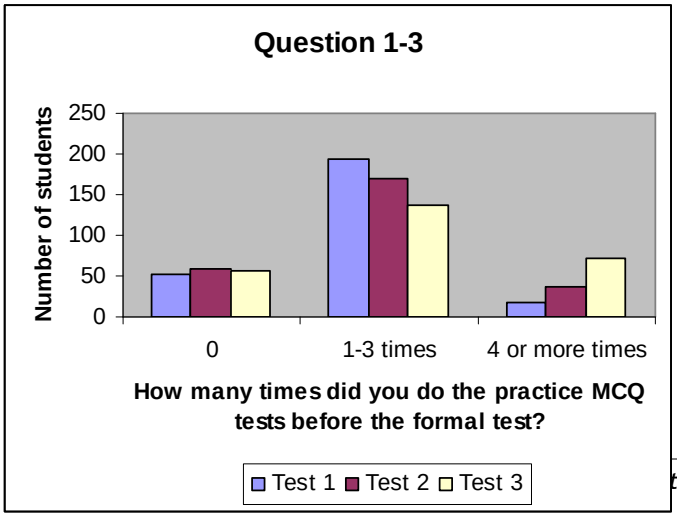
Students also had the opportunity to build skills between assignments as there was significant overlap between the criteria for the report and the criteria for the essay, particularly in respect of technical criteria for example, standards of production, referencing, citation, upon which they received detailed feedback.

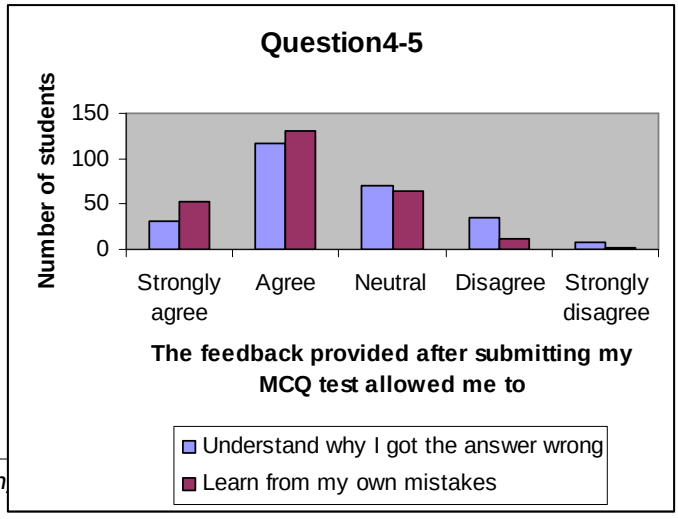
Student perspective

Students in the focus group indicated that they felt that the practice tests had been extremely beneficial in helping them to build skills between assessments and that the frequent tests were more useful than one larger test. The amount of information that was easily accessible via a variety of media was appreciated by the students and allowed for uncomplicated study in preparation for assessments. Over the three summative tests the majority of students (62.9%) had taken the practice test 1-3 times before and 15.9% of students had practiced the test four times or more before sitting the test (6.8% of the students had practiced the test more than four times before test 1, increasing to 13.6% before test 2 and further increasing to 27.2% prior to test 3). 21.3% indicated that they had failed to take the practice tests before sitting the summative MCQs (*Figure 6A*). These results suggest that some students became increasingly aware of the value of taking the practice tests over the duration of the course. 56.7% of students indicated that from the feedback on the MCQ tests they had gained understanding of why they had got the wrong answer and 69.8% felt that they had learned from their own mistakes (*Figure 6B*).

Figure 6A: Student Undergraduate feedback survey responses to number of practice MCQ tests taken prior to taking summative test

Figure 6B: Student Undergraduate feedback survey responses to what students felt they had gained from feedback on the MCQ tests.





83.6% of respondent in the class survey indicated that the opportunity to repeat the practice MCQ test had helped them gain confidence on their knowledge while 88.2% felt that doing the practical test improved their chances of success with the formal summative assessment (*figure 6C*). 86.7% of students did the practice test on their own and 92.8% did the formal summative test alone (*Figure 6D*).

Figure 6C: Student Undergraduate feedback survey responses to the perceived learning gains from the tests.

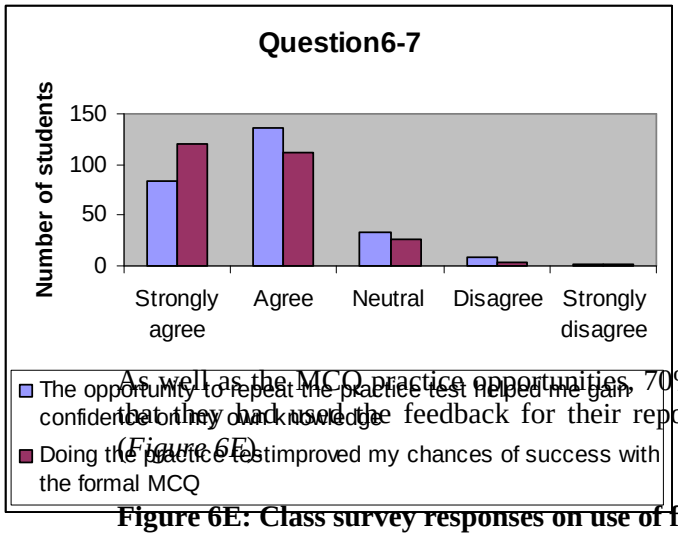
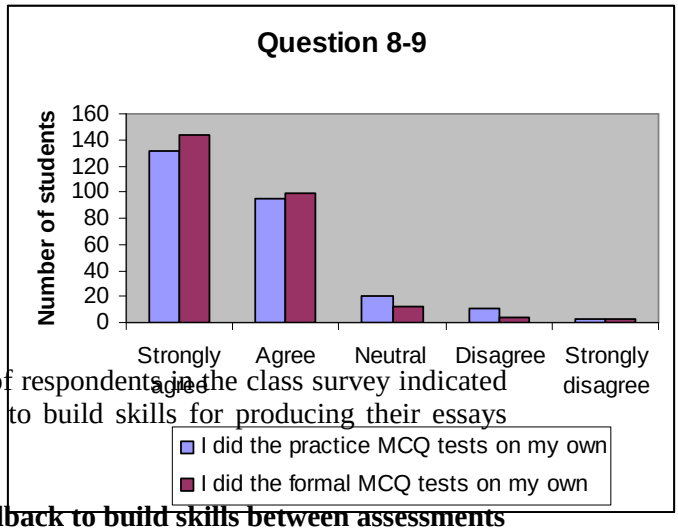
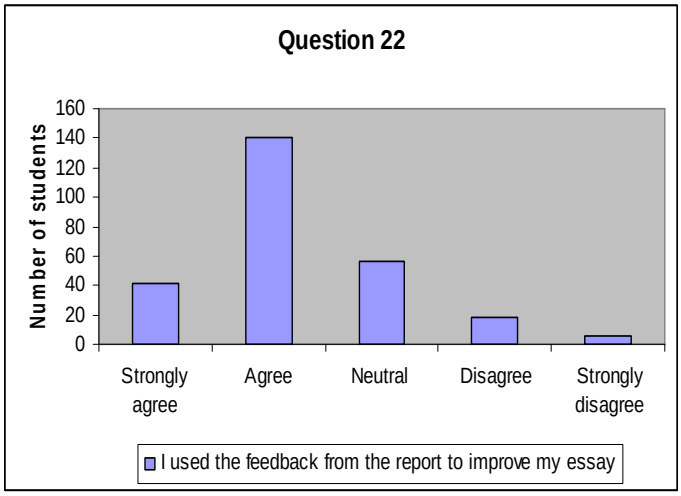


Figure 6D: Student Undergraduate feedback survey responses to what environment they took tests in.



As well as the MCQ practice opportunities, 70% of respondents in the class survey indicated that they had used the feedback for their reports to build skills for producing their essays (*Figure 6E*).

Figure 6E: Class survey responses on use of feedback to build skills between assessments



Principle 7: Provides information that can be used to help and shape the teaching

Low marks on the multiple choice test could provide staff with an insight into students' understanding. Michael elaborated that,

> *We have thought about having say half a dozen multiple choice tests that would be more topic specific but for administrative and scheduling reasons we have decided to limit it to three so you can talk about using them as a diagnostic tool.*

Staff were keen to avoid over-assessment of students and dilution of the marks weighting for each of the tests. However they had considered other means of gaining feedback from students about their level of understanding. For example Mercedes described how she had considered the idea of introducing a qualitative question where students could write a specific short answer that could be marked by a computer in order to add more depth to the process rather than relying on multiple choice data only. Staff shared information with each other regarding the students at bi-yearly lecturer/tutor meetings and this gave tutors an opportunity to shape the feedback given to student. Staff delivered generic feedback to students during tutorials gained from class scores on tests.

Condition 1: Sufficient assessed tasks are provided for students to capture sufficient study time

The provision of on-line practice tests offer the students the chance to study and receive immediate feedback from wherever they are and allow them to structure this around their own timetable and responsibilities. As Michael pointed out,

> *Access of WebCT can be done from any internet based computer, we have deliberately limited the formal multiple choice test to campus only PCs for security reasons essentially but everything else including the practice test can de done from anywhere in the world.*

Condition 2: These tasks are engaged with by students orienting them to allocate appropriate amounts of time and effort to the most important aspects of the course

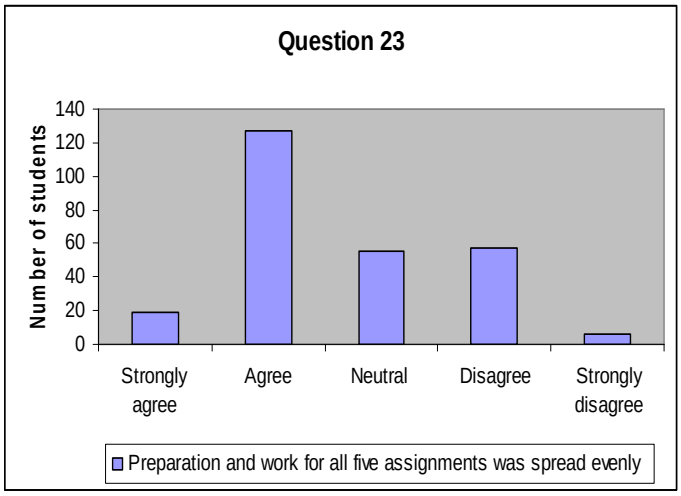
The on-line tests have been designed to provide students with opportunities to distribute their study evenly over the course of the year. Michael explained that,

> *The 3rd MCQ test is scheduled towards the end of semester 2 to basically keep them interested and keep them involved because obviously for them it's 20% so for most of them it will make or break whether or not they will have to do the exam.*

Student perspective

Students in the focus group indicated that they felt that the three multiple choice tests had helped them considerably to distribute their study tasks evenly throughout the year. Responses from the class survey revealed that 55% of students felt that the preparation and work for all the assignments had been spread evenly over the course of the year compared to 24% who disagreed (*Figure 7*)

Figure 7: Class survey responses regarding the spread of assessments



Condition 3: Tackling the assessed task engages students in productive learning activity of an appropriate kind

It was hoped that the combination of the lectures, multi-media presentations, on-line multiple choice tests and feedback would deepen the understanding of the students of the course content and objectives. Staff observations appeared to confirm this. As Mercedes noted,

> *I've noticed in their essays for example they are going more widely. They are even bringing in some economics principle which you know in terms of pricing and demand and supply and that kind of thing so it's quite good. So I think their knowledge of marketing is more in-depth now than it was.*

Student Perspective

There was concern among tutors in the tutor focus group that understanding of the lecture material was not being transferred to the tutorials and tutors felt overburdened at times in having to assume responsibility for going over some of the content at the beginning of each tutorial to ensure understanding. There was also concern that the content in assignments was not being effectively linked by the students to the lecture content. Some tutors felt the need to bring a slide or two or a graph from the lecture to illustrate the concepts but they felt unhappy about covering material that students should already be familiar with. One tutor claimed that up to twenty minutes per tutorial has regularly been taken up with going over key concepts from the lectures. However the main cause of this was thought to be poor lecture attendance and a lack of motivation with respect to downloading notes from WebCT. There was also some concern that students have become too dependant on the internet at the expense of

reading books and there was some suspicion that even the core textbook was being underutilized.

Staff anecdotal evidence from interviews suggested that the students were reading more widely in general this year and using more varied sources rather than simply sticking to the core textbook and that this was facilitated by the division of the previous single multiple choice test into three test distributed over the year. Mercedes also suggested that that despite some staff misgivings, the evidence from the incremental progressions in grades over the MCQ tests suggests that students were making use of the core text book in a more evenly distributed manner.

Students in the focus group generally found the course easy to follow and for the most part felt the technology and assessments were appropriate. They all agreed that the structure of the course had been very clear and logical, which allowed for ease of learning of the content. In particular, the required reading prior to each lecture was found to be very useful, and it corresponded well with the content of each lecture. Students recognised that the various facets of the course, such as lectures, technological resources and assessments all hung together in a logical fashion. AFEQ results revealed that 80% of respondents felt that the assessments measured the kind of learning that they should compared to just 11% who disagreed (*Figure 8A*). The content and expectations of the course were described as easy to follow, and students felt that if the provided reading list and course structure were followed, it would be straightforward to complete the course in a satisfactory manner. One student put it in the following way,

> *I didn't know what to expect and it's been very clear through the course exactly where they're coming from, the foundations, they're really starting to build up your knowledge. You can see a clear composite structure all the way through. And the book was excellent as well. It just matches it.*

Students were very positive about their experience in lectures. They were pleased that lecture notes were put on the web well in advance of lectures and that the lecturer showed concern that students had the lecture notes with them in lectures. They appreciated that the lecturer remained after class so that students could ask questions. Students valued the lecturer's input on the WebCT discussion board in answering questions and took this as evidence of the lecturer's interest in the class. As one student expressed,

> *He's obviously very comfortable using like the discussion boards and the PowerPoint and I think it makes a huge difference.*

The students agreed that the technology including the WebCT, electronic tasks and feedback and MCQs were a fundamental aspect of the course, and the same objectives and experience could not have been achieved without it. The technological aspects were all seen to tie together well, and allowed for easy access to information for the students. 72% of students considered their grade on the MCQ test to accurately reflect the amount of effort that they had put in and 80% felt that the material covered in the tests was comprehensive (*Figure 8B*). The overall value of the tests for improving their learning was reflected in the positive views in the class survey regarding consolidation of lecture material (70%) although a lower number of students applied the material from the tests for their essays and report (50%) (*Figure 8C*). The material covered in the tests was the theory to be used in the assignments so this finding may indicate that students are not able to make the link between theory and practice. This reinforces the concerns discussed in the tutor focus group. 55% of students felt that their grade on the reports and essays had been matched to the effort made (*Figure 8D*). All of the students in the focus group agreed that they would all be happier about the presentation if it was worth marks. However this view was only reflected by 22% in the class survey compared

to 61% who disagreed. 53% indicated that they appreciated the opportunity to do an individual presentation while 22% did not (*Figure 8E*).

Figure 8A: Student AFEQ responses to whether assessments measured the appropriate kind of learning

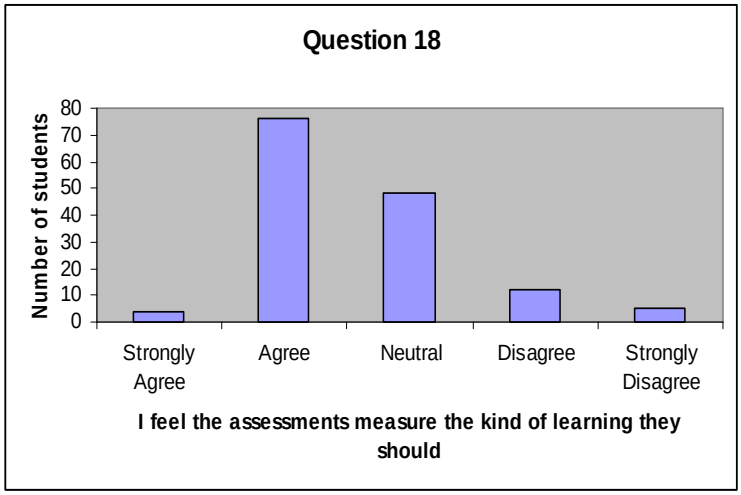


Figure 8B: Class survey responses to whether assessment reflected appropriate amount of learning

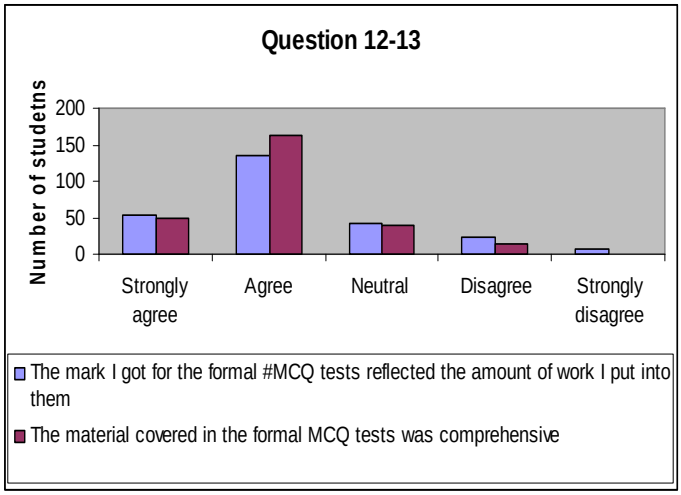


Figure 8C: Class survey responses regarding consolidation and application of lecture material

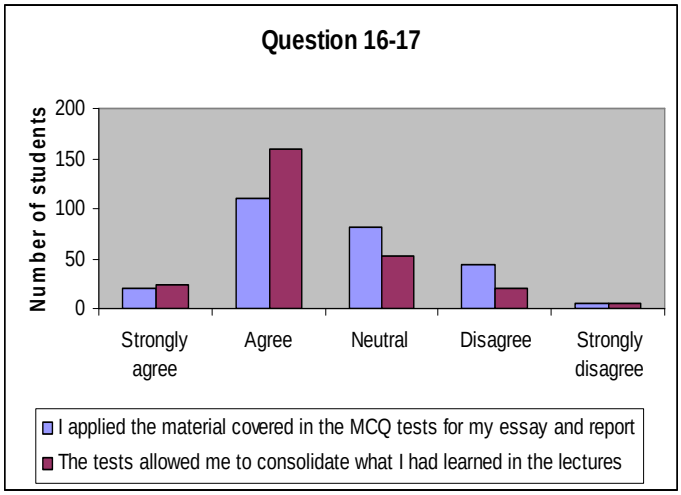


Figure 8D: Class survey responses regarding the relationship between effort and outcome on coursework

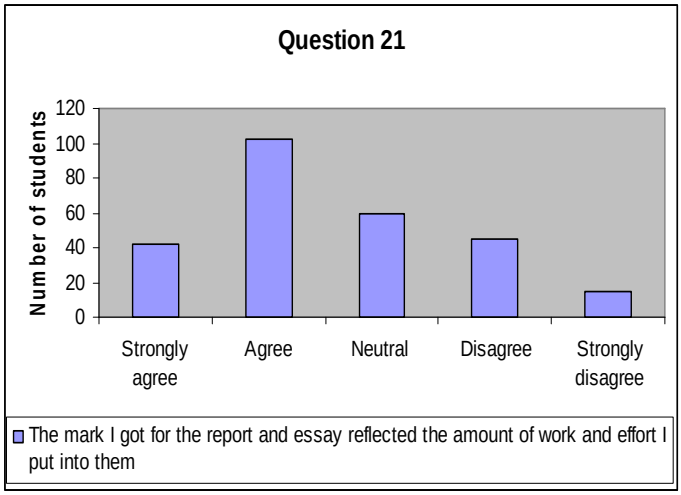
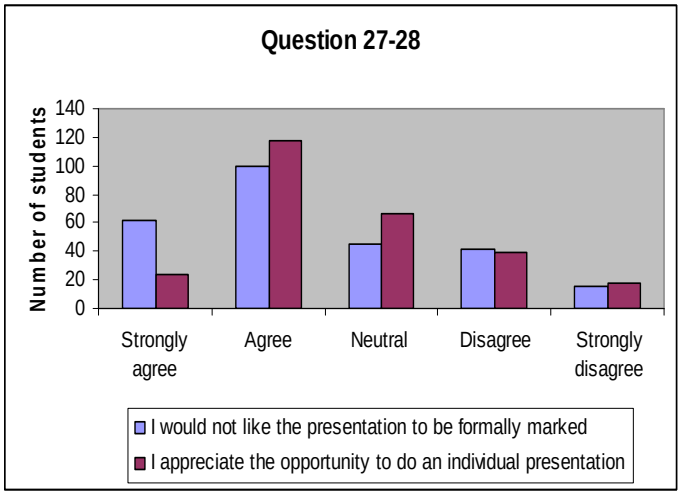


Figure 8E: Class survey opinions on the unweighted presentations



Condition 4: Assessment communicates clear and high expectations

Staff felt that the introduction of the three multiple choice tests this year has conveyed high levels of expectations to the students in terms of the degree of work and commitment required. Mercedes illustrates this point in the following way,

> *Because of the new practices we have introduced, they have to read at least the marketing book, in the past they weren't even reading the marketing textbook. Two years ago they weren't because they only needed to pass two assignments, get 60% and that was it. Now because of the MCQ tests, they have to read, they have to read the textbook at least and in order to do the assignment they have to go and do lots of research on the net and they do, you know, the overwhelming majority of sources are from the internet obviously but they are also doing a couple of journals, which is incredible I mean really. So now, their expectations seem to be changing.*

Student/tutor perspective

One tutor in the focus group expressed doubts about the developmental readiness of first year students to meet the standards expected of them by commenting,

> *I just think it's a huge jump for them, the expectation of what we would expect compared to what they had to do at school.*

Another tutor agreed and said that they tended to advise their students not to put undue pressure on themselves in their initial report. However an opposing view was offered by a tutor who expressed his opinion that high expectation should be put on the students from the beginning in order to set a precedent, providing clear criteria and standards have been effectively communicated first. Another tutor suggested that the students on this course gained more autonomy in their learning very gradually, building skills through interaction during tutorials with questions and presentations to gain confidence, culminating in a more independent approach in their second year.

Students found the report challenging, particularly the amount of research required. A. A couple of students suggested that websites that don't require a paid subscription should be suggested, rather than the ones mentioned in lectures such as Mintel or Brand Republic. These two websites are also not subscribed to by the library. The Keynote website was suggested as a possible alternative. Finally, in terms of the report, students found it difficult to know where to draw the limit in terms of obtaining information from a live website.

> *I made a compromise actually. I just made a cut off date and said 'I'm collecting information until that day'.*

One student expressed that it would be most helpful to follow and be trained in the industry standards for report writing,

> *What would have been helpful there is to say, this is a standard way for example in the UK if you are going to a company to do a report…And this is the way that you would do it, you know, specifically if you were involved in marketing and you were doing something like C2.*

In terms of the expected standards on the on-line multiple choice tests, 81% of AFEQ respondents felt that the overall course had expected high standards of the students (*Figure 9A*) while 75% of the students in the class survey felt that the material and range of questions in the on-line tests had reflected their expected level of difficulty (*Figure 9B*).

Figure 9A: Student AFEQ responses to the level of standard expected of them on the course

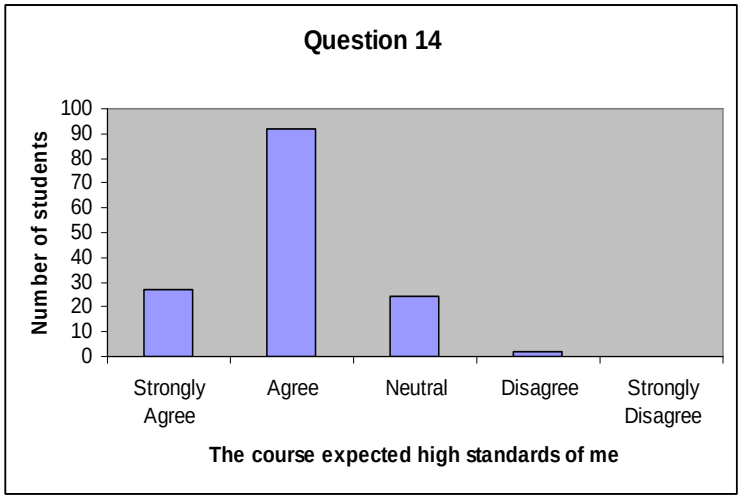
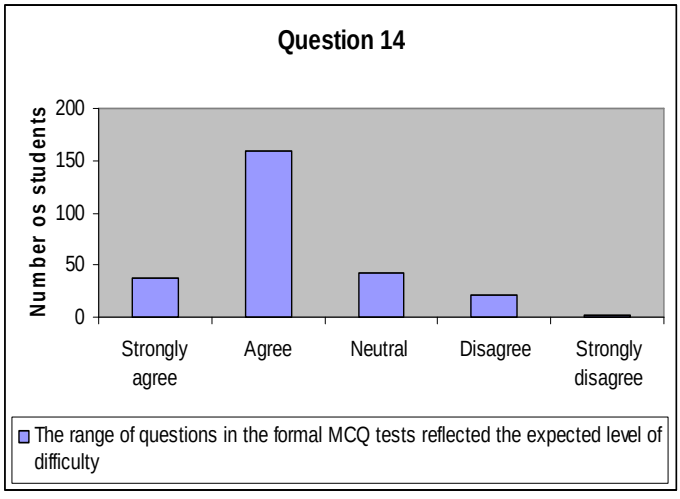


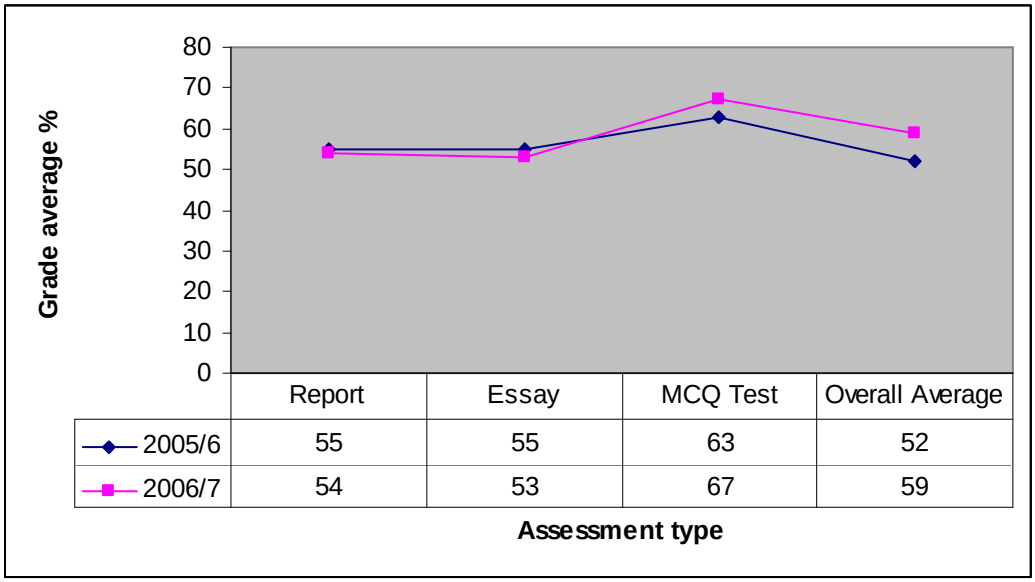
Figure 9B: Class survey responses to expected task difficulty in relation to online MCQ tests



Formal evaluation outcomes

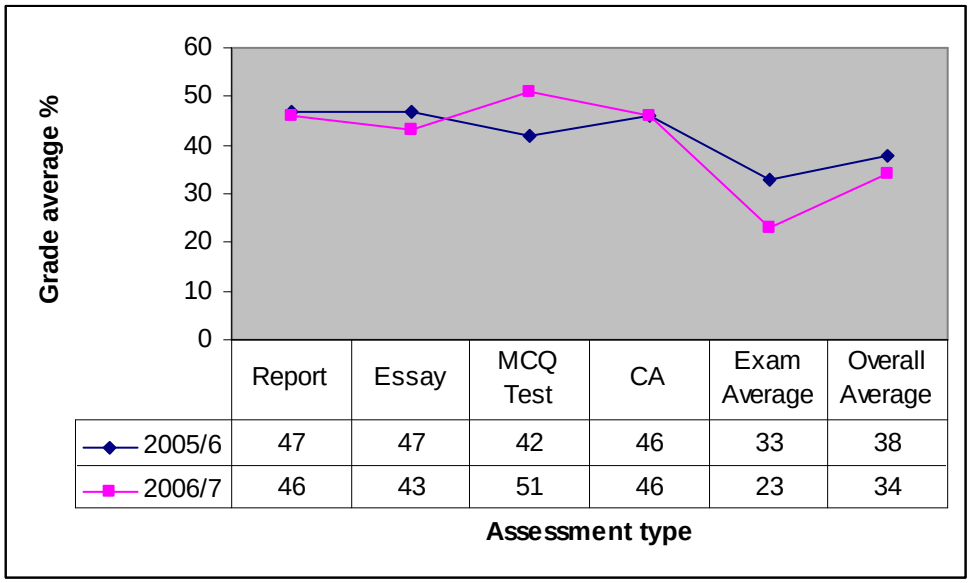
There were 404 students in the class in 2005/06 and 99 (25%) did not get exempted. This particularly high level of exemptions was mainly due to the fact that the Department decided to award exemptions on the bases of 2 pieces of assessment only because of the industrial action which prevented the release of all marks. In 2006/07 there were 516 students and 172 (33%) did not get an exemption. Overall the marks indicate that students have gained some advantages from the MCQ tests. The results for the exam show a very poor performance and needs further investigation. However it is important to note that that only students who failed to achieve the mark of 60% or over in order to obtain the exemption, were required to sit the examination. By definition, this meant that the weakest sub-grouping of the overall cohort were represented in this category. Overall Continuous Assessment: in session 2005/06 there were three pieces of CA, one report, one essay and one MCQ Test. In the present academic year the report and essay have been maintained but there have been three MCQ tests. The results for the whole classes can be seen in *Figure 10A* below:

Figure 10A : Class Continuous Assessment Averages (%)



Although the report and essay marks were slightly lower for the present academic year, the MCQ test average is a significant 7% higher which indicates that breaking down the test into smaller tasks benefited the students' overall marks. The lower report and essay averages for year 06/07 could be explained by the particularly weaker performance from students who did not get the exemption (*Figure 10B*).

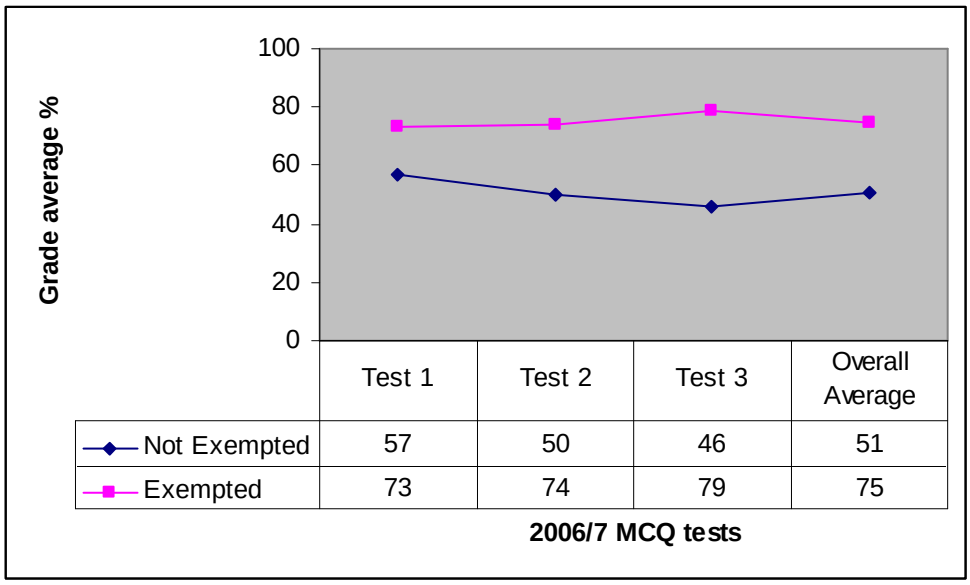
Figure 10B: Continuous Assessment and Exam averages for students **who did not get exempted**



There was a marked difference in their essay and exam performance where students were 4% and 10% lower respectively than for the previous year. Their average performance for the MCQ test however is higher by 9%, 2% higher than for the class average. This may suggest that weaker students benefit more from this type of test.

Multiple Choice Tests: besides the overall averages discussed above, there were some interesting differences in the performance of students for this academic year in terms of the tests results.

Figure 10C: 2006-2007 MCQ Tests averages



As *Figure 10C* reveals, students who got exempted showed a gradual improvement in their marks (by 6%) while those who did not get exempted got considerably lower marks, losing 9% for the last test. This lack of effort could be due to a number of reasons: awareness that they have missed their chance of getting an exemption and are resigned to do the exam; some would have decided that Marketing is not for them and are simply doing the test to comply

with regulation and avoid being NQ'd. The very low exam average (23%, see *Figure 10B*) from this group possibly indicates that they may not be planning to continue with Marketing as part of their degree. We do not have information to see if this is the case but once Registration is finished this could be further investigated.

Staff time on task

Efficiencies

Secretaries have benefited from a reduced administrative burden as marks go automatically onto WebCT and grade book. This data can also be used to monitoring student's progress over time. Students also register for tutorials using the VLE and this has reduced administrative work considerably.

The class coordinator had to upload the multiple choice tests questions and this added considerable time to his work in the first year of the project. However the time spent on setting up multiple choice tests paid dividends this year and for next year there will be only minor changes required. In addition, the class coordinator has invested considerable time replying to questions on the bulletin board. However this has provided the students with an opportunity to receive immediate individualised tutor feedback, which is a valuable learning gain. There have been time efficiencies regarding receiving course work and providing feedback on-line and paper is also being saved. As indicated before although staff workloads have not been reduced, the Department is providing better quality assessment and feedback. These changes to the first year class will be maintained over the long term at no additional cost.

The additional on-line 'Joker' summative task using multi-media uploaded on the VLE to give borderline students an opportunity to gain enough marks to get exempted created extra work for the course coordinator but the quality of some of the submissions was very good and will be used as an input to lecture material next year.

Potential efficiency gains

Time spent on overall planning, organisation and preparation of materials will improve efficiency in future iterations, at least for the next two years.

There are also potential efficiency gains for in terms of tutor time as Mercedes explained,

> *In terms of the team of tutors who deal with feedback provision and marking assignments, obviously if this is set up quite effectively and efficiently they will have more time to do research because that's the issue. We may still have to keep the numbers, when we first started with the REAP project, we were aiming at maybe trying to reduce the number of tutors and maybe have some financial benefit for the department so we don't need 10 tutors for 1st year, maybe 8 so that would be 2 salaries that would be saved. But obviously the contact with the students, I think 8 sessions over one year is the minimum we can provide the students with to maintain the human contact but this new system would allow tutors to spend less hours on marking and feedback. If we could reduce this by 1/3 even, tutors would have time to do more research.*

Tutor Perspective on Efficiencies

There was a strong feeling among tutors that the feedback comments were too generic as well as far too long, resulting in extra workload due to the need to edit the comments. One tutor

described writing the comments by hand, as previous practice would have required before entering them into the system, thus increasing rather than reducing marking time. Another commented that it would be of more value to provide five minute face-to-face feedback to each student in the time currently required to generate feedback on assignments. One tutor suggested that a further waste of resources was incurred by the printing of hard copies of assignments and feedback for filing purposes, as opposed to the previous carbon copy method of duplication. However, tutors were all much more positive about the ability to upload students by tutor group this session rather than the previous alphabetical method as this did save considerable amounts of time.

Limitations

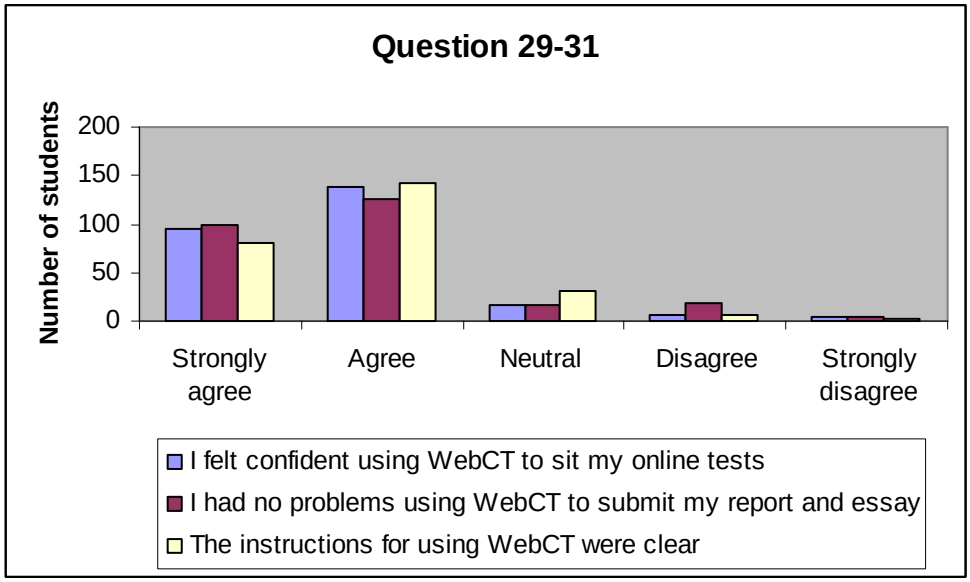
Technical issues

The class coordinator used WebCT for uploading lecture and tutorial materials and also for student's informal discussion groups. In terms of tutors, there were some problems downloading and uploading material for the first assignment but this was addressed for the second assignment. The system is slow but has been used without any other problems and has not increased the overall workload of tutors.

Student/Tutor perspective

90% of students felt confident using WebCT for their tests and 85% reported that they had no problems in submitting their reports and essays and that the instructions had been clear (*Figure 11*). While students in the focus group also reported to have experienced no real technical problems with any of the software, notwithstanding their lack of experience in downloading podcasts and one or two early problems, tutors in contrasts complained of a variety of minor technical difficulties and slow download speeds with the online feedback system in particular.

Figure 11: Class survey responses to technical issues with WebCT



The most important implementation issues were the engagement, training and participation of students and tutors in the design and delivery of feedback which need to be given more

attention. The problem with inaccurate data from WebCT/Registry caused concerns since according to their list there should have been 587 students but the real number was estimated to be about 512. The format of multiple choice questions was not necessarily compatible with WebCT and manual checking by the course coordinator was required. As Michael illustrated,

> *WebCT can't extract the university spreadsheets very effectively so all the data has got to be manually re-entered, which is absolutely. You can extract it to some spreadsheets but it doesn't work with the university ones.*

WebCT has been accessible, mostly free of problems, immediate, private and has meant an added tool to communicate with students beside lectures, tutorials, personal access to tutors and e-mails. Earlier problems had included feedback being processed through one central location so that tutors had to search for their own students but the changes this year have solved this problem as Michael explained,

> *I think we have streamlined the management of the process of the written work in the way that it comes and in the way that it is distributed and the way that it's sent back and so for example last year we has one big post box for them all to submit to and this year we have got a different box for each tutor so in terms of sources and systemising and improving I think that has been a benefit.*

Mercedes added

> *We managed to solve the problem from the first to the second semester, that's true because providing a deadline in the 1st semester meant that for some reason the system put all the assignments together again so when we went to provide feedback we had to look for our students so by not putting a deadline then each tutor keeps their own groups.*

However staff did note that they felt that they would benefit from increased engagement on the part of WebCT with individual departments and from increased staff training.

Feedback Template

One tutor recalled being unable to successfully to post feedback to all of the students, and thus having to resort to individual e-mails, resulting in increased workload. Time inefficiencies and staff frustrations also occurred due to poor uploading speed of the system at times. As well as the slow speed, one tutor described a typical bugbear of the system,

> *I clicked onto the screen and I clicked right down to the bottom where you put your mark and then you go to add your attachment and you add it and when you come back it's flicked back to the top of the screen'.*

There were some concerns about lack of training since although instruction had been available to some extent; the tutors felt that they have really had to learn on the job, whilst under extreme time pressures. Other technical problems have included posts disappearing and access problems from home. This is particularly irksome for tutors who are only timetabled on campus for a very limited number of hours.

None of the eight students in the focus group had experienced any technical difficulties in accessing or completing online tests or in submitting their reports electronically.

iPOM Downloads

One of the students had used one of the downloads for the C2 report, and had found it useful. The rest of the students had not used any of the downloads. Some had simply not used these resources, and a couple of students gave technical issues as the main reason, but could not recall what the specific problem had been as it had been early in the semester. Another student felt that the lecture notes and provided information were sufficient to complete the two major assignments, and didn't need any further resources for guidance. One student said

> *I added up the pros and cons of it and I think that I pushed it to the side because there were other alternatives there.*

Sustainability

Staff felt that the electronic feedback was sustainable in the longer term.

Radical curriculum changes are made collectively as Sean explained,

> *If you were making radical changes then we would discuss it at the undergraduate review, which meets once per semester and that committee involves everybody who is involved in the undergraduate teaching and any major changes would be discussed and agreed or disagreed with.*

However smaller changes would be made independently by the course coordinator and there was some concern that some of these changes may not survive staff turn over. Although the major changes brought about by the REAP project can now be assumed as established practice to be inherited by any new members of staff, some staff members may not be prepared to provide the students with the level of individualised feedback that the current class coordinator does through the bulleting board.

Institutional support

Staff felt that while there was some institutional support in terms of commitment to a VLE in the form of WebCT there was a great deal of inconsistency across departments with regard to its implementation. There was a feeling that reluctance on the part of staff in some departments to embrace e-learning activities may reflect a perceived lack of rewards for innovation in teaching and that this was a pervasive problem throughout academic institutions.

Future progress and strategic development

Second year and large elective classes will use the feedback process piloted in the first year class. Effective assessment should be put at the centre of the learning experience. In order to achieve this, the Department has to develop a strategy for assessment which drives and integrates all classes. Time has to be provided to staff to allow such change to occur. From 2009 a different book will be used. The Jokers will be used for one more year at least depending on take up rates.

While staff were keen to expand the redesign in light of the benefits of incorporating the technology into the pedagogical aims of the course, they viewed this expansion as a complementary method to the more traditional direct contact learning designs rather as a replacement. As Sean explained,

I think I can say we will roll it out to other electives certainly in the next year or two tears. I can see it working and working well in the mechanical areas of submissions, feedback, I don't think we are going to see a move towards e teaching where lecturers will use it to replace lectures and so on. I think that was one of the original themes behind e-learning, that it was going to replace people standing up physically, I mean I think students still require that and I think staff will put the time in to teach a course so I think it will be developed from a mechanical point of view and I think it will address some of the issues of administration and I think it will allow students to do self learning and reflection but I don't think it will ever make the jump to a virtual teaching environment where virtually everything is done online and whatever and physical teaching drops, I don't think that's ever going to happen.

Lessons learned

Staff felt that other staff who may be undertaking similar projects would benefit from providing more time to discuss the stages of the process and involve all people concerned well in advance. In terms of technology, staff felt that it is important to check for inconsistencies. Students assigning themselves to tutorials were considered to work well and they did not appear to have problems with WebCT with regard to downloading materials, even very large files like the commentated revision lecture. Staff noted that they had not experienced technical failures when using WebCT to administer multiple choice tests on a mass scale.

Dissemination

The Senior Tutor attended a conference organised by BMAF in Birmingham (May) to present findings related to the bank of comments and feedback. It was well received and it needs to be improved to submit for publication. Papers are also currently being prepared based on a Departmental survey as well as on the REAP researchers findings.

Conclusion

The course redesign for 2006-7 consisted of the roll out and extension of phase one interventions including three summative on-line multiple choice tests delivered through the university's VLE (WebCT) in a change to the previous single one last year. Self-test practice tests were available during a two week window of opportunity. Electronic feedback on assignments was delivered via a feedback template drawn from a bank of comments designed collaboratively by staff based on criteria formulated through discussion with students. The design of the template had been revised in phase two in light of phase 1 evaluations in order to provide more positive, detailed feedback to students. Multimedia podcasts were introduced and students who were close to the required exemption grade of 60% were given the opportunity to submit multimedia presentations to bring their grade up to the exemptions level. Increased structure was introduced to the WebCT bulleting board with dedicated academic and social areas.

Students were provided with criteria which was standardised through tutor review meetings although quantitative and qualitative evidence from student and tutor focus groups and student questionnaires suggested that both tutors and students agreed that there was a significant degree of inconsistency between expected standards and more specific criteria across tutorials groups. However questionnaire data showed that on the whole, students felt that the criteria for tasks had been clear in advance. Students found the exemplars to be very useful for report writing but were frustrated by inconsistencies between tutorial groups in the

opportunity for peer formative feedback. Those who did receive it did, contrary to some tutor's apprehensions find it to be a valuable learning experience. Students considered the formative element of the practice multiple choice tests and the feedback from the summative tests to be a valuable tool for self-assessment and reflection on their progress and helped to build skills between assessments but would have preferred more immediate feedback on the summative tests.

Students felt very supported by individual feedback available on the discussions board and benefited from having the learning resources on-line so that it could be accessed at any time. Initial qualitative evidence collated from student and tutor focus groups suggested that both students and tutors agreed that more personalised electronic feedback would be more valuable than the more generic feedback that the current template options offered. Notwithstanding these comments, additional qualitative evidence gained from open-ended responses on the class survey coupled with quantitative evidence suggested that this view may not be generalized to the whole cohort and that the majority of the questionnaire respondents indicated that the feedback on this course was better than that of their other courses and that they had a clear idea of how they had performed on tasks. The feedback primarily informed students about the differences between their current and desired effort, strengths and weaknesses as well as enabling them to develop new strategies to improve their performance. Tutors expressed some concerns that the shift to electronic feedback reduced the opportunity for discussion of feedback but quantitative results suggested that students tend to turn to peers as a first option for verbal feedback and tutors did acknowledge that students would approach them with specific questions on occasion. Thus the shift away from tutor discussion in tutorial may reflect the increased opportunity to engage in virtual dialogue with the lecturer and peers on-line and in face-to-face interaction with peers during exercises, although students expressed a preference for more peer face-to-face discussion.

Students were generally satisfied by the course. They were very enthusiastic about and were actively engaged by lectures on various levels, considered all of the technologies to be integral parts of the course and felt that the course on the whole was well aligned with the exception of tutorials, which they felt would benefit from being more standardised. Staff felt that the multiple choice tests were useful diagnostic tools, which helped them to shape feedback to the students and that the ability to deliver practice tests and resources on-line facilitated provided students with greater flexibility in their learning. Students indicated that the frequency of the tests helped them to distribute their study evenly over the course of the year. Some of the staff questioned expressed that they felt the students were more autonomous in their approach to learning although some voiced concerns about the student's readiness for such high expectations. The majority of students did feel that expected standards were high. A small majority of students felt that the standard of knowledge required for multiple choice assessments matched their expectations while some concerns were raised regarding the reports due to perceived inconsistencies in expected standards. However, overall the majority of students felt that the assessments measured the appropriate type of learning. Staff noted that students were using a wider range of resources to support their assessments but there was some concern among tutors and students that the links were not being made effectively enough between theory and application.

Exam data indicated that the small MCQ tests spread throughout the year achieved some positive learning outcomes. While the higher performing exempted students appeared to build more knowledge between the tests the non-exempted students still appeared to have benefited from this type of assessment more than from the essays and reports. The progression rate for the first phase of the pilot (2005-6) was 65% compared to 45% from the previous year. The overall results on retention for phase 2 (2006-7) will not be evident until the student register in September. The attendance to lectures has remained stable although as last year, numbers dropped considerably after the exemption list was released. Only one in three of those due to do the exam were there for the revision lecture. The redesign has increased administrative

efficiencies as well as efficiencies in terms of timeliness of student feedback. Increased lecturer time on tasks has facilitated efficiencies in student learning gains. Potential efficiencies include reduced marking time and reduced tutor hours and thus time gains for doctoral research. There were some administrative technical problems with WebCT but most of these have been rectified and students experienced few problems. The redesign is largely sustainable, although at the lecturer level, the discussion board feedback may be dependant on staff motivation. Strategic development plans include the roll out of the scheme to second year classes.