University	Strathclyde
Department	Business School
Module	Principles of Marketing
Overview	The first year class *Principles of Marketing* is a core, one-year long class delivered to approximately 520 students. Early revisions to the course in 2003 reduced 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 were granted an exemption from the final class exam. 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 and teaching in lectures is now delivered solely by Dr Harker and the remaining members of the teaching team are responsible for facilitating tutorial groups.
Drivers for change	The original 2003 revisions resulted from concerns over staff workload and over-assessment but these changes resulted in a drop in the number of students (50%) receiving the required standard for exemption from the final class exam because of fewer feedback opportunities, which negatively impacted on grades. Limited engagement with topics also resulted in some students being under-prepared for progression to second year. In addition, staff were still over-burdened with marking responsibilities and formative feedback on paper copies was being ignored in favour of electronic receipt of grades. Poor attendance and progression rates were a significant concern.
Intervention	**Phase 1** Three technologies were introduced to the *Principles of Marketing* class during the academic session 2005/06. These included the introduction of message boards via the newly commissioned institutional VLE (WebCT); online multiple choice question tests were introduced during semester two, using approximately 1500 questions provided by publishers McGraw Hill to support the class textbook. 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. Immediate post-test feedback comments incorporated in the publisher's materials were provided and additional feedback opportunities were offered during tutorials Students were able to take the test as many times as they like to 'close the loop' in their learning and self-correct their responses. 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. Students already received summative marks for each written assignment via WebCT and written feedback on a pro-forma but during the phase 1 pilot an electronic version was introduced with a bespoke databank of comments. Although students indicated that the practice tests were helpful, there was a fairly low take up rate for the formative test. Technical problems with WebCT resulted in administrative inefficiencies and the feedback comments were evaluated as being too negative and vague. **Phase 2** 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 formative test was 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. The entire cohort submitted all written work on-line and simultaneously submitted written copies in tutorials in a change from two years ago when it two written copies were submitted with no electronic submissions. Feedback for all written work was provided through revised templates based on work by Phil Denton at Liverpool John Moore's University. Increased multimedia content was supplied and students were provided with increased opportunities to generate multi-media contributions to increase borderline grades to exemption level. Increased structure has also been introduced into the on-line discussion boards.

				Activities
PROCESS	**EMPOWERMENT**	**NICOL'S 7 PRINCIPLES OF GOOD ASSESSMENT DESIGN**	**Principle 1** (clarify criteria)	(1) A pre-designed criteria sheet was reviewed by tutors and by students before being revised and subjected to further discussion and revision. This formed the basis for the feedback template comments. (2) The template comments were engaged with by tutors when marking and assignments were discussed with students in tutorials. (3) Students had the opportunity to discuss criteria on two occasions before assignment submission. (4) A special session was set up after the first assignment to discuss and revise criteria for the second assignment. (5) A four page hints and tips document was provided to students to provide guidance on report and essay assignments. (6) A points system was introduced to promote the use of diverse research sources and thereby widen the scope of reading materials
			Principle 2 (self-assess, reflect)	(1) Students had an opportunity to reflect on and monitor their progress through formative practice tests and summative grades on multiple choice tests received within two weeks of submission. (2) Practice multiple choice tests provided students with an opportunity to self assess. The tests could be taken on repeated occasions during a two week window of opportunity. (3) Immediate feedback on performance from practice tests enabled students to effectively pinpoint gaps in their knowledge and take remedial action. (4) Receiving marks and feedback on WebCT individually allowed students to reflect on their performance (5) Peer review opportunities in tutorials enabled students to compare their grade with other students' and reflect on the reasons why students were awarded with an appropriate grade. (6) Students could compare their performance with the range of class grades and class averages, which were provided by the lecturer.
			Principle 3 (tutor feedback)	1) The use of electronic media has allowed for the provision of better quality of written feedback and information to the students. 2) The feedback templates offered students around 700 words of feedback for a 1500 essay. 3) Written feedback was supported with verbal tutor feedback during tutorials. Students were invited to bring hard copies of electronic feedback to be discussed in the tutorials and were also encouraged to ask questions. 4) Prompt individual feedback was delivered by the lecturer via the WebCT discussion board. 5) Generic verbal feedback was gained during tutorial slots on class performance in the on-line tests.
			Principle 4 (peer feedback)	1) The provision of a social space on the discussion board has promoted the formation of student study groups. 2) Students in some tutorial groups were provided with the opportunity to peer review assignments either directly before or after submission.
			Principle 5 (motivation)	1) Students had an increased opportunity for control over their time management and learning activities because of the increased flexibility with respect to the practice tests. 2) Students were 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 through the 'joker' multimedia presentation submission system, which has offered the students more control over their assessment by giving them the option to submit extra work rather than sit the exam in some cases. 3) Self-esteem and motivation were strengthened by the promotion of social cohesion of students on the course through verbal encouragement and the provision of social space on WebCT. .
			Principle 6 (close feedback loop)	1) Students were exposed to repeated learning cycles through the multiple practice test opportunities with the on-line multiple choice tests and feedback. 2) Students had opportunities to build skills between assessments due to the significant overlap between criteria for the essays, reports and exam and thus the opportunity to use the feedback from one to inform formulation of the subsequent assessment.
			Principle 7 (shape teaching)	1) The multiple choice tests provided staff with valuable diagnostic opportunities and staff acted upon this by providing generic verbal feedback on class results during tutorials.

ENGAGEMENT	**GIBBS & SIMPSON'S 4 CONDITIONS OF TIME & EFFORT ON TASK**	**Condition 1** (in and out of class)	1) All of the lecture resources, web-based reading material could be accessed from WebCT in or out of the campus, which provided students with an opportunity to study in a more flexible way than was previously possible. 2) The practice multiple choice tests could also be accessed on an off campus, providing the students with opportunities to self-assess and monitor their progress on a regular basis from any location in order to offer them more flexibility in their lifestyle and a greater opportunity to manage their time effectively.
		Condition 2 (spread evenly)	1) The on-line tests have been designed to provide students with opportunities to distribute their study evenly over the course of the year with the third test being timetabled towards the end of the second semester in order to maintain student motivation, particularly in light of earlier problems with students who had achieved the 60% exemption grade.
		Condition 3 (deep not surface)	1) The combination of lectures, multi-media presentations, on-line multiple choice tests and feedback were designed to facilitate a deeper learning experience. 2) The repeated cycle of discussion and revision of criteria afforded the students increased opportunities to understand performance requirements and expectations. 3) Tutorial discussions of feedback on assignments enabled students to reflect on their performance in greater depth in relation to their initial reflection and in comparison to their peers.
		Condition 4 (high expectations	1) The division of the previous formative multiple choice test into three tests distributed over the year has increased the level of expectation on and of students by coercing them into studying and learning during several periods over the year at times when students in previous cohort may have chosen not to. 2) Students have to assume more responsibility than in previous iterations of the course because they are expected to take responsibility for downloading, printing and bringing hard copies of their feedback to tutorials for discussion and the consequences of failure to do so is in their own hands.
OUTCOME		**Efficiencies**	1) The redesign has increased administrative efficiencies as marks go automatically onto WebCT and grade book. This data was also used to monitor student's progress over time. Students registered for tutorials using WebCT and this reduced administrative work considerably. 2) There were efficiencies in terms of timeliness of student feedback which improved student learning gains. 3) Increased lecturer time on tasks in the discussion board has also facilitated efficiencies in student learning gains. 4) Potential efficiencies include reduced marking time and reduced tutor hours.
		Informal Learning Gains	Student focus group responses indicated that 1) The practice tests increased reflection and self assessment. 2) Completing the three MCQ tests had considerably helped students to distribute their study task evenly over the year. 3) The timely individual lecturer feedback available through the discussion board increased learning even when it was supplied in response to another student's question. 4) Peer verbal feedback increased their awareness of their learning and performance, although not all tutor had offered these opportunities. 5) The discussion board has facilitated an increased feeling of social cohesion that but students requested more face-to-face interaction in addition. 6) The combination of the lecture style and technological resources increased students' engagement with and enjoyment of the course. Student questionnaire responses indicated that 7) Students recognised the formative element of the test (open book) as being positive in terms of helping them to correct their own mistakes and this helped them to gain confidence in their knowledge. 8) The vast majority of students felt that completing the practice tests increased confidence in their knowledge and enhanced their chances of success with the summative assessment. 9) The majority of students felt that they received more feedback from the feedback templates than they did for their other subjects and half of them considered the feedback to be more useful. 10) The majority of students felt that the formal MCQ tests were useful to help them correct mistakes. 11) Evidence from discussion board tracks revealed that students were seeking increased peer feedback through forming their own study groups. 12) Staff observations suggested that students were more autonomous in their learning and researched more widely for assignments.

Formal Learning Gains	In 2006/07 there were 516 students and 172 (33%) did not get an exemption. 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. 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. Students who got exempted showed a gradual improvement in their marks (by 6%) whereas those who did not failed to show an improvement but these students may have been less motivated if they did not plan to continue with Marketing as part of their degree. Overall the marks indicate that students have gained some advantages from the MCQ tests.