	University	**Glasgow Caledonian**
	Department	**Caledonian Business School**
	Module	**Marketing Fundamentals**
	Overview	Marketing Fundamentals is a level-one core module taught by a team of 17 staff on the basis of 2 one-hour lectures and 1 one-hour seminar (22 sections) per week. Summative assessment comprises a group project presentation (30%), a group written report (30%) and a paper-based MCQ exam (40%). The class typically enrols 450 students each semester.
	Drivers for change	The paper based MCQ exam was for a number of years created in the Blackboard VLE but printed out for students to answer under examination conditions using an answer grid designed for marking by an optical scanner. *Problems identified:* • In practice marking by the optical scanner has not proved to be effective, and manual marking and processing of marks has had to be used. • Marking multiple choice exam papers manually was very time consuming for staff. • Students had to wait some time before receiving their final grades Staff also recognised that the because of the large numbers of students in each lecture (c450) the mode of delivery has been somewhat transmissive meaning that the lectures themselves have been problematic. In practice, it was extremely difficult to be interactive with up to 450 students in lectures. Allied to that, there were attendance issues, which had been a problem for a number of years. All of the previous interventions had happened in line with the VLE (Blackboard) being adopted across the university and particularly with the business school because they were the first to adopt it. Since much of the teaching material had been posted on to the VLE there was a perception that students were not attending because they could access the learning materials on-line i.e. either lecture web notes or PowerPoint slides and viewed these as being a substitute for attending the lecture.
	Intervention	In 2005-06 concurrent online assessment with large numbers of students was implemented using the Blackboard virtual learning environment as a replacement to the paper based MCQ exam. Issues of security of computers, special invigilator instructions and procedures were resolved. On evaluation, students responded very positively to taking the exam online and particularly liked receiving their marks immediately. However technical issues limited capacity for concurrent assessment to c250. Since the Blackboard system has not yet been configured for large scale use further use of Blackboard for this activity has been suspended and when the configuration has taken place, this will be re-considered. In 2006-07 the use of EVS (electronic voting system) technology was introduced in large lectures for formative assessment in order to engage students in more active learning in order to focus their attention and deepen their learning experience with the added benefit of being able to monitor attendance. This technology was also piloted in a formative mode as an alternative solution for paper based MCQ exam.
		Activities
PROCESS	**Principle 1** (clarify criteria)	1) Not undertaken
EMPOWER-MENT	**Principle 2** (self-assess, reflect)	1) Increased self-reflection through access to class responses and through discussion. Students had increased opportunities to reflect on their learning through EVS prompted discussion and from being able to access other students' responses, which they could compare to their own. 2) Increased opportunity to generate explanations and increase self-assessment through debate. Since many of the course leaders have chosen to use the EVS to facilitate debate or discussion, students have an opportunity to generate and defend their own explanations, which enables them to self-assess their responses and knowledge compared to both peer responses and tutor guidance *"Best used when 2 very possible answers and the lecturer could then go on to explain why half the class would have picked the wrong one etc. Good to get feedback from lecturers like this."* Student comment
NICOL'S 7 PRINCIPLES OF GOOD ASSESSMENT DESIGN		

			Principle 3 (tutor feedback)	1) Use of EVS in lectures enabled two way feedback – to individual students and to the lecturer 2) Use of EVS also enabled students to compare their performance with the overall cohort *"when used to give your own opinion on a topic before the topic was looked at. Then after the topic was studied the lecturer would ask the question again to see if the lecture had made you change your opinion."* Student comment
			Principle 4 (peer feedback)	1) Increased peer discussion, peer assessment & formative feedback through electronic handset voting. Ambiguous style EVS MCQs were particularly useful for promoting peer discussion and debate among students. The anonymity provided by the EVS appeared to engender confidence in the students to offer their opinion and engage more in peer dialogue. The EVS system has been used by most of the course leaders to promote increased peer discussion and formative feedback.
			Principle 5 (motivation)	1) Use of EVS (especially in semester A) was perceived to be motivating *"when the topic that the question covered was difficult to grasp, using the clicker helped reinforce ideas discussed and I would feel more confident about my understanding of the subject if I got the answer correct. If I was wrong it was fine as there would be a similar trend in students performance which made me feel better that it was not only me who was having difficulty. The lecturers questioning of these answers and student responses clarified what had been discussed."* Student comment
			Principle 6 (close feedback loop)	1) Students were asked a question at the beginning of the lecture that was repeated near the end of the lecture, so that again they would be prompted to attend to and engage with the lecture content. Following the initial response, the student results were graphically displayed so that they could compare their own responses with that of their peers. Peer discussion was then generated from the responses. After the question had been resubmitted, the student responses were again displayed so that the change in class responses could be compared. For these students, EVS was also used as a revision tool at the end of each lecture and each lecture block, using both MCQs and true/false formats and the questions were related to website pointers for further study aids *"Best used was when the revision lecture took place and could answer the question that way"* Student comment
			Principle 7 (shape teaching)	1) EVS was used to shape teaching at a small scale. If EVS responses indicated that students were failing to grasp topics attempts were made to use these feedback to direct students to the correct answer.
	ENGAGEMENT	GIBBS & SIMPSON'S 4 CONDITIONS OF TIME & EFFORT ON TASK	**Condition 1** (in and out of class)	1) Increased access to generic feedback campus wide & beyond. Students had the opportunity to communicate with each other throughout the campus and from outside using the Blackboard VLE system. The specific redesign issues this year have added an extra dimension to this facility by using it to deliver class EVS responses, thereby providing tutor and peer feedback that is available from anywhere in or out of the campus
			Condition 2 (spread evenly)	1) Not undertaken
			Condition 3 (deep not surface)	1) Deep learning was promoted through reinforcement of concepts by presentation of EVS questions, cues and testing.
			Condition 4 (high expectations)	1) By posing EVS questions taken from past exam papers or by the lecture identifying them as key concepts expected standards were reinforced

OUTCOME	**Efficiencies**	1) Additional effort was required to establish the procedures of the online concurrent MCQ exam It is however envisioned that if mass online MCQ examination were to be adopted after Blackboard reconfiguration that considerable time would be saved in marking exam scripts. 2) The main efficiency has been in terms of the student learning gains, which may potentially increase retention and progression rates but this has yet to be formally evaluated.
	Informal Learning Gains	Anecdotal evidence from staff focus group. 1) There was a feeling among staff that students appeared to significantly benefit from being able to see their peer's responses and receive immediate feedback. 2) Increased tutor engagement. Students appeared to engage better with the tutor through increased opportunities for open discussion 3) Increased peer engagement. Students appeared to engage better with the peers through increased open discussion arising from EVS use 4) Increased lecture material engagement. Students appeared to engage better with the material through increased opportunities for reflection, discussion and peer response comparison 5) Increased enjoyment of lectures. Outcomes of discussion with seminar students suggested that they did generally enjoy the experience although there was a feeling that this may have been particularly the case for the less able students, while the more successful students seemed to become a little more agitated by technical problems and any loss of lecture material as a result. 6) Increased understanding of core concepts. There was a perception among the staff that the use of EVS appears to has deepened understanding of concepts through increased opportunity for discussion and reflection and in some cases where for example several iterations of a single question have been posed, the students are taken beyond a superficial analysis by having to think about alternative perspectives, and layers to a problem. Quantitative evidence from staff & student questionnaires revealed that using the EVS in lectures 1) Increased student understanding of course content - staff (66%) students (65%) 2) Increased student concentration in lectures – staff (66%) students (76%) 3) Increased student interest in lecture content – staff (67%) students (60%) 4) Increased the opportunity for staff to gain feedback from students about their understanding – staff (100%) students (90%) 5) Increased student engagement with staff – staff (100%) students (79%) 6) Increased student engagement with peers – staff (83%) students (56%) 7) Had been beneficial to students learning – staff (100%) students (84%)
	Formal Learning Gains	N/A