University	Glasgow Caledonian
Department	Caledonian Business School
Module	Managerial Finance
Overview	Managerial Finance is a level-one core foundation module for students who have an accounting component in their course. The emphasis of the module is to promote an understanding of accounting rather than on the preparation of sets of accounts. By the end of the module students should be able to understand accounting data and interpret its meaning and its significance for management information. A team of eight full time staff undertake the teaching. Summative assessment prior to re-engineering comprised: a group project (20%); two class test (20%); and an end of module unseen MCQ exam (60%). Formative assessment consisted of: tutorial sessions; and on-line quizzes supplied by the publisher.
Drivers for change	Historically the extent to which students used the formative on-line quizzes declined throughout the semester and despite the module team repeatedly impressing on the students that engagement in quizzes was beneficial for them, the uptake remained disappointing. There was also recognition by the module team that there was an end loading of assessment, students not receiving any formal feedback on their performance until the final third of the module. This lack of early engagement was believed to be a contributing factor in declining student attendance at lectures as the semester progressed. Interestingly however student attendance at seminars remains one of the best of all level 1 framework modules possibly indicating students' desire for formative feedback opportunities.
Intervention	10 on-line weekly assessments (10%) which had been used previously for formative assessment purposes were converted to 'low stakes' assessment (quizzes). The move from formative and summative assessment was undertaken due to the disappointing participation rates which occurred in previous sessions. The introduction of this initiative led to full engagement by students given that their efforts within the assessment now contribute to their overall aggregate grade. The two class tests (20%) and final exam (60%) remained unchanged while the group project was reconfigured and weighting adjusted accordingly (10%). In session 2006/07 electronic voting (EVS) was introduced into lectures 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. The primary aim of this additional intervention was to provide increased opportunities for self-reflection and peer feedback.

PROCESS	EMPOWER-MENT	NICOL'S 7 PRINCIPLES OF GOOD ASSESSMENT DESIGN	**Activities**	
			Principle 1 (clarify criteria)	1) Not undertaken. [As a future development staff will be defining performance thresholds to guide students through each quiz and clarify what good performance is]
			Principle 2 (self-assess, reflect)	1) Weekly online MCQs provide a focus for regular reflection by students 2) Students monitor and record their own performance in weekly MCQs across the semester. 3) Students had increased opportunities to reflect on their learning through EVS prompted discussion. [As a future development staff members intend to explore the notion that students should write their own feedback for MCQs]
			Principle 3 (tutor feedback)	1) Feedback used in for individual questions in the weekly MCQ was enhanced to make it more informative for students 2) Staff use EVS as a mechanisms for providing students with verbal high quality feedback information 3) Both the weekly MCQ and EVS are used to provide timely feedback throughout the semester
			Principle 4 (peer feedback)	1) EVS is used to promote peer discussion and formative feedback 2) The anonymity provided by the EVS appeared to engender confidence in the students to offer their opinion and engage more in peer dialogue
			Principle 5 (motivation)	1) Qualitative responses from students indicate that the weekly online MCQ encouraged positive motivational beliefs and self esteem 2) Interactive nature of EVS enhanced lectures perceived to increase motivation as students are engaged in active rather than passive learning

ENGAGEMENT		**GIBBS & SIMPSON'S 4 CONDITIONS OF TIME & EFFORT ON TASK**	**Principle 6** (close feedback loop)	1) Students can re-take tests as often as they wished which enables them to immediately use feedback to close the gap. 2) Students were sometimes asked several iterations of EVS question based on one concept therefore providing an immediate opportunity to apply what is learning in new tasks
			Principle 7 (shape teaching)	1) The EVS was considered by staff to be very useful in some cases as a diagnostic tool, providing student feedback to staff in order to facilitate staff action in shaping the lecture content in a more educationally targeted approach.
			Condition 1 (in and out of class)	1) Directed study time involved undertaking weekly online MCQs, these were date released and closed to enforce paced completion. 2) Open book approach to online MCQ tests required regular reading of chapters from core text book 3) A mixture of online, individual, seminar and lectures was used in this module
			Condition 2 (spread evenly)	1) Prior to redesign students did not receiving any formal feedback on their performance until the final third of the module. Redesign has resulted in early engagement of students into formalised assessment tasks as well as informal opportunities for enhanced learning possible with the usage of EVS in lectures
			Condition 3 (deep not surface)	1) Deep learning was promoted through reinforcement of concepts by presentation of EVS questions, cues and testing. 2) Students were sometimes asked several iterations of one EVS question, which helped to facilitate a deeper understanding on the students' behalf through the requirement of increased reflection of the content
			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) The main efficiency has been in terms of the student learning gains, which may potentially increase retention and progression rates. [As a future development staff are planning to remove the group project (10%) and increase the weighting of the online MCQs. This will lead to further saving in staff workload]

	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