Teaching & Technology in Higher Education: Student Perceptions and Personal Reflections

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Abstract

Over the past few decades universities in the United Kingdom have undergone fundamental and accelerating change with the resultant outcome of a radical move from what can be described as an elitist model of education to a popular or "populist" model. Entrance routes to higher education courses of study have diversified, and as a consequence the student population has also diversified in terms of age, gender, ethno-religious background and socio-economic profile. This paper describes one author's response to these changes and assesses his implementation of a technologically rich approach to introducing the principles of business marketing to under-graduate students. The political, intellectual and institutional contexts which generated the desire to make increased use of technology in the classroom are considered as well as student feedback. The paper concludes with some recommendations for possible areas of development in the use of computer technology as a means of improving the quality of learning and teaching.

Introduction

In the last decade the higher education sector in the United Kingdom has witnessed unprecedented growth in terms of both students number and the number of institutions offering university level courses. The present Labour government intends this growth to continue and Tony Blair has publicly stated that his hope is to establish a "learning society" in which 50% of school leavers will avail themselves of a university education. Much of the stimulus among politicians for greater access to higher level education is the perception of a link between national levels of educational attainment and economic growth (Robertson 1998). In the British case the aim of raising educational standards is believed to be furthered by an extension of customer choice in education. The logic of this political commitment (that came to the fore under Mrs Thatcher's successive governments) is that free competition between institutions will act as a stimulus for improvement and increased performance as students exercise their right to choose the courses both best suited to their needs and best respected within the educational and industrial communities.

The expansion of student numbers alongside the aim of broadening accessibility to third-level education beyond its traditional middle-class constituency has not unexpectedly created a number of problems for universities, not least financial. The requirement is for each institution to become more efficient through teaching large numbers of students from diverse socio-economic backgrounds while at the same time driving down unit costs (Sneddon & Kremer, 1994). The university system is in transition as it continues to accommodate a shift from an elitist model of education (dominant up to the 1960s), where the privileged few enjoyed the benefits of third-level education, to a more popular or populist model. As a result educational institutions are experiencing intense turbulence as they struggle with the aggregated imperatives of growth, demands for demonstrable, relevant measures of output, less generous resourcing, increased competition, greater accountability and widespread curriculum change. In such a context it is not entirely unexpected that Wisker & Brown (1995, p1) should conclude that "there are grave concerns that the student learning experience as a whole is being threatened".

This paper describes one personal attempt to respond to the challenge of improving the learning experience of university students, in this case through the use of new technology in the delivery of a course on marketing. Before describing the research investigation in more detail it may be useful to comment more broadly on the political and educational context within which university teaching and learning are currently set.

Perceptions of Learning and Teaching

Calls for teaching to become more efficient and more successful are not exclusively modern refrains. John Amos Cornelius, a 16th Century scholar, spoke of the need for a methodology whereby “teachers teach less but learners learn more". Two centuries later, in 1780, Adam

Smith stated that the discipline of colleges and universities is in general contrived, not for the benefit of the students, but for the ease of the masters. Both views would indicate that current complaints have noble pedigrees.

The purpose of higher education is to pass on the social, cultural, scientific, political and technological heritage to the next generation who test, reject and recreate part of it (Barnett, 1994). According to Bruner (1996, p129) education must also be critical, so that students are equipped to "go beyond … information … to figure things out" for themselves. This quest for critical knowledge he regards as one of the few untarnishable joys of life. As is widely documented, however, the different teaching methodologies employed in educational institutions do not always take cognisance of the learning needs of students and for this reason the noble aims of education are not always achieved. An analysis of more than 600 feedback questionnaires at one UK university revealed that some fifty-percent of the students surveyed identified a need for more effective teaching delivery (Pennington, 1994). A survey the previous year by Williams and Loder (1993) highlighted a number of areas of criticism of teaching in higher education. These included lecturers lacking presentational skills, not showing sufficient enthusiasm for their subject, not encouraging active participation by students and not providing quick and detailed feedback to students. Findings such as these prompted Derek Bok to conclude that, "... teaching remains one of the few human activities that does not get demonstrably better from one generation to the next" (Bok,1992, p16). He contended that academic staff in higher education simply followed the teaching methods that they had experienced as students. Ruth (1997, p1) has noted, "that while a medical doctor from the previous century would not recognize the technology in to-day's hospital, a college professor from that era, would see virtually no change in the tools of education". The conclusion that traditional “tried and tested” methods of teaching are not without their

problems is well documented.

Throughout the 1980's much of the research and development designed to improve learning in higher education focused on teaching and the ways in which learning activities were organised and structured by the teacher (Brown et al, 1982; Dunkin, 1983 and Dunkin and Barnes, 1986). By the early 1990s this orientation had broadened to include the relationship between teaching and learning, with particular emphasis placed on the latter (Ramsden, 1992; McKenzie & Scott 1993). As the nineties progressed so increased importance came to be attributed to student learning. Effective student learning became the central theme and organising principle of university education. This viewpoint finds official recognition in Sir Ron (now Lord) Dearing's Report; where in Section 3:1 it is stated:

> The grant letters to the Higher Education Funding Councils for England and Wales for 1998-99 asked them to encourage institutions to give high priority to developing and implementing learning and teaching strategies which focus on the promotion of students' learning.

It also has to be said, however, that universities have other directives apart from improving the quality of learning to which they must respond. In the British context, funding is related in part to research output and research quality, and sometimes the aim of promoting student learning alongside developing an institutional ethos of research can come into conflict. This has resulted in a crisis of identity for some lecturers who are unsure if they are teachers, researchers or both. A recent AUT report (p14) suggested that increasing emphasis on research was, "leaving a shrinking core group of teachers to manage rapidly increasing student numbers". The critical nature of this comment was recently evidenced in a university

with an international reputation, which decided to dispense with the services of more than one hundred staff who were regarded as “research inactive” regardless of their teaching ability! Presumably some kind of balance has to be struck between competing institutional aims, even though it is clear, despite the example just quoted, that the educational and political importance of student learning has grown over the last few decades and is likely to continue to grow in the foreseeable future (Franz et al, 1996; Cloonan & Davies, 1998).

Reflection on teaching and how to improve student learning should be important aspects of every lecturer's job. According to Eble (1988, p9) "[l]earning and teaching are constantly changing activities. One learns by teaching; one cannot teach except by constantly learning". Learning and teaching proceed together. This presents perhaps an over optimistic view of the learning process, as if improvement occurs automatically and almost mechanically. Such a view, overlooks the fact that teaching is an art, which expresses, in a form accessible to learners, an understanding of the nature of that which is to be learned (Stenhouse 1984). According to Stenhouse, the art of teaching is developed through research on teaching performance. There should be reflection on practice. Reflection is an important aspect of human activity in which people recapture their experience, think about it, mull it over and evaluate it. It is this working with experience and reflecting upon it that is essential to learning and the improvement of practice. The capacity to reflect and evaluate, although differing between individuals, undoubtedly characterises those who learn effectively from experience (Boud et al, 1985); even if it is possible to reflect and evaluate while refusing to move beyond this process and revise practice accordingly. Another way of saying this is to say that critical reflection is a necessary but not a sufficient condition of initiating educational change and improving educational quality.

The aim of improving educational quality invites the question of the extent to which new technology aids this process. This seems a natural question to raise, particularly because we know that the familiar lecture/tutorial format is not always successful and efficient and that new technologies offer novel opportunities for learning that take account of individual aptitude and interest. Pennington's research into students' perceptions of learning, referred to earlier, questioned the use of lectures as the chief means of delivering course content. He concluded that there was "an over-reliance on the traditional lecture as the major vehicle for course presentation and [that there were] indications that these (*sic*) were not always well planned or effectively utilised"(p6). Despite their known pedagogic limitations, lectures provide a cost-effective way of delivering material and this has undoubtedly been a factor in diverting criticism. Nevertheless, the use of new technology can be used to improve both the teaching and learning experience. There is no need to regard the lecture format of delivery as necessarily opposed to the use of new technology. While the traditional lecture can promote learning, technology can enhance the learning experience. According to Baker *et. al.* (1997) students who are exposed to computer mediated learning, compared with those enrolled on conventionally taught courses, generally achieve improved learner effectiveness.

Personal Reflections and Action

Our review of recent developments in research on learning and teaching has identified a number of important issues that merit further reflection. Clearly there is growing professional disquiet about overuse of the lecture format as the exclusive means of content delivery. There is a also a recognition that traditional, university teaching methods have served the interests of lecturers and educational institutions more than they have served the interests of students. Basically the learning needs of students have not been sufficiently

acknowledged in institutions of higher learning. Finally, there is the matter of what contribution new technology can make to the improvement of the standard of education and to student learning. Although these issues raise questions that need to be considered at an institutional level they also raise questions at a personal level regarding one's own practice and one's commitment to student learning. How can the lecturer who is cognisant of recent research and the kind of developments we have outlined enhance student learning? What follows is the description and analysis of one particular project that attempted to improve the quality of teaching and learning through the use of new technology. In order to appreciate the significance of the changes that were initiated, it is necessary to say something about the situation prior to their introduction. (The personal nature of the research conducted by one of the authors, John Milliken, will be reported in the first person.)

Upon coming to the university in 1989 as a lecturer in marketing, after a business career that included international banking, marketing and strategic management, I was charged with delivering a course on introducing the principles of marketing to second year students. Originally, the course was taught for 26 weeks over the three terms of the academic year. The students had two contact hours per week comprising one lecture and one tutorial. Lecture groups typically extended to about 45 students, and tutorial groups to 15. The teaching approach was conventional: lectures passed on essential content with the students as passive learners; tutorials reinforced the lecture content by providing a context where student questions and concerns could be addressed. Tutorials often required group presentations and involved practical workshops; these included designing a television commercial, writing an outline marketing plan and designing a supermarket layout. During the first and second terms the students were given 1500 word assignments that focused on key concepts of marketing such as market analysis and marketing planning. Extensive written feedback,

identifying strengths and weakness of analysis and argument, were provided on each assignment. At the end of the third term students undertook a three-hour examination.

In 1994 the University of Ulster (followed national trends) announced plans that it intended to move from the traditional three-term structure of the university calendar to a two semester academic year. A hastily conducted research exercise conducted within the university indicated that staff had significant concerns about the possible effect of semesterisation on teaching quality and the student learning experience. Chief among the issues identified was the challenge posed to subject integrity and course cohesion. Content that was once aligned in the teaching year would become separated, and the rich transfer of knowledge between subjects was perceived to be less likely to occur (see Williams and Fry 1994 p71). To compound the challenge in my own particular case, it was decided within the Faculty of Business and Management to combine students from different programmes on a newly designed marketing module that would run for one semester only (formerly students from different programmes pursued the subject matter in separate groups). The average lecture size was to increase from 45 to about 150.

The cumulative effect of these institutional changes along with my increasing awareness of the limitations of traditional methods of content delivery convinced me that it was time to develop and explore alternative strategies of learning and teaching – strategies that would employ the latest technologies to raise student commitment and performance. It was decided to abandon the familiar lecture format with the students as passive learners in favour of a "structured" approach whereby a single two-hour session each week was divided into a number of short twenty-minute lectures, followed by equally short workshops. As students were entitled to three "contact" hours a one-hour tutorial for each group of 25/30 students

was arranged to commence the week following the first lecture. The entire lecture content was rewritten in a bullet point format in order to facilitate computer presentation; illustrations, models and diagrams were integrated into the content. In order to facilitate clarity, ease of understanding and flexibility of note taking, key words were highlighted and both bullet points and diagrams were layered so that the content could gradually be built up on screen. The sharply focused “mini” lectures were structured so that each was a complete lesson in itself. The learning objectives for each lecture were displayed at the beginning and again at the end. This allowed students to judge if the objectives had been met and they were positively encouraged to voice their opinions. Throughout each lecture a number of computer slides were included that contained “thought bubbles” which signalled to the student that this was a workshop element which they would have to complete later. This prompted responses and discussion, which served to reinforce the lecture content and to indicate possible areas of uncertainty or misunderstanding. Short video extracts were also included: the screen “trigger” was a graphic in the form of a reel of film so the students knew that a video clip was coming up. The tasks and workshops that followed each lecture incorporated time for the students to interact with each other and with the lecturer. Although PowerPoint initially suggested itself as the best tool for this form of delivery (Anderson, 1995), after some deliberation and some experience of trying to set up the course in electronic format, it was decided to make use of Aldus Persuasion - it offered more flexibility and control. An appropriate lecture theatre that could accommodate a viewing screen of 8'x 8' was chosen. This ensured that the farthest student was seated no more than fifty-five feet from the screen (i.e. five times the diagonal width of the screen). This active lecture/workship format was supplemented by five tutorial sessions with about 30 different students in each group.

Student Perceptions

How successful was the module in improving the quality of student learning? To answer this it was necessary to gain students' opinions. A questionnaire was given to students at the beginning of week 8 of each of the two teaching semesters. The data was processed using SPSS for Windows and the tables that follow are compiled from the outputs. The findings of the survey were complemented by the use of representative focus groups from the different degree groups who followed the course. These groups met the following week to consider and expand upon the responses within the survey, particular attention was given to "quality issues" such as the appropriateness of the methodology used and how learning was enhanced. It was obvious from student comments in the focus groups that they appreciated the opportunity to be involved in providing feedback. One student noted that "[t]his is the first time we have been given feedback on surveys we have completed".

The summary of student responses is longitudinal and now includes eight different student cohorts over eight semesters from April 1996 to April 2000 where n=484.

TABLE 1 ABOUT HERE

As evidenced from Table I, a high proportion of the students felt that the structure and organisation of the material was good. Two areas for concern, however, can be identified - the content of the lectures and the reinforcement of the lecture content in tutorials. Discussion on these two issues, during the focus groups, suggested that the underlying issue was that of student expectations. Marketing was the only module to use the "technologically rich" approach and students, who were accustomed to making copious notes, often dictated by lecturers, initially felt uneasy when faced with a bullet-point presentation and the need to

develop their own notes. Unease was also felt by students on the high levels of participation and involvement required by tutorials. Some reported that most other modules did not require active participation in tutorials.

TABLE II ABOUT HERE

The responses to lecture delivery in Table II indicates that the majority of students felt that this aspect of the module was good although there are a few students who disagreed. This indicated the need to develop the learning environment of students to ensure that they all had a positive experience.

TABLE III ABOUT HERE

The structured method to teaching the module generated by the computer-based approach attracted a positive response from students, with the exception of the ease of learning. Focus group discussions suggested that this somewhat negative response was linked to their expectation that the computer based approach would reduce their work load; see Table IV. They did not fully appreciate that the approach was a teaching aid to help them to learn, rather than a means of lessening their time and work commitments.

TABLE IV A BOUT HERE

In his 'The Outline of History' H.G. Wells said that human history becomes increasingly a race between education and chaos! This view is supported by Morrison (1990) who advocated the needed for quality education to keep ahead of the economic catastrophe that

faces many counties. Within education West-Burnham and Davies (1994) believe that quality management can be used as a response to imposed government policies. With the current emphasis on quality teaching in higher education, no doubt intensified by the funding council interest, it is gratifying to see such a positive response from the students as evidenced in Table IV.

As the preparation and editing of materials for this approach had involved two years of research, discussion, and preparation it was obvious that the students recognised and appreciated the lecturer's commitment and contribution to the development of the computer-based approach. (Table V).

TABLE V ABOUT HERE

Some of the comments made during focus groups would support the students' awareness of the time commitment in developing the module.

> I feel that this module is very structured and easy to follow. I'm sure a lot of planning has been involved and it has paid off. If other modules were like this then the students would find it more helpful.

> It is an interesting way of learning and people are more willing to attend lectures, which are structured, not to mention computerised. It is important to know that the lecturer is aiming at an end result with the students as the prime concern.

When asked to grade the overall assessment of the marketing lectures 89.6% of respondents indicated that they felt the lectures were good.

TABLE VI ABOUT HERE

The impact on the student learning experience is regarded by students themselves as positive, see Table VI, where this positive attitude is consistently evidenced across the eight surveys. This attitude is reflected in some of the comments from the focus groups.

> Computer-based teaching offers clarity of lecture notes for future reference, they are easy and interesting to follow and provide a greater understanding of the subject.

> It is easier to follow than overheads and information is easily digested. Also there is less chance of missing important points, as there is more time available to take the notes.

> There is not too much information crammed into the screen, therefore key points are digested more readily. Such a teaching method eliminates the 'boredom' factor. Also there is less chance of missing vital information, as is common with lecture note taking.

TABLE VII ABOUT HERE

The crucial issue is whether students felt that the technologically rich approach adopted in the marketing module should be used in other modules. TABLE VII indicates that some 90% of students would like to see a computer-based teaching approach used in other modules of

study. Again, the consistency of results over eight cohorts was very evident. Some comments from the focus groups would reinforce this finding.

> The system is much more effective and beneficial than other systems we have used before.

> Finally, a teaching method has been devised to capture the students' attention for longer than the 10 minute span, which is quite common in other lectures.

> This approach is delivered in a logical way. It helps to deliver lectures in a clear way, as it is sometimes difficult to read the hand-written lecture notes, written on a board, as used by other lecturers.

As well as providing feedback for development, it was obvious that the students appreciated being involved in a feedback process.

Interim Developments

As a result of initial student feedback, modifications were subsequently made to lecture structure and lecture content and ways were sought to make tutorials more interesting. These modifications, however, did not entirely fulfil student expectations. Student feedback indicated that there was need for an increased linkage between lectures and tutorials, yet at the same time students did not want tutorials to be reduced to the repetition and reinforcement of lecture content. There was also the challenge to convince students of the importance of tutorials and for them to view them as integral to the learning process. The

negative legacy of the traditional lecture/tutorial format for some students was that tutorials were relatively unimportant and uninvolving.

Over the summer period of 1999, it was decided to redraft the marketing module teaching plan to reflect my changed teaching approach and also to provide a resource base in the form of Web locations for relevant sites. This information was placed on the Web with "clickable" links. Lecture notes were also placed on the Web with a hard copy located in the library. I also decided to change the weighting of the two assessment elements: from the 65% - 35% split between examination and written assignment to 50% for each element. This, I felt, would redress the imbalance of the teaching year and reduce the perceived risk associated with examinations. These changes were made for the 1999/2000 academic year.

As Ramsden (1998, p1, our emphasis) has noted, however, "the problem is *how* to engage people with the things they learn". The computer-based approach was designed to help students remember the essential content but more participation in the tutorials was necessary to develop understanding. As Confucius stated, "I hear I forget, I see I remember, I do I understand". In response to this I decided that if part of the assignment mark was allocated to the tutorial work then perhaps this would generate increased participation (and consequently 10% of the assignment mark was allocated to tutorial presentations). It was hoped that this participatory approach would facilitate student development of specialist knowledge, skills, values and personal qualities, such as those defined by the Dearing Report (NCIHE, 1997). A list was placed on the noticeboard for each student to chose a tutorial topic on which they would make a presentation applying the previous week's lecture notes to a specified case study/task. This meant that everyone had to participate and collectively each tutorial group carried out an aggregated case study analysis.

The traditional emphasis on teaching rather than learning over the years has resulted in the tutorial being a much under-utilised form of teaching. According to Ritter (1996, p.1), the tutorial "can be effectively used in a world of rapid change, bewildering instability ... to give individuals the capacity to create and re-create an identity, to negotiate and renegotiate its components in a social setting". A properly managed tutorial can provide an effective arena for teaching and learning through immediate, interpersonal dynamic exchange. In this situation knowledge does not have to be conveyed as pre-defined. By collectively interrogating the meanings and interpretations of marketing theory through a case study analysis knowledge may be created and re-created in a pedagogy of possibility. The idea of including the tutorial presentation as an element of assessment was intended to generate full participation and recognise the students as critical and proactive elements in the process. This required evaluation and a questionnaire (using a semantic differential approach) was developed to elicit student feedback on tutorial organisation and student participation.

TABLE VIII ABOUT HERE

Table VIII shows that most students were positively disposed across the range of criteria toward the structure and organisation of tutorials.

TABLE VIII ABOUT HERE

Table IX indicates that for the most part students view their participation in a positive light. Follow-up discussion, however, revealed that some students would prefer not to make individual presentations especially as the tutorial groups consisted of people from a range of

degree courses and many of the students had never met each other before undertaking the marketing module. This also impacted on the level of student discussion and evaluation of the presentations. On the basis of this feedback modifications will be effected for the next academic year. Hopefully these modifications will contribute to an increased focus on student learning.

Some Early Conclusions

The actual management of change is, itself, a complex process and although many institutions within higher education recognise the need for changes in teaching and learning there is significant resistance from different quarters, both individual and institutional.. This is reflected in a quotation from a university lecturer' letter to the Guardian in 1991:

> I do not wish to be a teacher, I am employed as a lecturer and in my naivete I thought my job was to 'know' my field, contribute to it by research and to lecture on my specialism! Students attend my lectures but the onus to learn is on them. It is not my job to teach them.

Given the external political pressures for improvement in university teaching as well as the determination of some colleagues to improve their own practice, it is perhaps surprising that changes in teaching strategies and the embracing of technology as an aid to teaching have not moved very far in the last decade. Most university teaching remains firmly wedded to traditional 'chalk and talk' pedagogy. The research project described in this paper is one stage of an action learning cycle that will be progressed through both the development of problem-based tutorials to encourage experiential learning and the evolution of assessment methods that reflect and further student capabilities.

Initial conclusions about the viability and the value of developing more participatory and successful learning programmes utilising computer technology are encouraging. There is little doubt that electronic lectures made accessible through the Internet and the Web will provide an important building block for developing courses not just for "residential" students but also for "virtual" students who could be resident anywhere in the world. Development of other aspects of the learning experience, however, must be undertaken and, at all stages, students must be involved in the evaluation of teaching and the assessment of learning as advocated within the NUS Student Charter (1992). Academics must undertake continuous reflection of their own teaching and be prepared to respond rather than react to external pressure. Pennington and O'Neill (1994) suggested that a prime condition for effective learning was the commitment of lecturers to reflect systematically on their own practice, and as a result to seek improvements. Like the bumblebee who is unaware that (according to aerodynamic theory) he cannot fly, it is often rewarding, and indeed necessary, to move out of the established comfort zones of beliefs and practices of teaching and try something different. Smith (1997) advocates that the teacher must constantly recreate the process of instruction and be prepared, *and* equipped, to impart knowledge in a variety of ways, so that individual learner's needs can be met.

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TABLE I Structure and Organisation of the Material (Expressed as percentages)

		V. Good/Good		Average		Poor/V. Poor	
		Total Students	Current cohort	Total Students	Current cohort	Total Students	Current cohort
1:1	Clarity of module aims	90.1	90.5	8.5	9.5	1.4	0.0
1:2	Reinforcement of module structure & linkages	80.4	79.3	19.0	20.7	0.6	0.00
1:3	Stated objectives of each lecture	93.0	94.8	6.2	5.2	0.8	0.0
1:4	Structure of the lectures	85.7	87.9	12.6	11.2	1.7	0.9
1:5	Cohesion of the lectures	80.8	83.6	16.1	14.7	3.1	1.7
1:6	Content of the lectures	72.1	79.3	22.9	16.4	5.0	4.3
1:7	Presentation of the material in a coherent way	86.4	86.2	11.2	9.5	2.5	4.3
1:8	Use of models/diagrams to explain concepts	87.6	88.8	9.9	10.3	2.5	0.9
1:9	Reinforcement of lecture content in tutorials (1)	61.0	51.7	29.1	31.9	9.9	16.4

n.b.1 Due to my illness another lecturer undertook the tutorials without fully applying the specified interaction

TABLE II Lecture Delivery

		V. Good/Good		Average		Poor/V. Poor	
		Total Students	Current cohort	Total Students	Current cohort	Total Students	Current cohort
2:1	Visual impression	93.6	92.2	5.4	6.0	1.0	1.7
2:2	Audibility of lecturer	91.1	96.6	7.4	3.4	1.4	0.0
2:3	Speed of delivery of material	76.9	72.4	18.8	19.8	4.3	7.8
2:4	Style of delivery	84.7	87.9	12.6	9.5	2.7	2.6

TABLE III Use of Computer Based Teaching (2)

		V. Good/Good		Average		Poor/V. Poor	
		Total Students	Current cohort	Total Students	Current cohort	Total Students	Current cohort
3:1	Structure	90.7	89.7	7.9	7.8	1.4	2.6
3:2	Use of 'layered' bullet points89.0	89.0	89.7	9.7	9.5	1.2	0.9
3:3	Use of 'layered' models/diagrams	88.6	90.5	9.9	9.5	1.4	0.0
3:4	Colours/layout	85.9	81.9	11.6	12.9	2.5	5.2
3:5	Ease of learning	66.5	60.3	28.5	36.2	5.0	3.4
3:6	Use of 'keynote' symbols to relate to keynotes	78.7	73.3	18.6	25.0	2.7	1.7
3:7	Keywords for focus	81.2	75.9	16.9	23.3	1.9	0.9

n.b 2 Second semester students include those from our Business with Computing Degree and they have extremely high expectations of computer applications (similar pattern across 4 cohorts)

TABLE IV Quality Issues

		V. Good/Good		Average		Poor/V. Poor	
		Total Students	Current cohort	Total Students	Current cohort	Total Students	Current cohort
4:1	An improvement on other teaching methods	79.5	79.3	18.8	19.8	3.3	0.9
4:2	Facilitation of the student learning experience	74.4	75.0	22.3	24.1	4.5	0.9
4:3	Ease of following lecture content	80.5	77.6	16.4	20.7	3.1	1.7
4:4	Aids comprehension of the subject	73.1	74.1	24.8	25.0	2.1	0.9
4:5	Provision of 'keynotes', booklets etc. (3)	67.6	62.9	23.8	29.3	8.7	7.8
4:6	Availability of WEB resources (4)	82.4	50.0	12.0	28.4	5.6	21.6

n.b. 3 Due to departmental cutbacks a copy of the 'keynote' booklets was only available in the library and photocopying proved expensive for the students

TABLE V Lecturer's Capability

		V. Good/Good		Average		Poor/V. Poor	
		Total Students	Current cohort	Total Students	Current cohort	Total Students	Current cohort
5:1	Evidence of preparation for lectures	95.3	97.4	1.0	1.7	0.6	0.9
5:2	Evidence of knowledge of the subject	98.3	97.4	1.0	1.7	0.6	0.9
5:3	Ability to relate theory and practice	91.1	87.9	7.0	9.5	1.9	2.6
5:4	Ability to make the subject interesting	84.5	76.7	13.2	20.7	2.3	2.6
5:5	Understanding of student difficulties (5)	74.6	69.0	20.7	25.0	4.8	6.0
5:6	Approachability	88.4	87.9	9.1	9.1	2.5	2.6

n.b. 5 The current cohort also included a larger than usual exchange student cohort who felt that the module should be modified to suit them.

TABLE VI Overall Assessment of Marketing Lectures

		V. Good/Good		Average		Poor/V. Poor	
		Total Students	Current cohort	Total Students	Current cohort	Total Students	Current cohort
6:1	Overall Assessment	89.7	93.1	9.1	5.2	1.2	1.7

TABLE VII Other Applications

		Yes		No		No Response	
		Total Students	Current Cohort	Total Students	Current Cohort	Total Students	Current Cohort
7:1	Should this approach be used for other modules	88.6	93.1	8.5	6.9	2.5	0

TABLE VIII Tutorial Organisation (N = 95 i.e. two cohorts)

	1	2	3	
Well organised	72.6	26.3	1.1	Muddled
Well prepared	77.9	21.1	1.0	Badly prepared
Interesting	61.1	34.7	4.2	Boring
Flexible	81.1	13.7	5.3	Inflexible
Time is well spent	64.2	27.4	8.4	A waste of time
Good progression	74.7	21.1	4.2	Poor progression
Develops lecture content	84.2	13.7	2.1	Does not develop lecture content

TABLE IX Student Participation

	1	2	3	
I have learnt a lot	70.5	29.5	0.0	I have learnt very little
I look forward to tutorials	30.5	54.7	14.8	I would prefer not to attend
I enjoy contributing	40.0	37.9	22.1	I prefer not to participate
My comments are welcomed	65.3	32.6	2.1	My comments are not welcomed
I would like to study the subject further	58.9	25.3	15.8	I would not like to study the subject further