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Researching student learning on business management degree courses: the problem of evaluation

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Abstract

The twenty first century has been a period of major change for business organisations and industries. This has led to an ever greater interest in and demand for managers with not only the traditional subject knowledge and technical skills but also individual business skills such as creativity, people skills, personal self- knowledge, managerial intuition and judgement.

To meet these demands business schools are under pressure to innovate and adapt their courses appropriately. For an undergraduate degree in business management, this includes both the structure of the degree, the subject disciplines covered and the teaching methods used. But innovation poses a major challenge for researchers and teachers alike – how can the effect on student learning of an innovation be measured or assessed? For each new subject discipline and teaching method there are three critical issues – the quality of the delivery of the module, student response to the learning experience and the overall effect on student learning. A raft of student feedback methods using multiple channels of communication, have grown up in recent years, which set out to measure student satisfaction and student learning as well as the quality of the delivery of the module.

This paper outlines the innovation challenge to business schools and describes the approach taken to evaluation on the newly designed set of first year modules for the Cass business management undergraduate degree.

Keywords: 21st century business, constructivist teaching methods, transmissive teaching methods, evaluation of learning, student feedback methods, business management degree

1 introduction

Measuring Student Learning achievement (and now learning gain) is the focus of concern for the university sector, including Business Schools, and their funding and regulatory authorities. Moreover to researchers and teachers the success of the delivery and effect of new teaching ideas on student learning is the most important aspect of teaching innovation. Hence evaluation methods are key to establishing the value of new initiatives for business courses. For each new subject discipline and teaching method there are three critical issues – the quality of the delivery of the module, student response to the learning experience and the overall effect on student learning.

The 21st century has brought major changes to some business sectors and the advent of the 4th industrial revolution seems likely to bring change to other sectors as yet untouched. These effects are beginning to alter the manager's job, making demands for new skills. In particular, managers are being faced with unique situations for which business theory is only a partial help. A range of skills such as managerial intuition, critical thinking and creativity are becoming important for the practicing manager. To meet this challenge, educationists have been developing new teaching approaches – the most significant of which features constructivist methods using student centred exercises. These can develop into major costly management projects requiring a high level of teaching staff time in their design and execution. The high cost puts a premium on being able to evaluate the value in terms of student learning. Evaluation itself is a separate project that can also become time consuming and expensive.

This paper outlines the changing educational needs of business students and assesses the issues raised by attempts at evaluation of student learning. A case example of evaluating the new 1st year redesign of the business management degree at Cass is used to illustrate the practical issues involved.

2 Business trends and their impact on business courses

The effective management of organisations has been recognised as an important factor in their success, since the early 20th century (Peters and Waterman, 1982; Colby et al, 2011; Bloom et al, 2017). The demand for professional managers drove Business Schools to recognise and develop theory for the key business disciplines. The resulting success of this approach allowed managers to succeed through applying standard theory to well understood problems. With the arrival of the twenty first century however the profound and accelerating changes (Economist, December 2019) in the industrial, organisational, social and environmental scene requires managers that can not only apply business theory but are also equipped with the skills to deal with unique situations needing individual judgement.

The tension between the demands of academia for theoretical knowledge supported by research and that of industry for practical ideas, has been a feature of all Business School's research and teaching since their inception. The pressures from industry now, are for ways of handling new types of challenges generated by the environment, both business and social, in which they must operate. Mao's desire for continuous revolution has been translated into a world in which companies are experiencing continuous change. The principal drivers of change are changing social attitudes about business organisations' behaviour, technology developments (notably from ICT, new materials and medical research) and major new theoretical ideas for traditional business disciplines. Perhaps the most unpredictable aspect is the way in which these factors interact to create innovations (Bennett and Lemoine, 2014).

Organisations are expected to take on wider responsibilities than just those owed to their customers and owners. Other stakeholder's interests are becoming difficult to ignore – including suppliers, the well-being of employees, the use of power in personal interactions, physical impact on the local community and on the world community through contribution to climate change.

Technology, especially information and communications technology (ICT), has driven major changes in the ways organisations can organise and control their operations. The internet has spawned new types of companies such as social media and platform organisations like Airbnb. The reduction in travel costs and the internet have together created the conditions for developing supply chains across national borders. It is claimed that we are at the start of the 4th Industrial Revolution, a state in which success will follow those that can harness the promise of the exponential growth in digital data and its universal availability via electronic communications (D'Aveni, 2018).

Theory in some business disciplines is changing. Research into human behaviour has established how erratic our behaviour as consumers and managers can be (Kahneman, 2011) and the challenge of handling trade with unknown people (Botsman, 2017). Traditional leadership theory emphasises the value of vision and goal setting whereas more recent theorists extoll the value of leadership that enables and supports creativity in the workforce (Martin and Golby-Smith, 2017; Hill and Davis, 2017). The 20th century focus on competitive strategy is morphing in some sectors into another type of strategy which emphasises innovation (Kim Chan and Mauborgne, 2005, 2017; Martin and Golby-Smith, 2017)

As a result the manager's job is changing with a shift in focus to innovation and to making change work for their company. It is now the quality of a manager's world view, personal judgement and intangible managerial skills as much as business knowledge that ensures successful business and organisational performance. Organisations want managers with an ever expanding skills and a mind-set that gives them the confidence to make independent judgements. These skills include:

- Basic business skills presentation, speaking, report writing, managing a meeting, time management, negotiation, numeracy, using standard office computer packages such as word processing and spread sheets, virtual communications tools such as video conferencing and mastering new computer packages/ company information systems quickly
- People management skills, often referred to as soft skills –communications skills such as listening, verbal and conversational skills, team working, managing meetings. Preparing for meetings, leadership at all levels of an organisation, managing dysfunctional groups and teams, management of a diverse workforce
- High level personal skills phronesis (Antonacopoulou, 2010; Aristotle, 1934; Flyvbjerg, 2001), problem solving, managerial intuition (Brown et al, 2015), critical thinking, self-knowledge and the ability to–
 - o reflect and learn from experience
 - observe
 - o innovate
 - think holistically
 - o manage one's own and other's continuous learning
 - manage ambiguity and paradox in the workplace

Business School courses are grappling with the challenge of teaching such a diverse range of subjects and skills.

3 Learning, pedagogy and evaluation

Learning is essentially an individual activity. The quality of learning achieved will vary from student to student and depend to some extent on the requirements of the subject taught. Ramsden (1992) discussed the distinction between 'deep' and 'surface' learning, where deep learning involves a critical approach to a subject, and a thorough understanding of concepts. Surface learning, by comparison, refers to the collection of facts and theories and developing the ability to use them in a mechanistic manner, but in the process acquiring only a limited understanding of the underlying concepts. Deep learning has come to be seen as an important outcome for student learning (Gibbs, 2010; Marton and Saljo, 1976).

Traditional teaching for business discipline subjects has been by the transmissive methods of lecture, coursework and class exercises. This was developed primarily for the learning of knowledge, theory and application of theory. These teaching methods have used formal written or viva voce examinations and tests of various types such as multiple choice to evaluate subject discipline learning. When administered to similar cohorts of students it is then possible to compare performance from year to year, as changes to the teaching are made (teaching staff, curricula, coursework and assessment, feedback mechanisms). Student feedback on quality of delivery is usually obtained via survey often now online. However non response to student surveys poses an intractable problem in interpreting the survey results.

In Gibbs (2010) review of the research into student learning, he identified four key elements that can be shown to support the learning process – 'class size, the level of student effort and engagement, who undertakes the teaching and the quantity and quality of feedback to students on their work' (Gibbs, 2010, section 1.4). The importance of student engagement has led to a shift from relying mainly on the traditional lecture to adding courses and exercises that use a 'constructivist' approach where students collaborate on the creation of knowledge (Goodyear, 2001; Chickering and Gamson, 1987; Laurillard, 2003)

Although originally proposed as a way of supporting deep learning of subject discipline knowledge and understanding, student centred teaching is also an effective way to develop personal skills of all types. Skills are learnt through practical experience (Dreyfus and Dreyfus, 1988; Brown et al, 2015; Hill L, 1992). Hence the

increasing interest in constructivist methods which not only support theory acquisition but are based on student practical work through which individual managerial skills can also be learnt.

Constructivist methods require significantly more teaching and organisational resources than traditional methods – both in design and delivery. Moreover the expansion of student numbers of recent decades, on business degrees compounds the management problem of delivering constructivist (small group) teaching. Any courses using this approach become serious management projects. Descriptions of the use of Problem based learning (PBL) establish the many factors that must be planned in detail (Ungaretti et al, 2015). Most commentators agree that key to the success is the quality and relevance of the practical exercise at the heart of the course and the effectiveness of the teaching staff (Loyens et al, 2011; Schmidt et al, 2009). In particular the quality and timeliness of the feedback offered to students by the teaching staff. The high level of resource required makes evaluation of the learning achieved of some importance. But the complexity of the teaching exercise also focuses a spotlight on the importance of monitoring the whole project closely in all aspects, with a view to dealing with serious student problems early in the course, and to improve the quality of the course for its next delivery. If there are major problems with this then assessing learning is a moot point.

An astonishing range of student centred exercises have been developed for business courses over recent decades. Some are aimed at giving practice in specific skills – for example negotiating exercises for negotiating skills, team and individual presentations to develop verbal skills, reflective practice to develop personal awareness and team exercises to develop team working skills. Simulations of business situations or company operations are a popular way to show specific aspects of subject theory. Many exercises are case based activities, placing theory into practical situations to gain a better understanding of its application. Case teaching comes in a variety of guises. From traditional Harvard type business analysis of a real life case (written by a researcher) posing specific questions (Colby et al) to various forms of practice based case work - for example PBL (Schmidt et al, 2009; Ungaretti et al, 2015) to real life client's problems and to exercises in which students act as consultants to a client. This is the most promising way for students to encounter and practice the high level skills, such as critical thinking, managerial intuition and handling ambiguity, in a training environment.

Much of the research into the value of PBL on student learning, has been its use in medical education (Loyens et al, 2011; Schmidt et al, 2009; Ungaretti et al, 2015). The standard approach is to compare the learning achieved by two student cohorts, similar in all relevant characteristics, taught the same subject but one by traditional methods and the other by PBL methods. The measures of achievement include both hard measures such as medical knowledge tests and softer ones of student self-assessments after having completed their courses and started practising as medics. The scientific method requiring objective measures informs these types of assessment. The attempt to evaluate skills, such as diagnostic ability, is interesting as it rests essentially on student/learners self-assessment at a later date when practicing the skills in their jobs. Hence the problem of evaluation becomes that of giving them the tools to make a reasonably accurate self-assessment. Studies comparing PBL in medicine with management suggest that similar benefits should be achievable for the business discipline (Ungaretti et al, 2015). But these evaluation studies tend to become major research projects in their own right.

There is a need for business courses to develop modules that include practical student centred exercises to complement traditional teaching. The high cost associated with these innovations means that the choices of how and at which point in the course to introduce them are not insignificant. Evaluation of the potential value would be an important part of this decision.

4 Case: Critiquing the Evaluation measures applied to the redesigned 1st year business management undergraduate degree at Cass

The redesign of the Business Management degree course at Cass was initiated for the 2018-2019 academic year. The planned structure of the redesigned degree was for a common 1st year taught to all students on the degree covering the key business subjects. This was to be followed by a choice from 5 distinct streams developed in the 2nd and 3rd years, comprising a general Business Management option and specialisms in Finance, Marketing, Entrepreneurship/Innovation, and International Business. A significant benefit was being able to offer students greater choice of business subjects developed in greater depth than the previous structure allowed, so that students were well equipped to work in their chosen specialism on completion of the degree course.

4.1 The Firstyear modules

Students study eight modules during their first academic year. The subjects introduced fall into two groups – a set of core subjects (Organisational Behaviour, Economics, Marketing, Supply Chaim management and Accounting) and key business skills (Critical Thinking, Quantitative Methods and Managing Complexity). The first year of the redesign was delivered to a cohort of 360 students drawn from over 40 countries world-wide. A brief description of each of the eight modules is given below.

Organisational Behaviour. The overarching purpose of this module was to introduce students to the key topics, theories, and frameworks that explain how organisations, and the people within them, work. Topics included: classic management theories, motivation, power and authority, teams, leaders, communications and influence, culture and control, structure and co-ordination.

Economics. Recognising that economics principles are fundamental to an understanding of business management and also that the language of economics can be unfamiliar to many who encounter it for the first time, this module placed a strong emphasis on learning to 'think like an economist'. Because of its relevance to the business environment the emphasis was on microeconomics but with a small amount of macroeconomics at the end of the module. It followed a standard textbook closely.

Marketing. The content of this module covered well-established ground which forms the basis of the introductory marketing material in many business and management degrees. The design principle for this module was that for this particular subject interaction could better be achieved by setting aside time within a lecture, than by holding separate tutorial sessions. The lecturer placed considerable emphasis, when designing the content and student activities, on the diverse nature of the cohort and the range of prior knowledge, not only of marketing but of everyday experiences as consumers which inform marketing concepts.

Supply Chain Management. This module covered very widely established principles around the use of supply chains but added a requirement for students to carry out their own action research. Students were expected to go out and discover an organisation of interest to them, and to determine how they could apply concepts from the module lectures to this organisation. Students were encouraged to carry out interviews or to observe processes as part of this assessment and were given guidance on how to do this ethically.

Financial and Management Accounting. This module set out to provide a comprehensive understanding of accounting, as a means to understand and report information about an organisation, and as a set of practical skills relevant to people working in a range of different types of organisation. The tutorials placed a strong emphasis on learning examples and practical skills.

Critical Thinking. The stated educational aims were to develop critical thinking skills and students' understanding of 'what is going on in any given situation through the use of reasoning, the evaluation of evidence and self-reflection on their own thinking processes' (Critical Thinking in Business handbook, 2018). This was the only core module in the first year to be based on the concepts of Problem Based Learning (PBL), adopted because the method itself creates the conditions in which the skills of critical thinking are developed (Smith, 2005; Ungaretti et al; 2015; Schmidt et al, 2009; Loyens et al, 2011). The module was taught through ten weekly student led group discussion sessions. Students were organised into small groups and assigned a group tutor for the term. Every student was required to lead one of the class discussions.

Quantitative methods and analytics. This module aimed to provide students with the level of numeracy necessary to progress to subsequent stages of their degree. It combined a grounding in mathematics for finance and statistics with an introduction to issues such as data visualisation.

Managing complexity and business skills. This module combined a number of areas around management that did not fit elsewhere but that the team designing the course regarded as essential. These included practical skills in connection with searching for a career, such as preparing CVs and navigating employers' recruitment processes, and skills such as teamwork, delivering presentations, and business writing, which were essential for students' future careers. Additionally students were introduced to areas of contemporary management thought with an emphasis on how they could address the challenges of a fast-changing and unpredictable world. A range of lectures and tutorials combined contributions from lecturers, tutors, and careers consultants.

4.2 Teaching methods

The teaching methods used varied from module to module. The design adopted ranged from transmissive to constructivist. Table 1 shows the type adopted for each module. An integral part of the teaching method is the way assessment is designed. Table 2 shows the type of coursework set and the structure of the final exam. Feedback on student coursework if written must be delivered to the student within 3 weeks of submission (university policy). Feedback on Class work exercises is generally given in class, at the time of completion of the exercise. Both teaching method and coursework offer students opportunities to practice some of the skills outlined in section 2, that are needed for management.

Table 1: Teaching Methods

Module	Methods: weekly Lecture and class sizes; type of class	Transmissive/ constructivist	Practice in Skills listed in section 2
Organisational 2 hour lecture (2 streams of 180); one textbook; smaller classes (14 groups of 25) 1 hour/week - doing example exercises illustrating theory		Transmissive	Verbal; problem solving; reflect and learn from experience
Economics 2 hour lecture (3 streams of 120); one textbook; smaller exercise classes on taught theory (12 groups of 30)		Transmissive	Reflect and learn from experience, problem solving
Marketing	3 hour lecture (3 streams of 120); interaction built into the lecture via structured activities; students expected to carry out pre-reading before lecture using flipped classroom approach	Combined transmissive and constructivist	Presentation and speaking, report writing, time management, managing continuous learning, innovation
Supply Chain	2 hour lecture (2 streams of 180); students carried out an independent Coursework project working in teams to analyse a supply chain	Mainly transmissive – constructivist Coursework	Team working, problem solving, numeracy, writing, time management, holistic thinking, observing, managing continuous learning.
Financial and management Accounting	2 hour lecture (2 streams of 180); smaller classes (14 groups of 25) working through exercises, in-class tests	Transmissive	Numeracy, managing continuous learning
Critical Thinking	Problem Based Learning (PBL) - 10 weekly student group discussions in 20 groups of between 15 and 20; a textbook; case and discussion questions designed by 3 lecturers; 1 group leadership role per student	Mainly constructivist; transmissive contributions	Team working, verbal, listening, problem solving, writing, time management, holistic thinking, chairing; innovative and critical thinking, leadership, managing continuous learning
Quantitative Methods and Analytics	2 hour lecture (2 streams of 180); one text book; weekly 1 hour exercise classes (14 groups of 25)	Transmissive	Numeracy, thinking holistically, managing continuous learning
Managing complexity	2 hour lecture (3 streams of 120); weekly practical workshops (14 groups of 25); 5	Combined transmissive	Leadership, managing groups and teams

and business skills	careers-focused workshops (6 groups of 60)	and constructivist	including dysfunctional ones, writing, time management, verbal,	
			listening, managing	
			ambiguity and paradox	

Table 2: Coursework and feedback to students

Module	CW assignments & final assessment	Timing/ type of	Markers	Practice in skills listed in section 2
		feedback		
Organisational Behaviour	Mid-term multiple choice test	Imme- diate	automatic	Learning from experience; managing own learning
	Team presentation	Imme- diate verbal	tutors	Team working, problem solving, time management, holistic thinking, managing continuous learning, presentation, speaking
	Final written examination – Multiple choice & essay		automatic	Understanding of knowledge, time management, writing
Economics	Multiple choice test mid term and final exam	Imme- diate	automatic	Understanding of knowledge; time management, managing continuous learning,
Marketing	Team marketing plan	3 weeks	Lecturers	Team working, time management, reflection, innovation, managing continuous learning
	Final exam – essay questions		lecturers	Writing; structured thinking; Understanding of knowledge; time management
Supply Chain	Practical team exercise	3 weeks for team exercise	Lecturers	Team working; time management; Numeracy; reflection and learning from experience
	Final exam; multiple choice questions and essays		lecturer	Writing; structured thinking; Understanding of knowledge; time management, managing continuous learning,
Financial and management Accounting	Multiple choice test mid term and final exam	Imme- diate	automatic	Numeracy; time management; Understanding of knowledge
Critical Thinking	Attendance and class participation	Imme- diate	tutors	Team working; discussant; listening; reflecting, innovative & critical thinking, verbal, managing continuous learning,
	Quality of Leadership role	Imme- diate	tutors	Leadership/ chairing; team management, preparation
	Individual essay	3 weeks	tutors	Writing, critical and structured thinking, managing continuous learning
Quantitative Methods and	Series of tests throughout the term	Imme- diate	automatic	Spreadsheet skills; numeracy
Analytics	Final exam – multiple choice and general questions		Lecturer	Spreadsheet skills; numeracy; interpretation of data, time management, management of continuous learning

Managing	Presentation	Imme-	Tutors and	Teamworking; presentation; critical
complexity	Written team report	diate	Lecturers	thinking; time management; writing;
and business	Individual	informal		reflection
skills	CV and career plan	3 weeks	careers	time management; writing; reflection
			experts.	
	Final exam - essay		lecturer	Writing, critical and structured thinking,
				managing continuous learning

Constructivist methods were the core design for only two modules (Critical Thinking, Managing Complexity) and it was these module that offered the greatest scope to students for practice in a wide range of the business skills. Two other modules had imbedded a substantial element of constructivist student activity within a transmissive teaching structure (Marketing, Supply Chain). These also offered practice in a range of business skills but with less time available for these activities. Half of the module were essentially taught by transmissive means. The skills practice these offered focused more on the basic business skills rather than the soft skills or high level personal skills.

4.3 Evaluation of the 1st cohort's work

The main evaluation methods of the delivery of the modules depended on feedback throughout the delivery of the module from the teaching staff, course director and students. Teaching staff and the course director monitor delivery throughout the module to pick up and deal with major student problems. The main evaluation method for assessing student learning remains formal examinations at the module completion. Student Feedback specific to individual modules included:

- Written feedback on the module itself: students completed an overall module evaluation form which was in line with the university's standard policy, (appendix 1).
- The online tutorial evaluation form which as already observed was better aligned with the requirements of a module taught through PBL
- Informal oral feedback to lecturers and tutors teaching the module.

Student Feedback on the course as a whole included:

- Oral feedback gathered through staff-student meetings
- Oral feedback through a series of focus groups led by an Educational Technologist. This text was recorded, transcribed and analysed with standard qualitative techniques using the NVivo package.
- Informal feedback gathered through discussions with students, for example by personal tutors and second year mentors, throughout their first year.
- An online questionnaire referring to the overall student experience

4.4 Assessment of evaluation methods used

The formal evaluation of the quality of module delivery as seen by the students and staff during and after the completion of the module, is extensive. Module reviews by the teaching staff are standard and where multiple tutors teach small groups the staff meet regularly during and after the module delivery to discuss progress and student responses. The methods of collecting feedback from students however presents more of a problem.

The university's standard questionnaire addresses individual modules, and indeed the use of further questionnaires was discouraged so as to avoid students feeling over-evaluated. In practice three drawbacks became apparent:

- The questions presumed a didactic lecture-based approach to delivery
- The questionnaires were entirely focused on particular modules to the detriment of understanding the course as a whole
- The questionnaires were administered at the end of term and results only available some weeks after that, limiting the scope for introducing changes in the light of questionnaire findings.

Staff-student meetings are well organised and the cohort included a visible and well-trained group of representatives able to represent their peers at these. Issues raised at these meetings, which are usually held mid-term, can be addressed during the latter part of the module delivery. Other channels proved less

effective for gathering feedback. While the online questionnaire on the student experience had the potential to surface issues that spanned multiple modules, in practice the response rate for this has usually been less than 20% and the amount of data gathered from it has therefore been minimal. The focus groups run by the educational technology team asked for student volunteers to contribute to one of three sessions (approximately one and half hours). Disappointingly only a few students responded and the 2nd focus group session became a one to one interview. However the students who did turn up were clearly highly motivated, committed to the course and had a lot to say on many aspects of it. The exercise provided some valuable insights into student issues and problems that had not been considered by the staff.

The evaluation of learning achieved remains dependent on traditional methods of formal written examination. This will give some assessment of surface learning of subject knowledge but is less effective at measuring deep learning. In addition the effect of the many potential activities that deliver experience relevant to developing the various business skills is not assessed. Nor is it obvious how this can be addressed.

5 Future Research

Course directors are concerned with the value of at least four aspects of business courses, for all of which current evaluation measures are less than satisfactory

- Student response to course delivery
- Student learning especially deep learning
- Student Skills acquisition
- Relevance of Course structure

Student response tends to be closely linked to quality of delivery. This is the aspect on which academic staff concentrate. The major drawback in obtaining student feedback is the difficulty of getting a reasonably representative student response. Response rates can be below 50%, leaving us to wonder what the views of the non-responders are. A survey of a random group of students investigating the reasons for non-response might throw more light on the value of student responder survey results. An alternative approach would be to run an experiment using the coursework element of a module, by adding a requirement to write a short deep reflection on a specific aspect of the module.

Assessing the acquisition of Individual skills is a different and more intractable theoretical problem. Perhaps rather than trying to measure performance a more practical approach would be to consider the design and delivery of the activities in a more systematic way. A research study could compile a list of the existing range of published exercises and activities with a view to assessing for what skills they best offer experience. The study would aim to compare the relevance and effectiveness of the various activities for teaching each skill and perhaps develop a template of good practice in terms of the characteristics associated with good teaching practice.

This issue of course structure is addressed regularly by the teaching staff and course leadership but the choices made of what subjects or activities to include and what to drop are extremely contentious both within business schools and for the business community that the courses serve. A research project that not only establishes what is wanted now but also sets up a process for systematic review for the university sector as a whole would formally address this choice. Such a project could combine the recent management literature on managerial education needs with the views of business managers at middle to top level across a representative range of industries.

6 Conclusion

Business courses are undergoing change from two separate but related trends- the demands of the changing management role in business and the development of constructivist teaching innovations. The case example of the 1st year of the business and management degree at Cass demonstrates the scope of the challenge for evaluation. The university's module evaluation form provides a measure of feedback from students, and because the questions and format are standardised it offers comparability between one module and another. Nevertheless within the first year of the degree course a very wide range of teaching and learning approaches is used, and the form is not necessarily a good fit with all of these.

The course is clearly moving towards a greater use of constructivist methods and hence addressing the pressing need to teach the personal skills now required by business. While the student feedback processes do ensure that students provide an input to the management and development of the course, their involvement through the current channels falls some way short of true co-creation, where students and lecturers would work collaboratively to design a course which best met the requirements of both.

Attempts to develop and apply objective measures of student learning of theoretical concepts and high level personal skills are proving difficult. Moreover potentially effective measures look likely to require as much teaching resource as the original teaching itself. Perhaps it is time to reconsider the whole issue of evaluation — to turn the question round to focus on good design of the course as a whole and of its component activities based on learning theory and trust to the learning outcomes?

Appendix 1 – university module evaluation form

1. F	or this member of staff						
		Ochnics disagree	No No	Pullar 1	efinitely a	9re	Not applicable
1.1	This lecturer/ tutor/ supervisor is good at explaining things and has helped me understand the module						
1.2	This lecturer/ tutor/ supervisor has made the module interesting						
1.3	The teaching on this module has been of a high standard.						
2. N	ly progress on this Module (assessm	ent and feedba	ick)				
2.1	I understand the assessment criteria and what is required of me to perform well in this module						
2.2	I have received helpful comments on my progress and/ or work I have submitted						
2.3	Staff have been available to respond to my queries about the module and/ or my work						
3. F	or this Module						
3.1	This module is well organised and is running smoothly						
3.2	I have been able to access the library resources I need for this module						
3.3	The Moodle resources for this module have supported my learning						
3.4	Overall I am satisfied with the quality of the module						
3.5	Ethical issues were appropriately covered in this module						

4. Fr	ree Text Questions					
	What are the best features of this module?					
4.2	How could this module be improved?					
4.3	Can you provide an example of an ethical issue you thought was well covered or you thought could be appropriately covered in this module?					
	7					

Thank you for your participation

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