CHANGES FACING HIGHER EDUCATION — OPPORTUNITY OR CHALLENGE?

EXPLORING ALTERNATIVE LEARNING AND TEACHING PRACTICES FOR UNDERGRADUATES

Andrea Benn
University of Brighton
United Kingdom

Abstract
This paper acknowledges that UK Higher Education Institutions are facing interesting but challenging times ahead. As with many other business enterprises, in the private and public sectors, each Vice Chancellor will be looking for improvement and efficiency savings while being seen to offer value for money and maintain quality of provision. This paper identifies the reasons why this is an opportunity to bring about change to undergraduate programmes, explores the pedagogical structures tried by others and demonstrates how new technologies can be integrated to bring about the desired effect of promoting independent enquiry and development of the associated personal skills. The initial research focused on developing one module within an existing programme, but the results will feed into a larger more significant development of a new BSc Hons programme designed entirely towards a more student-led approach.

Introduction
As a practitioner in education, I consider that my work is to improve learning: mine and that of others — and this can come from looking at ways to improve my practice.

Duch, Groh, & Allen (2001) suggests that it may be the way that we teach that reinforces a view of learning — that the teacher is responsible for delivering content and the students are the passive receivers of knowledge. Duch et al. continue to argue that the way we test, the expectations we set and the learning materials we use may also contribute to the level of student motivation and intellectual maturity.

So are we restricting the students’ natural inquisitiveness as well as telling them what we expect the answer to be?

I wanted to design a module that required students to find out the answers for themselves, demonstrated to them how to do this, and supported and encouraged them throughout to reflect on the process, thus empowering them to become independent learners.
Hart (2005) advises that the improvement should be a matter of influence and that change has to come from within. My intention was not to impose this change but to encourage the students to rise to their new challenge. My challenge was to find a way of achieving this.

The current situation regarding the UK Higher Education Funding Review, the Browne Report (2010), and increased tuition fees taking effect in 2012, has brought an opportunity to review current practice, to identify pedagogical strategies which can incorporate technology, and to design a curriculum that offers value for money from both the students’ perspective and that of a Vice Chancellor (i.e., it achieves a balance of improved contact time for the students but not necessarily an increase in contact time which could overreach a programme’s budget).

However, the question was raised whether it is as simple just to desire change. There is a plethora of information discussing enhancing learning through technology that acknowledges that the practice still does not appear to be widespread. This could be due to HEIs not wishing to make costly mistakes in the implementation of online learning. Cox et al. (2010) discuss the importance of being aware of the impact on university teachers’ practices and the curriculum delivery and how these interrelate with technology development. They offer an analytical framework based on two theoretical models which have been developed and used to analyse teachers’ pedagogical practices, as well as institutional factors which affect students’ learning.

Final consideration went to the students themselves. Otting, Zwaal, Tempelaar, and Gijselaers (2010) reviewed the relationship between students’ epistemological beliefs and conceptions of teaching and learning and found that students do recognize the importance of self-directed learning.

UK HEIs routinely ask their students for feedback through the annual National Student Survey. In 2010, results indicated that they would prefer to have more contact time with their lecturers. Given the increase in fees, this request should perhaps not go unheeded.

**Research Objectives**

The main objectives for this research were to identify:

- the pedagogies and pedagogical strategies that could incorporate technology into the Level 4 undergraduate business programme;

- which technologies would best suit the subject being delivered;
how much guidance to give to students regarding independent enquiry — how much information to provide, in what format, at what point to step in and for how long to step back;

• the skills the students could be expected to have, how they would identify the skills that needed development, and opportunities for these skills to be developed/monitored; and

• the ways this would empower the students to be independent learners.

Both the students and I needed to know our respective roles and I would need to be aware of when to change from being the provider of information to being a facilitator supporting them through various learning activities.

The results of this project will form the basis of the longer term objective, which is to change the structure and content of the whole programme from that currently offered to this cohort of Business Students.

Research Methods

The original research into change was initiated during the academic year 2008/09 through action research borne from a concern that a module offered in Semester One and given as traditional lecture was too focussed on me as disseminator of information and did not provide enough opportunities for the students to develop their own learning strategies.

McNiff and Whitehead (2006) suggest that in action research the process itself is the methodology and is experimental, requiring a certain degree of entrepreneurialism as practitioners will need to try multiple innovative ways until they find one that is suitable.

It was this definition that persuaded me that action research at this time would be appropriate, bringing about a change in my practice which could ultimately bring about a change in how the students would approach their learning.

Investment of Time

My time was spent researching what technology was generally accessible, if it was available within the Business School (BS) and if so how it was being integrated, and how it could be utilised in the module in context. The L5 cohort of 2009/2010 agreed to participate in a trial of some new technology which provided the opportunity to observe their reaction to and interaction with technology and identified the need for an induction period and the support which would be required subsequently. Attention then turned to the pedagogical strategies that already incorporated technology and a review of the literature in particular for blended and problem-based learning.
Participants
During semester one of the academic year 2010/2011, the module in context was offered to a new cohort, but this time with the introduction of blended learning. The module entitled Business Environment (BE) is one of the L4 modules within the Foundation Degree in Business — it provides the scope to enable the students to understand the environment around them and its effect on the business world generally. I believed an element of current affairs would lend itself to independent enquiry by the students. I recognised, however, that they would need some guidance in identifying the theory associated and this module could be the opportunity I was looking for to demonstrate to the students how to seek information for themselves, interpret it in a given situation, and apply it.

I produced a series of short e-lectures, based on my previous lecture notes, which were available to the students from podcasts to e-lectures. They were released to the students at the beginning of the semester along with a full schedule and instructions to listen to each e-lecture during the week prior to the seminar session. During the seminar the students were divided into groups: at the start of the year I organised the groups but as the semester progressed they chose their own. Each group then received a different scenario and set of questions based on the topic of the week. Their task was to investigate current affairs news items relevant to the topic and then to explain how the theory supported their interpretation of events and possible courses of action. Each group presented their findings and invited discussions and questions.

During week one, I ensured that the students were able to locate and download the e-lectures and were aware of what was required of them. During subsequent weeks, I observed the students’ behaviour within the groups, their development of the theory, and the level of attendance at each seminar.

Evaluation of the module was obtained by issuing a questionnaire to each participant asking how and if this met their expectations of university lectures and what specifically they enjoyed about it. This questionnaire had originally been issued to the L4 cohort of 2008/2009 and their responses together with my evaluation had prompted the change in the delivery but not the curriculum content.

The Pedagogical Strategies
A review of the students’ evaluation from the 2008/2009 cohort revealed that the majority of students expected to find their lectures delivered in large theatres via PowerPoint to many students with no interaction. They liked the content of the BE module. Comments received included that it was “a good introduction” or it “instilled confidence as it refreshed [their] memory.” They felt that the lecture was easy to understand. They liked the opportunities for group work and research but would have liked more such activities.
This was, however, countered by comments (sometimes from the same students) that occasionally they felt bombarded by the information, did not always understand what was being discussed, or did not feel stretched or able to develop themselves.

It has already been determined that the subject matter was thought to be suitable for an alternative teaching strategy and in fact would benefit from such.

The feedback received from the trial of new technology indicated that the L5 2009/2010 students were open to using technology but the observation showed that the students had to be familiar with the system beforehand in order to get the best from it. Carefully planned induction sessions would be required before introducing any technology.

**Problem-based Learning**

Taking the view that this could be an opportunity for a complete change, one of the alternative strategies identified was problem-based learning (PBL). PBL requires the students to work in groups to resolve a problem by managing their own learning process and deciding what information they will need as well as the skills they will have to develop. It therefore indicates that each student will require a certain amount of skills and knowledge gained from previous experience which will then be applied to activities devised from problems usually originated from professional practice.

One consideration was whether the content of the BE Module needed to be modified in any way in order to benefit fully from this method — or would the fact that each week introduced a new topic be sufficient, particularly for a module offered so early in the programme. Lee, Shen, and Tsai (2010, p. 556) advise that PBL is well suited to help students become active learners as it makes students responsible for their own learning. However, Parrott (2009, p. 14) warns that the first year at undergraduate level represents a major challenge for students. Should this module, therefore, support their transition period rather than hand over the sole responsibility for learning to the students at this stage? The study by Otting et al. (2010) into the students’ epistemological beliefs and the relationship to the conceptions of teaching and learning was particularly informative as its findings showed that where students do not believe in the teachers as the main source of expertise they tend to have a constructivist conception of teaching and learning and that this philosophy is in line with the principles of PBL. The challenge is identifying which students hold this philosophy and how to encourage those who do not.

The next consideration was whether the integration of technology would complement PBL. Savin-Baden (2003, p. 91) describes several online models under the title of “Virtual Facilitation”, where the “Content + Support Model” suggests a content channel for students as packages of material while tutorial support is given separately, usually via e-mail or e-conferencing. However, it is generally regarded that students do not usually develop an online community and so the opportunity for collaborative learning is low in an online sense.
**Blended or E-learning**

E-learning offers new opportunities for both educators and learners (Holmes & Gardner, 2006) and when reviewing the choice of E or blended learning, I found the literature was suggesting putting emphasis on learners to “source and create at least some course content” Smyth (2010, p. 4) but this from my viewpoint was going a stage too far. While I am seeking to empower students to take control of their own learning, I was doubtful whether L4 undergraduates were actually ready to determine their own learning outcomes to that extent. Smyth’s review of his own research (with post-graduate students) notes that some students will only reluctantly take to fully online work.

Research by Davies and Eynon (2009, p. 1) found that not all learners will be “digital natives,” and observation of my own students illustrated to me that they will not all be totally familiar or comfortable with interacting with IT, so expecting them to engage with a fully online module is not what I was hoping to achieve. They would be expected to use technology for their own and group learning and so development of their IT skills would be a consideration, but interaction generally would be preferable in a face-to-face environment.

By way of support for that decision, Wu, Tennyson, Hsia, and Liao (2008) warn that with “virtual e-learning environments, students have to be highly motivated and responsible because all the work they do is on their own” (p. 1852). Even with PBL and my desire to promote a more student-centred pedagogy I am not convinced that a total online approach is going to help me achieve that.

**Resources**

Laudon and Traver (2009, p. 404) advise businesses of a key lesson, which is to let the business decisions drive the technology and not the other way around. This is to ensure that its technology platform will be aligned with the business and not the other way around. This viewpoint is reiterated by Cox et al. (2010) in an educational setting when determining the technology to enhance learning: find the best that suits the subject being offered and the context in which it is offered and which can be utilised for the greatest advantage for that purpose, without needing to change the curriculum content and goals.

However, with University of Brighton (UoB) having already made some key decisions as to which technologies to invest in, I had to start by establishing what was available.

Technology is already integrated into the existing course to varying degrees but is entirely subject to the module tutor’s experience, innovation, and aspiration to try new approaches. The technology needs to complement the principle for the new course to be student-centred. The students will work in teams and will have to work collaboratively to achieve their shared goal. Communication will therefore form a major part of this collaboration but may not necessarily take place face to face. Using the technology as an asynchronous tool may assist the students here but does this tool need to be supplied by the university? It raises the question of whether we want to or need to see the learning process exactly as it unfolds or are we happy to see the end result in whatever format that
is determined via the course assessment strategy? The issue of whether to join the students in the environment of their social network sites need not arise, particularly if we are timetabled to meet with the students on a face-to-face basis during scheduled sessions as part of the PBL strategy. It also puts the responsibility for this part of the learning process onto the students, and, in particular, forming the virtual and actual group dynamics, resolving conflicts and division of labour, just as they would in a social environment and without interference from the tutors.

It is here that the issue of formative assessment may arise. The students will be required to reflect as part of this learning strategy and one way this can be achieved through IT is via the ‘journal’ facility currently available in the UoB’s virtual learning environment (VLE). It can offer the students the opportunity to evaluate their own learning and because the tool can be restricted to collaboration between an individual student and the tutor, it can offer one-to-one feedback which would be entirely relevant to each student and timely at the point that it is required. Either online or with pre-arranged one-to-one tutorials the student can discuss specific points of concern. At a recent UoB symposium relating to feedback and assessments, students advised that they needed instant feedback and that waiting for two weeks or longer is of no use — the moment has gone.

Instruction demonstrating exactly how this learning tool can be used should be offered during the early stages of the course, including examining the Web 2.0 technologies that students will experience in the field to see how businesses share documents and information and work across time and geographical zones and prepare for the limited occasions when they will meet face to face. The inference on this latter point is that the time spent face to face is to be regarded as precious and should therefore be planned for to ensure that the time is maximised. This is another expectation that the tutors need to advise students of from the outset.

### Defining the Roles

As a senior lecturer, I am used to designing and planning the curriculum, preparing lecture notes for presentation to large groups in the somewhat stark environment of a lecture theatre, and then meeting students in smaller numbers for seminars or workshops usually of one hour duration to offer guidance and support through tasks or case studies complementary to the lecture. Currently, the opportunities for formative feedback arise during the weekly seminars and are available to all students who choose to attend or, in some cases, how much time is available and how many students are asking for guidance.

### The Lecturer

My role in PBL requires a transition from lecturer to facilitator, but Savin-Baden (2003) warns that this could be a challenge as it demands recognition of a loss of power and control. She continues that it is about allowing the students to “manage knowledge for themselves” and involves “letting go of decisions about what the students should learn,
trusting students to learn for themselves, and accepting that students will learn even if they have not been supplied with a lecture or handout” (p. 35).

When searching for an alternative approach and the next development stage of this project, a colleague and I were able to liaise with another UoB colleague, Professor Gaynor Sadlo who runs a fully PBL programme in Occupational Therapy (Sadlo, Piper, & Agnew, 1994) and who pointed out that a key issue is the design of problems which graduates are likely to encounter after university in their profession. She also advised that PBL can be a very structured process (which is how she uses it), or it can be used in a more diffuse or diluted way.

Each module of a UK programme is allocated a number of Credit Accumulation and Transfer Scheme (CATS) points which determines the number of hours of study associated with that module. The hours of study are translated as contact hours with the lecturers, self-study hours, and assessment hours. I used this information to assist with the change in the teaching and learning strategies for the module in context. I used the lecturer contact hours fully for seminars, enabling me to have more time to integrate with the students and the ability to offer formative feedback. The self-study hours I “borrowed” for the dissemination of the theory. I produced small packets of information, no more than 10 minutes in length, uploaded them to the VLE but expected the students to produce a portfolio of work as evidence of the theory. This portfolio is worth 30% of their overall assessment and students are permitted to take this into the exam as their ‘open book.’ Their success comes from the amount of work they have put into the development of the portfolio. This came about as some of the first cohort (2008/2009) had advised me that they did not know how or where to start finding out information for themselves, were uncertain as to what was expected of them, and if they did not perceive a purpose, i.e., it was not used as assessment, then there was little point in doing it.

The Students
The students are required to take an active role in their own learning. Lee et al. (2010, p. 556) advise that the principle of PBL is for the students to engage in self-directed learning, apply their acquired knowledge to the problems and then reflect on what they have learned.

The students in this context were given the opportunity to work collaboratively when researching, interpreting and presenting the information back. This did require them to identify the theoretical elements from the scenario, provide definitions for the relevant theory and demonstrate how this had been applied.

Most of the students chose not to purchase the core text for this module; those who did shared the resource and all had access to the online materials.

Feedback from the L4 (2010/2011) students for this specific module revealed that many were pleasantly surprised at being able to interact as much as they did with the lecturer (me), spend as much time within the sessions researching topics and working in small
groups, and being able to present their findings. Most expected to be in a lecture with a “slide show.” When asked how much work was done independently outside the lecture, the results varied with one student doing 5 hours a week on the theory, another spending 1 evening a week, and the majority admitting to a “fair amount but could have done more.” One student commented that he/she would prefer more e-lectures for all modules so more practical work could be done in the seminars.

The Learning Points

The requirement for change has to be either as a result of necessity (i.e., because of political or economic factors) or from a desire/willingness on the part of the practitioner to invest the time in order to bring about the change. In the current economic climate and its likely outcomes, the need to make change and to be seen to be making change is an issue that should not be ignored. Indeed, our own Vice-Chancellor is encouraging us to consider our programmes and practices and advise what, if any, changes we would like to make. Therefore, this is a chance for my colleagues and me to review what we do and practice what we preach as lecturers of business management, of finding a way to work smarter, not harder.

Given the plethora of information regarding what constitutes good teaching practice, the change will require in-depth research into pedagogical strategies which may incorporate technologies and will certainly need to complement both the subject matter and the practitioner’s pedagogical beliefs. This includes a decision as to whether or how the delivery of a programme or module needs to switch from a teacher-centred delivery or a student-centred focus. Further exploration to identify diverse technologies, e.g., Web 2.0, should continue to be part of a general review of the business programme in order to keep up with industry requirements. Therefore, the investment of time in order to bring about this change should not be underestimated.

An induction period needs to concentrate on the IT skills that will be required to permit full compliance with any system. This should include a demonstration of the purpose of the system and the expectations of the students in utilising it.

But how far does this fit with the principles of PBL or did it empower them to be independent learners? The end-of-module results for this cohort showed a significant increase on the pass rate compared to previous years. My observation of the students found that average attendance was in excess of 80% — they undertook the tasks willingly and participated well within their groups. I provided them with access to the relevant material which I disseminated only in electronic format; however, it was collated and synthesised by me. Their feedback states that overall they were pleasantly surprised at the level of interaction, enjoyed finding supporting information for themselves, and preferred small group work when researching. As such, I believe that this module was not fully PBL but it did support their transition period from secondary to tertiary education and
that they had an opportunity to do so in a relatively safe environment with plenty of access to my time. This project has been about demonstrating to them how/where they can find information for themselves, and so removing their reliance/dependence on me for information.

The intention now is for the whole course to be delivered as PBL. This could provide more time for the students to adapt to the process as they progress. First-year students will likely require more support and guidance and Duch et al. (2001) suggest that the problems be delivered in stages, allowing the students to cooperate, to make assumptions based on the information they have, and to decide what more they need to request. On the problem brief the learning objectives stated should include those beyond the content objectives and should be more complex and involve process skills objectives as well. Eventually, as they become more familiar with this process and their knowledge and experience grows, this could also help the students to identify the direction they need to work towards.

The Challenges

As has already been acknowledged, Parrott (2009) advises that the first year at university represents a major challenge, continuing that, for a number of reasons, a significant number of students do not successfully manage the transition from secondary to tertiary education.

The first challenge I envisage would be to establish the students’ expectations as demonstrated in the research by Otting et al. (2010). The next step will be to manage those expectations before establishing what our expectations of them are. We then need to demonstrate how these can be compatible.

To bring this about will require considerable planning of an in-depth and focussed induction period. It is envisaged that this could include input from students already well-established in the University from L5 or L6, who have volunteered to act as mentors or ambassadors.

It is, however, recognised that this could be costly in terms of development investment — but should this be a prohibiting factor? This is a matter for each individual Vice-Chancellor and his/her Senior Management Team. It will require each programme/course team committing to the concept of changing the curriculum in terms of delivery and probably of content, demonstrating the requirement for “improved contact time” by offering the students more opportunity to interact with the lecturers rather than just being passive receivers of their information.

As colleagues, the challenge will be encouraging participation in action learning which requires us as a set (team) to work collaboratively on a real issue: developing the new
curriculum and understanding a new strategy (PBL) while reflecting on what we as individuals have previously experienced and can share with this set, in order to drive this initiative forward (McGill & Brockbank, 2006).

The Opportunities

While change may be viewed as challenging, the opportunities that it brings should not be overlooked. In this case the opportunities are:

- To investigate and develop a new curriculum that is more student led, improves the contact time, and will develop the students as independent learners by offering them a more challenging curriculum where they will be able to utilise and enrich skills requested by business and industry, as well as the higher levels of their university careers.

- To review our own practice, make changes or identify areas that complement and which can be shared with the team to enhance the student experience.

- To introduce a new approach to learning at the beginning of the first-years’ university career. They will have some expectations, not least that university will be different from their previous experience, but are more likely to be open to trying something new.

- To continue building relations between local businesses and UoB, through invitations to participate in the knowledge dissemination and development of authentic activities based on professional problems experienced in their field of work.

Conclusion

The reason for exploring alternative learning and teaching strategies is to bring about a change in students’ approach to learning which will last beyond their academic careers. The ultimate aim is to change the students’ behaviour from being passive to active learners.

A review of the literature suggests that the reason for the way the students currently behave is because of the way they are taught and the expectations we as tutors are portraying. This would suggest, therefore, that the change initially needs to come from us and our approach to our teaching and the resources we wish to utilise in doing so.
This change, however, will not be without some substantial challenges that the teaching team will encounter not only from the students’ perspective but their own as well. It will require the teaching team to let go of the responsibility for providing the information while relying on the co-operation of the students to find out for themselves, albeit with guidance and support.

To bring about the co-operation of the students, they are going to have to want to engage with the programme, be interested in the topic and see some value for them from it. It will also be about managing the students’ expectations in relation to their new learning environment as most will probably have experienced a more teacher-led approach so time and patience must be invested in explaining what a student-led framework will look like. Demonstrating the skills to cope with this will be a priority and a carefully planned transition period will be essential for a group of L4 undergraduate students.

The students participating in this research did enjoy the e-lectures or podcasts prepared in advance and this could be a starting point using existing technologies for support.

Co-operation and collaboration across the course team will be essential to ensure that no learning outcomes are left uncovered or are doubled up, particularly as this is now a holistic approach to the programme. This experience will help the course team to reflect on the course progression and provide the opportunity to anticipate the needs and possible fears of the students.

References


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*Andrea Benn* is a Senior Lecturer with the University of Brighton, Business School and joined the University in 2008 as course leader for the business programme at the Hastings Campus. Andrea’s fields include Information Systems, E-Business and Business Practice. New to the field of research, her current interests include problem-based learning and integrating technology into the curriculum. Andrea is also a member of Business e-Learning Research Group. She is currently working with colleagues to develop a fully problem-based learning programme.