

Work on Your ABS!

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Abstract

Applied Business Solutions (ABS) is an enquiry-based learning module, piloted in the School of Business in IT Carlow in the academic year 2007/08. The module allowed final year BBS (Hons) students to apply their acquired knowledge to a range of business scenarios, many of which involved cooperation with real businesses and organizations. This was achieved by embracing a learner-centred approach which promoted the use of a range of enquiry-based learning methodologies.

The module consisted of a number of independent learning tasks of variable duration, each having its own prescribed learning outcomes and assessment strategies. The learning outcomes of each of the individual tasks mapped to those of the overall module. These outcomes focused on the students being able to apply theory, synthesize knowledge and develop key transferable skills through the execution of the tasks. The tasks were both individual and group-based and, in the case of the latter, both the task deliverable and the group process were assessed. ABS was assessed entirely through continuous assessment and in order to facilitate this, a variety of assessment strategies were adopted, including elements of both self and peer assessment.

This paper outlines the rationale for the development of an enquiry-based learning module. It presents how the Applied Business Solutions module was implemented and outlines the key findings and outcomes of this pilot project.

Background

This module was offered to 4th year undergraduate students on the final year of a BBS (Hons) in International Business in IT Carlow. There were twenty four students taking the module. Prior to the introduction of this module, students of the degree had pursued a mandatory dissertation based module. This year long module had been designed as a capstone for the overall programme and had been running for two years. However, based on feedback from employers, colleagues and the students themselves, it was felt that this module was not helping the students to fully achieve the learning outcomes of the overall programme. Additionally students tended to delay working on the dissertation until well into the second term which compromised their learning.

Furthermore, with the challenges of poor student attendance and participation, the module co-ordinators felt that there was a need to examine alternative teaching strategies. A new, enquiry-based module 'Applied Business Solutions', was therefore designed and implemented within the Business School on a pilot basis in the academic year 2007/8.

Rationale

In order to improve the overall learning environment for the students, it was decided to implement a different teaching methodology, that of enquiry-based learning.

It was felt that, by adopting this methodology, the students could better engage with the material being covered and would play a more active role in their learning, thereby maximizing their learning. The aim of the module was therefore to allow students to engage in a number of applied business scenarios. Through this, it was envisaged that they would apply theory, synthesise knowledge and develop key transferable skills. This would be achieved by embracing an active learner-centred, enquiry-based approach through the use of real business tasks, scenario-based assignments, PBL, and case studies.

What is enquiry-based learning?

The term 'Enquiry-based Learning (EBL)' is defined by Kahn and O'Rourke (2005) as being a broad term describing approaches to learning which are driven by a process of enquiry. In this, the role of the lecturer changes, moving from traditional lecturing towards facilitation as a means of teaching. Equally, the students move from being passive learners to more active learners. This type of learning normally takes place in a group environment, where the groups would include anything up to eight members.

Students are given a task and are then encouraged to engage with the material themselves. They must first establish what they already know about the topic; in doing so they are sharing their existing knowledge and learning from each other. Following on from this, they must complete the exploratory work necessary to fulfill the task themselves under the guidance of the facilitator. One of the last stages of the process is the 'presentation' process in which the learners outline what they have learnt. This 'presentation' process may take numerous forms and may be oral or written. The focus of the learning does not simply lie on what is learnt, but also on how it is learnt, as groups may examine issues in different ways. In an EBL environment, the process is as important as the product.

There are many benefits to EBL, both for the staff and the students involved. Clearly, by being active in the learning process, the students are more engaged with the material. Not only do they learn in terms of content, but they also acquire a new skill set as part of a group. In particular, they develop numerous transferable skills and become not just independent thinkers, but also independent doers.

Criteria for creating an EBL programme

An effective EBL programme requires adherence to certain criteria. Firstly, the scenarios/tasks chosen must be designed in such a way that there is more than one valid outcome possible. Learners must feel that their work on the task is valuable despite not necessarily arriving at the traditional 'correct' answer.

Secondly, the scenarios/tasks should be designed so that they allow students demonstrate the knowledge, skills and competences acquired during their completion. To ensure that this occurs, the scenarios/tasks must not only be well designed as stand-alone units, but

also the learning outcomes for each task must map against the learning outcomes of the entire programme.

Finally, the scenarios/tasks need to be matched to the level of experience of the students. Otherwise, if the demands of the task far exceed the students' ability, the students might become de-motivated and disillusioned and this will only result in them developing a negative attitude towards the entire learning process. Equally, if the scenario/task appears too easy for the learners and does not test them, then the students will not be stimulated by it.

Facilitating in an EBL environment

The facilitator plays an integral role in EBL. Firstly, having designed the appropriate scenarios/tasks, the facilitator must ensure that all learners are clear about what is expected of them. They must then check that the learners stay on track with their learning to attain the required learning outcomes. Consequently, the facilitator must be involved at all times in the process and must meet regularly with the students, particularly as there is also formative feedback involved.

Facilitators must be aware that theirs is a role of facilitation and not of participation and consequently they must be ready to step back from the process and allow the students the freedom to pursue their own lines of enquiry. What is fundamentally important is that the learning environment which is created is one of freedom, trust, collaboration and consultation, in which the learner feels free to explore ideas and to exchange them with both colleagues and the facilitator.

As can be seen the role of facilitator is one of a juggling act; getting the balance right between over intervention and too little intervention. Whilst the former may result in the students' learning and creativeness being stifled, the latter results in the students feeling confused and isolated.

Assessment within an EBL environment

Although many of the standard forms of assessment can be used in the EBL context, it is important to note that, it is not just the product which is assessed, but also the process. Gibbs (1999) notes that the vast majority of learning occurs outside of the classroom and as this is typical of an EBL approach, it is vital that the process is assessed.

Given that a wide range of scenarios/tasks may be used, it is important that a broad range of assessment strategies are adopted, so as to ensure that the module learning outcomes are met. In addition, assessment of group workings may be necessary and could take the form of records of group meetings, progress reports, reflective logs, peer and self assessment.

In any case, just as the learning process includes input from the learner and the facilitator, so too should the assessment process. Rhodes and Tallantyre (1999) suggest that

whatever form it takes, the assessment process should include '*negotiation between tutor and student*'. This further endorses the notion that the learning process within an EBL environment is a collaborative one.

Implementation of Applied Business Solutions (ABS)

ABS is a 10-credit mandatory module with three contact hours a week and two additional independent learning hours per week.

Induction

An induction day for the incoming students was held to explain the different teaching and learning strategies employed on the module. This induction was hosted off-campus and consisted of a series of workshops on the enquiry-based learning (EBL) methodology, the role of the learner and the facilitator and creative thinking. Student feedback about the day was extremely positive and the authors feel that the day was crucial in preparing the students for the different style of learning that was employed in the module.

Tasks

As per the aims of the module, a series of business-related tasks formed the building blocks for the module content. The tasks and their accompanying descriptors were developed in advance. Some of the tasks were designed and developed in conjunction with outside organizations which meant that they had a more rigid framework in terms of time.

Each task was described according to a standard task template (see Appendix 1) and had its own set of learning outcomes, assessment methods, weighting and time allocation. The task descriptor document which describes the task, its assessment, resources and deliverables was provided and explained to the students in advance of the task.

The learning outcomes of each task were in turn mapped to the learning outcomes of the overall module. They related to the students' ability to integrate their knowledge from other modules and apply this knowledge to the execution of the task. This application not only allowed students to put themselves into real-life situations but also afforded them the opportunity to learn new skills in a realistic environment.

The tasks varied in length from one week to ten weeks and some tasks ran concurrently. Most tasks involved group work of three to four students with rotating leaders appointed by the team members. Groups were chosen at random by the facilitators to ensure that students interacted with each other and did not just stay within their previously formed friendship groups. In the second semester, it was decided to change the groups again so as to allow the students the opportunity to work with different people. Again, this was done so as to add to the realistic nature of the tasks.

An outline of the tasks undertaken in the module is shown in the following figure:

Figure 1: Sample of tasks used in pilot ABS programme

| | Title | Description | Duration |
|----------------|--|---|-----------------|
| Task 1: | Case Study analysis | A business case analysis | 1 week |
| Task 2: | Stock portfolio management | Virtual stock portfolio management | 3 weeks |
| Task 3: | Group work analysis | Analysis of dynamics and failings within a group | 1 week |
| Task 4: | <i>What employers want, what they really, really want? –</i> | Establishing the skills set desired by employers | ½ week |
| Task 5: | A local Farmers’ Market promotion | Required student groups to conduct market research on behalf of a local Farmers’ Market. They subsequently presented a report based on analysis of their data findings and made recommendations for the future development of the market. | 9 weeks |
| Task 6: | A local and national charity | This task consists of two strands: i) Designing and organising a promotional event for both charities. This event was also designed to be a fundraiser for the national charity. ii) Developing ongoing promotional strategies for the local charity. | 10 weeks |
| Task 7: | Case Study Analysis | A business case analysis | 1 week |

Process

At the beginning of each task, the entire group met with the facilitators to discuss the task, its learning outcomes, assessment methods, weighting, timeframe and deliverables. At those sessions, the students had the opportunity to clarify what was expected of them for the task. Students then met within their groups to determine what they needed to investigate in order to advance the task.

During subsequent meetings, the facilitator sat in on the group meetings and observed what was taking place. During this time the facilitator was able to see whether or not the students were following a line of enquiry that would lead to the achievement of the prescribed learning outcomes. These facilitator-guided sessions also allowed the students to map their own progress and to receive any necessary guidance from the facilitator.

When the task deliverables (e.g. project, report, presentation) were due for submission, the students each completed an accompanying reflective journal/log, which outlined their learning throughout the different parts of the task. The log was a record of what they had learnt, what they had found difficult in the task, as well as a brief action plan for improvement in future tasks. Students were encouraged to be very expressive in these reflective logs, which were never disclosed to anyone other than the facilitators involved. These reflective logs also formed part of the assessment procedure.

Feedback was given at all times during the execution of the tasks and, in addition, the facilitators met each student on an individual basis each term in order to discuss their progress to date.

A number of assessment strategies were deployed in the module and students were made aware that they would be assessed both on the product and the process. Task deliverables included oral presentations, written reports, reflective logs. For some of the assessments, students were allocated an individual and group mark.

Findings

Throughout the year the students were invited to give their opinions about the module, both individually and as groups. At the end of the year, the students were again invited to provide the facilitators with feedback on the module by means of a questionnaire.

Probably the most significant thing to come out of these was that the majority of students readily acknowledged that they had learnt a great number of skills through the module. They also commented on the fact that they had developed in terms of their own self-confidence as they had completed the tasks themselves and had been responsible for the organization and the execution of the task.

However, some students raised concerns about the module. Firstly, they remarked that, initially, they had found it difficult to adjust to a new teaching methodology in the final year of their programme. Many of them had come through a traditional lecturing system and were consequently unfamiliar with this particular teaching methodology. For this reason they commented that they would have liked to have been exposed to enquiry-based learning at an earlier stage in their programme.

In addition, some of the students had concerns about the amount of group work involved, having experienced problems with group work in other modules. These students had to be reassured that individual marks would be allocated within the groups and that the assessment strategies would cover both the product and the process of the task.

Another issue raised by the students was that some of them felt that the module tended to dominate their other modules, both in terms of time and effort. As the module was based entirely on continuous assessment, and as each of the tasks had a defined time line, the students felt under pressure to work hard from the outset of the programme. However, the

absence of an examination in this module was welcomed by the students and they also came to appreciate that what they had learnt during this module was of benefit to them in their other modules.

Overall, there was a mixed review, with the majority of the students very pleased with the skills they had acquired using enquiry-based learning. They felt that it was both a rewarding and enjoyable experience which they would highly recommend to incoming students.

Outcomes

This pilot has shown that EBL can be successfully applied within the Business School in IT Carlow. The project was successful in allowing students take responsibility for their learning and in enabling them to develop a large range of transferable skills. However, the skills gained varied across the student cohort, with those who fully participated in the process gaining the most from it.

Aspects of the project which were particularly instrumental in its successful implementation included the Induction Programme and the applied nature of the tasks designed. However, the involvement of external organisations presented additional challenges with respect to the definition of the task, the sacrifice of control and the external timeframe demands. However, this involvement did lend a sense of reality to the task which was very much appreciated by the students particularly in the early stages of the tasks.

Some of the aspects which require revision for the next delivery of the module would be a longer induction period and more time for facilitation; it was found that an inordinate amount of time was devoted to explaining individual tasks and this detracted from the amount of facilitation time available.

The students also found that the methodology was challenging as this was their first exposure to it. It would therefore be advantageous if students encountered this methodology during an earlier stage of their programme.

One final aspect relates to the physical infrastructure for the delivery of the module. The pilot module was hosted in a standard classroom environment which restricted students' ability to engage in their own groups. Ideally, facilities tailored to the EBL methodology would be made available and this would greatly assist with the delivery and facilitation of the module.

In conclusion, it was felt that overall the module was successful in allowing students attain the learning outcomes of the module. It also allowed students gain additional transferable skills. There is scope for improvement as outlined above but overall it is felt that the module has led to a more effective learning environment and consequently, it is envisaged that it will be adopted for the next academic year.

References

Gibbs, G. (1999) 'Using assessment strategically to change the way students learn', in Brown, S. and Glasner, A. (eds) *Assessment Matters in Higher Education*, Maidenhead: Society for Research into Higher Education and Open University Press, pp 41–53.

Kahn, P. and O'Rourke, K. (2005) 'Understanding Enquiry-based learning', in Barrett, T., Mac Labhrainn, I and Fallon, H., (eds), (2005) *Handbook of Enquiry and Problem-based Learning - Irish Case Studies and International Perspectives*, Dublin: Centre for Excellence in Learning and Teaching NUI Galway and AISHE.

Rhodes, G. and Tallantyre, F. (1999), 'Assessment of Key Skills', in Brown, S. and Glasner, A. (eds) *Assessment Matters in Higher Education*, Maidenhead: Society for Research into Higher Education and Open University Press, pp 106–121.

Appendix 1 – Task Template

| | |
|-------------------------------------|--|
| Title | |
| Subject Area(s) & skills | |
| Nature of Task | |
| Length & Time allocation | |
| Learning Outcomes | |
| | |
| Description of task | |
| Process | |
| Assessment | |
| Internal Resources | |
| External Resources | |