

Good Practice Guide in Learning and Teaching

Volume 2

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EDITOR'S INTRODUCTION

HELEN HIGSON

This is the second edition of our Aston Business School (ABS) Good Practice Guide and the enthusiasm of the contributors appears undiminished. I am again reminded that I work with a group of very committed, dedicated and professional colleagues. Once again this publication is produced to celebrate and promote good teaching across the School and to offer encouragement to those imaginative and innovative staff who continue to wish to challenge students to learn to maximum effect. It is hoped that others will pick up some good ideas from the articles contained in this volume.

Contributors to this Guide were not chosen because they are the best teachers in the School, although they are undoubtedly all amongst my colleagues who are exponents of enthusiastic and inspiring approaches to learning. The Quality Unit approached these individuals because they declared on their Annual Module Reflection Forms that they were doing something interesting and worthwhile which they thought others might find useful. Amongst those reading the Guide I am sure that there are many other individuals who are trying to operate similar examples of good practice in their teaching, learning and assessment methods. I hope that this publication will provoke these people into providing comments and articles of their own and that these will form the basis of next year's Guide. It may also provoke some people to try these methods in their own teaching.

The themes of the articles this year can be divided into two groups. The first theme is the quest to help students to help themselves to learn via student-run tutorials, surprise tests and mock examinations linked with individual tutorials. The second theme is making learning come to life in exciting practical ways by, for example, hands-on workshops and simulations, story telling, rhetorical questioning and discussion groups. A common theme is one of enthusiasm, reflection and commitment on behalf of the lecturers concerned. None of the approaches discussed in this publication are low effort activities on the part of the facilitator, but this effort is regarded as worthwhile as a means of creating greater student engagement. As Biggs (2003)¹ says, in his similarly inspiring way, students learn more the less passive they are in their learning. (Ref). The articles in this publication bear witness of this and much more.

Since last year Aston Business School has launched its Research Centre in Higher Education Learning and Management (HELM) which is another initiative to promote excellent learning and teaching. Even before this institution has become fully operational, at least one of the articles in this publication has seen the light of day in the research arena and at least two others are ripe for dissemination to a wider audience via journal publication. More news of our successes in this activity will appear in next year's edition.

May I thank the contributors for taking time out of their busy schedules to write the articles this summer, and to Julie Green who runs the ABS Quality Unit, for putting our diverse approaches into a coherent and publishable form and for chasing us when we have needed it! I would also like to thank Ann Morton and her colleagues in the Centre for Staff Development who have supported this publication. During the last year the Centre has further stimulated the learning and teaching life of the

¹ Biggs, J. (2003), Teaching for Quality Learning at University, 2nd edition, The Society for Research in Higher Education and Open University Press, Chapter 1

School (and the wider University) via their Learning and Teaching Week and sponsorship of Teaching Quality Enhancement Fund (TQEF) projects. Pedagogic excellence is in better health at Aston than ever before – long may this be because this is what life in HE should be about.

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This second edition of Aston Business School's Good Practice Guide is a tribute to the wealth of teaching expertise residing in the School. Over the last twelve months it has been my pleasure to be involved on a number of fronts in relation to learning and teaching, and I know how much excellent work is going on. Many of you may not consider yourself to be expert teachers, but like the editor I too believe that the vast majority of you try new, different and interesting things as a way of enriching and enhancing the student learning experience. I also think that most of you probably take it as read that these new ideas are well known and that you're not doing anything special, but the real usefulness of an idea is best demonstrated through seeing it in practice, and this is what the case studies in this Guide offer. I hope you will take the time to read through this publication and to apply some of these ideas to your teaching. I also support the editor in her wish to see this as a stimulus for writing case studies of your own. The Centre for Staff Development is very happy to support the publication of Guides from the other Schools, or to support the publication of Guides on thematic issues, such as assessment, group project work, distance learning, or e-learning. Please get in touch!

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TEACHING OTHERS IS A GREAT WAY TO LEARN YOURSELF! OR USING 'STUDENT-RUN' TUTORIALS FOR SELF- REFLECTIVE LEARNING

AMANDA BRODERICK

Introduction

30% of the assessment for the postgraduate e-marketing module was allocated for coursework. The coursework comprised a group presentation and summary report. The group work was evaluated by the lecturer and through both self and peer-assessment. In small groups, students were allocated one specialist subject from a list of contemporary issues in e-marketing. Each group presented to the tutorial as a whole, providing a specialist 'lecture' on the context of e-marketing and the issues that impact on its process. The group work enabled students to conduct an in-depth literature review of a specialist subject, to debate the pertinent issues between group members in order to produce a summary presentation, and to use the presentation as a basis for discussion across the tutorial group as a whole. In addition to an evaluation of students' research and critical appraisal abilities, this assessment developed and tested group working and presentation skills.

Advantages of this Format

The one-hour 'tutorial' period provided an opportunity for students to develop ideas/manage learning activities to a much greater extent than a more typical 15-20 minute presentation period. It was possible to discuss and debate the key conceptual and theoretical ideas, identified from lectures and readings, in both more detail and from a stronger grounding (i.e. students demonstrated great breadth and depth of reading). The exercises/tasks/activities that the small Project Group developed as part of the management of the one hour session forced students to think through the critical issues, adding to their own self-learning and the learning of the cohort as a whole.

The student groups were innovative in both their presentation style and the content they presented, often providing significantly new and useful conceptualisations/summaries of the various theories. Theory was applied across a range of products and industries through role-playing, web demonstrations, surveys and other exercises.

On completion of a student-run tutorial, the Project Group filled in a self and group evaluation form. This called for students to be reflective of their own learning and to identify action points for the future, in addition to being used as a contribution monitoring form. The cohort as a whole also had to evaluate their peers on the tutorial, useful in terms of identifying what the wider group learnt as well as to input into their own preparation.

The four tutorials ran extremely well. Student feedback was good in both the student questionnaire and through email comments. There were no problems with lack of individual contribution.

Disadvantages to Format/Provisos!

A clear disadvantage of this format is the difficulty with scheduling larger cohorts. Four weeks in a 10-week postgraduate term is the absolute maximum for an assessment period as anything longer than that would disadvantage the earlier students. Each group contained between 3-8 students. Whilst equal allocation was sought, due to module choice changes, some groups ended up with fewer people, not the ideal situation for this considerable undertaking. An ideal group size would be 5-6. The time scheduled for the assessment meant that my input was reduced by four hours. I ran surgery sessions in addition to the tutorials to address group queries and questions, but the development of some lecture cases would have been possible if these four hours had been used for my input. The cohort as a whole was highly motivated and the resultant output was extremely good. No incorrect or inappropriate information was given to the cohort as a whole. This might have been the case if students had been weaker/not as focused, however, as the hour session provides opportunities for debate/questioning by myself as well as other students I could have controlled this.

Summary

In summary this assessment worked well. Students' knowledge and critical abilities in the subject of e-marketing were developed significantly. It is a particularly appropriate assessment format for 'new' subjects where there is much current research in the topic.

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Example used with postgraduate students
BMM618: e-Marketing

CHALLENGING STUDENTS AND ACTIVATING THINKING WITH RHETORICAL QUESTIONS IN A LECTURE SETTING

MARK PALMER

Introduction

As a Lecturer, I find that one of the most intriguing situations to grapple with is the didactic nature of lecturing. Nowadays, the increasing size of lecture theatres can offer students a very passive learning situation and, indeed, a comfortable existence where the world can literally pass them by, while the lecturer is faced with sustaining the attention of a large group of students. One way I have attempted to combat this passivity problem is to include rhetorical questions within the lecture content. After all, asking ourselves questions is something we all do, though the credibility we grant it may vary from person to person. In the Distribution and Retailing module, which is taught to final year Single Honours students, I have experimented with rhetorical questions in different ways to enhance the lecture content and invite or activate more thinking during the lecture period.

You Call that a Rhetorical Question?

Admittedly, rhetorical questioning in management education is not new but it is often put across to students mainly in effectiveness terms – that rhetorical questioning will lead to better decisions (i.e. playing devil's advocate). To use rhetorical questioning in this way is straightforward enough. Having said this, there are other ways in which this persuasive device can be used to enhance the content of lectures as well as the style of the lecturer. In the Distribution and Retailing module content, I have experimented with rhetorical questioning in two different ways: a question and answer style which is geared towards informing, and a more probing style which attempts to activate thinking and encourage students to wrestle with alternative permeations. In the first instance, rhetorical questioning is used in an informative way. For example, questions are used to introduce module content, topics and to request clarification. Here, I introduce all of the topics with short clear questions and immediately answer. In this process, questions serve as a means of introducing the topic rather than actually asking a question intended to receive a response. The aim of this approach is used to lift the lecture to a higher level of interest and cognitively pull the students into the lecture.

The second way highlights that alternatives exist to our present ways of thinking. Here, rhetorical questioning is concerned not so much with eliciting information as with prompting reflective analysis. Again, such questions generally do not expect to elicit an answer. Rather, it is used to identify and challenge assumptions, but also to explore and imagine alternatives. In other words, it looks for, recognises, and welcomes contradictions as a stimulus for academic development. Most times, however, asking rhetorical questions about previously held assumptions, values, ideas and behaviours will increase student anxiety. As you can imagine, the increase in thinking when rhetorical questioning is used appears to threaten or undermine the continuation of the good old-fashioned comfortable lecture theatre setting for the student.

How do Rhetorical Questions Benefit Students?

As I have found from the insightful comments of students, the tactic of posing questions that expect no answer can be a very persuasive device, particularly in low involvement lecture settings. Posing rhetorical questions to a large passive group of students places a cognitive demand on them to respond to it – albeit covertly. In these circumstances, the inclusion of rhetorical questioning prompts the students to form judgements implied in the question and, in so doing, enhances the students' abilities to recognise the virtues of strong and weak arguments.

Some of the students found that rhetorical questioning also made them sceptical of single answers to questions. This is an especially beneficial aspect of rhetorical questioning when viewed against the background of corporate publicity and rhetoric. So, just because the Chief Executive of Tesco says something is conducted in this way does not make it so. If nothing else, rhetorical questioning raises the possibility that retail executives may harbour ulterior motives for their actions. It may also make students more wary of the fee-driven advertising agent who argues that the company's slogan is old and tatty!

Another point highlighted by the students is that rhetorical questioning forced them to imagine and explore alternatives to existing ways of thinking about retailing. In this way, asking rhetorical questions is one of most effective means through which ingrained assumptions can be challenged. Such questions, almost inevitably, deliberately break with the rational modes of thought and so prompt students to think more creatively. Sadly, this can be threatening to some students, however, because it implies that assumptions which they consider as 'givens' may be meaningless or obsolete. There is nothing wrong with this situation of course, but it may be more appropriate for final year undergraduate students who are capable of handling the ambiguity of the question as a stimulus for thought, rather than feeling intimidated and confused.

Lessons Learned

The problem from a pedagogic point of view is how to introduce rhetorical questions in a way that would be meaningful to the students but also would not serve to antagonise and alienate students. This should be kept in mind before interspersing the lecture content with rhetorical questions. To be sure, it is best to be upfront with students. Outline what you are doing and why you are doing it at the outset of the module.

Over the course it is possible to prompt, nurture, and encourage this process without making the students feel threatened. Trying to force students to accept this activity is likely to serve no function other than antagonising and intimidating them to the point where resistance builds up against the idea and the lecturer! Actually, I have some experience of this, as I introduced too many questions without providing sufficient reflection time to absorb the implications of the statements implicit within the rhetorical question. The result of this was to recognise that rhetorical questioning within a lecture setting required a reflective dimension. By providing an opportunity for reflection, lecturers can perhaps help students to articulate and understand the assumptions underlying theories. Needless to say, it is also important to mention that such questions should be specific by relating them to particular events, companies and actions. Questions are best interspersed with statements, with tags (e.g. do you think?) and preceded by reflective clarifying statements or personal opinion.

Different types of questions can therefore be used rhetorically. Rhetorical questions are complex and frequently perplexing for the students, since it requires them to think creatively about the subject. If nothing else, rhetorical questioning is uncomfortable for students, but so too is learning – and this is as it should be.

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Example used with final year undergraduate students
BM3323 Distribution and Retailing

MAKING READING MATERIAL 'COME ALIVE' IN DISCUSSION GROUPS

MONICA GIULIETTI

Introduction and context

The final year module BS3340 'Economics of Business Organisations' has a rather theoretical content aimed at illustrating both the advantages and disadvantages of alternative types of organisation within the firm. It addresses concepts such as incentives, delegation, motivation and efficiency in rather abstract terms. These concepts and their implications for firms' performance have been discussed in a number of 'classic' articles which have been very influential in the development of the main theories of firm organisation. Over the three years I have been teaching this module, I have realised that students find the material demanding due to its conceptual content. The theoretical nature of the 'classic' articles for this module meant that students often failed to read them. The students' reluctance to undertake the reading, which they justify as due to pressure on their time, is a problem I have encountered in other modules.

This reluctance to undertake the reading led me to experiment with alternative forms of organisations of the lecture slots, including the introduction of general discussion in class and student presentations. The student presentations of the articles are clearly reliant on the students being in command of the material. In general, I found that the students gave a poor description of the content of the articles, which offered few insights into the articles for the rest of the class. Additionally, the rest of the class often failed to read the recommended article, hoping to 'free-ride' on the work of presenters and were therefore in no position to ask questions of the presenters. In my opinion neither group was benefiting from this set-up. The content of the reading material was not mentioned as part of the students' answers in their exam. Furthermore informal feedback from the students expressed dissatisfaction with this component of the module.

How discussion groups work

To try and resolve these problems discussion groups were introduced as part of the module. At the beginning of the semester students are provided with a list of articles to be discussed and a timetable for the discussion of individual articles. In the week prior to the class discussion, I cover the general ideas and concepts about the topic in a lecture. This provides the students with background knowledge to support their reading activity during the next week. In the following week, students are allocated into groups of 7-8 and spend about 30 minutes discussing the reading material, where the objective of each group is to identify the main ideas presented in the article and to provide examples based on 'real life' company organisations that are linked to the conceptual content of the article. In the final 5-10 minutes a student is nominated from each group to briefly describe the examples of company organisation they were able to identify. In practice, there have been a few occasions when only a small number of students have read the material. When this occurs, the students spend 15 minutes to scan read the article to pull out the main arguments of the articles. While this reduces the time available for discussion, it is still possible for the students to form ideas about the article and its relevance in practice.

Main advantages of the approach

The use of discussion groups as part of the seminar activity in this module has helped me challenge the students' reluctance to do the reading and to discuss the content of the reading material. The nature of the task the students are required to carry out, helps them to deal with the theoretical complexity of the material covered in the lectures and to understand its practical relevance. The successful use of this teaching method relies heavily on the fact that the large majority of the students taking this module have been on placement and have practical experience of companies' organisational structure in different industries and sectors.

Adopting this approach has made it possible to verify whether the reading has been done. Even in the case when some students have not done the reading they have been able to take part in discussion if the rest of the group has done the reading.

Despite the fact that the number of students taking this module is not large (about 25-30), the student presentations did not prove successful in challenging the students' passive behaviour in the class. In contrast, small group discussions have been rather active and have generated good results in terms of the students been able to provide a wide range of relevant examples, which my general knowledge would not have generated. The students' evaluation of the tutorial activity has also improved as a result.

Main disadvantages of the approach

The main problem with this approach is that it makes it possible for some of the students to free ride on other students' work, although I hope that peer pressure might help to avoid this problem. As mentioned before even the student who do not do the reading beforehand can benefit from this approach but there is a risk that recognising that it is possible to avoid the reading will induce the majority of the students not to do it. In my experience this has not happened yet, apart from a few occasions when I had to set aside some time for the students to do the reading in class.

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Example used with final year undergraduates
BS3340: Economics of Business Organisations

INTRODUCTION OF “SURPRISE” TESTS IN TEACHING ACCOUNTING

ILIAS G. BASIOUDIS

Introduction and module context

I teach the module BF1100 *Introduction to Financial Accounting* to first year single honours students of the Business School. The teaching delivery pattern of the *Introduction to Financial Accounting* module is based around large group lectures with small group tutorials, with the ratio of one tutorial to a two hour lecture per week. The students have two formal assessments (tests) during the term contributing to their overall module mark, and one end of term examination.

BF1100 *Introduction to Financial Accounting* is an introductory first year accounting module and as such is compulsory for all students and all degrees offered by the Business School. Those who do accounting as a major as well as those who do other degrees in the School but choose accounting modules in their subsequent years options get significant exemptions for the examinations of the professional accounting bodies in the UK, and this has influenced syllabus content and assessment strategy.

Topics covered in the *Introduction to Financial Accounting* module include the nature of the double-entry bookkeeping system and preparing financial statements for various forms of business organisations. The focus of the module is to illustrate to students how they can use the accounting information to prepare financial statements and assist information users in decision-making. Since 2001, all learning materials relating to this module have been delivered online via the internet, the only print materials being the assessments (tests) during the term, final examination and textbook.

The existing approach

Given the large size class of the BF1100 (around 500 students are enrolled in this module), I have chosen a traditional method of assessment for the BF1100. As mentioned above, the existing approach in assessing the students is via two formal class tests and one written examination. Formal class tests last one-hour and consist of multiple-choice questions. There are two formal class tests taken by learners studying the BF1100 module and are given outside the lecture and tutorial times. I set the first formal class test normally during the half term week and the second towards the end of the term (permitting availability in the examination rooms). The written final examination is taken at the end of term 1.

The nature of the challenge

Financial Accounting is not a particularly popular subject among first year students; especially for those who don't study accounting as a major subject. Students usually find the BF1100 module specifically challenging and demanding. The fact that there are large number of students in the class and possibly the lack of continuous assessment does not make it easy for the lecturer to engage the students and achieve an innovative delivery of the teaching material.

Dealing with the following three issues, which I believe are a side-effect of the above, would help developing an effective learning environment and provide a better learner support system:

- i) the need to establish, on a frequent basis, that the module learning objectives are properly delivered and reflect the needs of the students, and what skills students have acquired;
- ii) the way students could get feedback on a more frequent basis and, finally,
- iii) students always come up with good excuses not to attend lectures and tutorials and this has a direct impact on their performance.

Handling the above three issues successfully would ensure that learners are helped effectively to improve and enhance their performance. This was a real challenge!

The new approach

Higher education is experiencing a notable shift from pedagogy to learning, creating an opportunity to implement new strategies within the traditional environment (as well as the virtual learning environment¹). Last year (i.e., academic year 2003-2004) I tried a new approach. Note here that I was trying to find ways to meet with the challenge as set above. I came up with the idea of introducing in the class 1-3, 30-minute multiple-choice question tests in addition to the two formal class tests. These tests would take place during the lectures and for which no prior announcement would be provided. I named them "surprise tests". These would be properly assessed and weigh 5% of the overall mark of the BF1100 module. This would lead to students being assessed literally every fortnight during the term. A continuous assessment strategy in effect was launched.

Advantages

Assessing and revising the teaching and learning outcomes is an important and critical step in the process of student educational experience. Since introducing the "surprise" tests along with the formal established tests, I was able to reappraise the learning objectives/outcomes at more regular intervals and this in turn helped in establishing whether they continued to reflect the needs of the subject and/or the students. The results of students' assessments of the module were used as a further channel to inform if any changes were to be made. Also, these "surprise" tests provided an additional feedback for the students and were used explicitly to guide students in their study and to assist them in judging their strengths and weaknesses more often than otherwise.

Disadvantages

As in any new teaching strategy that is tried for the first time, along with the advantages, there were bound to be some disadvantages. The biggest negative aspect of this approach for me was the extensive marking I was facing. This higher administrative work was something that I was not particularly looking forward to picking up².

Some students who did not attend a lecture felt that they were penalised; especially those that held a legitimate reason (e.g. a doctor's appointment, etc) not to be present in the class when the "surprise" test was given out. My way of thinking behind the introduction of the "surprise" tests was to make

¹ See Basioudis and DeLange (2004) for a discussion of the important role a web-learning environment can offer in learning and teaching strategies.

² Remember that this Business School is regarded as research focused, and as such the academics' research output is highly appreciated. This new approach is definitely not helping my research productivity.

students enjoy the challenge and opportunity to work harder and learn. That's why these tests weigh only 5% of the overall mark of the BF1100 module.

As mentioned earlier, these "surprise" tests took place during the lectures. One result of this was that the students were sitting next to each other and so it was easy for them to behave in a dishonest way. I was not concerned too much about students cheating, however, as I explained continuously to the students that these tests were used to assist them in their learning rather than to support them getting higher marks. I was watching them during the test, and all these "surprise" tests counted for 5% of the module only.

The outcome

Overall, the new approach kept the audience attending and attentive, and provided the basis for an extra tool in giving more regular feedback to learners (by assessing individual understanding of certain core themes and topics more systematically). It also was a useful way to evaluate the effectiveness of the module learning objectives and outcomes. Minimising absentees from lectures was another successful outcome from these "surprise" tests³. So, on the whole, I thought the new approach worked. Students liked it (they even enjoyed it, it excited and amused them), and realised the benefit of these "surprise" tests. Students now ask other lecturers in the Business School to introduce these tests in their own learning and teaching strategy. This new approach helps students to take control of their own learning. On reflection, I plan to use this new approach again.

Reference:

Basioudis, I. G. and P. DeLange (2004). "An assessment of the learning benefits of using a web-based learning environment when teaching accounting", working paper, Aston Business School.

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Example used with first year undergraduates
BF1100: Introduction to Financial Accounting

³ The average turnout of students was 86% in the "surprise" tests, it was 94% in the two formal class tests, and in the written examination the turnout was 91%. I cannot tell the number of students in the class if the "surprise" tests had not been introduced, but I think that the positive informal student evaluations of the "surprise" tests have shown that these tests make students work harder and think twice before they miss a lecture.

BROADENING STUDENTS' LEARNING EXPERIENCES: A MOCK EXAM IN COMPANY LAW

ROBERT GODDARD

Background

Within Aston Business School, Company Law is a compulsory final year subject for Accounting for Management (AFM) students and is optional for Managerial and Administrative Studies (MAS) students. It is a double module, with 2 hours of contact time per week. Approximately 65 students study it each year.

Company Law is a difficult subject. Indeed, it is subject with which law undergraduates often struggle and it is invariably taught in such students' final year of study. For final year ABS students the study of Company Law is challenging for several reasons. First, Company Law will be for some students the first law subject they have studied since their first year. Second, unlike law undergraduates studying Company Law in their final year, ABS students have not studied other legal subjects (such as equity and trusts or tort) which can aid their understanding of the concepts encountered in Company Law, particularly in the context of the remedies available for breaches of directors' fiduciary duties. Finally, Company Law is the sum of its parts and cannot be quickly understood or assimilated; it cannot be reduced to a series of "bite size" chunks of knowledge. Against this background, assessment involving a three hour written examination is, for some students, a daunting prospect. It remains, however, one of the most effective ways of assessing individual student's understanding and knowledge of the subject as well as their ability to appraise and critically analyse the issues before them.

The mock exam

The mock exam was held at the start of the summer term and was identical in format and style to the actual exam taken at the end of the course. Students were aware from the start of the course that a mock exam was scheduled and many structured their revision during Easter and the summer term around it. The mock exam was not compulsory, although the majority of students attempted it.

The exam contained 8 questions drawn from across the syllabus, some requiring the writing of an essay and others requiring the writing of a short report in which legal advice is given. However, given that the scheduled time available in which to hold the mock exam (2 hours) was less than that available during the formal exam period (3 hours), students were permitted greater flexibility in answering the questions. Some students provided detailed answers for a couple of questions, whereas others prepared essay plans for several questions. Prescription was deliberately avoided and students were advised to attempt the exam in a way that was most suitable to them and their revision to date. Some students referred to their notes as a last resort and this was tolerated because preparing answers to unseen questions with the help of notes is a valuable revision exercise in itself.

Providing feedback

Each student taking the mock exam had the opportunity to discuss their performance, and the mock exam generally, in a follow up tutorial. This lasted, in most cases, at least one hour. Tutorials were conducted on an individual basis, which enabled students to be given specific advice relevant to them, thereby clarifying misunderstandings and highlighting areas of weakness for further discussion. In addition to providing feedback on the content of students' answers, suggestions were also given regarding the ways by which students could improve their essay writing skills. Advice specific to the study of law was also provided, including, for example, guidance concerning the preferred manner in which factual information should be discussed and analysed in order to provide legal advice. Students were also given an indication of the standard of their work.

Reflection

The mock exam and individual tutorial provided students with the opportunity to develop and enhance their understanding of the subject. They also provided students with something that is not usually available: detailed guidance and comment on work produced under exam like conditions. More specifically, the format adopted provided students with an indication of the progress of their revision to date and also pointed to areas requiring further study. The mock exam also enabled students to understand what can be achieved under timed conditions. This is something that those taking the exam particularly appreciated, not least because many students appear unaware of how much they can write under timed conditions. Equipped with this knowledge, students are better able to allocate their time during timed examinations and they are also able to provide answers in which they demonstrate more fully the extent of their knowledge and understanding. All of the students taking the mock exam during 2003/04 found it, and the subsequent tutorial, a positive and valuable experience. For the lecturers involved, the process – setting the exam, reviewing students' answers and providing tutorials – was certainly time consuming. However, when spread across several weeks this burden was easily borne.

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Example used with final year undergraduates
BL3304: Company Law

BRINGING LEARNING OUTCOMES TO LIFE – MAPPING, STORYTELLING AND IMAGINATION

MICHAEL J. R. BUTLER

“Now I am ready to tell how bodies are changed
Into different bodies.”

Ted Hughes: Tales from Ovid – Creation; Four Ages; Flood; Lycaon

Bringing Learning Outcomes to Life

Like last year's Good Practice Guide, this mini-paper wrestles with the issue of creating a student-led learning culture (Higson, 2003). Like Omneya's paper, it recognizes that lecturing does not necessarily cause learning to happen effectively (Abd-Elsalam, 2003; Mumford, 1993). Whereas Omneya uses quick check questions to enhance students' learning of management accounting, the approach outlined here attempts to bring learning outcomes to life. This is achieved at two levels of student experience: at the macro (collective Module) level and at the micro (individual Lecture) level. At the Module level, a map of the Lecture Programme is made explicit. At the Lecture level, various storytelling techniques are utilized to emphasise key messages. Together, it is hoped that mapping and storytelling will engage the students' imagination. The mini-paper specifically refers to teaching methods that have been used during BP2200 – Analysis of Organisations, a Second Year Undergraduate Module, though its methods have been transferred to other Modules, at both undergraduate and postgraduate levels.

Mapping

Race (1999, 12) explicitly links creating student-led learning, learning outcomes and mapping: 'Your intended learning outcomes should serve as a map to your teaching programme.' By this he means that 'Students and others will look at the outcomes to see if the programme is going to be relevant to their needs and intentions.' (Race, 1999, 12). Later, he warns against swamping students by the enormity of the whole picture.

Analysis of Organisations had three specific issues. First, in its recent past, the module had been taught by a variety of lecturers, which had made the module disjointed – a problem exacerbated by it being a double module. Second, although the learning outcomes are specific, their delivery through lectures could involve drawing on much of the organisational theory literature, which meant that students lost the whole picture. Third and last, one of the recommended texts was perceived to be too difficult.

The first issue was easily overcome by one lecturer teaching the module. The second and third issues were overcome by mapping out the lecture programme by drawing on a conference paper to use as a backbone to the module. The paper added structure, or drew a whole picture, by focusing on key organisational theory and, in particular, identifying four underlying management ideologies. The management ideologies were then tied to specific chapters from the recommended text that was perceived to be too difficult. The first half of the module ensured that all students understood the ideas (linking theory to practice), could relate them to their existing knowledge (making connections to

other modules) and could relate them to broader social change (making connections outside their Business degree). The second half of the module summarised the learning from the first half and then extended the learning by critiquing that learning (introducing more complex levels of analysis).

The main limitation with this approach is individual lecturer choice – the selection of what is deemed to be key organisational theory, especially when it is focused on emerging thinking – a paper. It could be argued, however, that most teaching requires such choices – all knowledge related to a module cannot be taught. Choice is also conditioned by a higher education environment, and Aston Business School is part of this, which promotes its teaching as research-led (Prosser and Trigwell, 1999).

Storytelling

Using mapping alone is not enough to bring learning outcomes to life, students need to engage with each lecture. Minto (2002) argues that effective learning requires a presenter to capture an audience in the introduction through a story structured in a logical sequence of information-giving. The story method is advocated in order to grab the audience's attention – to push aside existing thoughts, because 'He [the audience] will be pleased to make that effort only if there is a compelling enticement for him to do so.' (Minto, 2002, 39). Part of the enticement is structuring the story in a logical sequence which involves having 'a beginning, a middle, and an end. That is, it establishes a situation, introduces a complication, and offers a resolution.' (Minto, 2002, 39).

In addition to the previous three specific issues, Analysis of Organisations has another two issues. The module is theory-based and the older theories can seem out-of-date. The theory needs to become enticing and its relevance needs to become clear.

The issues of enticement and relevance can be overcome by the story method. Various techniques can be used, but three will be focused on here: film clips, pictures and play. Film clips are a useful technique for demonstrating how organisations used to operate, for example, industry before working conditions were improved. A situation has been established (harsh working conditions), a complication has been introduced (the need for change) and a resolution has been offered (improving conditions). Pictures are a useful technique for stimulating debate, for instance, modern art provokes positive and negative responses. A situation has been established (an opinion), a complication has been introduced (that there are various possible responses and all are legitimate) and a resolution has been offered (the need for pluralism). Play is a useful technique for simulating an experience, for example, acting out the potential benefits of inclusive decision-making. A situation has been established (decision-making), a complication has been introduced (the need for high performance) and a resolution has been offered (being inclusive to maximize the chances of achieving the optimal decision). Having utilized the various storytelling techniques to emphasise key messages, the ideas which have been generated are then related to organisational theory during the main part of the lecture.

The main limitations with this approach are the dangers of emphasizing gimmickry rather than the key messages and the various storytelling techniques might last too long which means that there is not enough time to fully develop the relationship between the ideas which have been generated and the theory. Experimentation, however, will eventually find the balance between style and content and the timings of interventions. Unfortunately, experimentation is again conditioned by the higher education environment, but in this context, it expects its lecturers not only to teach well, but also to research and write for an international audience.

Imagination

Reducing Patching's (1999) work to its core, which reinterprets Kolb (1984), it approaches learning through two dimensions: discovery and convergence. The discovery dimension links ideas, possibilities and concepts to reality, data and theory. The convergence dimension decides how to act

on the information along the discovery dimension by prioritizing between the significance of subjective and objective information.

Traditional lectures can prioritize theory-giving because it appears factual. Storytelling is an attempt to rebalance lectures along the discovery dimension by engaging the student's imagination. The various storytelling techniques facilitate students to discover for themselves ideas, possibilities and concepts.

Discovery, though, is not enough and needs to have a purpose. Mapping is an attempt to rebalance lectures along the convergence dimension by placing the student's imagination in a context. Mapping the lecture programme and continuously reminding students where each lecture fits into the programme, ensures that students do not get lost in their subjective discoveries, but places their learning in the context of the learning outcomes of the module.

These are only embryonic ideas which are continuously reflected on. Nevertheless, the ideas are a serious attempt to bring student outcomes to life. Positive student feedback and the quality of the work produced suggests that students are not only enjoying the module, but actively learning how to analyse organisations.

References

Abd-Elsalam, O. (2003). 'Using Quick Check Questions to Enhance Students' Learning of Management Accounting', in Higson, H. (Ed.) *Good Practice Guide in Learning and Teaching*, December, Quality Unit, Aston Business School, Aston University, Birmingham, 14-15.

Higson, H. (2003). 'Editor's Introduction', in Higson, H. (Ed.) *Good Practice Guide in Learning and Teaching*, December, Quality Unit, Aston Business School, Aston University, Birmingham, 1-2.

Hughes, T. (1997). *Tales from Ovid*, Faber and Faber Limited, London.

Kolb, D. (1984). *Experiential Learning*, Prentice Hall, London.

Minto, B. (2002). *The Pyramid Principle*, Third Edition, Financial Times and Prentice Hall, London.

Mumford, A. (1993). *Management Development: Strategies for Action*, Second Edition, IPM.

Patching, K. (1999). *Management and Organisation Development – Beyond Arrows, Boxes and Circles*, MacMillan Business, Basingstoke.

Prosser, M. and Trigwell, K. (1999). *Understanding Learning and Teaching: The Experience of Higher Education*, SRHE and Open University Press, Buckingham.

Race, P. (Ed.) (1999). *2000 Tips for Lecturers*, The Times Higher Education Supplement and Kogan Page, London.

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BP2200: Analysis of Organisations

COMMUNICATING LEARNING THROUGH FILM-BASED MEDIA

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Background

As a part of their assignment brief for modules BM772 *Local Government and Local Agency Management* and BM774 *Social and Community Care Services* students were required to select a local community in the West Midlands region. Using this community as a case study, students were invited to explore the factors that had generated social problems in that community or that acted to constrain its scope for social improvement. They were then asked to generalise on the basis of their observations. Students worked in small groups of between 4 – 7 individuals to this end.

Case Selection

One group of students decided to select a relatively impoverished neighbourhood community to the west of the region. The case was selected because:

- It appeared, according to secondary data, to have suffered from a range of interconnected long-term problems associated with social deprivation. These were particularly visible in this community, because it was located in an otherwise relatively affluent urban area.
- It had also been in receipt of a sustained programme of public investment dedicated to the cause of its 'regeneration'. These monies had their origins in a national funding regime (the 'Single Regeneration Budget' programme), but the precise allocation and use of these resources was co-determined in a process of negotiation between local residents and council officials, on the one hand, and representatives of national departments of state, on the other.

The locality was also selected for pragmatic reasons. A number of the students worked for the council in whose jurisdiction the case community was located. This gave them a degree of pre-understanding, as well as potentially valuable contacts among some of the local stakeholding groups.

The Research Strategy

The student group decided to adopt a novel approach both to constructing their case study and to its communication. One of their members had access to multimedia equipment and expertise within an employing organisation. They also had experience of designing a multimedia-based approach to evidence collection, as well as knowledge of editing and production techniques. Utilising this expertise, the student group undertook a programme of rapid filmed interviews with key stakeholding groups. Their intention was to build up a triangulated picture of the range of practical problems impacting on daily life in the area, as well as the reasons for and perceived success of the initiatives aimed at improving the area.

Interviews were therefore conducted with randomly selected members of the local public. Some of these interviews were conducted 'in the street', while others were conducted in identified local theatres, like pre-school facilities. The views of young, middle-aged, parenting and single, older people were sought in equal measure.

Likewise, filmed interviews were conducted with council officials and local community representatives in order to garner their views. Other evidence that was intended to communicate the experience of daily life in the case study community was also utilised. Images of local community press coverage were used to underscore the contested nature of the changes that the community was experiencing.

The various filmed sequences were then edited into an integrated whole, intended to communicate a story of community development as it unfolded in practice. The edited sequence was then transferred to CD-ROM and used to support an oral presentation to all students studying the specialist modules of the MSc in Public Services Management that year.

The important judgement that these students made in preparing this CD-ROM was that it should only support their broader argument, rather than be permitted to displace it. The integration of oral and film-based materials was a challenging task requiring the exercise of considerable judgement on their part.

Lessons Learned

The key lessons learned by the students include:

- The need to identify from the outset the division of tasks and responsibilities that the student group intended to use to control and deliver a very complex and challenging communication and presentation strategy. This initial agreement worked well in this case, in part because all were clear about, and honoured their commitments to the project.
- The need to identify, again from the outset, the requisite resources and their owners, then to negotiate for access to and use of those resources. Editing and multi-media transfer facilities were required to deliver this project. Permissions were sought early in the process and the granting of these was essential to delivery.
- The need to be sensitive to the impact of different research strategies on the distinct social groups involved in the process. It was clear that film-based interviews affected some people much more than others. This probably shaped the responses that the interviewees felt able to give to the questions asked.
- The need to choreograph interviews with other research strategies used to compile the final report for grading.

The product of this experiment was certainly very satisfying and earned the students a high grade. It was a potentially risky enterprise on the students' part. They implemented the project effectively and, most important, did not allow themselves to be sidelined by the potential within the technology itself. The final product thus passed the test of relevance, especially as it was integrated within a broader presentation strategy. My only regret is that this stimulating product was not made more widely available by the students and systematically disseminated to their host employers.

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Example used with postgraduates
BPM772: Local Government and Local Agency Management
BPM774: Social and Community Care Services

TEACHING OPERATIONS STRATEGY AS HANDS-ON MANAGEMENT IN A VIRTUAL WORLD

DOUG LOVE

Introduction

The final year module in operations strategy seeks to give students an understanding of key operations principles, the way that operations strategy fits into the business and the issues that surround implementation. Strategy means not merely deciding what should be done but also how it will be done (if the strategy isn't feasible then it is of no value) and thus an understanding of application is critical. This means being able to see how the broad principles, concepts and techniques should be applied in a particular context to deliver the outcome required by a business. This view is grounded in the author's experience teaching manufacturing strategy to industrial managers and engineers where a common complaint was: 'I now understand what Just-in-Time is but I still don't know what I should do on Monday morning to make it happen'. The ability to translate high level business objectives into a series of implementation actions can only be properly tested in the real world, but any experience of that process, however limited, can be expected to improve the student's understanding of the topic.

The idea that understanding can be improved by application is not at all new and common in most vocational subjects. Many use teaching and assessment methods that relate directly to professional practice where simplified versions of real-world activities are used to test and develop their students' understanding. In art and design courses students do produce written work, but the greatest emphasis is placed on the artwork that they create. Engineers do calculations and experiments to develop their analytical skills and their design (synthesis) abilities are honed by a series of design tasks and projects - the racing car produced by Aston's mechanical engineering students each year is the ultimate expression of this. In each case the processes experienced by the students approximate or parallel those that would be conducted by practitioners in the real world. They test and develop the student's ability to apply the knowledge and skills they have acquired in a context that is vocationally relevant. This approach also tests the 'theories' that are being applied in a way that allows a student to gain an appreciation of their strengths and limitations.

The above examples involve processes that can be represented as tasks carried out by an individual person with little interaction with other people or the wider world. In contrast management processes invariably involve a great deal of interaction with both. Further, that behaviour of the real world is dynamic. Problems occur and are solved over time, implementation takes time and stochastic influences are everywhere. Real businesses are full of 'noise'. Data is inaccurate, incomplete or both. People are helpful, misleading, difficult, or simply ignorant. Development and implementation of a coherent strategy is not trivial in such an environment but it is very difficult to persuade students of that fact. Actual experience does so very effectively. Thus what is required is an environment that provides 'practitioner' management experience in the classroom.

Creating a Rich Simulation

Business games have been established for a long time and all of these add a time dimension to a case context to create a 'virtual business'. They may include stochastic factors and, less commonly, interaction with company personnel. In the main these systems are limited in the level of realism they offer, usually because they are intended as vehicles to provide students with appreciation rather than practitioner experience. The ABS second year game is a good example of this type of system. Increasing the richness of a business game to turn it into a simulation raises a number of practical

problems that impact on both the core modelling system itself and the information systems that support it.

The 'Mandrill' case study and the related simulation/information system that is described below was intended to fulfil the need for a rich simulation that could be used across a range of applications in operations training and education. It has been developed over a number of years, initially in a multi-national company and more recently at ABS.

To be considered a 'rich' system the scope of the case study and the simulation model needs to be sufficient to cover all the key business functions but must also offer depth of representation in the focused functional area(s) too. The case business key dimensions reflect that requirement: £30m turnover, 300 shop floor machines arranged in 15 cells and 550 employees. The factory operation is modelled down to the individual operator on an assembly line but also includes the factory manager. All the major functions of the business are present including operations, sales, purchasing, engineering, distribution, HR, and finance. External customers and suppliers are also modelled. Details are held of all products, manufacturing methods, plant, personnel, suppliers, customers, sales histories and financial reports. The very wide range of functions supported and the level of detail held means that over 1000 documents are stored in the case database.

Information System

Students are used to information being provided in a consistent, timely and accurate manner but real world experience is often very different. The answer to a question will differ depending on who is providing the answer and the information it contains may be incomplete or misleading. Furthermore it would be unusual for information requirements to be completely clear at the outset of a project - foraging for information is commonly required. We can do some of this with static cases by adding excess information or telling the story from different viewpoints but foraging and interaction are only possible with a system that can respond dynamically to a student's queries. Role playing allows interaction and perspective to be introduced but only at the expense of efficiency and inconvenience. The original Lucas system solved this with paper memos that were sent between students and the virtual 'actors'. This functioned well but demanded considerable resources and an excellent memory (for what you told other teams in response to a similar question).

The tutor's role in the interaction has been reduced by the introduction of an automatic query system that allows students to send a brief 'memo' to any person in the virtual company and receive a reply very quickly. The student enters the memo through a web interface and a backend program strips the key words from it, searches the document database for documents that contain relevant information and posts a reply back into the team's private area, where it can be accessed via the web. The reply contains links to the most relevant documents in the database. The system is home grown and imperfect so the tutor is given the chance to edit or modify the response before it is 'published'. If a new response document is required it is created by the tutor and added to the database to be used in future years. A fully automatic version of this system has been used for first year teaching where only information foraging was required. The system stores a wide variety of documents including memos, reports, spreadsheets, drawings and pictures, emails - even video and sound clips could be stored.

Simulation

Ideally the modelling part of the system should be able to handle the widest possible range of decisions that could be made by the student - the constraints should be no different to those in the real world (or at least justifiable in terms of it). Determining the appropriate level of decision making is important - set it too high in the organisation and the student can operate with a relatively superficial knowledge and too low and they will focus on the minutiae of the operation. Practitioner modelling tends to err on the side of detail to avoid constraining the realism of the experience but at the risk of inefficiency arising from the volume of decisions that have to be processed.

The simulation used in Mandrill employs a System Dynamics model that runs very quickly (important if a mistake is made and a re-run is required) and is also very flexible in the range of decisions that can be accepted. Flexibility is achieved by de-coupling the actual decisions from the inputs to the model. The tutor stands between the two and interprets the students' decision into a set of model adjustments - for example implementation of SPC (a quality tool) will result in a reduction in scrap rates, a slight decrease in operator efficiency, absence of operators during training and costs incurred for training and equipment. The degree and timing of adjustment to these 'handles' is necessarily approximate and subjective. More practically it needs to be consistent so that two teams making the same decision get the same result. A large spreadsheet uses VBA routines to formalise much of this knowledge and control the model execution. This process is completely hidden from the students to avoid them attempting to 'play the system'.

Running the Game

Teams make decisions weekly throughout the second term during which time the factory completes 26 weeks of simulated operation. The task is expected to occupy the students for approximately nine hours per week, including a half hour meeting with the tutor every two weeks. Regular interviews are held with the 'factory manager' to assess progress and articulate strategy. Mini-projects are used for cross-organised groups (one member from each Mandrill team) to investigate relevant topics as varied as payment systems, control of absenteeism, process mapping techniques, 5'S', SPC and financial ratios related to manufacturing. The exercise culminates in a major team-based presentation to the company 'executive'. An example of a web site created by a past student team to support their presentation can be seen at <http://www.idmru.aston.ac.uk/mandrillgame>. The site gives a good overview of the scope and nature of the exercise from the student viewpoint.

This case accounts directly for 35% of the total marks for the double module and related design and investigation mini-projects account for another 10%. The assessment is based on the performance of the group during the exercise and on the final presentation. Team and individual student performance is judged from reviewing all the team's memos and decisions as well as the quantitative model outcomes. Student performance can be tracked because all interactions are traced by individual as well as by team.

Conclusions

The system illustrates that a dynamic, rich environment can be created for business applications but achieving that richness has implications for both the simulation and supporting information systems if excess tutorial resources are to be avoided. That said although the use of new technology has improved the resource-efficiency of the system, experience also shows that the resources required do remain significantly greater than conventional lecture/case tutorial teaching. The web-related technology has been successful in allowing students and staff to be freed from time/place restrictions both in the participation and management of the game.

Students rate the experience highly although they do complain about the volume of work involved - in particular they rate the 'reality' of the environment as very convincing. Whilst students may have little experience upon which to make this judgement, it accords with that from industrialists. My subjective judgement is that the quality of the student's understanding improved with Mandrill's introduction and my recollection is that average examination marks increased too.

Future developments could include the use of the web-based information system to support case-based teaching in other modules and the use of the underpinning technology to develop a more general purpose interactive FAQ-type system for broader application.

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Example used with final year undergraduates
BN3318 Operations Strategy, Systems and Implementation

STUDENT FEEDBACK, COURTESY OF 'E'

PAUL ROBINS

Introduction

Providing feedback to large numbers of students is a challenge, particularly in areas where a considerable degree of judgment is required or where making a choice amongst alternative approaches to an issue is involved. In this situation the aim is for the student to understand the basis of an evaluation of their contribution rather than to be told how their response departs from a supposed 'correct response'. This is almost always the case in modules concerned with design and development (such as business IT modules) and is an inevitable element of 'problem solving' modules such as those concerned with Operational Research and Management Consultancy.

The traditional approach involving writing lengthy comments on submitted work is time-consuming, especially when done for an entire class (even if divided into groups). It is also of doubtful value, as writing something that will be interpreted as the intended guidance (assuming it is read) is a considerable skill. The time required to do this usually results in it not being done frequently enough during a module for it to become a key part of the learning support of that module.

The Approach

In an attempt to overcome these difficulties I have adopted a strategy of specifying optional un-assessed coursework to be submitted on an almost weekly basis. In the following class session I display and discuss selected examples of the submitted work, focusing on the issues arising from them. My aim is to turn the one way communication of the written comments into a two way discussion. As with all assessment processes, this serves as a diagnostic tool that, because of the timescales involved, is valuable for guiding the content and focus of subsequent class sessions. Such guidance also includes of course the selection of subsequent coursework tasks.

The submissions are optional so that my time is focused on committed students and not those who submit for the sake of the requirement or for the awarded mark only. The set task is small and one that only requires the preparation of a short document. This means that it can be undertaken within a week and the time taken to review them is manageable. Although individual tasks are small they may be closely linked, either into a larger undertaking or by later tasks being a revision or refinement of an earlier one.

The work is submitted electronically so that I may preview it and later display it in a class session. To date I have taken steps to ensure that anything displayed is anonymous but in future I may leave this choice to the students. The electronic submission process automatically renames each submitted document (logging the change made) so it is easy to identify the source of the work through the submitted file name but nowhere else in the document.

I encourage the students to submit group work as the preview and assessment workload remains an issue although in practice I have no way of preventing individual submissions. I ask for 24 hours lead time but in practice it may be as little as one hour or less (students are very conscious of their time demands but have a marked blind spot when it comes to that of the staff). In practice I usually read

those that have arrived by the time I plan to review them fairly carefully, making notes for the class session as I go, and then I review the later submissions more swiftly, looking for something not already identified in my notes.

Outcome

I continue to use the process because it successfully enables me to provide rapid and frequent feedback to students and it also gives me a clearer idea of the progress that they are making. However, there are some difficulties with the process. The failure of students to respect my 24 or even a 12 hour lead time request puts pressure on the review process. It is possible to review live in class but I would usually only do this towards the end of a module when I will also ask the class to make their comments on a submission.

There is also a problem that often occurs in the class sessions. By intention my comments focus on the strategy displayed in the submitted documents and compares them with alternatives or considers the potential difficulties of an adopted strategy. This results in a session that the students frequently view as being very negative and I am often asked to say what is good or right about the submissions. This problem gets worse as the general quality of the submission improves. At this stage my comments often focus on small points of detail or nit-picking as seen by students.

This is a problem that I feel I have to live with, as when I have selected and highlighted elements which I suggest work well I find that such comments unduly influence the students. I find such elements being used (thoughtlessly I fear) in areas where the context is completely different and an alternative would be much better. A poor review from me is seen as inconsistency (student frustration is often very clear). It seems that their request is in essence for an all purpose template but my aim to help them match templates to circumstances.

My current strategy in relation to this problem is to make whatever positive statements that I can but I resist the detail and precision asked for. An alternative form of the request is for me to provide an example response. This too I no longer attempt for much the same reason. No matter how much I stress that this example response is matched to the circumstances and therefore it has the form that they see, what continues to happen is that I find the structure and often detailed wording occurring in completely inappropriate settings.

A related problem is manifest by students asking that I mark the submissions. I resist this on the basis that the aim is that they should be acquiring the necessary understanding to do that for themselves. Even using very broad rough and ready categories to assist the students seems in practice to be used to promote questions such as 'which paragraph / section should I work on to improve it? Again I see this as missing the point, which is often a matter of strategy, and I take a hard line – no marks from me. Listen to what I say about the way to revise and improve.

Taking this strong line about listing the good points, providing worked examples and marking the contributions means that it is all the more important that the good points of their submissions, the sound decisions and good execution, should be clearly acknowledged. It is a pity that finding a way to do so without negative side-effects is so difficult.

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Example used with final year undergraduates
BN3370: Effective Management Consultancy

A DESIGN STUDIO APPROACH TO PROCESS LEARNING IN BUSINESS AND IT

PAUL ROBINS

Introduction

Modules that require students to acquire IT skills within a business context give students two particular challenges. The first is that of acquiring an understanding of the IT that is sufficiently strong to enable them to demonstrate the use of those skills in practice. Knowing about business IT is not sufficient to prepare them for employment in this area. The second challenge is that of being able to link, in a practically useful way, knowledge and skills based in the two very different disciplines of IT and business and management.

In order to provide suitable support for such students they should be provided with an environment in which they can acquire the necessary knowledge, develop the necessary practical skills and, crucially, to test and evaluate the quality of their current skill level. The skills concerned are broad and complex and require a rich environment in which to test their acquisition – more limited environments such as classrooms and workshops tend to lead to a fragmented approach set by the limits of these facilities. This generally leaves the students to make the links between the elements and to integrate them into well rounded understanding, but with little practical support.

The Approach

Doug Love¹ and I (with the support of the Postgraduate Programme) have developed a studio environment that is designed to overcome these problems. It is used to support a range of modules on the MSc in Business IT and the MSc in eBusiness. Half of the modules on the first of these two degrees are of the kind described above and most of them are now supported, to different degrees, by the studio. We believe the facility to be very valuable although its design and the way that it is used remains under active review. In the following description the basis of its design and the way it is used is described in relation to the first of the modules to be supported in this way.

Generic Learning Objective

The studio was designed to meet a variety of module requirements as captured by a single generic learning objective. Identifying the details of all of the possibilities was not an option in the time available and would have imposed a design burden that we felt would not be reflected in the quality of the design. The objective that was adopted was:

Students will be able to develop business support systems that effectively incorporate IT resources

This covers the range from traditional database and spreadsheet systems through to network design and implementation.

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A decomposition of this objective gives rise to the following component objectives:
Students should be able to:

Define *business requirements in business terms,*
Translate *business requirements into a system design,*
Build *a system that implements the design*
Demonstrate *useful business facilities for the client.*

This set of objectives shows clearly the separation between the business and the IT and indicates the general sequence of activities that will take place in each module. The defined activities are those to be supported by the studio.

The teaching strategy for modules of this kind is to run them as an apprenticeship where students receive a request from a client (in business terms) which the students translate into a development proposal for the client, a design of the system to be delivered and a plan for the implementation of that design. The second part of a module consists of the implementation of the plan followed by a demonstration to the client (again in business terms) and question and answer session. A key requirement set by the overall objective is that the students should make all of the development decisions themselves. This has implications for the nature of the instruction and learning resources provided.

As the students will not be given a step by step task list the instruction will take the form of broad guidance concerning the nature of the process and the approaches that one might take to it. In later employment students will have to be able to update themselves as IT develops and business practice changes to capitalize on the possibilities and this guides an aspect of the teaching strategy. The students are directed to library and internet resources to research topics that they will need to understand to make sound decisions throughout the module. They are given, in small groups, specific detailed topics to research on behalf of their colleagues to complement the generally more strategic level of the formal lectures. The results of each group are made available to every other participant.

A feature of a module run in this way is the variety of approaches (strategic or tactical) that students may take. We believe that they probably share much of this information informally but we also ask them to make formal seminar presentations at which the experience of others is shared, compared and evaluated. This, as far as an individual student is concerned, is almost three or four runs of the module for the effort of one.

It is not of course appropriate to leave students entirely to their own devices and much effort goes into providing direct support. The support is broadly of two kinds. The first and easiest to deal with from a learning strategy perspective is concerned with detailed tasks eg getting an item of equipment or an element of software to work. Support in this context is given freely, provided that students have read the manual and can demonstrate an ordered approach to their difficulty.

The second kind of support concerns the nature of the development decisions that the students have made. Here we have no standard to guide evaluation but we wish to ensure that they recognize a weakness in their decision making wherever one exists. We have a policy of never saying 'do not do it like that' but we will always ask them to explain their decisions, in some detail if necessary. We also make use of the 'apprenticeship context'. Their client must be convinced that something useful will be delivered and their notional employers (employing them as a development team) also need to monitor the progress of their work.

This is a rich conceptual environment for students to work in and our intention is to support it by an equally rich physical environment. The key requirements are defined by the learning objectives listed above and the activities that they lead to.

Thus the studio is designed to provide:

1. *Suitable office space and a team work environment to support the **definition** of business requirements in business and IT terms,*
2. *Hardware and software tools to support the **translation** of business requirements into a system design,*
3. *A supply of hardware and software components that may be used in the system to be **built**,*
4. *Suitable office space, representing that of a client, in which the final **demonstration** of the built system will take place,*

Based on these requirements the studio takes the form of a large room divided into separate office spaces for the students and an additional area marked off to provide the necessary support. The student space doubles up as development team offices and client offices as necessary. It is equipped with PCs, internet connections, meeting table, desks, chairs, cupboards, a bookcase, notice space and flipcharts.

The support room contains servers and the source of the internet connections in a form that enables us to configure them to represent different settings. The servers among other facilities provide access to Lotus QuickPlace, a widely used team working support system and an electronic shop through which the students may purchase (using 'funny' money) items to be used in their development. The shop system handles all the paperwork for monitoring the distribution and return of the equipment. The support room also houses the stock of items together with a small dedicated reference library.

The Use of the Studio

The studio has been developed and used over a period of four years and is effective in providing a rich learning environment for students. At present it is a comparatively expensive resource as it has taken some time to sort out the necessary technology to allow it use to be switched from one use to another to allow parallel running of similar modules. The changes in the university network and the desire to support securely remote working keep these goalsposts on the move.

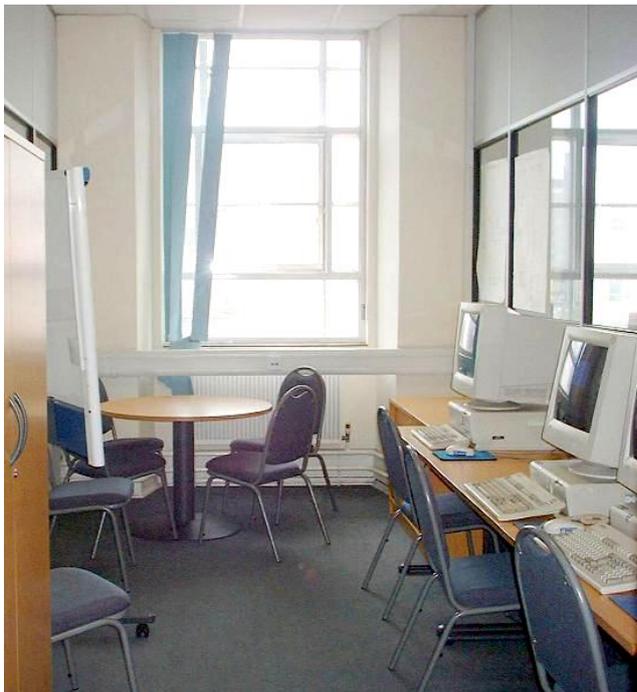
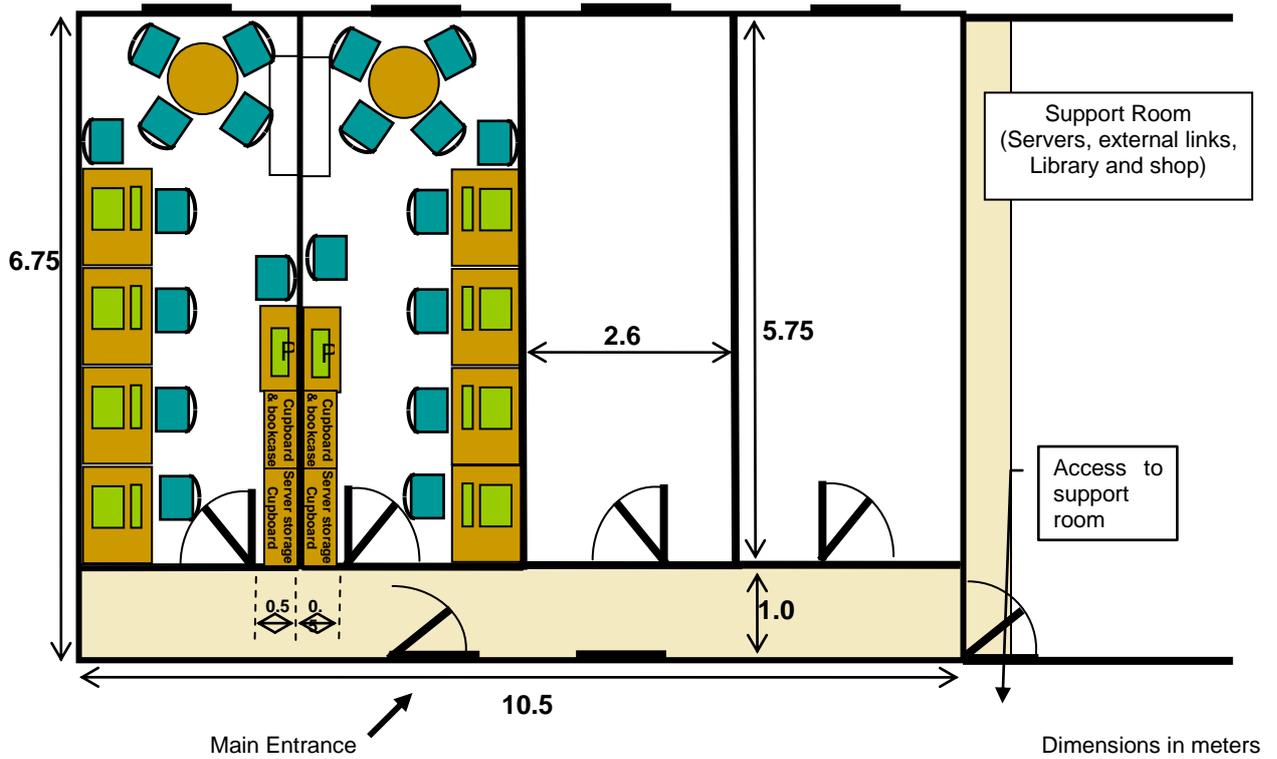
Such an initiative would not have been possible without the support of the Business School. We acknowledge with gratitude the particular support of the Postgraduate Programme who have supported the development and accommodated our non-standard module outlines. A module of this kind requires technical support to maintain the resources to make them available to students when needed. Gillian Bishop (IT Support Analyst) has fulfilled this role and much more by providing direct support to the students when needed. We greatly appreciate all her hard work and dedication.

Outcome

It seems that the challenging environment is unexpected if not unwelcome to many students. Apparently the security of being told what to learn and knowing how the assessment will be made is of greater value than the opportunity that the studio provides. This is perhaps to be expected where there is but one module of this kind but we hope that the problem will fade away when more modules are based in the studio. In the coming year compulsory modules will run in the studio in each of the three term and we hope that the students will learn to value the resource having put the fear and shock behind them in the first term.

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Example used with MSc students in Business and IT and MSc eBusiness

The Studio



General view into a student room with allocated discussion space



Support hardware and network connections

Good Practice Guide in
Learning and Teaching

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