

# Beyond Enron: Introducing the risks of financial mismanagement to business and management students - a case study approach

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## Abstract

The area of auditing and internal control can be argued as having a role within the curricula of business and management students but presents educators with a number of challenges, including student engagement, as well as bridging the gap between theory and practice. A case study approach introduces internal control mechanisms to lower level undergraduate business and management students with the emphasis on problem based learning (PBL). This paper outlines the case and its mode of delivery, including a justification for its inclusion and assessment approach within the curriculum. The case generated very positive student and staff feedback. The framework for discussing the case's effectiveness is that of PBL criteria as outlined by Milne and McConnell (2001), and the key elements in fostering deeper learning as identified by Biggs (1989).

*Keywords:* audit; case study; contextualisation; internal control

## Introduction

One of the challenges facing academics is making the curricula more relevant to meet the needs of the business community (Bailey & Ford, 1996; Richards-Wilson, 2002; Knowles & Hensher, 2005). Historically, business education gained academic credence through a scientifically based research emphasis (Rynes & Trank, 1999; Pfeffer & Fong, 2002) with many of the research findings informing business curricula (Knowles & Hensher, 2005). However, dissatisfaction with this model and a perceived limited focus on business practice is driving change in business education (Gioia & Corley, 2002). This dissatisfaction affects many areas of the education process including: the subject areas covered within the curricula; the contextualisation of materials; bridging the gap between theory and practice; and the modes of delivery which need to be invigorated to develop key soft skills such as problem solving and investigative analysis.

The application of theory and contextualisation of studies has provoked the inclusion of "practice" components to the curriculum (Pfeffer & Fong, 2002) with a movement towards bringing experience into students' studies aligned to active participation styles of learning (Doria *et al.*, 2003). Employers are not satisfied with students with limited exposure to the real world of commerce, who only have conceptual notions of what lies beyond their study years. In recent years, innovative learning approaches have been advocated to bridge the reality gap affecting both curricula and modes of assessment. Whilst recognising that educators exist in an age of increasing class sizes, increased student diversity, a culture of massification and standardisation (Booth *et al.*, 2000), often leading to "assessment driven calculative approaches to learning and gaining good results" (Grisoni, 2002, p. 41), there is a clarion call for an imaginative use of resources to turn students from spectators to participators, and to bring reality and academic reasoning together in a key area such as organisational governance.

Accounting educators can be accused of disciplinary insularity (Patten & Williams, 1990) by restricting their focus to students majoring in accounting. This is despite the great need to educate the business and management student community on the fundamental issues of the wider financial world within which they will operate. The inclusion of auditing as a discipline for business and management students is presently, at

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best, limited. Auditing is often only taught to accounting students as an option or as an add-on to a financial reporting class (Hughes *et al.*, 1998). Yet, within recent years a number of high profile financial scandals such as Enron have highlighted the need for businesses to have good governance. To deny business and management students the opportunity to gain some form of understanding of internal control requirements would appear negligent in the light of such scandals. However, to focus on corporate scandals of this size and complexity may not be as appropriate as providing learning stimuli for more basic controls deemed essential for businesses of any size (e.g., segregation of duties, documentary evidence trails). The authors are convinced that there is a need to introduce the basic foundations of internal and external audit functions as well as the more rudimentary aspects of internal control governance. Power (1994) argued that auditing should be more visible within universities and this, we would argue, is true for both accounting and business and management students.

Whilst auditing and internal control, *per se*, have not found their way into curricula of non-accounting students, ethics has generally been advocated (Donaldson, 2003). Bowie (2001) noted that Chief Executive Officers regard ethics as a key requirement for business students. However, a strong argument can be made for the introduction to students of the internal control framework which has a critical role to play within corporate governance and is a chief contributor to fighting corporate unethical behaviour.

Educators face many challenges when attempting to communicate subject matter but also in trying to enliven the subject and engage the learner. Research shows that students come to their studies with negative stereotypical perceptions of accounting which may influence their learning approaches as well as their future academic career choices (Mladenovic, 2000). This is especially true in the area of audit, governance and internal control, where lack of numeric involvement and students' difficulty in grasping the application of the subject area provide a demanding learning context. Siegel *et al.* (1997) recognised that the pedagogical methods required to improve the teaching of auditing deserved serious attention from the research community. They noted that one obstacle to such tuition is the students' lack of familiarity with the business world and they lack a grasp of the activities relating to auditing.

A number of innovative approaches have been adopted to counter these problems. These include such learning methods as the use of videos to simulate audits (Siegel *et al.*, 1997), the use of literature relating to corporate scandals to enhance teaching, bringing auditing to life, with students enjoying being critical (Hughes *et al.*, 1998), and student-planned and led operational audits within a classroom environment (Dombrowski, 1993). In teaching auditing related topics via case studies, Dittenhofer (1992) noted that:

The case study must be realistic; must be related to the material being covered in the course, must be presented in such a way that the student is drawn into the situation as a participant, and the situation must be resolvable. The case study must be credible to the degree that the student views it as an actual occurrence or a situation that in all probability will occur. (p. 17)

It should be noted that case study innovations have normally been utilised at a developed stage of the tuition of auditing (e.g., final year undergraduate) and not at an introductory stage. However, the use of case studies in auditing has been limited even for accounting students and Knapp (1996) noted their limitations as regards time constraints in the light of a significant amount of technical material. The case discussed in this paper could be used by lower level undergraduate business and management students and may change their perceptions of accounting at an early stage.

In what follows, we examine the experiences of studying the subject area of internal control system weaknesses within a firm in the construction industry. The case study, used with level one or two business and management undergraduates, allows students to sample the reality of the business world whilst using a theoretical auditing framework to consider weaknesses in business transactions. The case's main aim is to enliven the area of auditing. In an attempt to bring sharp reality to bear on the theoretical subject area, students should recognise the importance of the audit function and internal controls. The case uses a basic form of forensic accounting to source and analyse appropriate evidence to consider possible wrongdoing, whilst also suggesting areas for internal control improvement.

### **Rationale for the case study**

In considering the appropriateness of the case study a number of interlinked educational factors were considered:

- deep as opposed to surface learning
- participation rather than passive learning
- developing soft skills
- developing problem solving skills
- bridging the gap between theory and practice

The appropriate use of case study materials can provide an excellent resource to meet these criteria within an effective learning experience.

Beattie *et al.* (1997) regarded the deeper approach to learning as characterised by: students interacting critically with the teaching materials, relating ideas to previous knowledge and experience, examining the logic of arguments, and relating the evidence presented to their conclusions. The same authors also characterised surface learning, where students learn to focus on facts, as typified by: memorising the materials, accepting the facts without questioning the content, failing to distinguish principles or patterns, and being heavily influenced by assessment requirements. Interestingly, Norton and Crowley (1994) noted that the deep/surface dichotomy is mirrored by the active/passive dichotomy, whilst Paisey and Paisey (2003) stated that accounting education subjects must transcend purely training and technical aspects, being deep to be meaningful. This can reflect the progressive academic development of the learner which is fundamental to higher education, consistent with such thinking as Bloom *et al.* (1956), who presented a “taxonomy of educational objectives” as a progressive hierarchy (knowledge, comprehension, application, analysis, synthesis and evaluation). The development of a student’s ability to study independently is a key theme in educational literature (e.g., Matthews, 2001) and thus the active and deep learner skills need to be encouraged.

Biggs (1989) identified four key elements in fostering a deeper approach to learning with case studies, potentially assisting in their fulfilment (Table 1).

	Biggs’ key elements of deeper approach to learning	Case studies
1	Motivation - including the involvement of students in what is to be learnt and the emotional climate of learning.	Use of real world scenarios provide realism and stimulate student interest. Case studies can also introduce the complexities of the real world regarding ambiguities, moral considerations and complexities in decision making. This may include holistic thinking linked to other areas and disciplines.
2	Learner activity: which should be more active than passive, with planning, reflection, processing and being related to abstract conceptions.	Appropriate cases will lead to students having to develop processes unique to each case. The use of judgement due to uncertainty can be allied to testing students’ understanding of what they have learnt.
3	Interaction with others - as it is easier to gain greater meaning with others than on one’s own.	Active discussion and debate should be a central element of the case study.
4	Well structured knowledge base.	Running a case study alongside conventional accounting education enhances technical knowledge as it is seen to operate in the real world, also being an essential prerequisite to solving the case.

Table 1: Biggs’ key elements and corresponding example case studies

Boyce *et al.* (2001) noted that a key component of business education is the development and enhancement of generic skills<sup>1</sup> in students. They argued that appropriate case studies can play a central role in the promotion and development of such skills. Milne and McConnell (2001) noted a lack of general knowledge, lifelong and self-directed learning skills. Within accounting education the preponderance of the technical and procedural contents of undergraduate and professional body syllabi has detracted from the development of soft skills and may deter students from undertaking accounting studies (Saemann & Crooker, 1999).

Problem based learning (PBL) has been much discussed in recent years. This approach uses problems to focus student learning with the latter developing their problem solving skills whilst searching for knowledge. Milne and McConnell (2001) listed the following aspects of a PBL exercise with students being motivated to:

- determine whether a problem exists
- define what they believe the problem to be
- identify their current understanding of the problem
- identify further information needed to more fully understand the problem
- identify resources from which further information can be obtained
- generate possible solutions
- analyse these solutions, their information gathering and their reasoning
- if desired, recommend and present a solution

This model allows for the development of decision making processes as well as placing responsibility on the students for acquiring information. It should be noted that in PBL the case can be encountered prior to the teaching of the subject area, being used as a catalyst to promote the acquisition of new knowledge.

Stewart and Dougherty (1993) recognised the need for a bridge between the classroom and the real world. In an empirical study of student perceptions of the use of case study materials in accounting related subjects, Weil *et al.* (2001) noted a major benefit being that they exposed students to real world complexities including dealing with uncertainty regarding incomplete and ambiguous information, and multiple possible solutions, thereby bridging the gap between tertiary education and real world experience.

It should be emphasised that teaching methodology is only one factor impacting on the effectiveness of student learning. Thus when considering the impacts of changes to teaching methodologies these changes should not be looked at in isolation as their success or failure may be due to the interrelatedness of all learning factors, such as assessment. For example, Friedlan (1995) noted the lack of assessment as being a potential explanation for the lack of success of a case based course of study.

## Teaching notes on the case study

### Learning outcomes

The case (Nifty Construction Ltd)<sup>2</sup> is set within the construction industry, a sector regarded as being susceptible to resource mismanagement. The case itself is intentionally open ended with any of three directors being capable of manipulating resources. The aim of the case study is to increase the awareness of financial control weaknesses and review the applicability of internal control structures. The specifics of the internal control weaknesses include:

- misuse of an organisation's resources (material and labour) for other than company purposes
- misappropriation of cash through the use of casual employee payments
- tenuous and unmonitored links with clients and suppliers
- a lack of separation of duties within the financial administration (one individual) leading to potential abuse of company assets
- a clear lack of financial management awareness re budgetary planning and control and performance management

In general it is assumed that the company has very poor business systems apart from a computerised accounting system which records all financial transactions, whether or not they are "valid" business transactions (i.e., solely and exclusively for the purposes of the business). The case has a number of objectives relating to the student experience both of a technical and a personal transferable skills nature:

### Technical skills

- ratio analysis - with the focus on the analysis of the ratios with a view to identifying potential areas for further investigation
- internal controls - the identification of areas of weakness within internal control with a view to recommending improvements to business systems both specific to identifiable weaknesses e.g. casual worker payments, and more generic e.g. budgetary planning and control cycles

### Personal transferable skills

- written and oral communication
- group work
- integrative skills
- bridging of theoretical elements of study to real life contexts

The case study was used by the authors as follows:

1. The case study was given to a group of 60 second-year, non-accounting students in the United Kingdom (UK). The students were predominantly business and management students undertaking a 3/4 year undergraduate programme. The module adopting the case is a 15 week module split evenly between financial management and management accounting. Included in the syllabus is a 2 week introduction to the area of auditing incorporating such areas as the role of internal and external audit, and the role of internal control. This module follows on from a level one introductory module in financial management.
2. A PBL approach was adopted in the case study, introducing the case prior to the theoretical coverage of audit and internal control.
3. The students were placed into groups of a maximum of four students and provided with the case document to review prior to a seminar at which the students would be able to meet the three directors involved in the case study. The students were advised to review the documentation and to calculate any relevant ratios that might shed light on the accusations made within the case. The students were given 2 weeks to prepare for their meeting with the directors.

4. At each seminar there were four groups in attendance. A role play was undertaken where the hour period was split into three. Resource constraints resulted in the one lecturer taking on the three different director roles in turn. Each group of students was allowed to question the directors, in turn, about areas that concerned them. Where resources allowed, each individual group could have visited the lecturers' rooms thus keeping the discussions ongoing within their own group.
5. The lecturers involved met after the various seminars to review the questions raised and answered within the seminars. Thus any new questions deviating from the agreed role play materials were considered. Where necessary, clarifications could be made via the module's intranet site which also gave the facility for transparent discussion of the issue amongst all parties.
6. Students were then given 2 weeks to write up their reports and submit their conclusions and recommendations.
7. The group report was part of the module's assessment forming 20% of the overall mark.

The case study is seen as a flexible learning instrument. It can be used in an assessed or non-assessed unit, and also be carried out individually or within groups. The case can be undertaken either through the initial case study document alone or with additional add-ons such as role-playing and web based resources such as a chat-room. In terms of the recipients, the case is designed for business and management students undertaking a financial management module.

#### **The case study: A lecturer's perspective**

Based on the PBL characteristics outlined by Milne and McConnell (2001), the following reflections on undertaking the case are noted.

##### ***(i) Determine whether a problem exists***

When introducing the case study and dependent on student ability, two approaches are possible. Students could simply be told that the company has a business problem or they could specifically be told that a fraud has occurred and that there is no collusion (i.e., only one director is involved in the fraud). The evidence to support the misappropriation of cash within the company is best approached by carrying out a simple ratio analysis principally around the categories of profitability, liquidity and efficiency. This analysis highlights significant variances in the labour/sales, material/sales and subcontractor/sales ratios. These ratios have consequences not only for profitability but also affect the extent to which the company can settle its obligations as they fall due (as supported by the lengthening of the creditors' settlement ratio and the deteriorating cash position). Depending on the students' prior knowledge, they could be asked to prepare a cash flow statement to supplement their findings.

Students should be able to compute the ratios but often fail to understand the problem that the company faces and the inter-relationship between profitability, liquidity and efficiency. Moreover, at this early stage, they may not appreciate how fraud, and specifically the misappropriation of cash, could affect the other ratios. If the role play is adopted, they will arrive knowing that a problem exists and that fraud is being committed but will probably not appreciate at that stage how the fraud is being perpetrated.

##### ***(ii) Define what they believe the problem to be/identify their current understanding of the problem***

The benefit of conducting the role play is that it allows the lecturer to establish the extent to which the students have reflected on the problem using the results from their ratio analysis and the questions that they have self-generated from them. In our experience, at this stage, students will ask a range of questions that may focus on the fraud but they do not necessarily understand the problem, for example they note the adverse labour/sales ratio but do not understand why it might have occurred. The challenge is to encourage them to think through the process to improve their understanding around the weaknesses within the internal control system without giving too much away.

If educators choose to adopt the role play of all three directors, it is essential that they ensure that they are familiar with their roles and responsibilities. In addition, students should be asked to be specific about who they are directing their question to.

Students will generally question the directors about the significant variances but may not make the connections with the weaknesses within the internal control system. For example, they may note the deterioration in the bank position and demand answers from the directors without actually appreciating that the director is siphoning cash from the company by paying non-existent casual staff as well as using company resources to construct his house.

##### ***(iii) Identify further information needed to more fully understand the problem***

If the students ask more general questions about the trends in the financial statements, rather than exploring the weaknesses that allow the director to redirect the company resources, it may be necessary to reconvene the meeting after the students have had time to digest the directors' responses. Experience thus far suggests that allowing the students a short break to meet within their groups sharpens their questioning techniques,

and that the fraud may become apparent when the students discover that cash cheques do not require a counter signatory and that the director does not provide payslips to any of the casual employees. If the students fail to penetrate the weaknesses in the company's internal control through questioning then it is recommended that the lecturer ends the meeting and asks the students to revisit the content of the case along with their audit notes. The meeting can either be reconvened at a later date or a discussion board can be facilitated within a virtual learning environment used (if available) to allow them to continue with their questioning.

***(iv) Identify resources from which further information can be obtained***

Given that the case is primarily concerned with payments to non-existent casual staff, students could be encouraged (assuming that they have identified the fraud) to seek external guidelines on how the company could have prevented or detected the fraud. In this case, the requirements are as laid down by the government department responsible for collecting tax from employees. For example, in the UK there are clear guidelines laid down by Her Majesty's Revenue and Customs to employers as to how they should record payments to employees. Educators using the case study outside the UK may choose to modify this part of the case study to reflect their own context.

***(v) Generate possible solutions***

After the meetings with the directors, students should be encouraged to meet with their group (possibly after further reading) to relate the theory of audit to the current practices of the company and within this context to discuss the problems facing the company with a view to generating solutions.

***(vi) Analyse these solutions, their information gathering and their reasoning/ If desired recommend and present a solution***

The coursework requirements are specific. Part one requires the students to produce an analysis of the accounts and the variances that the group perceive to be of concern. Moreover, they are required to state their findings based on their reading, research and meeting(s) with the directors, and to write a report highlighting their conclusions and recommendations. In part two, the students are required to discuss the components of internal control and to relate these components to the weaknesses they have discovered during their investigation of the company. In other words, they should state how the company could address its internal control weaknesses and suggest robust alternatives.

## **Reflections on the case**

### **Staff reflection**

The members of staff involved with the case study were entirely enthusiastic regarding its success. Each staff member involved was asked to reflect on their experience of the case, good and bad, and to feed these reflections back to the module leader. A number of quotes are pertinent:

The level of engagement especially at the role play exercise was excellent. I was really surprised by their ability to question potential grey areas and their write up of the weak areas regarding misuse of company assets and suggested improvement to business systems.

The case study went beyond my expectations of it. Students not only considered weaknesses in physical resource management but also looked at weaknesses in the overall financial management e.g. budgetary planning and control and working capital management, as taught in other sections of the module.

Auditing made interesting!

### **Student reflection**

In order to assess the student body's views on the use of the case study, two approaches were taken to gain a breadth and depth. All students undertaking the module completed a questionnaire with 20 questions, administered to students prior to a class test at which there was an attendance of 56 students representing 94% of the student cohort. This anonymous questionnaire was administered to the level 2 students undertaking the module in which the case study presided. The questionnaire consisted of statements with students responding using a five point Likert scale from "strongly agree", score 5, to "strongly disagree", score 1, and was developed to reflect the students' views of the case drawn from Biggs' (1989) four key elements to fostering a deeper approach to learning via case studies. In compiling the questionnaire full cognisance was taken of pertinent issues elicited from the literature review. A copy of the instrument is provided in the Appendix. In addition, a focus group was formed to provide more depth in understanding the extent to which the case study encouraged the students to adopt a deeper approach in their learning. The focus group consisted of students (representing each of the different participating seminar groups) who volunteered to participate as a result of an open invitation to the previous session's cohort of students. Biggs' (1989) four key elements to consider when fostering a deeper approach to learning were again used as a framework by the facilitators of the focus group.

### Motivation

Table 2 below represents the percentages of students responding to each option of the question set and show a very positive response to the case presenting a real world scenario. The case was seen to stimulate the students' interest in the subject area (Question 1, mean 3.84). Both the complexity (Question 3) and credibility (Question 5) of the case scored highly (means 3.95 and 3.89 respectively) whilst the understanding of the real world phenomena of fraud was assisted by the case (Question 2, mean 4.07). Interestingly the role playing of the staff was seen to add to the realistic feel for the case, being a higher reading than the staff had anticipated and justifying its inclusion.

		Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)	Mean	Standard deviation
1	The case study stimulated my interest in the subject	17.9%	53.6%	23.2%	5.3%	0	3.84	0.78
2	The case helped me to understand the real world potential for fraud and misuse of company assets	17.9%	73.2%	7.1%	1.8%	0	4.07	0.57
3	The ambiguity and complexity of the case study helps as it reflects the real world	14.3%	66.1%	19.6%	0	0	3.95	0.59
4	Using our judgement in the case reflects decision making in the real world	10.7%	71.4%	17.9%	0	0	3.93	0.54
5	The case study was realistic and credible	8.9%	73.2%	16.1%	1.8%	0	3.89	0.56
6	The acting out of the different directors via role play added to the real world "feel" to the case	25.0%	57.1%	12.5%	3.6%	1.8%	4.00	0.83

Table 2: Student reflection on motivation

These feelings were corroborated within the focus groups. Here the students stated how they had enjoyed the case and did believe that it had happened in practice. They supported the view that the case study did offer a bridge between the classroom and the real world. One student recognised that the case was a form of problem based learning. When questioned as to whether they found the case stimulating/interesting, the responses by the students were particularly positive and they agreed that the assignment was much better than writing a theoretical essay on auditing. In addition, they suggested that they adopted a more innovative stance when working with the case and that they probably would not have produced as much in depth research compared with writing a theoretical essay.

In terms of the role play, they recognised the fact that they were not able to "get straight answers [from the directors in the role play] and that made it feel real world". They agreed that the case was incomplete, ambiguous and offered multiple solutions and that this was a "good thing". They all supported the idea that the content of the case was ambiguous and that "the real world is open to interpretation so therefore the case is a good example of a real world scenario". They recognised the fact that there could have been a number of potential frauds that could have been considered during their deliberations. When the students were asked whether the case made them think about the moral and ethical considerations in business decision making, some agreed that "people close to them could be capable of fraudulent behaviour". Moreover they agreed that the case highlighted the nature of complex family/business relationships. One respondent stated that he "normally criticises on feedback forms that there is not enough real world but not in this case". What was in no doubt by the participants was that the case did improve their knowledge of the business environment and financial management.

All of the students agreed that the case encouraged them to think holistically about business in that decisions are linked to other areas/disciplines. Having identified possible fraud in other areas of the company, they recognised that they had to research each different area and that it "made them discuss the operational nuts and bolts of each type of activity e.g. how would the casual workers be paid?" and that they "enjoyed the Nifty Construction coursework because it took the subject of internal control - which has potential to be a very boring topic - and made it interesting. It also gave a good insight into how an auditor would deal with a case of fraud".

### Active learning

Table 3 shows the student reflection on the active learning created by the case. Of critical importance to the

adoption of the case was that of creating participation rather than passiveness especially to a subject where they may have had little exposure and interest. The resulting mean of 3.91 for Question 1 shows a significant alteration in learning style. This was also regarded as being helpful in developing the students problem solving skills (Question 2, mean 4.04).

		Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)	Mean	Standard deviation
1	The case study made my study of the topics more participative than passive	14.3%	66.1%	16.1%	3.5%	0	3.91	0.67
2	The case study and its approach gave useful insights into how to approach problem solving and investigative analysis in the future	26.8%	53.6%	16.1%	3.5%	0	4.04	0.76

**Table 3:** Active Learning

In the focus group discussion, students were asked to compare the use of the case study with other assessments in their studies to date and they repeated that they liked the real world involvement of the case relative to the “monotony” of some other coursework they had attempted in their programmes to date. The students agreed that the case encouraged them to take responsibility for their own learning.

**Interaction with others**

In considering the interaction between students and staff a number of potentially conflicting opinions arose. The questionnaire results showed a positive reaction to working together as being preferred to working alone and giving rise to active discussion as shown below in Table 4, Questions 1 and 2, where the mean scores were 4.09 and 4.08 respectively. The issue of the fairness of a group mark for the assessment also received a strong commendation from the students with a slightly reduced mean score of 3.79 although there is a larger distribution of marks.

		Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)	Mean	Standard deviation
1	Using the case study within groups was a better learning experience than doing it on my own	37.1%	40.8%	14.8%	5.5%	1.8%	4.09	0.96
2	The case study resulted in active discussion and debate regarding the topic	25.0%	58.9%	14.3%	1.8%	0	4.07	0.68
3	Being given a group mark for the case study is a fair method of assessment	23.2%	48.2%	17.8%	5.4%	5.4%	3.79	1.049

**Table 4:** Interaction with others

The focus groups however threw up an anomaly indicating difficulties that some students had encountered in their groups. This led to a general conclusion that they did not support the notion that the case study allowed equal contributions from group members. Two of the students highlighted the fact that they did not like group course work and often felt “frustrated when working within a group”. Moreover, they suggested that group working was not popular among the wider student population as part of their second year experience given that some groups did not plan well or delegate sufficiently and that “one person could bring the whole group down”. They recognised that the leadership and co-ordination of their groups was poor and that in future the lecturers could “suggest ways of planning and splitting up work by checking the groups’ progress during seminars” to assist them in planning their workload through to the final production of the report. Having recognised the difficulties faced by students when working in groups, there was strength of feeling that the case study could be attempted individually and that the case encouraged them to think analytically.

**Well structured knowledge base**

The student questionnaire results gave a strong indication that students believed that the case integrated well with the other teaching materials adopted for the topic, both deepening their understanding and integrating well with the theoretical aspects (Questions 1 and 2, Table 5). Within the focus groups the students agreed that the case allowed them to demonstrate their technical knowledge of auditing and other

disciplines. As stated earlier, the lecturers decided to present the case before introducing the audit subject area. The students' response to this approach was mixed and some students "found it difficult to understand the case and link it to theory". However, another student liked the approach pointing out that it "stirred up interest and mystery". Some students would have liked a full lecture on fraud and how recognising fraud was a skill to be developed through their careers. The students stated that they would liked to have known how the audit team in the real life scenario resolved the fraud and requested that, in the student feedback, the teaching team clarify who was guilty. All of the students liked the way in which the lecturers constantly referred to the case in class to highlight the theory and how it related to practice. They also liked the fact that it was more than just audit and that other module content (knowledge of working capital management, sources of finance and ratio analysis) were employed as well as other module experiences.

		Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)	Mean	Standard deviation
1	The case study deepened my understanding of the textbook coverage of fraud and misuse of assets	16.0%	55.4%	25.0%	3.6%	0	3.84	0.73
2	The case study integrated well with the theory as provided in lectures and the textbook	12.5%	58.9%	21.4%	5.4%	1.8%	3.75	0.82

Table 5: Well structured knowledge base

### Other issues

The students were asked through the Questionnaire whether the assessment weighting was fair given the workload involved. Question 1 in Table 6 shows that the majority of students agreed, although there was a tail of those who were neutral and some disagreed. When asked if a zero stake would impact their work effort just under half of the students agreed or strongly agreed. When the students in the focus group were asked whether the assessment weighting (20% of their overall aggregate grade) was sufficient to reward their efforts, the majority view was that 30% might have been fairer and that this "higher stake" might have elicited greater contribution and could have motivated more students to be more active within their group with one student pointing out that "if this [increase to 30%] cannot motivate students towards contributing more, then nothing will".

		Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)	Mean	Standard deviation
1	Before commencing this module I had never considered the area of fraud and misuse of company assets	17.9%	35.7%	14.3%	25.0%	7.1%	3.32	1.24
2	I think that an introduction to fraud and misuse of company assets should be a part of business school degree	26.8%	62.5%	7.1%	1.8%	1.8%	4.11	0.76
3	Before commencing the course I had never considered the area of internal controls to stop fraud and misuse of company assets	23.2%	46.4%	10.7%	14.3%	5.4%	3.68	1.15
4	I think that an introduction to the internal controls to counter fraud and misuse of company assets should be a part of business school degree	23.2%	58.9%	14.3%	1.8%	1.8%	4.11	0.76
5	I think there should have been more coverage of these topics beyond that given in the course	10.7%	25.0%	46.4%	16.1%	1.8%	3.27	0.92

Table 6: Assessment stake

The students recognised that the meeting with the directors activated discussion and debate and particularly liked the role play. However, they suggested that having three members of staff involved in the role play would have been better. Interestingly, while they benefited from the vicarious learning during the meeting with directors, some students did not like the fact that a discussion board was then used for further

discussion and debate as it “gave information to other groups”. In addition, they had sufficient opportunity to talk about the case in more informal settings commenting very positively about the support that was offered by the module team throughout the assignment.

The student questionnaire asked students to reflect on their prior experience and perception of the relevance to them of the topic areas (Table 7). In considering their prior experience, a sizeable minority had some experience of fraud (Question 1, 32% disagreed or strongly disagreed) and to a lesser extent internal control (Question 3, 20% disagreed or strongly disagreed). However, students were more strongly of the opinion that fraud and misuse of company assets should be part of a business studies curriculum (Question 2, mean score 4.11) as well as internal controls (Question 4, mean score 4.11). The students appeared satisfied with the balance of the coverage of the topic area as shown in Question 5.

		Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)	Mean	Standard deviation
1	The % of marks awarded to the coursework as opposed to the other assessments is fair	10.7%	48.2%	26.8%	8.9%	5.4%	3.50	0.99
2	Had there been no marks awarded towards the final assessment for the case study I would have reduced my workload significantly	23.2%	28.6%	32.1%	14.3%	1.8%	3.57	0.82

Table 7: Relevance of subject area

## Conclusion

The aims of deeper learning, soft skill development and linking theoretical knowledge bases to practice, are clearly linked to effective learning. It might be assumed that case study material is more apt at a more developed stage of a student’s learning experience. However, this case shows that material set at an appropriate level for students can provide an excellent stimulus for their knowledge development, as well as making it an enjoyable experience for both staff and students, and not seen as detracting from the learning process or syllabus but adding to it.

A deeper learning experience is advocated by many accounting educators (e.g., Beattie *et al.*, 1997). Biggs (1989), in identifying four key elements of deeper learning, provided a benchmark against which the case study can be compared. The student and staff feedback would suggest that students were highly motivated, with the majority participating rather than being passive. In addition, the interaction between students and staff was clearly an enjoyable but also a creative experience, with the linking of the real world to the structured knowledge base provided in the auditing tuition on the model resulting in a more rounded and deeper learning experience.

Stewart and Dougherty (1993) and Weil *et al.* (2001) recognised the need for the bridging of the gap between the classroom and the real world. From the student feedback it can be seen that the case has been effective in opening students’ minds to the relationships between theory and practice. The realism built into the case through the scenario, the role playing and the ambiguity of the case left students with the frustration of finding it difficult to pin down the problem areas. However, they recognised the tools available, via their auditing lectures, to assist in the process of safeguarding organisational assets and creating a more efficient and effective structure.

The case itself is flexible when introducing the area of audit and internal control, and can be adapted to different learning environments (e.g., virtual), and different forms of assessment. The PBL approach was adopted in the application of the case to date. The criteria as set by Milne and McConnell (2001) for a PBL exercise are clearly seen to apply. However, the flexible nature of the case allows educators to select those criteria which they would wish to include. For example, the requirement for students to arrive at a solution may or may not be required.

From the student and staff feedback, there are still lessons to be learned especially in the area of the effectiveness of group-work as an instrument of assessment for young undergraduate students. However, the positive aspects of the experience to date have outweighed the criticisms which could be considered in future developments of the case.

## Endnotes

<sup>1</sup> Generic skills often referred to as soft skills include communication and interpersonal skills, problem solving

skills, conceptual analytical and critical skills, visual and oral skills and judgment and synthesis skills (Boyce *et al.*, 2001).

<sup>2</sup> The case study, assessment criteria, role play scripts and suggested solution are available for use with students and can be accessed by contacting the authors.

## References

- Bailey, J., & Ford, C. (1996). Management as science versus management as practice in postgraduate business education. *Business Strategy Review*, 7(4), 7-12. doi:10.1111/j.1467-8616.1996.tb00136.x
- Beattie, V., Collins, B., & McInnes, B. (1997). Deep and surface learning: A simple or simplistic dichotomy? *Accounting Education*, 6, 1-12. doi:10.1080/096392897331587
- Biggs, J. B. (1989). Approaches to the enhancement of tertiary teaching. *Higher Education Research & Development*, 8, 7-25. doi:10.1080/0729436890080102
- Bloom, B. S., Max, D. E., Walker, H. H., Edward, J. F. & David, R. K. (1956). *Taxonomy of educational objectives: Cognitive domain*. New York: Longman.
- Booth, C., Bowie, S., Jordan, J., & Rippin, A. (2000). The use of the case study in large and diverse undergraduate business programmes: problems and issues. *International Journal of Management Education*, 1(1), 62-75. doi:10.3794/ijme.11.f
- Bowie, N. (2001). The role of business ethics: where next? Is there a role for academics? *Business Ethics: A European Review*, 10, 288-293.
- Boyce, G., Williams, S., Kelly, A., & Yee, H. (2001). Fostering deep and elaborative learning and generic (soft) skill development: the strategic use of case studies in accounting education. *Accounting Education*, 10, 37-60. doi:10.1080/09639280110040971
- Dittenhofer, M. A. (1992). Teaching internal auditing: The case study method. *Managerial Auditing Journal*, 7(3), 17-24. doi:10.1108/02686909210008577
- Dombrowski, R. F. (1993). Auditing students: A way to get meaningful practical experience. *Issues in Accounting Education*, 8, 320-334.
- Donaldson, T. (2003). Editor's comments: Taking ethics seriously - a mission now more possible. *Academy of Management Review*, 28, 363-366.
- Doria, J., Rozanski, H., & Cohen, E. (2003). What business needs from business schools. *Strategy and Business*, 32, 39-45.
- Friedlan, J. M. (1995). The effects of different teaching approaches on students' perceptions of the skills needed for success in accounting courses and by practicing accountants. *Issues in Accounting Education*, 10, 47-63.
- Gioia, D. A., & Corley, K. G. (2002). Being good versus looking good: Business schools rankings and the Circean transformation from substance to image. *Academy of Management Learning and Education*, 1, 107-120.
- Grisoni, L. (2002). Theory and practice in experiential learning in higher education. *International Journal of Management Education*, 2(2), 40-52.
- Hughes, J. F., Humphrey, C. & Turley, S. (1998). Learning from mistakes?: Using corporate scandals to enhance audit teaching. *International Journal of Auditing*, 2, 89-101. doi:10.1111/1099-1123.00033
- Knapp, M. C. (1996). *Contemporary auditing: Issues and cases* (2nd ed.). Minneapolis-St. Paul, MN : West Publishing Limited.
- Knowles, L., & Hensher, D. A. (2005). The postgraduate business curriculum: The frontline in the war between professionalism and academic irrelevance. *International Journal of Management Education*, 4(3), 31-39. doi:10.3794/ijme.43.94
- Matthews, M. R. (2001). The way forward for accounting education? A comment on Albrecht and Sack "A Perilous Future". *Accounting Education*, 10, 117-22. doi:10.1080/09639280110050277
- Mladenovic, R. (2000). An investigation into ways of challenging introductory accounting students' negative perceptions of accounting. *Accounting Education*, 9, 135-155. doi:10.1080/09639280010000147
- Milne, J. M., & McConnell, P. J. (2001). Problem based learning: A pedagogy for using case material in accounting education. *Accounting Education*, 10, 61-82. doi:10.1080/09639280110044652
- Norton, L. S., & Crowley, C. M. (1994). Can students be helped to learn how to learn? An evaluation of an Approaches to Learning programme for first year degree students. *Higher Education*, 29, 307-28. doi:10.1007/BF01384496
- Paisey, C., & Paisey, N. (2003) Developing research awareness in students: An action research project explored. *Accounting Education*, 12, 283-302. doi:10.1080/0963928032000138295
- Patten, R. J., & Williams, D. Z. (1990). There's trouble - right here in our accounting programs: The challenge to accounting educators. *Issues in Accounting Education*, 5, 175-179.
- Pfeffer, J., & Fong, C. T. (2002). The end of business schools? Less success than meets the eye. *Academy of Management Learning and Education*, 1, 78-95.
- Power, M. (1994). *The audit explosion*. London: Demos.
- Richards-Wilson, S. (2002). Changing the way MBA programs do business - lead or languish. *Journal of Education for Business*, 77, 296-300.
- Rynes, S. & Trank, C. (1999). Behavioural science in the business school curriculum: Teaching in a changing institutional environment. *Academy of Management Review*, 24, 808-824.
- Saemann, G. P., & Crooker, K. J. (1999). Student perceptions of the profession and its effect on decisions to major in accounting. *Journal of Accounting Education*, 17, 1-22. doi:10.1016/S0748-5751(99)00007-X
- Siegel, P. H., Omer, K., & Agrawal, S. P. (1997). Video simulation of an audit: an experiment in experiential learning theory. *Accounting Education*, 6, 217-230. doi:10.1080/096392897331451
- Stewart, J. P., & Dougherty, T. W. (1993). Using case studies in teaching accounting: A quasi-experimental study. *Accounting Education*, 2, 1-10. doi:10.1080/09639289300000001
- Weil, S., Oyelere, P., Yeoh, J., & Firer, C. (2001). A study of students' perceptions of the usefulness of case studies for the development of finance and accounting-related skills and knowledge. *Accounting Education*, 10, 123-146. doi:10.1080/09639280110081642

## Appendix: Student questionnaire

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Before commencing this module I had never considered the area of fraud and misuse of company assets					
2	I think that an introduction to fraud and misuse of company assets should be a part of business school degree					
3	Before commencing the course I had never considered the area of internal controls to stop fraud and misuse of company assets					
4	I think that an introduction to the internal controls to counter fraud and misuse of company assets should be a part of business school degree					
5	I think there should have been more coverage of these topics beyond that given in the course					
6	The case study stimulated my interest in the subject					
7	The case helped me to understand the real world potential for fraud and misuse of company assets					
8	The ambiguity and complexity of the case study helps as it reflects the real world					
9	Using our judgement in the case reflects decision making in the real world					
10	The case study was realistic and credible					
11	The case study made my study of the topics more participative than passive					
12	The case study and its approach gave useful insights into how to approach problem solving and investigative analysis in the future					
13	The case study deepened my understanding of the textbook coverage of fraud and misuse of assets					
14	The case study integrated well with the theory as provided in lectures and the textbook					
15	The acting out of the different directors via role play added to the real world "feel" to the case					
16	Using the case study within groups was a better learning experience than doing it on my own					
17	The case study resulted in active discussion and debate regarding the topic					
18	Being given a group mark for the case study is a fair method of assessment					
19	The % of marks awarded to the coursework as opposed to the other assessments is fair					
20	Had there been no marks awarded towards the final assessment for the case study I would have reduced my workload significantly					