

USING ROLE PLAY TO TEACH INTERNAL CONTROLS IN A BASIC AUDITING COURSE

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ABSTRACT

The auditing of business operating cycles is often taught using the textbook approach, whereby students are presented with basic theory, followed by an explanation and demonstration of relevant audit procedures. This instructional case describes a role playing exercise that has been successfully used at Universiti Malaysia Sabah (UMS) to provide students with hands-on experience in testing internal controls in a revenue cycle audit.

Although this activity involved relatively little formal lecture input from staff, there was a significant investment of staff time in writing the role-play document and in organising and facilitating the role play exercise. Students' feedback was largely encouraging in that a high level of enjoyment and understanding of the material was observed.

KEYWORDS

Role play, Audit, Internal controls

INTRODUCTION

Internal controls play an important role in how the management of an organisation meets its stewardship responsibilities. Internal controls are implemented in order to ensure the effectiveness and efficiency of operations, reliability and timeliness of financial reporting, prevention and detection of fraud and error and compliance with laws and regulations (Messier and Boh, 2007).

Students are usually taught to audit internal controls via a 'show and tell' approach, and frequently do not understand the purpose behind the audit procedures. This role play exercise utilises an active learning strategy to increase students' understanding of the revenue cycle and to be able to perform control testing procedures related to the cycle. Role play has been defined by Yardley-Matwiejczuk (1997, p.1) as 'a way of constructing an approximation of a "real life" experience, but under "controlled" conditions to facilitate learning'. McMillan (1994) highlighted the need for simulated audit cases and role playing scenarios that can be used to help students and recently-hired auditors to attain the skills and proficiencies of more experienced auditors. In the teaching of auditing, role play has been used by Janvrin (2003) in the examination of internal control and fraud detection concepts, and to a certain extent in a problem-based learning case in forensic auditing presented by Durtschi (2003).

In this exercise, students are led to participate actively in the performance of control testing, rather than just being taught about them and given the relevant examples. In the performance of the said procedures, students are progressively led to question the findings, interact with the instructor (acting as the "client") accordingly, and, if needed, to further question subsequent findings. As such, learning is effected on a layer-by-layer basis, and students discover rather than acquire the knowledge involved.

The advantage of using the role play as a teaching approach (as opposed to a real-life audit in an organisation) is to avoid throwing students too much at the deep end. In a role play, the instructor can control the learning environment. Another advantage is that it involves minimal upfront reading on the background of the company, unlike a case study approach. Students are given a brief history of a company (and the relevant financial and non-financial data) and are then plunged straight into conducting the audit, audit programme in hand.

THE CASE

General Background of the Company

Ice Cream Paradise Sdn. Bhd. is an ice-cream manufacturer which owns a factory in Kota Kinabalu, Sabah. It sells ice-cream on a retail and a wholesale basis. For retail, it has a shop outlet which sells goods to walk-in customers. For wholesale, it sells ice-cream in tubs to retail shops and supermarkets. It also delivers its goods to customers by express.

Exercise

This is a role-playing game. Your class will be divided into audit teams comprising of no more than 4 to 5 people each.

The task of each team is to perform testing of the internal controls pertaining to the revenue cycle of Ice Cream Paradise, in accordance with the audit programme below, and to record down the findings obtained. During the course of performing the testing procedures, each team will be prompted to request for documents or records from the "client" and examine them accordingly, and to make certain enquiries of the "client".

Students should note that in performing the procedures, they should be wary of any potential misstatements (either error or fraud) in the data/documents/records and verbal responses given, and highlight them accordingly. Indicators of misstatements may be as follows: (1) verbal information or explanations given by "client" is inconsistent with the data/documents/records handed out, and (2) data in a document is inconsistent with data in another document.

Students will be given documents only in response to specific requests (with reference to the name of document and relevant time period the document pertains to).

The lecturer will act as the client with whom each audit team deals. Each team will meet up with the client separately and ask any question they can think of. Teams must maintain professionalism and treat the "client" with respect, as they would in a real-life working environment.

The following is an extract of the audit programme to be followed by students. The words in *italics* show what the students should have obtained, either from observation of the documents obtained or from enquiries made to the instructor/lecturer, as their audit findings.

Test of Controls – Revenue Transactions

Audit Objective	Audit procedure	Extra guide for students/Findings
Validity (to find out whether there are fictitious sales, or incidences whereby sales is recorded but goods not shipped/services not performed)	Test 5 sales invoices and look for the relevant authorised sales order & shipping document (bill of lading). [Refer Appendix A for a sample of sales invoice, authorised sales order and bill of lading]	<i>No exceptions noted. Bill of lading should show references to sales invoice.</i>
Authorisation (to avoid incidences where goods are shipped/services performed for a customer who is a bad credit risk; to avoid shipments/ services performed at unauthorised prices or on unauthorised terms)	Review the client's procedures for granting credit to customers.	Your lecturer is the client. Ask her about this matter. <i>Lecturer's response: When sales order < RM40,000 is received, the order is passed to the Finance Manager for credit approval. The Finance Manager will review the customer's credit rating with the company. If it is positive, then credit approval will be given. For sales order > RM40,000, approval needs to be obtained from the General Manager.</i>
	Examine sales orders for evidence of credit approval. [Refer to Appendix A for authorised sales order]	Use the sales orders which you have already obtained. <i>Sales orders are approved by Sales Manager (instead of Finance Manager). Hence, internal control has not been complied with.</i>

TEACHING NOTES

Learning Objectives of the Case

The primary objective of this case is to increase students' understanding of internal controls and to be able to test the controls accordingly.

A secondary learning objective is to sharpen students' interviewing and communicational skills. When interacting with the instructor as a 'client', students would learn how to elicit information efficiently and employ critical listening skills. When interacting with other students in a team, students participate in team work and sharpen their interpersonal, teamwork and, in some cases, leadership skills.

Another objective is to train up analytical, critical thinking and problem solving skills. This is effected when students try to execute the audit programme. For instance, they would need to analyse and problem-solve the information given to them, numerical or otherwise, and to critically assess the answers given by the 'client'.

Programme, Course and Class Background

The accounting programme at Universiti Malaysia Sabah (UMS) is a four-year honours course, and auditing is one of the core subjects. Students take a basic auditing course in their 2nd year of study, followed by an intermediate course in the immediate following semester.

At the time of writing, the basic auditing course had been conducted four times (and is currently being conducted for the fifth time) by the author. The syllabus was structured to include 8 weeks of lectures covering various topics such as audit planning, audit sampling, materiality, audit evidence and documentation and internal controls. From the ninth week onwards, students learnt about auditing various business cycles. This exercise is usually played when covering the internal controls topic in general, or when teaching the internal controls section of the revenue cycle. No specific subject matter needed to be deleted from the course to accommodate this exercise.

This role play exercise has been class-tested by the author in 5 basic external auditing classes, in consecutive semesters between January 2005 – May 2009, at Universiti Malaysia Sabah. The total number of the students in the classes were 77, 73, 68, 73 and 70 respectively.

Implementation of the Exercise

As preparation before the role play, students were encouraged to read the chapters on internal controls and the revenue cycle in the textbook, which is, in this case, *Auditing and Assurance Services in Malaysia* (3rd ed.) (Messier and Boh, 2007).

Before undertaking the exercise, students were given a short briefing session. They were also reminded that they could clarify the points they do not understand with the instructor at any point in time during the role play. The instructor, in essence, wears two hats during the entire process – facilitator and client – and switches to and fro as necessary.

Resources given to students include the following handouts: (a) brief background of the case company; and (b) audit programme. The instructor himself should be armed with the audit programme, in which suggested solutions are incorporated.

Time allocated for this is up to the discretion of the instructor, but as a rough guide, it should be about 1 to 1.5 hours. Ideally, the room where this exercise is run should have sufficient space for students to move around, as they will be working in groups and going to and fro between their desks and where the instructor is. The instructor should also move around from group to group to handle questions and to give hints, where necessary. Since the students will be working in groups, the room should be laid out in a way that facilitates discussion – for instance, there should be groups of tables and chairs in different areas of the room.

Students can work on the audit programme in no particular sequence; however, the programme is designed in such a way that performing the procedures in sequence helps a student learn in a more logical manner.

This exercise should be largely free-flow. Once briefed, students should start reading the audit programme and attempting the audit procedures. The students should also make use of the information provided to them to help them when making an analysis of the organisation, be it the background of the organisation or the financial data. Any organisation-related questions should be directed to the “client”. The goal of

this exercise is to note down the findings as the result of performing the audit procedures in the audit programme.

At the end of the exercise, the instructor would call a stop to activities, and discuss the answers to the audit programme. The discussion should include the findings that the students should have located, any indications of discrepancies, the queries that students should have made to the "client", and finally the reason/s for the variances in financial data.

Problems Encountered During the Implementation of Exercise and Suggested Ways to Overcome Them

Students not previously exposed to auditing role play may need very detailed explanation as to what is expected. However, it is the author's experience that students quickly get into the routine of analysing data, asking questions, obtaining answers, and following up with more questions for clarification or when the answers do not sound feasible.

Students may experience information overload, especially when faced with data that is seemingly unarranged. However, if they concentrate on completing the audit programme sequentially, they should realise that the information given will be used in piecemeal fashion. In other words, they do not need to use all of the information at one go. It is very important that students understand this, otherwise it may form a psychological barrier to learning.

When separating into groups, students tended to group themselves into large groups of 7-8 people each, due to the desire to flock together with their friends. While enjoyment when performing a class exercise is conducive to learning, this frequently leads to a lack of discipline within the group, whereby members are not censured when they do not perform. Students also may get distracted easily by other (personal) topics during discussion. The instructor must be strict in limiting the numbers of students in each group – 3 to 4 members to a group would be quite ideal. In the author's experience, the entire class numbered about 60 students. The author split them into 2 classes (run at different times), of 30 students each, for easier control. To prevent students from flocking together with their friends, students could be grouped together via lot-drawing.

As with all group-based learning, the free-rider problem may be prevalent, whereby students do not participate to the best of their abilities. This may be frustrating to the other group members, especially in a time-constrained situation. This could be avoided by group-member rotation (Joyce, 1999). Students could also be requested to maintain a journal reflecting on what they have learned, as advocated by Cooper (1998). Here, students might identify events that changed their perception about the analytical procedures performed, note down what they did right (and what they did wrong), what were the situations faced and how they took steps to rectify any problems. With the benefit of hindsight, students would also note down what they could have done better. Both group-member rotation and reflection journal maintenance force students to be individually accountable for their own learning.

Feedback and Reaction from Students

A majority of the students have reacted favourably to this exercise. They felt that this gave them exposure and insight into the actual workings of an audit. Many of the students would be performing their internship at audit firms during the semester holidays and were not confident of being able to handle the tasks assigned to them. This lack of confidence was due largely to a lack of knowledge of the type of work

done at audit firms. Having gone through what they perceived was an actual audit task performed in firms, they felt better equipped.

A high level of enjoyment was evident during the exercise, because it was noted that students wanted to finish the exercise rather than stop when the time was up. It was also noted that they paid close attention to the debriefing sessions and compared their answers to the suggested answers. They also took note of what they missed out on. It would be quite safe to say that they treated this as a game.

During the course of running this exercise, the author encountered a few students who reacted unfavourably. These students preferred passive and more structured learning, where the instructor elaborates on material from the textbook, and were exam-oriented. It is a national requirement (in Malaysia) that Accounting students are evaluated using a high weighting of written examinations. These students were therefore more comfortable with the passing out of lecture notes and practice questions as these usually served as exam preparation material. In the author's course, this exercise would replace the entire traditional lecture. No materials would be given to the students other than case-related materials, as it was expected that the students would have read the assigned text readings.

Quantitative Evaluation of Students' Attitudes towards the Role Play Exercise

Following the completion of Basic Auditing course in May 2009, a questionnaire survey was undertaken to determine student attitudes towards the role play exercise. The survey was tailored to quantitatively measure the students' opinion of the role play exercise, and their assessment of certain skills and competencies gained. The questionnaire allowed students to remain anonymous by not requesting for their identity, and explicitly stated that students would not be negatively penalised in their course marks if unfavourable answers were given.

A five-point Likert scale was employed to measure responses to 16 statements, with a score of 5 indicating that the student strongly agrees with the statement, and a score of 1 indicating that the student strongly disagrees. (Scores of 4, 3 and 2 refer to "Agree", "Neutral" and "Disagree" respectively.) For each of the questions posed, mean scores were high and fell within the 2.79 – 4.15 range. The survey findings revealed a generally supportive and positive attitude towards the exercise. Students recorded a high level of enjoyment from the role play exercise and preferred having exercises to normal lectures. They thought that the exercise was realistic and helped them better understand the purposes and benefits of an audit. They also generally felt that the exercise was of value to them as a student and as a future auditor, and helped them gain skills that could be used in other subjects. However, they felt that the role play exercise highlighted the difficulty of a real-life audit assignment and generally did not feel that the exercise was easy to perform. With respect to skills and competencies gained, students generally agreed that their communicational, client interviewing, critical thinking, problem-solving and analytical skills have improved. The detailed results to the survey are shown in Table 1 in Appendix B.

It should be noted that the student assessment, in general, has its limitations. Although it is easy to administer, score and summarise, it is mainly a measure of student satisfaction with the course/project (Smith, 2004). In this case, it is also a measure of students' perception of the skills that they have achieved. Even though the actual skills achieved by the students were not measured by this, its merit, arguably, is in being an indicator of student confidence level after the course/project.

CONCLUSION

This paper described a role play exercise that has been successfully used at Universiti Malaysia Sabah (UMS) to provide students with hands-on experience in conducting analytical procedures in a revenue cycle audit. It provides a good example of how auditing can be brought to life for students. Students' feedback was largely encouraging in that a high level of enjoyment and understanding of the material was observed. The results suggested that the role play exercise can play a significant role in the teaching/learning process of the auditing subject.

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APPENDIX A

Invoice

ICE-CREAM PARADISE SDN. BHD.
 209 Jalan Lintas, Penampang
 89034 Kota Kinabalu, Sabah, MALAYSIA
 Tel: 088-256 389, Fax: 088-256 390

Invoice No. 238901
 Date: 5/2/2008

Ship to: Tong Hing Supermarkets Sdn. Bhd.				Bill to: Tong Hing Supermarkets Sdn. Bhd.		
Order ID	Customer ID	Salesperson	Order Date	Req Date	Delivery Date	Deliver Via
10480	THING	SA	4/2/2008	7/2/2008	6/2/2008	APCI
Product ID	Product Name	Quantity	Unit Price	Discount	Price	
47	Chocolate tub ice-cream (5 litres)	500	\$45.00	0.00%	\$22,500.00	
					Freight:	\$675.00
					Total:	\$23,175.00

Payment due date: 30 days from the date of this invoice

Checked by:
Nora Baharuddin (Signature)
 NORA BAHARUDDIN, SALES EXECUTIVE

Authorised by:
Lim Teik Wee (Signature)
 LIM TEIK WEE, SALES MANAGER

Sales Order

Order Number: SO1201
Date: 04/02/2008

Sold to:
 Tong Hing Supermarkets Sdn. Bhd.
 55 Jalan Gaya
 88000 Kota Kinabalu
 Sabah

Deliver To:
 Tong Hing Supermarkets Sdn. Bhd.
 55 Jalan Gaya
 88000 Kota Kinabalu
 Sabah

Salesperson: SA

Particulars:
 500 units Chocolate flavour 5-litre tub ice-cream
 (500 x RM45/unit)
TOTAL

RM
22,500.00
22,500.00

Checked by:
Nora Baharuddin (Signature)
 NORA BAHARUDDIN, SALES EXECUTIVE

Authorised by:
lim Teik Wee (Signature)
 LIM TEIK WEE, SALES MANAGER

Bill Of Lading

CARRIER: APCI Distributors 178 Jalan Tiga 89077 Kota Kinabalu, Sabah	LOAD # 1993	BILL OF LADING # 20001	DATE 6/2/2008
DELIVER TO: Tong Hing Supermarkets Sdn. Bhd. 55 Jalan Gaya 88000 Kota Kinabalu, Sabah			
QUANTITY/CASES/UNITS 500	PARTICULARS Chocolate flavour 5-litre tub ice-cream		WEIGHT 2,500 kg

Authorised by:
Nasril Ahmad (Signature)
 Shipping Department Manager
 (APCI DISTRIBUTORS)

APPENDIX B

Table 1: Results of Student Survey

Statement by Student		Mean score
OPINION OF THE ROLE PLAY EXERCISE		
1	I enjoyed the role-play exercise.	4.15
2	The role-play exercise was realistic.	4.00
3	The role-play exercise helped me to better understand the purposes and benefits of an audit.	4.04
4	As a result of the role-play exercise, I feel confident that I can perform an audit in a real-world situation.	3.75
5	The role-play exercise made me feel that a real-life audit is difficult.	4.08
6	The role-play exercise was of value to me as a student.	3.96
7	The role-play exercise was of value to me as a future auditor.	4.00
8	I feel that the role-play exercise helped me gain skills that can be used in my other subjects.	4.04
9	I prefer role-play exercises to lectures.	3.75
10	I feel that role-play exercise do not prepare me well enough to do the final exams.	2.96
11	I found the role-play exercise easy to do.	2.79
SKILLS AND COMPETENCIES GAINED		
1	After the role-play exercise, I felt that my communication skills have improved.	3.58
2	After the role-play exercise, I felt that my client interviewing skills have improved.	3.50
3	After the role-play exercise, I felt that my critical thinking skills have improved.	3.73
4	After the role-play exercise, I felt that my problem-solving skills have improved.	3.65
5	After the role-play exercise, I felt that my analytical skills have improved.	3.69