

A Strategy for Improving Student Engagement in Auditing: Evidence from Reflective Journals

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Abstract

Deficiencies identified in accounting graduate skills and capabilities have resulted in the spotlight being placed on techniques for improving student learning outcomes. Research has established that student approaches to learning have a significant influence on the achievement of learning outcomes. It has further been found that the contextual basis on which learning occurs contributes to the achievement of improved learning outcomes through improved motivation. One such basis is experiential learning. Through the analysis of student reflective journals, this study reveals how the inclusion of a mini-audit in the auditing course is perceived positively and leads to heightened motivation of students thus encouraging them to adopt a deep approach to learning. The implications of these findings for accounting educators are discussed and future research opportunities arising from this research are identified.

Key words: mini audit, audit education, experiential learning, deep learning, surface learning, approaches to learning

Introduction

This investigation examines the potential for experiential learning in the form of a mini-audit to encourage students to abandon their vocational concerns and increase student motivation to become active learners thus encouraging a deep approach to learning.

Several critical reviews in the USA, New Zealand and Australia, claim that accounting education has failed to adequately prepare students for the rapidly changing role of professional accounting practise (Accounting Education Change Commission, 1992; Arthur Andersen et al., 1989; Lothian & Marion, 1992; Mathews, Brown, & Jackson, 1990). Skill deficiencies in the accounting graduates were blamed in part on the pedagogy and curriculum utilised by tertiary educators (Arthur Andersen, et al., 1989). It was claimed that the teaching approach adopted by most universities emphasised the achievement of technical skills which involved the presentation of specialist content that was then repeated back to the instructor in the examination. A study by Campbell & Lewis (1991) found that the education system conditioned students to attend class in a 'receptive' mode copying information for later memorisation thus supporting these claims. These concerns appear not to have been addressed, as twenty-three years on The Pathways Commission (2012, p. 11) found that "students in accounting classes are exposed to technical material in a vocation-focused way that is disembodied from the complex, real world settings to which students are bound", confirming that there were still gaps in the linkages between accounting education and practice. Lucas (1997) claimed that under this pedagogical approach, students failed to actively engage in the learning process due to their vocational concerns, and were less likely to adopt a deep approach to learning. This in turn negatively affected the quality of student learning outcomes (Booth, Lockett, & Mladenovic, 1999).

This dilemma is further complicated by claims (R. Libby, 1995) that auditing is unsuited to the traditional teaching approach commonly used in universities and that audit knowledge is best acquired through instruction and experience from the performance of audits. To enable potential auditors to develop the skills useful for audit, Libby (1991, p. 195) suggested that case studies could be used in teaching “*to illustrate real-world institutions and practices*”. These real world cases encourage students to use data from multiple sources, exercise judgement and evaluate risks (Green & Calderon, 1994).

Accounting academics have responded to these criticisms and suggestions with the implementation of case studies, an experiential aspect of teaching, to incorporate *real life* examples into their auditing courses (Chaffey, Van Peurse, & Low, 2011; Clikeman, 2005; Cohen, Krishnamoorthy, & Wright, 2008). However, Maltby (2001) expressed concern that whilst auditing cases have been used to solve a particular problem, there was a need for students to understand audit needs through the practice of audit. However, cases must contain a question and only examine aspects of an audit (Campbell & Lewis, 1991). An alternative learning context to cases which addresses this concern is the completion of a mini audit. The mini audit examines the entire audit process where no specific questions are asked but the issues are embedded within the mini audit for the student to ‘uncover’.

Given that approaches to learning are influenced by perceptions of the learning context (Marton & Saljo, 1984; Ramsden, 1992), this study seeks to identify *how* the completion of a mini audit influences students’ perceptions of the learning context and whether this encourages them to become more active learners.

The remainder of this paper is organised as follows. The next section provides the background to the education literature and its application to the accounting and more specifically the auditing discipline followed by the research design. Data collection is

reported and analysed. The final sections summarise the results and discusses the implications for instructors interested in delivering similar courses.

Background

Higher education studies have found that high academic performance is associated with a deep approach to learning and lower performance with a surface approach (Biggs, 1987; Trigwell & Prosser, 1991). Deep learning and surface learning are two distinct approaches to learning proposed by Marton and Saljo (1984). In a surface approach to learning:

The focus is on reproducing bits and pieces of memorised or textbook knowledge.

The process of learning is external to the student: it is one in which alien material is impressed on the memory or manipulated unthinkingly with the intention of satisfying assessment demands” (Ramsden, 1992, p. 46).

As the students perceive the learning task to be externally imposed they become extrinsically motivated which encourages them to adopt a surface approach to learning.

In a deep approach to learning:

Students are focussing on the content of the task and how it relates to other parts of the course, or previous knowledge; they are trying to understand the task and relate its component parts to the whole. The process is internal: the students are concerned with integrating new material with their personal experiences, knowledge and interests.” (Ramsden, 1992, p. 48).

Under this approach it may be said that students aim to understand the subject and seek meaning. They are intrinsically motivated as they enjoy studying for its’ own sake. The significance of this distinction between the two approaches to learning is in the quality of learning as measured by student performance and satisfaction (Biggs, 1987).

Lucas (2001) suggests that learning outcomes and approaches to learning may differ across disciplines. Watkins and Hattie (as quoted in Lucas, 2001, p. 163) found that arts students were the most likely to show intrinsic interest in their course and to adopt a deep-level approach to their work. Scientific students tended to be relatively more motivated by vocational concerns and to adopt surface-level reproductive study methods. Subsequent investigations within the accounting discipline found that accounting students deep approach to learning declined sharply during the first year of study and while it rose between years two and three still remained below the year one level (Gow, Kember, & Cooper, 1994). These findings were supported by Booth, Lockett & Mladenovic (1999) who found that many accounting students adopt a surface rather than a deep learning approach and that this was associated with less successful academic performance. This behaviour encourages students to memorise what they have learnt rather than think about the concepts (Sharma, 1997). Adler and Milne (1997) and Sharma (1997) claimed that learning approaches were associated with perceptions of the learning context and that altering the learning context would encourage accounting students to adopt a deep approach to learning. These claims were endorsed by Lucas (2001) who found that the approach to learning adopted by students was not dependent on the student but rather the context in which teaching and learning takes place.

Sharma (1997) and Lucas (2001) both suggest that accounting students fail to adopt a deep approach to learning due to the perceived lack of relevance of the subject. What is learned in the course is not perceived as relevant to future employment. It was further suggested that the alignment of the educational environment with work expectations created relevance and reduced the effect of vocational concerns (Lucas, 2001). Making study relevant increased students' intrinsic motivation that in turn encouraged the adoption of a deep approach to learning.

Prosser and Trigwell (1999) claim that altering the teaching and learning context influences students approach to learning and can improve the quality of learning outcomes. This context may be considered from a number of perspectives some of which include curriculum, assessment, modes of teaching, students prior experiences and perceptions (Booth, et al., 1999).

The Accounting Education Change Commission (AECC) suggested that “*students must be active participants in the learning process, not passive recipients of information.*”

(Accounting Education Change Commission, 1990, p. 309). Active learning has four distinctive features: a search for meaning and understanding, a greater student responsibility for learning, a concern with skills as well as knowledge and an approach to the curriculum which looks beyond graduation to wider career and social settings (Denicolo, Entwistle, & Hounsell, 1992). It has been suggested that involving students in case studies, role plays, seminars and simulations more actively involves students in the learning process (Sundem, Williams, & Chironna, 1990) and leads to the development of communication, problem solving and interpersonal skills (Sharma, 1997). These findings have led to the promotion of case studies as vehicles in auditing courses for improving judgemental skills, including the ability to probe for information, manipulate data and analyse information (Helliard, Monk, & Stevenson, 2009). It was also found that this context provided the catalyst to intrinsically motivate students to learn and thus counter the vocational concerns of students which have traditionally led them to adopt a surface approach to learning (Lucas, 2001).

Siegel et al. (1997, p. 224) noted that “*in auditing courses the initial learning phase, concrete experience, is most often missing*”. This study concluded that experiential learning can be an important technique for improving teaching effectiveness in auditing as concrete experience provides the relevance to instruction (P. A. Libby, 1991). Kolb (1984) describes the elements

of experiential learning are: concrete experience; reflective observation; abstract conceptualisation; and active experimentation. The first stage, *concrete experience*, is where the learner actively experiences an activity such as a lab session or field work. The second stage, *reflective observation*, is when the learner consciously reflects back on that experience. The third stage, *abstract conceptualization*, is where the learner attempts to conceptualize a theory or model of what is observed. The fourth stage, *active experimentation*, is where the learner is trying to plan how to test a model or theory or plan for a forthcoming experience. In this context “*concrete experience is used to validate and test abstract concepts while providing a publicly shared reference point for testing the implications and validity of ideas created during the learning process*” (Kolb, 1984, p. 21).

These claims were further endorsed by Siegel, Omer and Agrawal (1997) who found that experiential learning through video simulation can be a useful strategy for improving teaching effectiveness in auditing. One learning context suitable for auditing students, is the completion of a mini audit based on Kolb’s (1984) experiential learning cycle where knowledge that has been learned through instruction is applied in practice.

The mini audit is a simulation of an actual audit that provides that missing *concrete experience*. The only limitation is that instead of students having to search through client files for evidence, the necessary audit evidence is given to the students. Although audit issues were embedded within the information provided students were deliberately not directed to them. Unlike case-facts, the mini audit does not have any questions which will direct students to the audit issues. Instead the students must first identify the audit implications of these issues and deal with them. We therefore suggest that if students can place themselves within the context of an actual audit, this will address their vocational concerns, their motivation to learn is increased and their understanding is further enhanced.

Little is known from a student perspective, of how the completion of a mini-audit in an Auditing course may facilitate engagement with the learning process. As a consequence this study investigates the effectiveness of the mini-audit as a relevant concrete experience which encourages auditing students to be more intrinsically motivated and engaged. In so doing, answers to answer the following research questions are sought:

- RQ1.** Does experiential learning encourage students to abandon their vocational concerns and lead to heightened intrinsic motivation?
- RQ2.** How does completion of a mini-audit encourage students to become more active learners?
- RQ3.** Does the completion of a mini-audit encourage auditing students to adopt a deep approach to learning?

Research Design

Evidence for this study was collected from 128 students enrolled in a third year auditing paper at a New Zealand university. Data collection involved the completion of a reflective journal. All 128 students enrolled in the paper were required to submit the reflective journals as part of the summative assessment. The reflections covered their perceptions of *how* the mini audit activities encouraged them to become active learners. In particular, students were asked to reflect on the impact the mini audit had on their understanding of the theory and practice of auditing and the effectiveness of working in a group situation. Data analysis for this study was informed by Appleton (1995), but focussed specifically on the work of Miles and Huberman (1994). Internal validity and confidence in the research evidence were achieved by converging observations from multiple respondents. Credibility was enhanced by theoretical generalisability, i.e. the ability to generalise back to key constructs of the explanatory theory.

The Mini Audit

The mini audit was a group assignment which was adapted from instructional audit cases by Paul (1996), Pratt et al. (1990); Trussel and Frazer (2003) and Wyber (2005). The task was distributed to students on the first day of the twelve-week semester. They were then required to form groups of four and were given three weeks to bond, settle into their group situation and to proceed with the assignment. They were allowed to change groups within the first 3 weeks, but no further changes were allowed after that. Students were required to plan their meetings, work out their time schedule for completing the sections of the mini audit. They were also required to prepare and submit minutes of their meetings and documentation of any group issues. During the semester, students were not allowed to discuss or ask any questions about the mini audit in class. Its completion was entirely student-driven.

Written protocols and guidelines on how to manage any conflict in the groups were given to the students at the start of the semester. Additionally, peer assessments were taken into consideration when awarding final marks to each student. Individual peer assessment was made against a given marking criteria for meeting attendance, contribution, participation and the ability to meet deadlines. This ensured that individual effort and contribution to the group were duly acknowledged and equitably awarded. It also prevented individual group members from freeloading and contributing insignificantly towards group efforts. Peer assessment was required for each submitted section of the mini audit. This meant that the defaulting student still had the opportunity to improve his/her performance for other sections of the mini audit and also his/her marks.

The mark allocation for the mini audit is presented in Table 1. The group assignment was worth 50% of the overall mark for the paper. The remaining 50% was for the final

examination. The assessment of content accounted for 40% and the remaining 10% was for individual self-reflection on the effectiveness of mini audit as a learning tool.

	Weighted % of Overall Assessment
Mini Audit	
5 x 20 mark assignment sections for submission	40%
Individual student reflective journals	10%
	50%

Table 1: Marks Distribution for individual Assessments

Dates for submitting each of the completed five sections of the mini audit were scheduled one week after the class lesson that covered that section of the mini audit. This meant that at the end of each lesson, students had the opportunity to go back and revise any parts of the mini audit they felt could be further improved.

Findings

This section presents the findings and the implications of the findings on *how* the students working in groups experienced each of Kolb's (1984) four stages in the experiential learning cycle. A thematic analysis was undertaken until it was felt saturation of the common themes had been reached. The signals of saturation occurred when patterns or themes in the data begin to make sense, i.e. has enough data to build comprehensive and convincing findings (Denzin & Lincoln, 2005). The themes identified in this section enabled a qualitative informational isomorph to be achieved (Lincoln & Guba, 1985 ; Marginson, 2004) .

Vocational Concerns and Student Motivation

Students' comments indicated that regardless of experiential learning, they continue to have vocational concerns as detailed by the following students in their written reflections which were representative of students' reflections:

I feel that I could quite easily go out and get a job in the audit field,
confident that I would know what to do, and also be able to produce work
of a high standard. I may not end up working for an auditor, but this paper
has taught me enough to know what an auditor's job is, and what it involves
(Student 71 – emphasis added).

I feel that I learnt more and obtained information that will relate to real life
instead of just learning information about the subject. I was able to see if
auditing is an area that I wanted to continue with after finishing my degree
(Student 117 – emphasis added).

These student reflections were an example of Kolb's (1984) second stage *reflective observation* as the students had to consciously reflect back on their experience in the mini-audit.

The auditing course is a compulsory academic requirement for professional membership. Students were therefore studying the auditing course for vocational reasons i.e. professional accounting body membership, rather than an intrinsic desire to understand auditing. In other words, students 'have' to take auditing as a subject rather than 'want' to do auditing for its own sake. In relation to research question one '*Does experiential learning encourage students to abandon their vocational concerns and lead to heightened intrinsic motivation?*' the above reflections were representative of students who revealed that students' engagement in experiential learning had not led them to abandon their vocational concerns. However, students' perception that the course is relevant to future employment and that it also provided

insight into ‘real auditing’ practices increased their intrinsic motivation. This evidence provides further support for Lucas (1997) and Sharma’s (1997) observations that students’ perception of the relevance of the subject through an alignment of the educational environment with work expectations created relevance. It also reduced the effect of vocational concerns and increased students’ intrinsic motivation which in turn encouraged the adoption of a deep approach to learning.

The Mini Audit – A Learning Context for Active Learning

Many students commented that the mini audit provided them with the opportunity to apply theory to practice thus engaging students in Kolb’s (1984) third stage *abstract conceptualisation*. The following quotes were consistent with many students’ reflections:

Combining the practical application to the mini audit and the theory taught in the classroom provided me with a well rounded understanding of the audit process. Just reading the theory alone would not have allowed me to fully comprehend how to audit the cycles. I think that it is also important to understand why you do certain procedures. By addressing the problems encountered in the practical audit process I better understood the need for certain audit tasks. (Student 83 – emphasis added).

The mini audit gave the opportunity to take the theory and put it into practice. Doing this made me see how important it is for the auditor to have a good understanding of the basic accounting principles. Without this it becomes hard for the auditor to identify problems with the accounting records or even understand the audit program. (Student 73 – emphasis added).

Students also commented that the mini audit required a greater level of application of auditing knowledge which necessitated self-directed research thus moving them on to Kolb's (1984) fourth stage *active experimentation*:

For the mini audit, the role of research was subtly different compared to research on a topic for essay-style assignments. The tasks that required specific knowledge to complete provided positive motivation for me to undertake further research. For example, when completing the trade debtors section I was having difficulties grasping the approach required to make a reasonable estimate for doubtful debts provision. I had to hone in my research skills in search of further information (Student 65 – emphasis added).

When the tasks were unclear, we had to research and learn on our own. Allowing students the opportunity to research for themselves is more essential than spoon feeding students all the information in lectures because it decreases students' learning. Rather than regurgitating the information we learnt in class, the mini audit required a greater level of application which I believe has assisted in my learning (Student 21 – emphasis added).

In addition to the reflective journals, the classroom teaching provided another opportunity for Kolb's (1984) second stage of *reflective observation*:

The lecturer explained the whole process in detail and that got the class thinking about the many issues which could be raised throughout an audit and the ways in which the issues should be treated (Student 70 – emphasis added).

Class interactions were useful for the mini audit. We were not allowed to discuss the mini audit in class. We had to discuss and complete in groups, case studies which focussed on specific learning outcomes taught. I found the case studies very insightful, enabling us to apply theoretical concepts taught in class while still demanding us to think further. This approach taught me to think more 'outside of the square' and to consider other concepts that would be relevant for the mini audit (Student 74 – emphasis added).

Students initially expressed reservations about participating in a group assignment. However, in their reflections they acknowledged that group participation was perhaps the only way to complete the mini audit because of the volume of work involved. Students consistently appeared to rationalise the requirement for group participation by reasoning that real world audits are mostly completed by audit staff working in groups:

The advantage of group work is that it prepares you for team work which is the usual practice required in real-life in auditing (Student 45 – emphasis added).

I personally do not like group work. It takes too much time and effort, but I felt that this mini audit needed to be completed as a group assessment. The work required for completing the mini audit is huge. Besides, in the 'real audit world' you would be working in teams. This mini audit is definitely a team effort and I believe it should stay as such (Student 97 – emphasis added).

The above evidence supports Hughes, Humphrey & Turley's (1998) findings that group work gives students an awareness of the real-life environment where auditors work in teams. It

also supports the findings of Helliar et. al. (2009)'s that small groups allowed for far more innovation and interaction. Moreover, the introduction of group participation adds to the list of learning contexts suggested by Sundem, Williams, & Chironna (1990) which actively involve students in the learning process through the development of communication, problem solving and interpersonal skills (Sharma, 1997). However, the students were still unwilling to abandon their vocational concerns.

Several students indicated that for them 'active learning' began when they started identifying the auditing issues:

The learning actually took place at the point when the problems came out.

That is because whenever I face a problem, I will have to find the relating topic in the textbook and standards and discuss it with my team (Student 60 – emphasis added).

This specifically answers the second research question '*How does completion of a mini-audit encourage students to become more active learners?*' by focusing on the point at which active learning took place within a group environment. Changing the learning context to include the mini-audit provides the relevance necessary for student to become active learners. In this case the key to improved student engagement was the perceived relevance of the learning context which was aligned with their vocational concerns. These findings support Knechel's (2000) claims that students need to move from passive receivers to active participants. The findings also confirm Helliar, Monk & Stevenson's (2009) premise that auditors learn through instruction and experience when they actually perform audits, in this case the mini-audit which focuses on stage four - the *active experimentation* component of Kolb's (1984) experiential learning model.

In particular, the mini-audit group assessment encouraged students to search for meaning and understanding, to take a greater student responsibility for learning and to be concerned with skills as well as knowledge (Denicolo, et al., 1992). The mini audit in effect creates a real life situation as it takes the whole process of the audit cycle rather than just one portion. Davies (2000, p. 251) claimed that this allowed learners “*without any work experience to gain an understanding of realistic tasks*”. The mini audit also extends the learning past the classroom setting. This goes some way to addressing McCormick’s (1973, p. 802) concern that “*it is impossible to simulate a ‘real world’ comprehensive audit situation in a classroom setting*”. This was especially seen by the following student who said:

After completing the [mini]audit I feel I can say that this is the way to learn such a practical topic. To put learned-knowledge to the test, and perform an audit as it would be performed in the actual situations, is the only way to understand how the theory taught is actually applied. (Student 67 – emphasis added)

The final research question “*Does the completion of a mini-audit encourage auditing students to adopt a deep approach to learning?*” findings identified that the active learning environment provided by the mini-audit encouraged students’ self-paced and self-directed deep learning:

I felt that the classes we had during the process of completing the audit gave us only the concepts but not the solutions outright. I believe the educational environment developed here encouraged self-learning (Student 33 – emphasis added).

Working as a group caused me to take responsibility to complete the tasks and research new ideas and concepts which I was uncertain about. On reflection, I was able to see what knowledge I am lacking and manage my learning at my own pace (Student 38 – emphasis added).

There were however, a minority of students who were only interested in preparing for their examinations and they were not able to see the relevance of the mini-audit as a means of helping them to study in more ways than just passing their examination. As a consequence their motivation was extrinsically focussed and they have passed up the opportunity to engage in experiential learning. These views were best reflected by the following student:

I cannot see the importance of the mini-audit related to our whole semester's study for the final exam. Once I had completed the mini-assignment, I still had to review the whole semester's class material to get ready with the final exam. I would like to see a better link between the mini-audit and the examination (Student 62 – emphasis added).

It should be noted here that the mini-audit and the final examination both accounted for 50% of the final mark. Both the mini-audit and the final examination incorporate the whole semester's class material something these students unfortunately did not reflect on.

Overall, as indicated by the majority of students, the mini audit was both relevant and necessary for students to engage in active learning:

Overall I found the mini audit very interesting. It gave a greater understanding of how the theory works in practice. The importance of auditors having to work together was also emphasised, if they do not, it would not work. Doing the assignment made the study process easier as it pointed out the areas in which I am fairly competent and which areas I need to work on. It turned out that the mini audit assignment was not as daunting and incomprehensible as I first thought. It was in fact an interesting assignment and a useful learning tool (Student 128 - emphasis added).

Discussion

The above findings support Sharma's (1997) and Adler & Milne's (1997) findings that learning approaches are associated with perceptions of the learning context. Sharma (1997) found that *altering* the learning context could encourage the adoption of a deep approach to learning. A surface approach to learning would not have led to the successful completion of the mini-audit. As the mini-audit required students to relate the theoretical concepts learnt in class to 'real life auditing' and this is not achievable through passive learning (Horsfield, 1995). As well the mini-audit provides students with the opportunity to extend their learning to new material that was not covered in class. For successful completion of the mini-audit there was a need for a deep learning approach by seeking the meaning behind the concepts covered in class rather than memorising them i.e. a surface approach to learning (Lucas, 2001).

Booth et. al (1999) asserted that in order to change accounting students surface-level perception there is a need for assessment items to encourage and reward a deep approach to students' learning. The findings from this study confirmed this. The mini audit met this challenge by rewarding students who apply knowledge, think critically and are able to relate theoretical concepts to the mini audit, as indicated by this student's comments:

I like the approach of learning by practical experience and work. I really hate to memorise things by reading so many times. For me, learning through the mini audit was very innovative. It was also an interesting and joyful experience because the application of class room theory into practice imprinted auditing concepts clearly in my mind (Student 18 – emphasis added).

However, the evidence from this research suggested that student engagement was dependent on a variety of learning activities and was not solely dependent on participation in the mini audit.

The findings reported in the previous sections demonstrate that the mini-audit provided a realistic, concrete experience of completing the full cycle of an audit which students without any work experience could experience (Davies, 2000). It also provided a learning context that met the remaining three of Kolb's (1984) four stages; stage two *reflective observation*; stage three *abstract conceptualisation* but also stage four *active experimentation* as the following student demonstrates:

It was group work that helped me finish the project and understand more of the theories. The mini-audit provided me a good chance to communicate with other group members and exchange my opinion with them. Not only did I learn how to do this mini-audit project, but I also learn why we did the different tasks. I could also reflect on what other group members thought of the problem and the way they solved these problems (Student 87 – emphasis added).

Generally, the students felt that they benefitted much from the concrete experience they received from completing the mini audit:

After completing the [mini] audit I feel I can say that this is the way to learn such a practical topic. To put learned-knowledge to the test, and perform an audit as it would be performed in the actual situations is the only way to understand how the theory taught is actually applied (Student 67 – emphasis added).

Altogether they provided probably as realistic experience as you could get regarding audits in a classroom situation. Without doubt EXCELLENT. I

think mini-audit should always be part of the auditing paper (Student 26 – emphasis added)

Conclusion

Based on the analysis of student reflective journals, this study investigated the effectiveness of the mini audit group assessment as an experiential learning exercise which involved all four stages of Kolb's (1984) learning cycles. These findings revealed that the mini audit completed by group participation and supported by class lectures was positively perceived by the participants. This learning context provided a concrete experience for students to become active learners. These findings supports Lucas' (2001) findings that the learning approach adopted by students was not dependent on the student but rather the context in which teaching and learning takes place and that perceived relevance of the learning experience was aligned with the students vocational concerns.

Previous studies (Lucas, 2001) have suggested that vocational concerns cause students to become extrinsically motivated and hence fail to adopt a deep approach to learning. We suggest that it is not the vocational concerns but rather the absence of a perceived relevance of the learning context that causes students to become extrinsically motivated. As a consequence, this learning approach provides a response to the perceived deficiency that has been identified in audit education.

The findings from this study contribute to the existing auditing education literature by confirming that students positively perceive an experiential learning activity such as a mini-audit. In particular, the perceived *relevance* of the learning context and *the need to work with others*, encourages students to become more active learners. This in turn will encourage the students to adopt a *deep approach* to learning and lead to improved learning outcomes.

References

- Accounting Education Change Commission. (1990). Objectives of Education for Accountants: Position Statement Number One. [Article]. *Issues in Accounting Education*, 5(2), pp. 307-312.
- Accounting Education Change Commission. (1992). The First Course in Accounting: Position Statement No. Two. [Article]. *Issues in Accounting Education*, 7(2), pp. 249-251.
- Adler, R., & Milne, M. (1997). Promoting Active Learning. *Chartered Accountants Journal*(June), pp. 65-66.
- Appleton, J. V. (1995). Analysing qualitative interview data: addressing issues of validity and reliability. *Journal of Advanced Nursing*, 22, pp. 993-997.
- Arthur Andersen, Arthur Young, Coopers & Lybrand, Deloitte Haskins & Sells, Ernst & Whinney, Peat Marwick Main & Co, et al. (1989). *Perspectives on Education: Capabilities for Success in the Accounting Profession*.
- Biggs, J. B. (1987). *Student Approaches to Learning and Studying*. (Hawthorn, Vic: Australian Council for Educational Research.).
- Booth, P., Lockett, P., & Mladenovic, R. (1999). The quality of learning in accounting education: the impact of approaches to learning on academic performance. *Accounting Education*, 8(4), pp. 277-300.
- Campbell, J. E., & Lewis, W. F. (1991). Using Cases in Accounting Classes. [Article]. *Issues in Accounting Education*, 6(2), pp. 276-283.
- Chaffey, J., Van Peurse, K., & Low, M. (2011). Audit education for Future Professionals: Perception of New Zealand Auditors. *Accounting Education: an international journal*, 20(2), pp. 153-185.
- Clikeman, P. M. (2005). The rise and fall of Heilig-Meyers. *Journal of Accounting Education*, 23(4), pp. 215-231.
- Cohen, J., Krishnamoorthy, G., & Wright, A. (2008). Waste Is Our Business, Inc.: The importance of non-financial information in the audit planning process. *Journal of Accounting Education*, 26(3), pp. 166-178.
- Davies, M. (2000). Using a computerised case study to teach computer auditing: the reasons, the approach and the student response *Managerial Auditing Journal*, 15(5), pp. 247-252.
- Denicolo, P., Entwistle, N., & Hounsell, D. (1992). *Effective Learning and Teaching in Higher Education*. Sheffield: CVCP Universities Staff Development and Training Unit.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *The Sage Handbook of Qualitative Research* (3rd ed.). Thousand Oaks, CA: Sage Publications Inc.

- Gow, L., Kember, D., & Cooper, B. (1994). The teaching context and approaches to study of accounting students. *Issues in Accounting Education*, 9(1), pp. 118-130.
- Green, B. P., & Calderon, T. G. (1994). Using Real-world Cases to Illustrate the Power of Analytical Procedure. *Journal of Accounting Education*, 12(3), pp. 245-268.
- Helliar, C. V., Monk, E. A., & Stevenson, L. A. (2009). The Development of Trainee Auditors' Skills in Tertiary Education. *International Journal of Auditing*, 13(3), pp. 185-202.
- Horsfield, L. (1995). Factors to consider when choosing a computerized case study for an undergraduate auditing course. [Article]. *Accounting Education*, 4(4), pp. 297.
- Hughes, J. F., Humphrey, C., & Turley, S. (1998). Learning from Mistakes?: Using Corporate Scandals to Enhance Audit Teaching. *International Journal of Auditing*, 2(2), pp. 89-101.
- International Accounting Education Standards Board. (2010). *International Education Standard 8: Competence Requirements for Audit Professionals*. New York: International Federation of Accountants.
- Knechel, W. R. (2000). Behavioral Research in Auditing and Its Impact on Audit Education. [Article]. *Issues in Accounting Education*, 15(4), pp. 695-712.
- Kolb, D. A. (1984). *Experiential Learning: Experiences as the Source of Learning and Development*. (Englewood Cliffs, NJ: Prentice-Hall.).
- Libby, P. A. (1991). Barriers to Using Cases in Accounting Education. [Article]. *Issues in Accounting Education*, 6(2), pp. 193-213.
- Libby, R. (1995). The role of knowledge and memory in audit judgement. In R. H. Ashton & A. H. Ashton (Eds.), *Judgement and Decision Making Research in Accounting and Auditing*. (Cambridge, MA: Cambridge University Press).
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. (Newberry Park, CA: Sage Publications.).
- Lothian, N., & Marion, I. F. P. (1992). *NZ Society of Accountants international rebview of admission policy*. Wellington NZ Society of Accountants.
- Lucas, U. (1997). Active learning and accounting educators. *Accounting Education*, 6(3), pp. 189-190.
- Lucas, U. (2001). Deep and surface approaches to learning within introductory accounting: a phenomenographic study. *Accounting Education*, 10(2), pp. 161-184.
- Maltby, J. (2001). Second thoughts about 'Cases in Auditing'. [Article]. *Accounting Education*, 10(4), pp. 421-428.
- Marginson, D. E. W. (2004). The Case Study, The Interview and The Issues: A Personal Reflection. . In C. Humphrey & B. Lee (Eds.), *The Real Life Guide to Accounting*

- Research: A behind-the-scenes view of using qualitative research methods* (pp. 325-337). (Oxford: Elsevier.).
- Marton, F., & Saljo, R. (1984). Approaches to Learning. In F. Marton, D. Hounsell & N. Entwistle (Eds.), *The Experience of Learning*. (Edinburgh: Scottish Academic Press).
- Mathews, R., Brown, P., & Jackson, M. (1990). *Accounting in Higher Education - Report of the Review of the Accounting Discipline in Higher Education*. Canberra, Australia: Department of Education, Employment and Training.
- McCormick, W., Jr. (1973). Trends in Education for Auditors. *The Accounting Review*, 48(4), pp. 801-803.
- Miles, M., & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook*. (London: Sage).
- Paul, J. (1996). *Apple Blossom Cologne Company*. (Chicago: The McGraw-Hill companies Inc).
- Pratt, M. J., van Esch, S., & Dilton-Hill, K. G. (1990). *External Auditing. Theory and practice in New Zealand: A Case Study*. (Auckland: Longman Paul Ltd).
- Prosser, M., & Trigwell, K. (1999). *Understanding Learning and Teaching: the experience in higher education*. (Buckingham: The Society for Research into Higher Education and Open University Press.).
- Ramsden, P. (1992). *Learning to Teach in Higher Education*. (London: Routledge).
- Sharma, D. S. (1997). Accounting students' learning conceptions, approaches to learning, and the influence of the learning-teaching context on approaches to learning. *Accounting Education*, 6(2), pp. 125-146.
- Siegel, P. H., Omer, K., & Agrawal, S. P. (1997). Video simulation of an audit: an experiment in experiential learning theory. [Article]. *Accounting Education*, 6(3), pp. 217-230.
- Sundem, G. L., Williams, D. Z., & Chironna, J. F. T. r. i. a. e. M. A., 72(6), 49-53. (1990). The revolution in accounting education. *Management Accounting (IMA)*, 72(6), pp. 49-53.
- The Pathways Commission. (2012). *Charting a National Strategy for the Next Generation of Accountants*. Sarasota, FL: AAA, AICPA.
- Trigwell, K., & Prosser, M. (1991). Relating approaches to study and quality of learning outcomes at the course level. *British Journal of Educational Psychology*, 61, pp. 265-275.
- Trussel, J. M., & Frazer, J. D. (2003). *The Lakeside Company*. (New Jersey: Pearson Education).
- Wyber, J. (2005). *Auditing Lovitts*. (Sydney: John Wiley & Sons Australia, Ltd).

Appendix A: Information for completing the Mini Audit:

- General instructions on how to study and complete the Mini Audit
- Narratives on company history and background
- A plan of the company premises and location
- Company staff organisational chart and structure (for production, sales, accounting, finance and administrative staff)
- Narratives and flow-charts for the accounting systems and internal control procedures
- the general accounting cycle, sales & collection cycle, purchases & payments cycle, the payroll cycle, the inventory management system
- Completed internal control questionnaires for the above cycles
- Company financial statements and financial ratios (current and previous year's) and client's supporting schedules
- Partially completed audit schedules
- Partially completed audit programs
- Simulated documentary "evidence".
- Any type of oriented material such as may be normally be found in audit working papers
- Information of meetings and discussions with the client
- Additional information for completing the Mini Audit
- Audit & accounting issues (messy stories) embedded in the narratives and other information
- No assignment questions to answer

Appendix B: Topics covered and assessed in the Mini Audit

- Audit risks and materiality assessments in audit planning
- Interim work – evaluating the effectiveness of internal controls in the accounting systems and deciding on the extent of tests of controls and substantive testing
- Final audit – verifying account balances
- Audit completion
- Audit reporting

Specifically, auditors need to apply the following professional skills:

Identifying and solving problems; undertaking appropriate technical research; working in teams effectively; gathering and evaluating evidence; and presenting, discussing, and defending views effectively through formal, informal, written, and spoken communication audits. (International Accounting Education Standards Board, 2010, p. 91)