

EDU013

Best practices: effectively manage Auditing open-book assessment resource material.

by Jana Lamprecht

Abstract

When the South African Institute of Chartered Accountants (SAICA) changed their assessment method from closed to open-book assessment (OBA) Accountancy lecturers at SAICA accredited universities also amended their teaching objectives. They no longer only lecture the content, but also aim to empower their students to take responsibility for managing their OBA resource material effectively. However, research on how to achieve this is limited and even scarcer in the Auditing field as such. This research study identifies, through a literature review, the advantages of OBA, traits of responsible learners; and suggested methods to manage OBA resource material effectively. It then goes further to identify and report on how successful students at the University of the Free State (UFS) managed their Auditing OBA resource material.

The research study was set in an interpretive paradigm making use of a naturalistic, qualitative, approach. All four the 2013 SAICA academic trainees at the UFS were selected. They were provided with a conceptual framework, derived from literature, of the identified suggested methods to manage OBA resource material effectively. As a starting point the respondents were requested to use the summary of suggested methods and to provide examples and feedback on how they managed their Auditing OBA resource material during their studies. The examples and feedback provided were processed and summarised. The advantages of OBA, traits of responsible learners and the respondents' feedback were merged to develop best practices to manage OBA resource material effectively. Since research has shown

that effective management of resource material in OBA has an influence on students' academic achievement, it is important to not only focus on the content of the material, but also on the management thereof. This research study provides methods obtained from literature as well as identified practical examples in Auditing, to both students and lectures on how to manage OBA resource material effectively.

Key words:

Management of learning; Auditing; Open-book assessment; Resource material; Responsible learners

Affiliation: University of the Free State

Contact address: 51 Scholtz Str., Universitas, 9301

Phone number: 073 170 1797

Fax: 051 444 5342

Email address of author: lamprecj@ufs.ac.za

I hereby confirm that the manuscript or a similar one has not been published and is not, nor will be, under consideration for publication elsewhere while being reviewed for this SAAA conference.

Introduction

All professions are currently faced with information overload due to improvements in technology, changes in regulations and legislation and an ever-increasing amount of research. Due to this information overload, it has become a requirement for most students studying toward a profession to not only memorise information, but also apply and manage their knowledge (Heijne-Penninga, Kuks, Scönrock-Adema, Snijders and Cohen-Schotanus, 2008:264). Applying and managing knowledge is at a higher cognitive level than memorising since it requires understanding and reasoning. At this higher cognitive level students are expected to shift from a surface approach to learning to a deep approach and ultimately change to an achieving approach (Biggs and Tang, 2007:22-24; Biggs, 1987:11). This cognitive development can also be linked to Bloom's revised taxonomy (Seattle Pacific University, 2010) by linking the verbs of Bloom's taxonomy to Biggs' students' approach to learning. Remembering and limited understanding links with a surface approach to learning. Higher level of understanding, applying and analysing link with a deep approach. While evaluating and creating link with an achieving approach.

Open-book assessment (OBA) has become an essential evaluation tool in testing whether students have shifted to an achieving approach because of its ability to assess students' high-level thinking skills (Ioannidou, 1997:132). These skills include conceptualising, problem-solving and reasoning.

The South African Institute for Chartered Accountants (SAICA) changed their assessment method from closed book assessment to OBA in 2003. Since this change it became the objective of Auditing lecturers to not only lecture the content, but also empower their students to take responsibility for managing their OBA resource material effectively. Entwined in this objective of developing OBA resource

material management skills is the development of students into responsible learners (Wiersema and Licklider, 2008) who can take charge of their own learning.

Even though research has shown that there is a link between the effective management of resource material and students' academic achievement in Auditing (Lamprecht, 2011) research on how to develop students into responsible learners in the OBA environment, and even more so in the Auditing field, is limited. Therefore, the aim of this research is to provide best practices on how to manage resource material effectively in the OBA environment with a specific focus on the Auditing field.

The literature review focuses on providing guidelines to both lecturers and students on how to manage OBA resource material effectively. This was done by identifying and then combining the advantages of OBA, the traits of responsible learners and suggested management methods for OBA resource material. These guidelines can be utilised by both lecturers and students to improve OBA resource material management, which in return can lead to improved examination results.

The literature review was used as the foundation for developing a conceptual framework which was provided to all four academic trainees at the University of the Free State (UFS) requesting them to provide feedback and examples of methods they applied to effectively manage their Auditing OBA resource material during their studies. The examples and feedback they provided were processed and summarised. The identified advantages of OBA, traits of responsible learners and the trainees' feedback were then combined into best practices to manage OBA resource material effectively. This final summary was then discussed with each of the respondents to ensure completeness and accuracy of their provided management methods. The feedback was recorded in a final report which is

discussed in the Results with examples specific to the Auditing subject. The paper concludes by providing best practices for effective management of Auditing OBA resource material.

Literature review

In order to provide best practices for the effective management of Auditing OBA resource material it is important to identify, from the literature, guidance on how to manage OBA resource material effectively. In addition to this, it is also important to take into account the advantages of OBA and traits of responsible learners.

Since in most cases change is driven by the advantages achieved by the change, the advantages of implementing OBA was the point of departure to provide best practices to manage OBA resource material in this study. Provided in Table 1 below are the advantages of OBA.

Table 1 Advantages of implementing OBA

Advantages	Sources
Assist in the movement from the surface approach to the deep approach and ultimately the achieving approach.	(Clark and Waren in Richards, Watson, Bulkeley and Powell, 2002:33; Loi and Teo, 1999:40)
Prevent rote learning (memorises information with no or little understanding) and cramming (the practice of working intensively to absorb a large amount of information in a short amount of time).	(Agarwal, Karpicke, Kang, Roediger III and McDermott, 2008:862; Shine, Kiravu and Astley, 2004:198; Maharg, 1999:227; Mohanan, 1997:1; Loi and Yuan, n.d.; Downey, Mort and Fitzimmons, n.d.)
Develop critical thinking because students can spend more time working on examples and questions instead of memorising.	(Bisse, Feller, Ioannidou, Theophilides <i>et al</i> in Loi and Yuan, n.d.:7 of 20; CDTL (Centre for Development of Teaching & Learning), 1999b:1; Mohanan, 1997:1)
Develop effective application of knowledge and mimics real life by providing a simulated real-life situation.	(Feller, Jacobs & Chase in Agarwal <i>et al.</i> , 2008:862; Rowlands and Forsyth, 2006:705; Gravet and Geysler, 2004:104; SAQA (South African Qualifications Authority), 2001:21; CDTL, 1999b:2; Mohanan, 1997:1; Loi and Yuan, n.d.:7; Downey <i>et al.</i> , n.d.:2)
Increase understanding	(Broyles, Cyr and Korsen, 2005:1; Shine <i>et al.</i> , 2004:198; Furedy and Furedy, 1983:1)

Reduce stress and selective studying (“spot”)	(LTSN Physical Sciences, 2002:1; Broyles <i>et al.</i> , 2005:456; Maharg, 1999:220; Mohanan, 1997:8; Loi and Yuan, n.d.:5)
Stimulate lifelong learning	(Kasworm and Hemmingsen, 2007:450; Rowlands and Forsyth, 2006:708; CDTL, 1999c:1)
Improve organisation of information	(Rakes, 2008:1)

To achieve the above advantages OBA would need to be implemented adhering to accepted principles for good assessment. In the South African accountancy context, the critical cross-field outcomes as prescribed by the SAQA (NQF (National Qualification Framework), 2011:1), and SAICA's Competency Framework (SAICA (The South African Institute of Chartered Accountants), 2010) are of particular importance for principles for good assessment. The critical cross-field outcomes and the pervasive skills overlap in many areas. The following is a suggestion by the researcher for synthesising the critical cross-field outcomes and the pervasive skills:

1. Communicate effectively and efficiently using visual, mathematical and/or language skills in the modes of oral and/or written presentation (i.e. communication skills).
2. Identify and solve problems by using creative and critical thinking (i.e. problem-solving skills) and make decisions. Strive to add value in an innovative manner.
3. Organise and manage themselves and their activities responsibly and effectively (i.e. self-responsibility), with a focus on ethics and professionalism. Demonstrating leadership and initiative. Ultimately developing into a life-long learner.
4. Work effectively with others in a team, group, organisation and community (i.e. cooperative skills) treating others in a professional manner.
5. Collect/analyse, organise and critically evaluate information (i.e. research skills).
6. Use science and technology effectively and critically, showing responsibility towards the environment, information systems and health of others (i.e. scientific, technological and environmental literacy and skills).

7. Understand that the world is a set of related systems by recognising that problem-solving contexts do not exist in isolation.

Due to the focus of this study these principles will not be explored further.

The provided list of advantages of OBA (Table 1) can be viewed from two angles, either as advantages as a result of implementing OBA or as the ultimate aim of OBA.

If it is seen as an aim, it should also be referred to when identifying best practices to manage OBA resource material.

When analysing the above advantages (Table 1) it is clear that, among other things, it is also in line with the development of students into responsible learners. For the purpose of completeness it is, therefore, also necessary to identify the traits of responsible learners (see Table 2 below).

Table 2 Traits of responsible learners

Traits	Traits applied to the learning environment
Evaluate their progress	Students evaluate the quality or progress of their work. Identify problems or learning needs. Continuous reflection takes place.
Organise information	Organise information in such a way that the student is able to identify and use resources to solve problems or learning needs.
Transform information	Convert learning material to improve learning. Able to transform information so that it can be used to solve problems or address learning needs.
Plan effectively	Planning when what will be done.
Set goals	Students set educational goals.
Identify information resources	Seek more information than just what the lecturer provided. Able to search for additional sources to solve problems or address learning needs.
Keep records	Make notes in class. Make own notes for learning.
Monitor their learning	Perform a post mortem of questions and assessments.
Structure their studying environment	Make an effort to develop a good studying environment and study habits.
Reward success and punish failure	Reward or punish achievement. Accountable for actions.
Rehearse and memorise information	Practise for the examination and memorise information when needed.
Seek social assistance	Seek help, when needed and work in groups.
Review study records	Students reread tests, notes and textbooks to prepare for class or further assessment.
Motivate themselves	Set high expectations.

Are aware of the process of learning	Apply good study techniques.
Work independently	Can work on their own, when necessary.

Source (Chakravarthi, 2010:38; Wiersema and Licklider, 2008:212; Göker, 2006:193;

University of Southampton, 2003; Barrows in Dunlap, 1997:36; Zimmerman and Pons, 1986:168) adapted

Since the above traits (Table 2) are applicable to learners in all types and forms of assessment, it should also be considered and where applicable implemented into best practices to manage OBA resource material.

Even though advantages of OBA (Table 1) and traits of responsible learners (Table 2) are important points of departure for this study, identifying methods to manage OBA resource material form the main focus thereof. Methods, suggested by literature, to manage OBA resource material effectively, are summarised in Table 3. These methods are core when dealing with the management OBA resource material.

Table 3 Management methods for OBA resource material

Management method		Source
Emphasise information	Underline and/or highlight important text.	(Broyles <i>et al.</i> , 2005:461; Loi and Teo, 1999:40)
	Do not overly highlight, underline and tag.	(Broyles <i>et al.</i> , 2005:461)
	Use colour as a learning instrument (for reference tags, underlining and highlighting).	(Broyles <i>et al.</i> , 2005:461; Buzan, 2003:7)
	Have a user-friendly system.	(CDTL, 1999a:3)
Identify important topics	Identify the important themes and topics.	(Downey <i>et al.</i> , n.d.)
	Tags (or labels) for fast reference.	(Broyles <i>et al.</i> , 2005:461; Loi and Teo, 1999:40; CDTL, 1999a:3; Downey <i>et al.</i> , n.d.)
Source material	Be familiar with what is where in the resource material.	(CDTL, 1999a:2; Downey <i>et al.</i> , n.d.)
	Create an overall picture of the information by drawing a concept map. Be familiar with the table of contents and the index. Understand the way the text is organised and why it is organised in such a way.	(Broyles <i>et al.</i> , 2005:461; Buzan, 2003:4; CDTL, 1999a:3; Gibbs and Habeshaw, 1989:18; Downey <i>et al.</i> , n.d.)
	Be familiar with material and memorise certain foundational knowledge.	(CDTL, 1999a:2; Loi and Yuan, n.d.:16)
∪ ∩ ⊆	Learn for understanding and not for	(Downey <i>et al.</i> , n.d.)

	remembering. Must be able to apply information in answering a question.	
	Prepare own notes – 1. During this process, it is important to understand, relate, prioritise and form an idea on how and where to use the specific information. 2. Use clear headings. 3. Notes should be organised.	(CDTL, 1999a:2; Downey <i>et al.</i> , n.d.)
	Prepare brief notes (post-its, index cards and/or flash cards) for studying foundation knowledge.	(CDTL, 1999a:3; Downey <i>et al.</i> , n.d.)
	Practise for the assessment (homework and assignments).	(CDTL, 1999a:3)
Practi- calities	Enquire about the examination requirements to be aware of what is going to be tested.	(Downey <i>et al.</i> , n.d.)

All the information from Tables 1, 2 and 3 above were combined and used as a foundation to perform the rest of the research.

RESEARCH METHODOLOGY

The research study is set in an interpretive paradigm using a naturalistic, qualitative, approach (Cohen, Manion and Morrision, 2007:20). This approach was followed as the author supports Blumer's point of view (in Cohen, *et al.*2007:20) that people are purposeful and creative in their learning, and that they act deliberately and make sense in and through their activities. In this approach, the focus is on researching the situation through the eyes of the successful students rather than the eyes of the researcher (Cohen *et al.*, 2007:21). Following this methodology it is possible to identify how successful students manage their OBE resource material and report best practices to other students.

All four academic trainees at the UFS for 2013 were selected as a purposeful convenient sample (McMillan and Schumacher, 2010 and 138). They were purposefully selected, from the total population of 65 students that obtained the Certificate in Accounting (CTA) during 2012 at the UFS, since academic trainees are

regarded as “intellectually gifted graduates” (SAICA, 2012). Therefore these respondents’ methods of managing their Auditing OBA resource material should be of importance to all Auditing OBA students. During this research study it was also identified that these respondents consulted with other students in their class during the year to develop and improve their own management methods. Therefore respondents also indirectly include methods followed by other students in the class.

The respondents were conveniently selected since the author is also from the UFS. In 2012 the UFS was one of thirteen SAICA accredited universities to provide a CTA program (or equivalent) (SAICA, 2013b). Even though the sample size of this research (four) is small compared to the total number of students that passed the 2013 Part 1 SAICA Initial Test of Competence (2 272) (SAICA, 2013a), this research aims to identify best practices for managing OBA resource material that can be used as a point in departure for further much needed research in this field.

The techniques for management of OBA resource material (Table 3) were given to the four respondents, as a point of departure, requesting them to provide feedback and examples on how they managed their Auditing OBA resource material during their studies. The feedback received from the respondents were processed and summarised. The identified advantages of OBA (Table 1) and traits of responsible learners (Table 2) were transformed and merged to create more suggested methods to manage OBA resource material. These suggested methods were then combined with the feedback of the four respondents and the techniques for managing OBA resource material (Table 3). This summary was then discussed with each of the respondents to ensure completeness and accuracy of their provided management methods. The feedback from the respondents was then merged with the techniques to manage OBA resource material, the advantages of OBA and the traits of

responsible learners to provide best practices on managing Auditing OBA resource material.

Therefore, the aim of this research paper is to identify from literature and respondents best practices for effective management of Auditing OBA resource material. As well as to report these findings to enable other students to effectively manage their own Auditing OBA resource material.

DATA ANALYSIS AND RESULTS

The management methods for OBA resource material (Table 3) were identified as the point of departure. The advantages of OBA (Table 1), where appropriate, were then selected and changed into an objective for the student to achieve when managing their OBA resource material. The objectives were matched to the management methods where applicable. This was done because assessors aim to achieve the advantages of OBA when implementing OBA. Therefore, these advantages can be used as objectives for students to be assessed by OBA. The traits of responsible learners (Table 2), where appropriate, were then matched with the management methods. This was done since, irrespective of the method of assessment, students aiming to be successful need to focus on developing these traits. Lastly, the feedback provided by the respondents on how they managed their OBA resource material were analysed and merged with the above combined information and are presented in Table 4.

Table 4 Practical management methods for Auditing OBA resource material

Management method		Objective	Traits	Respondents' comments
Emphasise information	Underline and/or highlight important text. However, do not overly highlight or underline.	Develop the skill of lifelong learning	Organise information	<ul style="list-style-type: none"> • Highlighting, underlining and tagging were done with guidance from the following resources: <ul style="list-style-type: none"> ○ Suggested solutions (homework, current and previous years' assessments), especially key words that repeat in suggested solutions or questions that repeat frequently. ○ Guidance received in class. ○ Mindmap notes provided by the lecturer. • Over-highlighting occurs when the key word could not be identified because the specific principle was not understood. This misunderstanding resulted in thinking that every word was important. • When afraid of missing something you end up colouring-in the whole paragraph. This is counterproductive. Trust yourself. Do not over-depend on the resource material. • Do not tag things you already know.
	Use colour as a learning instrument (for tags, underlining and highlighting).	Develop the skill of lifelong learning	Organise information	<ul style="list-style-type: none"> • Used the same colour tags for Companies Act sections and Code of Professional Conduct (CPC) that relate to each other, e.g. shares. • Use a specific colour, e.g. pink, to highlight information identified from suggested solutions. Since you know it must be right, because it's from a suggested solution, it gives you confidence when answering the question. • Use a specific colour e.g. orange for information that is more important. More important parts in the resource material is identified from previous assessments and guidance by the lecturer.

Management method	Objective	Traits	Respondents' comments	
	Have a user-friendly system.	Develop the skill of lifelong learning	Organise information	<ul style="list-style-type: none"> • Had a reference system that was understandable, I knew and found useful. • Tagged information, that relates to each other, close together so that it could be seen in one glance. Did not put tags underneath one another else it could not be seen in one glance. • Cross-referencing was handy. • Memorised the tags to make it easier to locate the tags during the assessment.
Identify important topics	Identify the important themes and topics.	Develop the skill to organise information	Evaluate their progress	<ul style="list-style-type: none"> • Identified important topics from: <ul style="list-style-type: none"> ○ the Competency Framework (SAICA, 2010), especially the knowledge levels. ○ suggested solutions (homework, current and previous years' assessments), especially key words that repeat in different solutions or repeating questions. ○ guidance received in class from the lecturer. ○ notes (mind maps) provided by the lecturer. • Specific attention was given to newly issued standards and/or legislation.
			Organise information	
			Plan effectively	
			Set goals	
			Monitor their learning	
Work independently				
	Tags (or labels) for fast reference.	Develop the skill to organise information	Organise information	<ul style="list-style-type: none"> • Used the top of the book to tag the different standards, e.g. ISA 200, one after another. For each standard used the side of the book, starting each time at the top and moving down, to tag the different important areas within the specific standard. • Information that relates was tagged close to each other (and in the same colour), e.g. right top corner of the Legislation book for sections that relates to shares. • To have easy quick access to frequently used information, tags

Management method	Objective	Traits	Respondents' comments
			<p>were added to the bottom of the book. If your book lies on your table, the bottom of the book is the closest to you.</p> <ul style="list-style-type: none"> • The index of the book or specific standard can be used as a guide to create tags. • Memorise your tags to make it easier to locate it during an assessment. • Tags should be neat, but should not take you hours to make.
Source material	Be familiar with what is where in the resource material.	Improve organisation of information	<ul style="list-style-type: none"> • Practiced OBA skills. The day before the assessment scanned over tags and practiced physically opening at a specific paragraph. • Memorised your tags to make it easier to locate information during an assessment.
	Create an overall picture of the information by drawing a concept map. Be familiar with the table of contents and the index. Understand the way the text is organised and why it is organised in such a way.	Improve organisation of information	<ul style="list-style-type: none"> • Used a poster of the Audit process to form an overall picture of the information. • Used the lecture notes (which includes mind maps) to form an overall picture. • Did not make mind maps. Made a one page summary of every ISA, the Companies Act and King III. • Did not make mind maps in preparing my notes because most of the time the lecturer handed mind maps out for the specific topic. Used these mind maps to highlight since it helped to identify key words. This also helped to identify key words. Used mind maps to plan questions and to plan homework.
	Be familiar with material and memorise certain foundation knowledge.	Aim not to resort to rote learning and cramming.	<ul style="list-style-type: none"> • Made a check-list of things that should be memorised. Before the test quickly scanned through the list, saving time by not using the books during the test. • Had a study buddy to help with the work that did require cramming e.g. general controls.

Management method	Objective	Traits	Respondents' comments
			<ul style="list-style-type: none"> • With reference to guidance provided by the academic trainee (this is the previous year's academic trainee) prepared standard mark lists. Standard mark lists were filed under <i>Things to remember</i>. • Did not refer to the resource material for every single thing.
Conceptualisation	Learn for understanding and not for remembering. Must be able to apply information in answering a question.	<p>Move from a surface approach for learning to a deep approach and ultimately an achieving approach.</p> <p>Aim not to resort to rote learning and cramming.</p> <p>Develop critical thinking.</p> <p>Apply knowledge and mimic real life.</p> <p>Increase understanding</p>	<p>Are aware of the process of learning.</p> <ul style="list-style-type: none"> • To help with understanding, I put myself (visualised) into the perspective, e.g. I am the audit senior. • Linked the information in the question to what I knew because of the other three subjects (Financial Accounting, Taxation and Management Accounting). • Did homework. • While studying, made quick summaries to test understanding on a specific topic.

Management method	Objective	Traits	Respondents' comments
<p>Prepare own notes –</p> <ol style="list-style-type: none"> 1. During this process, it is important to understand, relate, prioritise and form an idea on how and where to use the specific information. 2. Use clear headings. 3. Notes should be organised. 	<p>Increase understanding</p>	<p>Transform information</p> <p>Keep records</p>	<ul style="list-style-type: none"> • Put information into own words. • Made notes because the work is mostly theory based. • Made standard memo's for questions that repeat e.g. reporting a reportable irregularity. • Made notes for information that I struggled with.
<p>Prepare brief notes (post-its, index cards and/or flash cards) for studying foundation knowledge.</p>	<p>Increase understanding</p>	<p>Transform information</p> <p>Keep records</p>	<ul style="list-style-type: none"> • If there was a difficult paragraph I would make a sticky note with the paragraph number on it, e.g. "Remember S45 CPY Act = also Related parties". This was put on the wall where it was regularly seen so to be constantly reminded of the paragraph. • Kept and updated a <i>Did not know list</i> while working through questions.

Management method		Objective	Traits	Respondents' comments
	Practise for the assessment (homework and assignments).	Develop critical thinking.	Structure their studying environment	<ul style="list-style-type: none"> • Tried to work in a study environment that mimicked the assessment environment. • Performed a post mortem (what went wrong/right analysis) of assessments written. • While doing homework practice to find information in the OBA resource material.
		Develop application of knowledge and mimicking real life.	Rehearse and memorise information	
			Review study records	
Practicalities	Enquire about the examination requirements to be aware of what is going to be tested.	Reduce stress and selective studying ("spot")	Identify information resources.	<ul style="list-style-type: none"> • Used the lecture work program, the Competency Framework and examinable pronouncements issued by SAICA as a guide to what is expected to be assessed. • Focused on questions that are frequently asked. • Prepared a study plan to ensure that sufficient time is available to study for each assessment. • Planned each evening what to do the next day. • Prioritise what to study in accordance to importance. • Prepared a checklist on what to study to ensure nothing was left out.

Summary

Auditing, as with all other fields in accountancy, deals with a constant increase and change of information. Due to this increase and change it is becoming important for students to be able to use and manage knowledge (Heijne-Penninga *et al.*, 2008:264). OBA has become a vital evaluation tool to assess students' high-level thinking abilities such as conceptualising, problem solving and reasoning (Ioannidou, 1997:132). From the results above it can be suggested that students implement the following methods listed below, in Auditing as well as other subjects, to manage their OBA resource material effectively. It has been categorised under general preparation, lecturer and class, homework, resource material, prepare for assessment and during assessment.

General preparation

- With reference to the documents listed below, determine what information is important and when to prepare and study what information:
 - SAICA's Competency Framework
 - SAICA's Examinable Pronouncements (be aware of new standards and legislation).
 - Study guide
- Make notes and summaries (especially for information that needs to be memorised, e.g. general controls) such as:
 - Mindmaps
 - One page summaries
 - Make a post it's and put it up where you can see it frequently.
 - Transfer information into own words to ensure better understanding.
- Keep a "*Did not know journal*", updating it throughout the year.
- When studying visualise the given scenario to assist with understanding.

Lecturer and class

- Guidance, given by lecturer (lecturing or notes), should be used to identify what information should be highlighted, underlined and tagged.

- Attending lectures assist with forming a better understanding of the information.

Homework

- Do homework regularly and as far as possible try to mimic the assessment environment and practice utilising the OBA resource material.
- Use homework to identify what information should be highlighted, underlined and tagged by keeping a look out for questions and key words that repeat frequently.
- Use homework to prepare standard mark solutions that can be used as a structure for answering questions.

Resource material

- Develop and memorise a reference system that is understandable. Do not spend too much time on the system, highlighting, underlining or making tags.
- Use the index of the book or specific standard as a guide to form an overall picture of the information.
- Highlight, underline and tag resource material to locate information easily but do not overdo it.
- Do not tag information that is already known and remove tags that become unnecessary. Fewer tags make it easier and quicker to locate information during the assessment.
- Use colour as a system to highlight, underline and tag:
 - Use the same colour tags for Companies Act sections that relate to each other, e.g. shares. It is best to put these tags close together (e.g. down one side) but not under each other, because then it is not possible to view in one glance.
 - Use a specific colour, e.g. pink, to highlight information identified from suggested solutions. This gives confidence during the assessment.
 - Use a specific colour, e.g. orange, to highlight information that is more important.
- Cross reference information where needed.
- Use the top, side and bottom of the book to add tags. Use the top of the book to mark each standard, act or code. For each standard, act or code use the right hand side of the book,

starting each time at the top and moving down systematically, to mark important information. Keep in mind that the bottom of the book is the closest side to the candidate when writing assessment. Due to this the bottom can be used to tag the most important information, providing quick access.

- Do not over rely on resource material or check every single thing in the resource material.

Prepare for assessment

- Refer to previous assessments to highlight, underline and tag information.
- Refer to previous assessments to identify where more attention should be given to information, focussing on questions that repeat often.
- Practice OBA skills, e.g. search for and locate specific information in the resource material.
- Make a checklist of what to study so that nothing is left out.
- Get a study buddy for emotional and academic support.
- Perform a post mortem (what went wrong/right analysis) of previous assessments written.
- Prepare and manage a study plan to ensure that sufficient time is available to study for each assessment. Keep in mind that certain information is more important and therefore needs more attention.

During assessment

- When planning the solution to a question visualise the given scenario to assist with understanding and conceptualisation.
- Link information in the assessment to knowledge that relates to the other three subjects namely Financial Accounting, Taxation and Management Accounting.

In addition to students using the above methods, lecturers can also refer to these methods as a guide to facilitate students in how to manage their OBA resource material effectively, not only in Auditing, but also other subjects.

CONCLUSION

The aim of this study is to provide best practices on how to manage resources material effectively in the OBA environment with a specific focus on the Auditing field. The literature review focuses on providing guidelines to both lecturers and students on how to manage OBA resource material effectively. It also touched upon the advantages of OBA and the traits of responsible learners. The literature review was summarised and provided to four academic trainees requesting them to provide feedback and examples of methods they implemented to manage their Auditing OBA resource material effectively. The examples and feedback they provided were processed and summarised into methods students can utilise to manage their OBA resource material. However, these methods can also be utilised by lecturers to facilitate students in how to manage their resource material.

Future research could include performing a comprehensive study which includes respondents from more than one university, focussing on how they manage the resource material of all three OBA subjects (Auditing, Financial Accounting and Taxation).

The results of this study assist students in taking responsibility for managing the OBA resource material. It is only once students accept this responsibility that the advantages of OBA will be fully achieved.

Biography

Agarwal, P.K. Karpicke, J.D. Kang, S.H.K. Roediger III, H.L. and McDermott, K.B. (2008). Examining the Testing Effect with Open- and Closed-Book Tests, *APPLIED COGNITIVE PSYCHOLOGY*, 22(7):861-876.

Biggs, J.B. (1987). *Student Approaches to LEARNING and STUDYING*. 1st Edition. Hawthorn: Australian Council for Education Research Limited.

Biggs, J.B. and Tang, C. (2007). *Teaching for Quality Learning at University*. 3rd Edition. Berkshire: McGraw Hill.

Broyles, I.L. Cyr, P.R. and Korsen, N. (2005). Open book tests: assessment of academic learning in clerkships, *Medical Teacher*, 27(5):456-462.

Buzan, T. (2003). *Mind Maps for kids: the shortcut to success at school*. 1st Edition. London: Thorsons.

CDTL (Centre for Development of Teaching & Learning). (1999a). *How to maximise performance in OBEs*, [On-line]. Available from: <http://www.cdtl.nus.edu.sg/publications/obe/how.htm>. (Accessed on 19 August 2003).

CDTL (Centre for Development of Teaching & Learning). (1999b). *WHAT ARE OBEs*, [On-line]. Available from: <http://www.cdtl.nus.edu.sg/publications/obe/what.htm>. (Accessed on 19 August 2003).

CDTL (Centre for Development of Teaching & Learning). (1999c). *WHY HAVE OBEs*, [On-line]. Available from: <http://www.cdtl.nus.edu.sg/publications/obe/why.htm>. (Accessed on 19 August 2003).

Chakravarthi, S. (2010). Analysis of the Psychological Impact of Problem Based Learning (PBL) towards Self Directed Learning among Students in Undergraduate Medical Education, *International Journal of Psychological Studies*, 2(1):38-43.

Cohen, L. Manion, L. and Morrison, K. (2007). *RESEARCH METHODS IN EDUCATION*. 6th Edition. New York: Routledge.

Downey, T. Mort, P. and Fitzimmons, D. (n.d.). *Open Book & Take Home Exams*, [On-line]. Available from: <http://www.lc.unsw.edu.au/onlib/obe.html>. (Accessed on 14 November 2011).

Dunlap, J.C. (1997). Preparing Students for Lifelong Learning: A Review of Instructional Methodologies. (*Paper presented at the National Convention of the Association for Educational Communications and Technology held at Albuquerque on 14 to 18 February 1997*).

Furedy, C. and Furedy, J.J. (1983). *Open Book Examinations: Not an Open and Shut Case But Worth Considering*, [On-line]. Available from: www.psych.utoronto.ca/users/furedy/Papers/te/Obook83_j.doc. (Accessed on 19 November 2011).

Gibbs, G. and Habeshaw, T. (1989). *Preparing to teach*. 1st Edition. Bristol: Technical and Educational Services Ltd.

Göker, S.D. (2006). Leading for Learning: Reflective Management in EFI Schools, *THEORY INTO PRACTICE*, 45(2):187-196.

Gravet, S. and Geysler, H. (2004). *Teaching and learning in higher education*. Pretoria: Van Schaick.

Heijne-Penninga, M. Kuks, J.B.M. Schönrock-Adema, J. Snijders, T.A.B. and Cohen-Schotanus, J. (2008). Open-book Tests to Complement Assessment programmes: Analysis of Open and Closed-book Tests, *Advances in Health Sciences Education*, 13263-273.

Ioannidou, M.K. (1997). TESTING AND LIFE-LONG LEARNING: OPEN-BOOK AND CLOSED-BOOK EXAMINATION IN A UNIVERSITY COURSE, *Studies in Educational Evaluation*, 23(2):131-139.

Kasworm, C. and Hemmingsen, L. (2007). Preparing professionals for lifelong learning: Comparative examination of master's education programs, *High Educ*, 54449-468.

Lamprecht, J. (2011). *THE EFFECTIVE MANAGEMENT OF RESOURCE MATERIAL IN OPEN-BOOK ASSESSMENT BY ACCOUNTING HONOURS STUDENTS IN AUDITING*.

Loi, S.L. and Teo, J.C.C. (1999). The Impact of Open Book Examinations on Student Learning, *New Horizons in Education*, 40(11):34-42.

Loi, S.L. and Yuan, W. (n.d.). *Open-Book Examination*, [On-line]. Available from: http://www3.ntu.edu.sg/nbs/sabre/working_papers/10-98.pdf. (Accessed on 19 November 2011).

LTSN Physical Sciences. (2002). *Designing Assessment to Improve Physical Sciences Learning*, [On-line]. Available from: http://dweb.liv.ac.uk/ltsnpsc/guides/designing_assessment/openbook.html. (Accessed on 19 August 2003).

Maharg, P. (1999). The Culture of Mnemosyne: Open book assessment and the theory and practice of legal education, *International Journal of the Legal Profession*, 6(2):219-239.

McMillan, J.H. and Schumacher, S. (2010). *Research in Education*. 7th Edition. Boston: Pearson.

Mohanani, K.P. (1997). Open Book Examinations. (*Seminar on conducting open book examinations organised by Centre for Development of Teaching and Learning at January 1997.*) National University of Singapore.

NQF (National Qualification Framework). (2011). *What are the Critical Cross-field outcomes (CCFOs) and how do they relate to learning programmes?*, [On-line]. Available from: www.nqf.org.za/download_files/nqf-support/Learning%20Programmes_FAQ_Question_4.pdf. (Accessed on 14 November 2011).

Rakes, G.C. (2008). Open Book Testing in Online Learning Environments. *Journal of Interactive Online Learning* 7(1). www.ncolr.org/jiol/issues/PDF/7.1.1.pdf.

Richards, K. Watson, E. Bulkeley, H. and Powell, R. (2002). Some Ideas and Reflections on Teaching 'Ideas' in Geography, *Journal of Geography in Higher Education*, 26(1):33-47.

Rowlands, J.E. and Forsyth, D. (2006). Open book professional Accountancy examinations, *SAJHE*, 20(5):703-717.

SAICA (The South African Institute of Chartered Accountants). (2010). *Competency framework*, [On-line]. Available from: https://www.saica.co.za/Portals/0/documents/CompetencyFramework_CAs_Summary.pdf. (Accessed on 25 October 2011).

SAICA (The South African Institute of Chartered Accountants). (2012). *Annexure 6 Rules for the academic traineeship programme*, [On-line]. Available from: www.saica.co.za/Portals/0/Trainees/Training/Pages%20to32%20Training%20regulations.pdf. (Accessed on 11 May 2013).

SAICA (The South African Institute of Chartered Accountants). (2013a). *SAICA - Initial Test of Competence: 2013*, [On-line]. Available from: [www.saica.co.za/Portals/0/LearnersStudents/Examinations/Part 1 2013 Stats for%20website.pdf](http://www.saica.co.za/Portals/0/LearnersStudents/Examinations/Part%201%202013%20Stats%20for%20website.pdf). (Accessed on 11 May 2013).

SAICA (The South African Institute of Chartered Accountants). (2013b). *SAICA Accredited programmes*, [On-line]. Available from: [www.saica.co.za/Portals/0/LearnersStudents/documents/List%20of%20accredited%20programmes .pdf](http://www.saica.co.za/Portals/0/LearnersStudents/documents/List%20of%20accredited%20programmes.pdf). (Accessed on 11 May 2013).

SAQA (South African Qualifications Authority). (2001). *Criteria and Guidelines for Assessment of NQF Registered Unit Standards and Qualifications*, [On-line]. Available from: <http://www.saqa.org.za/docs/critguide/assessment/assessment.pdf>. (Accessed on 12 February 2007).

Seattle Pacific University. (2010). *The Center for Scholarship and Faculty Development*, [On-line]. Available from: www.spu.edu/depts/scfd/enews/Friday10_22_10.html. (Accessed on 24 October 2011).

Shine, S. Kiravu, C. and Astley, J. (2004). In defence of open-book engineering degree examinations, *International Journal of Mechanical Engineering Education*, 32(3):197-211.

University of Southampton. (2003). *Being an Independent learner*, [On-line]. Available from: www.studyskills.soton.ac.uk/studyguides/Being%20an%20Independent%20Learner.doc. (Accessed on 1 February 2011).

Wiersema, J.A. and Licklider, B.L. (2008). Developing Responsible Learners: Expectations and Accountability are Crucial, *Journal of Ethnographic & Qualitative Research*, 2(1):212-221.

Zimmerman, B.J. and Pons, M.M. (1986). Development of a Structured Interview for Assessing Student Use of Self-Regulated Learning Strategies, *American Educational Research Journal*, 23(4):614-628.