CREATING SUSTAINABLE LEARNING ENVIRONMENTS FOR A GRADE 10 ACCOUNTING CLASSROOM: A CRITICAL ACCOUNTING APPROACH

by

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DECLARATION

I, Makeresemese Rosy Qhosola, declare that the Doctoral Degree research thesis, **CREATING SUSTAINABLE LEARNING ENVIRONMENTS FOR A GRADE 10 ACCOUNTING CLASSROOM: A CRITICAL ACCOUNTING APPROACH**, that I herewith submit for the Doctoral Degree qualification in Education at the University of the Free State is my independent work, and that I have not previously submitted it for a qualification at another institution of higher education.

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M.R. Qhosola

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DEDICATION

This thesis is dedicated to

Katleho Mosea (My elder son) and

Kgarudi Mogane (My last born)

LIST OF ABBREVIATIONS AND ACRONYMS

ANA	Annual National Assessments
AOS	Accounting Organisation and Society
A=O+L	Assets = owner's + Liabilities
CAPS	Curriculum Assessment Policy Statements
CAR	Critical Accounting Research
CCFOs	Critical cross-fields outcomes
CDA	Critical Discourse analysis
CK	Content knowledge
DBE	Department of Basic Education
DoE	Department of Education
DVD	Digital Video Decoder
FAI	Free Attitude Interview
FET	Further Education and Training band
FSDoE	Free State Department of Education
GAAP	Generally Accepted Accounting principles
GET	General Education and Training band
HOD	Head of Department
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
MBS	Manchester Business School
NAFCOC	National African Federated Chamber of Commerce
NCS	National Curriculum Statements
NSCE	National Senior Certificate Examination
NQF	National Qualifications Framework

PAR	Participatory Action Research
PBL	Problem Based Learning
PCK	Pedagogical Content Knowledge
PTA	Parents/Teachers Association
SAIA	South African Insurance Association
SADC	Southern African Development Community
SAQA	South African Qualifications Authority
SDGs	Sustainable Development Goals
SMT	School Management Team
SuLE	Sustainable Learning Environments
SWOT	Strengths, Weaknesses, Opportunities and threats
T-FORM	Ledger account made simple in a form of a T shape. It's a convenient form to analyse accounts, because it shows both debit and credit sides of the account.
UBD	Understanding By Design
UFS	University of the Free State
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Emergency Fund
USA	United States of America

SUMMARY OF THE STUDY

The way in which accounting is taught in the Grade 10 classroom, presents a challenge to the pedagogical content knowledge. More teacher – centred methods of teaching are widely used, where memorisation with the focus on the examination is common. The textbook is still the primary source of instruction. Content is mainly abstract to which learners struggle to relate, in a way which is meaningful to their lives. The teaching of accounting contradicts with the key documents that are constitutionally derived. The roles of teachers are compromised intensively, in a way that undermines facilitative strategies and the ability to use suitable assessment strategies, which result in unsustainable learning environments. On the basis of the above, the study aims to formulate a strategy to create a Sustainable Learning Environment for a Grade 10 accounting class using a Critical Accounting Approach. In order to achieve this, the following specific objectives were derived to guide the study:

- To analyse and understand the challenges in the creation of SuLE for a Grade 10 accounting classroom
- To explore strategies in the creation of SuLE using the Principles of Critical accounting approach
- To investigate the conditions that make the creation of SuLE through the use of Principles of Critical accounting approach
- To anticipate possible threats to that might hamper the creation of SuLE through the use of Principles of Critical accounting approach
- To identify the indicators of success and lack thereof.

Critical accounting research (CAR) is used as the theoretical framework informing the study. It contains assumptions that guide and direct the thinking and actions taken by the researcher and participants. It is the best-suited theoretical framework for the study because of its recognition that accounting is a social science and not a mere collection of abstract mathematical manipulations or calculative routines. CAR is the lens positioning my stance in relation to the participants in an aspect of the whole study. The critical accounting framework is used for the study since it can offer many opportunities for students to explore and transform their knowledge in a way meaningful not only to them but also to the benefit of society. Furthermore CAR complements the research design and methodology of the study which is the Participatory Action Research (PAR) approach because they are both concerned

about the impact of accounting to the community and society at large. PAR is a philosophical approach to research that recognises the need for persons being studied to participate in the design and conduct of all phases of any research that involves them. It is through PAR that the meetings, dialogues, discussions with the focused groups were conducted, which consisted of lecturers, students, subject heads, coordinators and members of NGO's as well as departmental officials, the results were analysed through Critical discourse analysis since it allowed for the use of text by participants. The study revealed its findings and recommendations as well as conditions that would make the recommendations work, while indicating possible threats and ways to circumvent them and indicators of the successful implementation of the strategy are discussed. Many findings led to the conclusion that the teaching of accounting should be optimal as a result of effective teaching and learning strategies which are learner-centred, promote self-regulated learning, and are compatible with the prescripts of a democratic constitution of the country such as equity, social justice, peace, freedom and hope. The study ends by proposing a strategy to create a Sustainable Learning Environments for a Grade 10 accounting using a Critical Accounting Approach, which include the same components as used in the study itself.

Key terms: Grade 10 accounting classroom, Sustainable Learning Environments Critical Accounting Research, Critical Discourse Analysis, Participatory action research

OPSOMMING VAN DIE STUDIE

Die manier waarop rekeningkunde in die Graad 10-klaskamer onderrig word, bied ‘n uitdaging vir die pedagogiese inhoudkennis. Onderwyser-gesentreerde benaderings tot onderrig word algemeen gebruik soos memorisering van feite met die oog op eksaminering. Die handboek bly die primêre bron van onderrig. Leerders sukkel om sin te maak van die abstrakte aard van die onderrigmateriaal sodat dit sinvol is in hul lewens. Die onderrig van Rekeningkunde is teenstrydig met die belangrike dokumente. Die rol van die onderwysers word gekompromitteer op ‘n manier wat fasiliteringsstrategieë en die gebruik van geskikte assesseringsstrategieë ondermyn en lei tot ‘n onVolhoubare leeromgewing. Op grond van bogenoemde beoog hierdie studie om ‘n strategie te formuleer wat ‘n Volhoubare Leeromgewing (VLo) te skep vir ‘n graad 10 rekeningkunde klas waar ‘n Kritiese rekeningkunde benadering gevolg word. Om hierdie ideaal te verwesenlik, sal die volgende doelstellings as wegwysers vir die studie dien:

- Om die uitdagings by die skep van ‘n VLo vir ‘n Graad 10 Rekeningkunde klas te analiseer en verstaan
- Om strategieë vir die skep van ‘n VLo deur die beginsels van ‘n Critical Accounting benadering te verken
- Om die toestande wat die skep van ‘n VLo deur die aanwending van die beginsels Critical Accounting moontlik maak te ondersoek
- Om moontlike bedreigings tot die skep van ‘n VLo deur die gebruik van die beginsels van Critical Accounting te antisipeer
- Om die aanwysers van sukses of die gebrek daaraan vas te stel

Kritiese Rekeningkunde Navorsing (CAR) word as teoretiese raamwerk in hierdie studie aangewend en dit onderskraag die aannames wat die denke en optrede van die navorser en deelnemers aan die studie beïnvloed. Hierdie is die mees gepaste teoretiese raamwerk omdat dit rekeningkunde as sosiale wetenskap erken eerder as bloot ‘n versameling abstrakte wiskundige manipulasies of berekeningroetines nie. CAR is die lens wat my posisionering ten opsigte van die deelnemers aan hierdie studie bepaal. Hierdie kritiese rekeningkunde raamwerk word aangewend omdat dit studente veelvoudige geleenthede bied om hulle kennis te verken en aan te pas op ‘n betekenisvolle wyse om nie net hulself nie, maar ook die gemeenskap te bevoordeel. Boonop komplimenteer CAR die navorsingsontwerp en metodologie van hierdie

Aksienavorsing projek aangesien beide besorgd is oor die inwerking van rekeningkunde op die gemeenskap, in die kleine en die breë gemeenskap. Aksienavorsing is ‘n filosofiese benadering tot navorsing wat die behoefte van deelnemers aan navorsing om deel te neem aan die ontwerp van, en die uitvoer van alle dele van die navorsingsprojek waar hulle respondente is. Dit is deur aksienavorsing dat die vergaderings, samesprekings en besprekings met die fokusgroepe gehou is. Fokusgroepe is saamgestel uit groepe dosente, studente, vakhoofde, koordineerders, lede van NGO’s sowel as departementele beamptes. Die data analise is gedoen deur middel van Kritiese Diskoersanalise aangesien hierdie metode toelaat dat respondente teks kan gebruik. Daar is bevindinge en aanbevelings sowel as toestande wat die uitvoer van die aanbevelings bevorder. Moontlike bedreigings vir die uitvoer van die aanbevelings word uitgewys met voorstelle hoe die bedreigings omseil kan word en dan word aanduiders van die suksesvolle implimentering van die strategie ook bespreek. Die bevindinge van die navorsing wys dat die onderrig van Rekeningkunde gunstig behoort te wees as gevolg van effektiewe leer- en onderrigstrategieë wat leerdergesentreerd is en selfregulerende studie bevorder. Hierdie strategieë moet saamval met die bepalings van ‘n demokratiese grondwet wat onder meer gelykheid, vrede, vryheid en hoop insluit. Die studie sluit af met ‘n voorstel vir ‘n strategie wat die Critical Accounting Approach gebruik om ‘n Volhoubare Leeromgewing vir Graad 10 Rekeningkunde te skep met dieselfde komponente wat in hierdie navorsing gebruik is.

Sleutelterme: Graad 10 Rekeningkunde klaskamer, Volhoubare Leeromgewing, Critical accounting Research, Kritiese Diskoersanalise, Aksienavorsing

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CHAPTER 1: OVERVIEW OF THE STUDY

1.1. INTRODUCTION

This research study seeks to design a strategy to create a sustainable learning environment for a Grade 10 Accounting classroom. This chapter introduces this initiative with a brief background to contextualise the problem statement. It also provides brief outlines of the theoretical framework, study design, methodology and data analysis.

1.2. BACKGROUND OF THE STUDY

Accounting is frequently viewed as a dry, analytical discipline with very precise answers that are either correct or incorrect. However, nothing could be further from the truth (Ahmed, 1993: 3; Boyce, 2004: 571). Broadbent (2002: 433) argues that accounting is an activity that conventionally involves identifying, collecting, describing, recording, processing and communicating information about the economic events of an entity, in financial terms, to groups and individuals who have a need or right to the information. This is usually assumed to be for decision making purposes and also to contribute to the social welfare of the nation. In South African schools accounting is regarded as a “killer” subject as learners are performing very poorly in the subject. According to the National Diagnostic Report on learner performance (2016: 09), in 2015 only, 140 474 learners wrote the Grade 12 accounting examination, of which only 83 746 learners managed to achieve 30% and above, amounting to 59.6% of all learners participating in that specific examination. The majority of learners who make up this percentage are from former Model C schools and independent schools. The Department of Education (DBE, 2012: 21) has provided documents such as examination guidelines and work schedules in which they clearly outline what to expect and which aspects to cover (DBE, 2012: 24). However, according to diagnostic reports on accounting, among other factors that contributed to a decline in learners’ performance, are the shortcomings in teaching strategies and methodologies applied by teachers, which in many schools resulted in a deficiency in understanding specific subject content (NSCE, 2016:6). It is because of similar reasons that the need for a sustainable accounting learning environment has been highlighted.

This study intends to design a strategy to create a sustainable learning environment for a Grade 10 accounting classroom using principles of critical accounting. Sustainable accounting learning environments are those learning contexts and opportunities where the learning of accounting is optimal as a result of effective teaching and learning strategies that are learner-centred, promote self-regulated learning, and are compatible with the prescripts of a democratic constitution of the country, such as equity, social justice, peace, freedom and hope. Such learning environments for Grade 10 accounting are those where teachers, parents and all stakeholders go the extra mile to encourage collaborative and cooperative approaches and are underpinned by problem-based learning strategies, to mention a few (McPhail, 2001:476). Such learning environments are also compatible with and fostered by principles of critical accounting as a teaching and learning approach (Gallhofer & Haslam, 1997:74). Critical Accounting Research (CAR) focuses on measuring performance, processing and communicating financial information about economic sectors informed by the same founding principles of the constitution mentioned above (Boyce, 2004:575; Els, 2011:47; Gallhofer & Haslam, 1997:74). CAR further insists on ensuring that learners acquire and apply Accounting knowledge and skills in ways that improve their own and others' economic wellbeing, and are simultaneously meaningful (DBE, 2011:4). Furthermore, CAR is compliant with all the critical cross-fields outcomes which emphasise the cultivation of a democratic citizen who can meaningfully work and live with others towards the economic development of the country. Linked to the above are the level descriptors which CAR operationalises as they cascade the critical cross-field outcomes in the Accounting curriculum and classroom at a cognitive level suitable to the learner (SAQA, 2012:2). Derived from the critical cross-field outcomes are the learning outcomes for Accounting, which inform the lesson outcomes by using suitable facilitative strategies that encourage learners' active participation (DBE, 2011:5). CAR further requires a teacher who is a mediator between the intricacies of the curriculum and the learners, who adequately interprets real life for the latter, is a leader in terms of knowledge and skills required, a researcher and a pastoral carer, assesses effectively to enhance learning and a subject specialist. Critical Grade 10 accounting abides by all the steps from the intended curriculum to classroom practice and eventually the assessment, which is in line with the constitution to promote knowledge in local contexts while being sensitive to global imperatives.

1.3. PROBLEM STATEMENT

Emanating from the discussion on the background it is evident that in many countries the manner in which accounting is taught in the Grade 10 classroom leads to pedagogical content knowledge still being a challenge. More teacher–centred methods are widely used, where memorisation with the focus on the examination is common and, furthermore, the textbook is still the primary source. Content is mainly abstract with the result that learners struggle to meaningfully relate it to their lives. The manner of teaching accounting contradicts the key documents that are constitutionally derived. The roles of teachers are compromised in such a way that facilitative strategies and the ability to use suitable assessment strategies are undermined, resulting in unsustainable learning environments.

1.3.1. Research question

'How can we create a sustainable learning environment for a Grade 10 accounting classroom using the Critical Accounting Approach?'

1.3.2. The aim of the study

The aim of the study is to formulate a strategy to create a sustainable learning environment (SuLE) for a Grade 10 accounting classroom using Critical Accounting Research.

1.3.3. The objectives of the study are:

- To analyse and understand the challenges in the creation of SuLE for a Grade 10 accounting classroom;
- To explore strategies in the creation of SuLE using the critical accounting approach;
- To investigate the conditions that foster the creation of SuLE through the use of Critical Accounting Research;
- To anticipate possible threats that might hamper the creation of SuLE through the use of Critical Accounting Research; and
- To identify the indicators of success or failure.

1.4. THEORETICAL FRAMEWORK

The theoretical framework underpinning this study is the Critical Accounting Research (CAR) approach. The researcher works together with other participants in demonstrating the need for formulating a strategy to create a sustainable learning environment for a Grade 10 accounting classroom in order to eliminate a one sided view of determining the need to formulate a strategy (Merino, 1998: 607; Laughlin & Broadbent, 1994: 3; McPhail, 2001: 475). Its purpose is to ensure that the use of accounting does not represent certain interests at the expense of others, especially the marginalised (Dillard, 1991:18; Gaffikin, 2006: 11). CAR helps in determining the conditions under which the strategy could be successful on the basis of multiple realities (Boyce, 2004:569; McPhail, 2001: 475), involving all the stakeholders in ensuring that learners acquire knowledge in a way meaningful to their lives (Ahmed, 1993: 3; Boyce, 2004: 571; Higgs & Smith, 2008: 66).

CAR furthermore encourages a relationship of mutual trust and respect between the researcher and co-researchers. Because of its multi-facetted stance, it also promotes the power of dialogue, where dialogue in critical accounting is motivated by a love for, commitment to, and faith in people, and participants would be characterised by humility and a commitment to the common task of learning (McPhail, 2004: 491). CAR makes it possible to accommodate and discuss the anticipated threats from various perspectives. The researcher's role is to create space and conditions conducive for empowerment, to foster hope and to restore social justice with regard to all participants (Tinker, 1991: 30; Roberts, 1991: 360). Through CAR it is possible to identify the indicators of success and failure because its essence can be best captured through an understanding of its impact on individuals, organisations and societies.

1.5. OVERVIEW OF LITERATURE REVIEW

In order to operationalise the objectives of study, the literature is reviewed from the good practices of *learning* problem-solving skills using indigenous games. The literature reviewed is local, regional (the Southern African Development Community,

SADC), continental and global. Key concepts arise as constructs to be used in Chapter four to interpret the empirical data.

1.5.1. Demonstrating and justifying the need to develop a strategy

While SA policies encourage the creation of sustainable Accounting learning environments and talk about principles of Critical Accounting, current classroom practices regarding the teaching of accounting, especially at Grade 10, reflect the direct opposite (Broadbent, 2002: 433). Teachers are still locking themselves in their own corners, working alone without collaborating with other teachers or any stakeholder with a direct interest, whether they are busy with lesson planning, team teaching or reflection (Rahaman, 2010:421). In these classrooms the surface approach, where memorisation is encouraged, is preferred. Thus, learning of this type is externalized and less related to the learners' daily lives (DBE, 2011: 4; Yosso, 2006: 76).

In addition, more teacher-centred approaches to the learning of accounting are widespread, leaving little room for more learner-centred approaches (Armitage, 2010:4; Laughlin, 1987:479). Furthermore, there is limited use of teaching media and tools, and very high dependency on the textbook approach, which is most often a single view or a general statement giving only general guidelines, in violation of the teacher's roles of doing research, being a leader and providing pastoral care (Ackers & Hardman, 2001:250). In these classrooms the content seems to be far removed from the daily lives of the learners. Moreover, there seems to be inadequate feedback on assessment, in such a way that it limits learners' ability to identify and also alter their gaps (Boyce, 2004: 569; McPhail, 2001: 475). These challenges seem to indicate the ineffective use of the principles of good teaching as closely linked to the NQF level descriptors (SAQA, 2012: 7).

1.5.2. Determining the components of such strategy

In response to the above challenges, the Department of Basic Education placed many schools in South Africa, identified as underperformers in accounting, in a project called *Twinning*. In this project an accounting teacher from a good performing school is placed at an underperforming school to assist with classroom practices including

lesson planning, teaching methods and assessment. However, this leads to another problem as the assisted teachers depend too much on assistance from Twinning (DBE, 2012: 8). In the Free State province all schools with an average below 40% for Accounting partake in a joint initiative by the DBE and the University of the Free State (UFS) where the learners are taught by experts from the university, and also have the opportunity to ask questions via video conference. However, still more is needed as timetable clashes and learners' passiveness are problems (DBE, 2012: 23). Similar strategies have been used in other countries, such as Nigeria's Parents/Teachers Association (PTA), that makes collaborative efforts to improve performance by giving optimal involvement. Parental involvement encourages educators to achieve the set lesson outcomes by using appropriate facilitation strategies and assessment, since teachers account for the performance periodically (Thomson, Smith-Tolken, Naidoo & Bringle, 2010: 2), However, these and many more strategies have not been very successful in the creation of sustainable learning environments (Griffiths & Williams, 2009: 35).

1.5.3. Exploring the conditions conducive to the successful implementation of the strategy

Successful implementation of the principles of CAR requires effective planning, collaboration between teachers with different expertise in accounting, and *Twinning* between schools with different performance levels to share facilitation methods and suitable assessment strategies (DBE, 2012: 8). A strong relationship between the Provincial government and universities in order to bring Information Communication Technology (ICT) to the accounting classroom to enable experts from other institutions to access accounting learners in the classrooms and also alert teachers about the changes in the curriculum, as necessary (DBE, 2013:23; Hooks, 2006: 5). Collaboration between schools and communities are also necessary in order to ensure that parents and educators are aware of the principles of good teaching and realise when critical outcomes and lesson outcomes are achieved in the accounting classrooms (Thomson, Smith-Tolken, Naidoo & Bringle, 2010:2).

1.5.4. Identifying the risk factors that might derail the framework

Threats that could hamper the successful implementation of the strategy could be the lack of commitment from the Districts and SMTs to engage in projects with institutions such as universities. Teachers' resistance to change, especially with regard to teaching approaches, can also hinder success. Time may threaten the implementation of learner-centred approaches as these approaches require more time, but due to work schedules and other guidelines time is limited (DBE, 2012: 24). Poor collaborative efforts between schools can also hamper effective planning, exploration of effective techniques and suitable assessment strategies. Non-compliance with the education policies and documents can shift the focus away from what the constitution strives to achieve with the teaching of accounting (Osuji, 2009:298; Perraton, 2010:4).

1.5.5. Demonstrating the indicators of successes of the framework

There is a need to determine the indicators of success from the best practices in order to use them as guidelines, and to identify gaps in the teaching of Accounting in an effort to justify the need for a strategy. The success of this strategy can be seen through improved Accounting pedagogical knowledge (Broadbent, 2002:433), with learners becoming creative and critical thinkers, which leads to improved education outcomes (Griffiths & Williams, 2009:35; DBE, 2012:8). Where there is optimal involvement by parents and other stakeholders in ensuring that learners acquire and apply accounting knowledge and skills in ways that improve their own lives, others' economic wellbeing are at the same time meaningful (DBE, 2011:4).

1.6. METHODOLOGY AND DESIGN

The study adopts a Participatory Action Research (PAR) approach. PAR is a philosophical approach to research that recognises the need for the persons being studied to participate in the design and conduct of all phases of any research in which they are involved (Kemmis & McTaggart, 2000: 273; McDonald, 2012: 38). During teaching practice evaluation at Botle Secondary School, the principal and a few concerned accounting staff requested the researcher to help improve learners' performance at their school. In response a team consisting of the following participants was established: 6 accounting learners, 2 accounting teachers, 2 accounting education lecturers, the Principal, 3 entrepreneurs, 2 learning facilitators, a pastor, 6

parents, 1 SAIPA representative and 1 NAFCOC representative. All the above were to bring their respective stakeholders' perspective to the discussion of how to improve the school's performance in accounting.

The team formulates a common vision. They brainstorm ideas through an analysis of the Strengths, Weaknesses, Opportunities and Threats (SWOT). On the basis of this SWOT analysis the team is to set priorities. They then use these priorities to design a strategy to improve the learners' academic performance in accounting. The strategic plan includes all identified priorities and each priority is linked to an effective activity that will help the team to realise the priority. The activities are further linked to a participant, who is responsible to ensure their success. All participants are allocated roles. The team identifies resources for that particular activity and time frames are also determined for activities to take place. Monitoring as a means to evaluate progress happens on a monthly basis. The team chooses a coordinating team, which is responsible for creating space for engagements, making it possible to hold meetings and also for the principles of critical accounting to be implemented in the classroom during the pilot teaching session.

1.7. DATA ANALYSIS

Data was generated during monthly meetings held to reflect, re-plan, monitor and adjust activities. All these sessions were videotaped. Data was analysed (transcribed) through the use of Critical Discourse Analysis (CDA) (Van Dijk, 2006: 98). CDA is a field concerned with studying and analysing written and spoken texts to reveal the discursive sources of power, dominance, inequality and bias, and was suitable to analyse the data generated in this research study (Van Dijk, 1993: 250).

1.8. CHAPTER LAYOUT

Chapter 1: This chapter focuses on the introduction, background, problem statement, research question, aim and objectives of the study.

Chapter 2: The literature review is presented in Chapter 2 and outlines the theoretical framework in line with the study.

Chapter 3: This chapter deals with the research design and methodologies used in the study.

Chapter 4: This chapter focuses on the data analysis, as well as the presentation and interpretation of the results, towards designing a strategy for a sustainable learning environment for a Grade 10 accounting classroom.

Chapter 5: In this chapter the conclusions, summary, findings and recommendations for future research are presented.

CHAPTER 2: REVIEWING LITERATURE ON THE STRATEGY TO CREATE SUSTAINABLE LEARNING ENVIRONMENTS FOR A GRADE 10 ACCOUNTING CLASSROOM USING A CRITICAL ACCOUNTING APPROACH

2.1. INTRODUCTION

The aim of the study is to formulate a strategy to create sustainable learning environments for a Grade 10 accounting classroom using a critical accounting approach. In order to achieve the aim of the study, chapter two presents the theoretical framework steering the study. Firstly, we look at critical accounting as the theoretical framework and the historical origin of the theoretical framework is traced. We also look at the objectives of critical accounting research (CAR). Attention is also given to the different formats of CAR, ontology, epistemology and rhetoric of CAR, as a basis for justifying its use towards the operationalisation of the objectives of the study. The chapter looks at the role of the researcher and his/her relationship with the participants in the context of CAR. Operational concepts will be defined and discussed. This chapter also reviews literature on challenges and strategies used by other people in trying to solve the problem. Conditions favouring the formulation of the strategies, threats to their implementation and support to show how they worked are also provided. The purpose is to develop constructs that will help the study interpret and make sense of the empirical data gathered in chapter three and are presented in a meaningful and logical manner in chapter four. Finally, a conclusion will sum up the chapter by restating the aim of the study and chapter as well as highlight important points, as a way of tying up the loose ends.

2.2. CRITICAL ACCOUNTING RESEARCH (CAR) AS THE THEORETICAL FRAMEWORK

In order to achieve the aim of the research, critical accounting research is used as the theoretical framework informing the study (Tsotetsi, 2013: 25), it contains assumptions that guide and direct the thinking and actions taken by the researcher and participants. It is the best-suited theoretical framework for the study because of its recognition that accounting is a social science and not a mere collection of abstract mathematical manipulations or calculative routines (Lowe & Puxty, 1990: 54; Burchell, Clubb, Hopwood, Hughes & Nahapiet, 1980: 6). CAR is the lens positioning the researcher's

stance in relation to the participants in an aspect of the whole study. During my years at the school, the researcher believed accounting was for a particular group of people because of her struggle to relate to it, having been part of the voiceless and marginalised group with accounting that seemed divorced from her daily life. Given this context, CAR has enabled her to understand how issues of unequal power relations, social injustices, inequalities, oppression and a lack of hope may contribute to the alienation of accounting to my lived life. It is through CAR that one comes to an understanding of how ideology functioned to produce oppression and compliance (Mahlomaholo & Nkoane, 2002: 76). The fact that I felt inferior towards accounting, is covered under the use of CAR whereby the oppressed often participated willingly because of a belief system that led them to accept their oppression as natural and unalterable. Gavin (2008: 19-26) calls this a false consciousness of the self and the world brought about by and through distorted ideology that led some people to believe that they are naturally inferior to others, while others, believed in their own superiority (Blomley, 2009: 579). Subheading 2.2 is divided from 2.2.1 to 2.2.8 where it covers the historical origin, objectives, different formats, ontology, epistemology and the rhetoric of CAR as well as the role and relationship of the researcher with his/her participants. It seemed to be the most relevant to use since it enables me to better achieve the objectives of the study.

2.2.1. Historical origin of CAR (Basis for justifying its use towards operationalising the objectives)

CAR falls under the umbrella of critical theory. Critical theory is associated primarily with the German tradition, critical theory developed as a specific school at the University of Frankfurt in Germany in 1923 as the first Marxist–oriented research centre (Higgs, 1995: 3). Critical theory, which is neo-Marxist, is based on the premise that human beings should be free from any form of domination, since it is an infringement of freedom, particularly if it distorts our ability to communicate with and relate to each other (Gaffikin, 2006: 10; Higgs & Smith, 2008: 73). The critical focus was on human needs and suffering and the changes necessary to eliminate human suffering to increase human well-being (Kellner, 2000: 6). Critical theory is a diverse body of thought centred on four key characters – Horkheimer, Adorno, Marcuse and Habermas. Together the above are commonly referred to as the Frankfurt School (Higgs, 1995: 3; Laughlin, 1995: 63). The leader of the Frankfurt School was Max

Horkheimer and he gathered around him Adorno and Marcuse (1895-1973). Under Horkheimer, the institute sought to develop an interdisciplinary social theory that could serve as an instrument of social transformation (Levinson, 2011: 7). The work was a synthesis of philosophy and social theory, combining sociology, psychology, cultural studies and political economy, among other disciplines (Higgs, 1995: 8). They blame modern science for the objectification of the natural and human worlds (Levinson, 2011: 7). According to these theorists, it was as if modern science and the entanglement of science with capitalism and the state government could be deployed instrumentally and ultimately against the very subject of reason – human beings themselves (Levinson, 2011: 7). These theorists were central to the improvement of critical theory aspiring to emancipate the marginalised and the oppressed (Hellner, 2002: 209; Mahlomaholo, 2009: 7). There is a great diversity of thought between the first three proponents mentioned above in contrast to Habermas. The first three lean rather more towards a Marxist position while on the other hand, Jürgen Habermas is a modern critical theorist in post-war Germany, so his work is more optimistic about human democracy in a sense that people should be free from all forms of oppression and rule (Higgs & Smith, 2008: 73). According to Habermas, knowledge is produced by people, for people and is about people and their social and physical environment. Accounting is no different (Chua; 1986: 603; Laughlin, 1995: 64). He looks at the way we communicate with one another and the way we live our lives. Recently the work of Habermas has included ethics, law, the state and politics. He believed that critical theory has to be able to transform through praxis and deconstruction (Higgs & Smith 2008: 73).

The contributions of the above theorists have the common goals and values, which include:

(i) Participatory democracy and self-determination, which are closely related to the study since they are in favour of an accounting that encourages dialogue and uses more learner-centred methods of teaching that encourages construction of own transmission of knowledge from teacher to the learner.

(ii) Social justice, equity and respect for human dignity across the lines of cultural difference: class, nation, race, gender, sexual orientation and age (Chua; 1986: 603; Laughlin, 1995: 64; Levinson, 2011:8). The prescripts of a democratic constitution in which CAR seeks to enhance the teaching and learning of accounting by encouraging inclusivity and accommodation of their diverse needs and capabilities, of balancing the issues of power emanating from their cultural and political environments in their social relations.

(iii) A redistributive, sustainable and community-oriented economy. It may be in the form of wealth or any resources but we may as well refer to it as distributive justice, whose premise is that money and resources ought to be distributed in such a way as to lead to a socially just and possibly more financially egalitarian, society (Rawls, 2001: 67). In capitalist societies, unequal distribution of resources, including income is maintained, in order to have some form of social control (McPhail, 2001: 476). Social control manifests itself through hegemony, which refers to the situation where the group that is under the authority or control of a particular group tends to view the controlling group's ideas and beliefs as true and mostly absolute. Their views resulted from manipulation by the controlling group since it serves the controlling group's status quo (McPhail, 2001: 473). He further argued that schools are to be promoted first and foremost as agents of social control for an increasingly heterogeneous and poverty stricken urban population in an increasingly unstable and threating economic and political system (McPhail, 2001: 477). Accounting education is perceived as part of a broader pedagogical system that provides the workforce with a particular training that instils them with a particular set of knowledge, make up – persona, identity or attitudes to make it work (McPhail, 2001: 474). Accounting may seem to serve the interest of the capitalist since the economic base determines the kinds of uncritical attitudes engendered during the process. Accounting is a subject that is closely allied to the book, where students are supposed to know international accounting standards, as it is said to represent globalisation in the accounting arena. They are taught with the goal of developing the ability to interpret rules and principles and the capacity for analysis and judgement (Gilberto, Silvia & Edgard, 2012: 4).

The nature of accounting requires more attention to the application and interpretation of policies and ethics governing it (Levinson, 2011:8). At the early stage, students learn to study as much as possible sometimes without dialogue and understanding since they need to be labelled as persons who passed and claim to know accounting (Gilberto *et al.,* 2012: 4). From this scenario, one can begin to see how ideology may actually operate in accounting. McPhail (2001: 478) suggests that ideology is materialised in the teacher/student relationship, in the subjects chosen to comprise the syllabus, in the way students may or may not feel free to question the curriculum, in the lack of consideration of non-orthodox issues and in the methods of assessment. It would seem that ideology operates through accounting education not primarily through the cogent way in which students can defend the profit-maximisation system of economics or the ever promoted ways of capitalism but rather in the lack of dialogue or discussion they can provide for what is taken for granted as lived assumptions (Boyce, 2004: 569; McPhail, 2001: 475). Critical theorists strongly believe that education is a potentially liberating activity if parties in the system are striving for a similar agenda not only to leave the less privileged unconscious to have control over and maintain the status quo. According to McPhail (2001: 486) the emancipatory potential of education is a fairy well-established argument in which the educationalists, economists, environmentalists and critical theorists have raised their voices that education should be used in an effort to oppose and limit hegemony and ideological subjugation. Education in which accounting is part would be more emancipatory if the teaching and learning interaction in the classroom, prevails within the conditions where there is mutual respect. Thus, where there is an open exchange of ideas and proliferation of dialogue, while providing students with the lived experience of empowerment (Levitt, 2008: 49).

In this way, the redistribution of resources including wealth and education will lead to a more sustainable economy as more people would be equipped and conscious of finding ways to acquire the necessary wealth. This idea is further supported by sustainable development goals (SDGs), which are action-oriented, concise and easy to communicate, aspirational, global in nature, universally applicable to all countries while taking into account different national realities, capacities and levels of development and respecting national policies and priorities (Lamberton,2005:10). Critical education would be motivated by a love for, commitment to and faith in people

(Benhabib & Przeworski, 2005; McPhail, 2001: 491). Rather than ignorance, the participants in the teaching and learning would be characterised by humility and a commitment to the common task of learning. An education system that is constructed through these conditions tends to involve an increasing inclusiveness within the society rather than withdrawal from it. These conditions and others may satisfy the requirements of the community-oriented economy whereby local resources are used in a way that enhances economic opportunities while improving social conditions in a sustainable way (Neu, Cooper & Everett, 2001: 736, Lamberton, 2000: 586; Higgs & Smith, 2008: 73; Levinson, 2011: 8). Paulo Freire in Higgs and Smith (2008: 74) was amongst many critical theorist who were influential about power relations, he argued in the case of education that students learn to accept the power structure of their society at schools. He argued that education is a tool in the hands of the powerful. The poor child's inevitable lack of success at school (partially as a result of malnourishment) makes him believe he is inferior and must accept his situation in life as a poorly paid manual labourer (Higgs & Smith, 2008: 74). The other critical theorist was Pierre Bourdieu who argued that schools are quite autonomous institutions, which are only indirectly influenced by economic and political power, in that the autonomy of schools enable them to perform an important function within capitalism. This is because their impartiality enables them to serve specific interests yet appear independent and neutral (McPhail, 2001: 482; Higgs & Smith, 2008: 75).

All of these and others that are not highlighted here are referred to as the critical project in which critical accounting research is part. The above goals and values are closely linked to the principles of CAR since they all share a common feeling for accounting education that needs to be considered within a broader societal, economic and political context. The application of the tenets of critical theory to critical accounting implies addressing a redistributive agenda that embraces the requirements of sustainability and has a direct influence or benefit to the community.

Critical accounting research (CAR) originated from the Manchester Business School (MBS) in the 1980s (James, 2006: 645; Laughlin, 1995: 64). There was a distinct cleavage in the accounting discipline; it was paradigmatically separate fields such as positivists and critical accounting research because researchers began searching for alternative paradigms (Napier, 2006: 446). The initial and most prominent alternative paradigm was begun by Anthony Hopwood who founded the Accounting Organisation

and Society (AOS) in 1976 (Baker, 2011). He published positivist and critical research while working at the MBS. He was joined by many influential scholars such as Tony Tinker (a Marxist in orientation),Tony Puxty (a Marxist), David Cooper, Jan Mouritsen and Richard Laughlin, who were a growing network of well-known critical scholars who were associated with the MBS and Sheffield University in the 1960s and 1980s (Baker, 2011: 208).

The group associated with the MBS vastly contributed to the development of CAR. Perhaps the strongest advocates have been Richard Laughlin and Dillard and Jane Broadbent with the approach that is more directed at employing critical theory to solve "real life" accounting problems and issues (Gaffikin, 2006: 10). Their work extended their use of critical theory to include the later work of Habermas, which examines law and communicative action (Gallhofer & Haslam, 1997: 74). Tony Puxty was prominent among those critical scholars who explicitly sought to go beyond accounting in attempting to contribute to the development of an accounting that would be more enabling and emancipatory (Baker, 2011: 208). Since a more critical form of accounting education would conceptualise knowledge as an active tool that students could use to "generate their own meanings" and make sense of their life-world, rather than a set of meanings or perhaps even just words that were deposited in the student (Boyce,2004: 571; McPhail, 2001: 490). Apart from Hopwood's effort, another influence in the development of CAR was by Gibson Burrell and Gareth Morgan in 1979, publishing their book about sociological paradigms and organisational analysis. They argued that most accounting research is functionalist and supportive of the status quo. In addition, they suggested other alternatives of doing research such as critical theory or interpretive alternatives (Baker, 2011: 214).

The other issue for a new paradigm was due to the political context. The political environment prompted accounting researchers to be receptive to critical theories (Baker, 2011: 216). The crisis of oil in the 1970s and Keynesian economics failure brought a crisis of liberal economic and political thought to neo-liberalism. "Neo-liberalism", i.e. monetarism and related theories, has dominated macroeconomic policy-making, as indicated by the tendency towards less severe state regulations on the economy and greater emphasis on stability in economic policy rather than "Keynesian" goals such as full employment and the alleviation of abject poverty (Munck, 2005: 61). According to Munck (2005:61), the possibility of a"self-regulating

market‟ is a core assumption in classical liberalism and an important presumption among neo-liberals. Efficient allocation of resources is the most important purpose of an economic system and the most efficient way of allocating resources through market mechanisms, according to what Munck describes as “neo-liberal economic theories‟. Acts of intervention in the economy from government agencies are therefore usually undesirable because intervention can undermine the finely tuned logic of the marketplace and thus reduce economic efficiency. As “the dominant ideology shaping our world today”, neo-liberalism wields, according to Munck, great power over contemporary debates concerning reforms of international trade and the public sector. The Thatcher government in the UK and the Reagan presidency in the US were partially the result of the oil crisis and failure of Keynesian economics dealing with stagflation (Baker, 2011: 216). Stagflation drives prices up and causes production and economic growth to slow down, leading to stagnation. In other words, stagflation is a situation where inflation is high, unemployment is steadily high and the economic growth rate slows down (Hickel, 2012: 1). The Thatcher government was committed to reforming the public sector in conformity with neo-liberalism principles and opening up the university system to allow other paradigms such as critical accounting research (Baker, 2011: 216). What was felt to be important was not an examination of the details of accounting practices but rather what was happening in the wider society (Baker 2011: 215).This agenda remained central to the critical Accounting paradigm and the accounting impact on society (Baker, 2011: 216).

According to Gallhofer and Haslam (1997: 72), since the 1970s, particularly as one strand of an empirical turn in accounting research, “critical” accounting research has undergone significant growth. “Critical” social analysis has drawn prominently from Marxism, German critical theory and French critical theory to theorise accounting’s social constitution and consequences (Gallhofer & Haslam, 1997: 74). Such research has helped develop and promote a critical understanding of accounting and its interrelations with the context of which it is part (Boyce, 2004: 570). Critical accounting extends well beyond the life of individuals, social lives and the lives of others, including their ideas, hopes and sufferings which are equally important considerations because every person is “a citizen of a wider world” (Forgacs, 2000: 68; Boyce, 2004: 581).

From the above background it can be seen that CAR happens to be a more suitable theoretical framework coaching the study since it recognises that Accounting is a

social science and not a mere collection of abstract mathematical manipulations or calculative routines (Love & Puxty, 1990: 54; Burchell *et al.*, 1980: 6). This can be argued by looking at the positivist point of view. According to Baker (2011: 211) accounting research was dominated by a more positivist paradigm, in particular mainstream accounting research, which was optimised by the work of Paton and Littleton (1940), Edwards and Bell (1961), Ijiri (1967) and Moonitz and Spouse (1962). It originates from the Chicago School under the influence of the positivist economics paradigm, which was developed by Milton Friedman in the 1950s at the University of Chicago (Baker, 2011: 212; Gaffikin, 2006: 3). This university was the place where almost all of the early neo-empiricist accounting researchers were trained (Baker, 2011: 212). Mainstream accounting (also commonly referred to as conventional accounting) works from claims that accounting should be more scientific and practical. It is steeped in the neo-liberal ideology in which the right of individuals and the market mechanisms are fundamental beliefs (Laughlin, 1995: 83). Mainstream Accounting research is dominated by a belief in physical realism – the claim that there is a world of objective reality that exists independently of human beings and that the essence of that reality is knowable within probability (Baker & Bettner, 1997: 295).

From these contrasts, critical accounting can be argued to be a socio-political contextualisation of education within society, organisations and history and the recognition that it is a human endeavour (Armitage, 2010: 5; Laughlin, 1999: 73). It is concerned with how technical matters (accounting principles and reports) affect people and relations between them (Lowe & Puxty, 1990: 55; Els, 2011: 47). The inputs of accounting are human actions and the output of accounting information is likewise a human action. At every turn, in the contextual nature of accounting, one comes across human nature (Lowe & Puxty, 1990: 55). Critical accounting is always contextual, whether at school or as a profession, it is a phenomena which has social, economic and political consequences and needs to be understood (and changed) in this context (Laughlin, 1999: 73). In demonstrating the need for formulating the strategy to create sustainable learning environments for a Grade 10 accounting classroom, it is with CAR that the researcher works with other participants. This eliminates a one-sided view of determining the need to formulate a strategy (Merino, 1998: 607). Critical accounting acknowledges that people are able to recognise, grasp and extend the possibilities contained in every being. It accommodates people's feelings and attitudes and

contextualises the need to design a strategy (Armitage, 2010:5; Laughlin, 1999:73). CAR helps in deciding the conditions under which the strategy could be successful on the basis of multiple realities (Boyce, 2004: 569; McPhail, 2001: 475), involving all the stakeholders in ensuring that learners acquire knowledge in a way meaningful to their lives (Ahmed, 1993: 3; Boyce, 2004: 571; Higgs & Smith, 2008: 66). CAR encourages the relationship of mutual trust and respect between the researcher and other co-researchers. Therefore, because of its multi-facetted stance CAR makes it possible to accommodate and discuss the anticipated threats from different perspectives. The researcher's role is to create a space and conditions for empowerment, give hope and restore social justice to all participants (Tinker, 1991: 300: Roberts, 1991: 360), Through CAR it is possible to identify the indicators of success and lack thereof because its essence can be best captured through an understanding of its impact on individuals, organisations and societies. From this knowledge CAR is the framework that will enable me to realise the objectives of the study.

2.2.2. Objectives of CAR (basis for justifying its use towards objectives)

Critical accounting theory aims to unmask the often hidden interest of those who would seek an unjust allocation of a society's scarce resources, they unmask so that all interest in society can benefit (Laughlin & Broadbent, 1994:3). Unlike the majority of academic disciplines, a body of professional institutions determine a significant portion of the knowledge conveyed to accounting students (McPhail, 2001: 475). One can start from professional committees controlled by accountants to standard setting bodies controlled by government agencies to transnational agencies controlled by large corporations, including private accounting firms. These professional institutions may affect opportunities for democratic control and legitimacy (Cooper &Robson, 2006:416). Given the lobbying by large companies during the development of policies and frameworks (SSAPs and FRSs) by these institutions, it seems reasonable to conclude that powerful multinational companies directly determine at least part of what accounting students are taught (McPhail, 2001: 475). The view is manifested in a teaching and learning approach that centres on passive teaching education and focuses on the transfer of a discrete body of procedural knowledge, including ever-growing technical content (Cooper & Robson, 2006: 416; McPhail, 2001: 475). Its purpose is to ensure the use of accounting does not represent certain interests (the powerful and the capitalist) at the expense of others, especially the marginalised

(Dillard, 1991: 18; Gaffikin, 2006: 11). Conventional accounting supports accounting education that serves the interest of the capitalist because the economic base determines the kind of knowledge conveyed to accounting students and the kinds of uncritical attitudes engendered during the process (Boyce, 2004: 569; McPhail, 2001: 475).

Gaffikin (2006: 10) argues that there are at least four important characteristics of critical accounting. First, it is always contextual. In other words, it recognises that accounting has social, political and economic consequences. Secondly, it seeks engagement, which means that it is always undertaken to change (improve) the practice of accounting to the benefit of the people. Thirdly, it is concerned at micro (organisations) and macro (societal and professional) levels. Lastly, it is interdisciplinary in that it engages with and borrows from other disciplines such as economics because it deals with economic phenomena, even though it deals with it from a different perspective that involves control systems, information processing and behavioural considerations (Baker & Bettner, 1997: 300). It borrows in order to enable accounting to be viewed through other lenses of other disciplines that have a broad social science interest (Roslender & Dillard, 2003: 328).

Among other important objectives, CAR acts as a force for radical emancipatory social change, by making it visible and comprehensible and engendering dialogue and action towards emancipatory change (Gallhofer & Haslam, 1997: 82). This change has its goal in connecting the social, economic and political while transforming situations to overcome felt alienation, dissatisfaction, ideological distortion and the injustices of oppression domination (Kinsler, 2010: 175). A classroom should be a place to question rules and standards, a place to direct, formulate and cultivate character and the ethos of life (Armitage, 2010: 2). Through discussion and debate that highlights learners' viewpoint there is shared power and dialogue among the teachers and learners (Kinsler, 2010: 175). Aliakbari and Allahmoradi (2012: 157) refer to dialogue as a conversation with a focus and a purpose that shows that the object is not the exclusive property of the teacher and knowledge is not produced somewhere in the textbook and in offices and then transferred to the learners.

However conventional accounting provides students with a shallow uncritical attitude towards accounting and the function it performs, so that learners seem unwilling or

unable to critically analyse the function of accounting within society or take such critiques seriously (Boyce, 2004: 583; Armitage, 2010: 3). Teachers can use their authority to create a relationship that in turn enhances an educational relationship that challenges schooling notions of oppressive race, class and gender stereotypes (Neu, Cooper & Everett, 2001: 748).The dialogue becomes the means for the creation of democratic, emancipatory and transformative practices within the sphere of pedagogy and communication between teachers and learners.

Interaction and dialogue in critical accounting acknowledges that transformation is central to emancipatory practices and is central to an individual awareness that the learners exist in and with the world but being knowing subjects who have engagements of a social, political and cultural nature; it nullifies powerful discourses (Armitage, 2010:5). The dialogue in critical accounting is motivated by a love for, commitment to, and faith in people and participants in dialogue which would be characterised by humility and a commitment to the common task of learning (McPhail, 2004: 491).

It is through dialogue that we will be able to analyse the challenges in the creation of the sustainable learning environments for a Grade 10 accounting classroom. Using dialogue decentralises power in which learners are made aware of their wider political, cultural and social context and the impact these have upon educational life and the fact that if taught out of context can lead to alienation (Armitage, 2010: 6). Critical accounting through dialogue returns to the marginalised groups, their lost voices and identities to think about their situations and find out why things are the way they are (Aliakbari & Allahmoradi, 2012:156).

Secondly, to mobilise critical accounting processes by reflecting on the one hand, concern with the production and reproduction of relations empowering the disempowered and on the other, a concern to institute practical support for making judgements concerning democracy (Gallhofer & Haslam, 1997: 82). For accounting teachers, the acknowledged role of accounting in social production and reproduction means that accounting itself is part of an educational project, which aims to change accounting and other disciplines that will interact with other social change, in turn, bringing systematic change to education (Boyce, 2004: 582). CAR objectives are essential to the realisation of the objective of the study since it allows the exploration

of strategies that would enable the production and reproduction of knowledge to the creation of sustainable learning environments (Boyce, 2004: 582 & Broadbent, 2002: 435). Those teachers who fail to consciously make choices between reproducing the system by taking an active role in the creation of alternatives, where the teaching of accounting ensures that learners acquire and apply accounting knowledge and skills in ways that improve their own and others' economic wellbeing and is meaningful at the same time (DBE 2011: 4; CAPS, 2011: 1). These same teachers fail in consciously taking an active role or endeavour in taking pragmatic or pluralistic positions, "championing moderation, consensus and compliance". They tend to act in ways that have the effect of sustaining, protecting and preserving the status quo that is not conducive to sustainable learning environments (Broadbent, 2002: 436). The status quo in accounting classrooms, especially in Grade 10, memorisation is still common practice since more focus is on the examination. CAR argues that teachers at all levels have to be seen at their well-deserved roles of mediators, legitimising the work, being pastoral carers and producers of ideas and social practices while they remember their pedagogical function that is eminently political, social and economic in nature (Boyce, 2004: 583).

The third objective is to seek a renewed identification with the repressed and disempowered (Gallhofer & Haslam, 1997: 81). Based on the understanding that human beings have materialistic and non-materialistic aspirations and recognise the social or community- and environmental–dimension of the well-being of any particular individual, an understanding of people which helps constitute and stimulate a more meaningful and deeper assessment of "value" (McPhail, 1997: 83). Critical accounting would be mobilised to build community and environmental awareness, which revolves around the negative effects stemming from industrial pollution and how it is accounted for in terms of environmental control, monitoring, remediation and public health costs, as well as taking the more serious concern of fostering personal development and growth (Gray, 2013: 464; McPhail, 1997: 84).

In the first place, democratic considerations lead to the broad principle that people have a right to information about that which affects them. As the natural environment and people (to the extent that they might be separable) are clearly affected by

organisational activity – most notably in the pursuit of economic growth and profit – the people are due accountability concerning this effect (Gray, 2013: 464). An environmental account designed to discharge accountability needs to offer an account of the environmental matters implicated in the organisation's activities in as plausible and reliable a manner as possible – as judged by whatever criteria that might explicitly be chosen. This knowledge would then become powerful once it is made up of actions in the creation of the space for emancipation. If people are more knowledgeable socially and even environmentally, it leads to a deeper understanding and assessment of value in fostering personal development and growth (McPhail, 1997: 85). All human knowledge is a social artefact, it is a product of the constituting labour of people as they seek to produce and reproduce their existence and welfare (Chua, 1986: 603). Knowledge is produced by people, for people and is about people and their social and physical environment. Critical accounting seeks to mediate the relationship between people and their needs, for accounting that is sustainable, bearable, equitable and viable in a social, economic and environmental context (Puxty & Lowe, 1990: 60). In a feedback relationship, accounting thought is itself changed as human beings, their environment and the perception of their needs change.

Given this mutually interactive coupling between human, community and the environment, enables us to identify the possible threat that may hamper the realisation of the objectives from working with the community and learning from their aspirations and experiences. Critical accounting would enhance accountability and more generally the process of informing upon actuality, by drawing the attention to negative dimensions of social and organisational functioning (Gallhofer & Haslam, 1997: 81). The latter would reflect a concern to express a critique of the social structure and to counter the institutional constraints, which inhibit an exposure of the interests of the exploited (Gallhofer & Haslam, 1997: 82). Critical accounting acknowledges that people are able to recognise, grasp and extend the possibilities contained in every being. It accommodates people’s feelings and attitudes and contextually and determines the need to design a strategy (Mahlomaholo, 2009: 227).

Fourthly, opening the various sub-systems of society to public pressure by contesting the various hegemonic interests embedded within them makes accounting an instrument of democratic function and takes into cognisance the democratic principles, such as peace, freedom, equality, hope and social justice (Levitt, 2008:48). The South

African government in its way to redress the injustices of the past brought many educational reforms of which the latest is the Curriculum and Assessment Policy Statements (DBE 2011: 4; CAPS, 2011: 1). CAPS' aims are derived from the constitution with democratic principles such as hope, peace, freedom, social justice and equality among others. However, this policy is only symbolic in the sense that schools are still used as the dominant institution in the ideological subjugation (McPhail, 2001:472). Schools, through teaching and learning, should reveal the hegemonic ways in which power operates through accounting education (Morgan, 2006: 2) to illuminate some ways in which schools are used as agents to capitalists and in which interest are served through accounting education.

According to Gramsci (1971, 506) the role of the school and education is precisely the preparatory character which gives it its historical significance to develop, in the exploited, the consciousness (and unconsciousness) which would loosen the hold of enslaving needs over existence – the needs which perpetuate their dependence on the system of exploitation. Without this rupture, which can only be the result of political education in action, even the most elemental, the most immediate force of rebellion may be defeated, or become the mass basis of counterrevolution.

According to Bourdieu, each child inherits from their parents a set of symbols, meanings and values or cultural capital associated with their particular class. However, the conventional accounting education promotes specific ways of speaking, kinds of knowledge and ways of seeing the world that are familiar to families with specific class backgrounds (Boyce *et al.*, 2008: 50). It is an entire body of practices and expectations, over the whole living, our senses and assignments of energy, our shaping of perceptions of our world and ourselves. It is a lived system of meanings and values, which, as they are experienced as practices, appear as reciprocally conforming. In the strongest sense, it is a culture (Armitage, 2010: 10; McPhail, 2001: 474).

As such accounting education could be part of a broader pedagogic system whose historic function has been to help manage the dialectical tension between the accumulation of capital and labour by disciplining accounting from their initial accounting education and ensuring that they do not become a threat to capital (Boyce, 2004: 567). It would seem that conventional accounting subjugates and disciplines learners by providing them with a shallow uncritical attitude towards accountancy and

the function it performs so that accounting students seem unwilling or unable to critically analyse the function of accounting within society or take such critiques seriously (McPhail, 2001: 475). Instead of communicating, the teacher issues communiqués and makes deposits (transferring/transmitting knowledge) which students patiently receive, memorise and repeat. In the banking concept of education, knowledge is a gift bestowed by those who consider themselves knowledgeable upon those they consider to know nothing. The more students work at storing deposits entrusted to them, the less they develop the critical consciousness, which would result from their intervention in the world as transformers of the world (Freire in McPhail, 2001: 487).

Firstly, it transmits a body of technical knowledge required by the capitalist system of production. The process would be seen to be mediated by a specific connection between conventional accounting classrooms and their method of teaching (Boyce, 2004: 565; Chua, 1996:130). It is a mere transmission of education if the preferred methods of teaching are more teacher-centred rather than the methods of teaching that encourages the learning of accounting that is optimal as a result of effective teaching and learning strategies that are learner-centred. Learner-centred methods promote self-regulated learning and are compatible with the prescripts of a democratic constitution (Boyce, 2004: 575, Stillman; 2011: 140; Gallhofer & Haslam, 1997: 74). Secondly, it disciplines learners to respect the system of production: the law, time, honesty, loyalty and private property. From its foundation, learners are made to understand that accounting is only by the book and to follow only policies and ethics in accounting and in this way it discourages dialogue and only trains learners to be unwilling and unable to critically analyse the function of accounting within society.

McPhail (2001: 477) also contributes towards our understanding of how the teaching of accounting, as part of an ideological state apparatus, may operate hegemonically. He further contends that frequently ideology comes from hidden arrangements and formations and can sometimes take shape of a language, practices and social structures. Ideology is therefore unconscious. Thus, according to Althusser, ideology is more a matter of lived relations than true or false representations of reality. He further suggested that ideology exists materially in the language, practices, routines, techniques and architecture of education. Ideology is materialised in education in the teacher/learner relationship, in the subjects chosen to comprise the syllabus and in

the method of course content. It is also materialised in the methods and strategies of teaching, in the way students may or may not feel free to question the curriculum (McPhail, 2001: 478).

From personal experience, accounting education seemingly does not operate through the cogent way,in the sense that students can defend the profit-maximising objective of business or articulate the function of accounting within a free-market system of economics. Rather, it is the lack of discussion that provides quite obviously taken for granted yet lived assumptions that may lead to a more cogent way of operation. (Boyce, 2004: 568; McPhail, 2001: 480).

The fifth objective of CAR is to enhance the pedagogical knowledge and form of informing and sharing insights as to possibilities and potentialities consistent with a critical theoretical perspective. This is against the use of schools being promoted primarily as agents of social control for an increasingly heterogeneous and poverty-stricken urban population in an increasingly unstable and threating economic and political system.

McPhail (2001: 480) suggested that conventional accounting education initiates learners into the values and language of profession, rhetoric of scientism and positive epistemology, a vocabulary characterised by a sense of objective truth. Accounting education imparts learners with a body of knowledge, which they are expected to refer to in order to make sense of their actions within specific contexts (McPhail, 2001: 480). McPhail calls this body of knowledge, a special rhetoric, a vocabulary of motives and justifications and a distinct methodology, which is used for ascertaining facts. According to McPhail (2001: 481), the language of accounting would be seen to serve a specific function within the subjugation of accounting students. It is manifested through the methods of teaching, where accounting teachers are faced with a common dilemma today. That dilemma entails whether they should focus on the “correct procedure” and “cover” the majority of the text material or adopt themes that more deeply address multiplicative views of knowledge (Bonk & Smith, 1998: 298). In effect, the philosophical question confronting accounting teachers is whether they view learners as receivers of knowledge or as knowledge constructors. Teachers’ inadequate pedagogical knowledge contributes to this confusion. The teacher acts as the central authority with ready answers to all questions and problems. In accounting

classrooms, textbooks are presented to learners as a “truth serum” to ready them for the fact-finding questions of examinations (James, 2007: 649).

Learners who find it difficult to make sense of accounting concepts such as profit, assets or accountability may therefore not be “unintelligent”, rather they may come from social backgrounds that do not possess the requisite grammar that helps them to see particular situations (McPhail, 2001: 481). However, by examining and labelling them as ignorant and encouraging them to see their view of the world as intellectually inferior rather than alternative and politically different, education may help mediate the tension between capital and labour in a hegemonic environment (McPhail, 2001: 482). The accounting education process promotes ways of speaking, kinds of knowledge and ways of seeing the world that are only familiar to families with specific class backgrounds. Thus, some students are specifically disadvantaged (Bonk & Smith, 1998: 269).

Accounting is taught hurried coverage of information with learners assessment based on the ability to reproduce correct answers and apply standardised procedures in independent testing situations (Bonk & Smith, 1998: 268). This puts huge pressure on teachers to place developmental efforts upon learners by using education as an agent of emancipation, rather than of domination (James, 2006:649). McPhail (2001:482) contents that schools are quite autonomous institutions, which are only indirectly influenced by economic and political power. Indeed, the autonomy of schools enables them to perform an important function within capitalism. This is because their impartiality enables them to serve specific interests yet simultaneously appear independent and neutral (James, 2006: 649).

The sixth objective is to explore the possibilities of connecting accounting to the ordinary feelings and experiences, which learners have in their lives outside the classroom, thereby experiencing the lived reality and bringing the historical and contemporary social underpinnings of accounting practice into the classroom (Boyce, 2004: 575). CAR would involve trying to engender a critical reading of learner’s existential situation, which would allow them to develop their own frame of reference while simultaneously being aware of its contingency (McPhail, 2001: 488). It will involve encouraging them to play a more active part in their becoming using more

learner-centred methods that encourage problem-based learning and critical thinking (McPhail, 2001: 489). Critical accounting should provide an opportunity for learners to develop their ability to think critically about the system in which they would one-day work and question the way in which they are supposed to contribute to an ethical and just society (Armitage, 2010: 3). A significant amount of critical accounting theory asks questions regarding where powerful discourses in organisational settings are and how those who communicate their lived experiences in oppressive cultures and environments can change their situation by means of emancipatory practices and political action. Thereby they are not simply recognised as mere units of production or faceless and voiceless objects behind the data on a balance sheet (McPhail, 2001: 488).

2.2.3. Different formats of CAR (basis for justifying its use towards the objectives)

Lodh and Gaffikin (1997: 436) argue that the information produced in accounting cannot be viewed as value-free and neutral. This suggests that neither accounting nor organisations can be isolated from the social contexts in which they exist. Therefore, it becomes necessary in accounting research to consider a broader framework, which should ultimately provide a richer methodological basis for enhancing our understanding of how accounting works in practice (Levinson, 2011: 8). To date, a diverse range of theoretical and methodological underpinnings has been brought into the critical accounting research arena in order to investigate how accounting is related to society, politics and organisational functioning (Lodh & Gaffikin, 1997: 436). There is a common agreement among critical accounting researchers in their rejection of "functionalist" thinking that is said to be unable to account for social change and that is widely criticised for its ignorance towards inequalities including race, gender and class, which causes tension and conflict (Holmwood, 2006: 130). It would be wrong to see the alternative approaches, which they advance as some homogeneous set (Lodh & Gaffikin, 1997: 436). To see it as genuine heterogeneity could have many positive consequences for accounting research. It could offer us possibilities for developing truly novel propositions and research agendas as we would be allowed to think freely and it would arguably lead to the requisite intellectual variety needed in an ever-changing world. It would also permit a multi-vocal need as a principle of freedom (Lukka, 2010: 113). It is however important to remember that this multi-vocal need is

made under the auspices of CAR and is made from the premise that accounting is a discipline of the social sciences. Therefore, it seemed important to us to understand it in the context of a broader set of discourses from the social sciences (Baxter & Chua, 2003: 98).

The formats of CAR are outlined in three identifiable streams with regard to the relevance of each in the study. The relevance is closely linked to the examination of the social, economic and political context and the recognition of the role of power and conflict (Cooper & Hooper, 2007: 208). Post-structural theories, critical realism and the radical alternative are the three streams.

Post-structural theories in this study acknowledge the postmodern writings, such as Foucault and Latour because of their dominant influence in postmodernism in relation to accounting. They examine power, human subjectivity and knowledge to reconsider strategies for human emancipation (Cooper & Hopper, 2007: 212). The influence of the late French sociologist, Michel Foucault has been pivotal in generating the so-called new histories of accounting, following the theme of "archaeology", the new histories' outline and examining the conditions of possibility – "the social and organisational practices and bodies of knowledge" (Baxter & Chua, 2003: 101). Foucauldians point out diversity of influences on developments and how modes of rationality, ideas and diverse practises are embedded in power knowledge relations (Cooper & Hooper, 2007: 219).

Foucauldian accounting history using the strand of archaeology is considered the most "critical element" of Foucault's work as is his analysis of mechanisms of power for discipline and control in modern institutions (Cooper & Hopper, 2007: 212). He emphasises archaeological systems of thought and knowledge (epistemes or discursive formations) are deemed not as rules of grammar or logic but ways of governing consciousness that preclude other possibilities (Baxter & Chua, 2003: 102). This is essentially a product of the discourse that justifies disciplinary power in a particular period, accordingly truth emanates from discourse, which frames the operation of power (Baxter & Chua, 2003: 102).

Foucauldian accounting researchers view modern accounting as programmes or techniques to render subjects visible and governable following shifts from sovereign to disciplinary power post-enlightenment (Cooper & Hopper, 2007: 212). Power

relations in accounting emanate from shifting patterns of thought and ideas that influence the conception of accounting. Archaeological methods trace how complex webs of discourses and practices within particular legal and institutional circumstances legitimate the accounting methods of firms and states within programmes to govern organisations and society. For example, traces of how accounting education growth stems from moral discourses and the rise of middle class beliefs on how education, firms and society should be run, not economic and political imperatives (Cooper & Hooper, 2007: 220). Their critical trends are based on the historical method, the philosophy of history and the philosophy of culture, understanding culture as the connection among science, technique, economics, politics and morality (Vicencio, 2012: 734). On the other hand, there is a connection between history and philosophy of ethics. Foucauldians argue that if the latter underestimate historical developments, it moves away from reality, therefore, the philosophy of history represent against ethics, the beginning of reality (Vicencio, 2012: 734). Foucault's greatest contribution in accounting is explaining how "the will to exercise dominant control in society and history has also discovered a way to clothe, disguise, ratify and wrap itself systematically in the language of truth and discipline, rationality, utilitarian value and knowledge" (Baxter & Chua, 2003:103).

On the other hand, followers of Latourian theory (Michel Callon, Bruno Latour and John Law) are concerned with understanding technologies in the context of networks of human and non-human 'actants'. It can technically be described as a material-semiotic method. This means that it maps relations that are simultaneously material (between things) and semiotic (between concepts) (Baxter & Chua, 2003: 102). Actants denote human and non-human actors and in a network take the shape that they do by virtue of their relations with another. It assumes that nothing lies outside the relations and there is no difference in the ability of technology, animals or other non-humans to act (and that they are only enacted alliances). It assumes that many relations are material and semiotic especially in accounting. It is argued that accounting numbers are "fabrications" or inscriptions built to take on the appearance of 'facts' (Baxter & Chua, 2003: 101). It is believed that it is the people who make up accounting numbers in specific ways to try to achieve certain objectives (Albu, Albu & Guinea, 2010: 12). Latourians search to understand how certain realities came to exist in a socially constructed manner and how different actors influenced the process. This

process is referred to as “fabrication” in the sociology of Latour (Albu *et al.,* 2010: 13). Latour examines the production of technology, its nature and the process of fabrication. In accounting, such technologies are considered budgeting systems and costing systems (Baxter & Chua, 2003: 103). Latourians argue how the process of fabrication is related to how unspecified social, political and economic conditions enable some weak, hesitant possibilities. Some of them emerge because of the convincing arguments through rhetoric or experiments and an increasing mobilisation of allies and resources (Albu *et al.,* 2010: 12).

However, it is acknowledged that the approaches are a loose amalgam of approaches adopting post-structural emphasis on subjectivity and identity discourses and social reality is fragmented (Cooper & Hooper, 2007: 219). The study emphasised how these two writers analysed mechanisms of power, constructions of identity and local and specific interventions to improve the human condition. The above introduces the approach under the umbrella of critical theories in accounting and claims to move towards a paradigmatically consistent research approach, critical realism.

Critical realism is an approach to the philosophy of social science advocated centrally by Roy Bhaskar. Other contributors include Margaret Archer and Andrew Collier (Brown *et al*, 2015: 774). The ontological position advanced by Archer provides for a multi-layered analytical perspective affording equal attention to social structures and the more subjective processes whereby individuals deliberate on their position in the world and develop strategies for emancipation (Brown *et al*, 2015: 775).

Critical realists argue that accounting education or the accountancy profession would continue to exist if teachers and accountants continued their activity but it is not true to say that those teachers and accountants living today created accounting. Rather they reproduced and transformed the existing education and profession, they refer to this process as the transformational model of social activity (Modell, 2015: 32). Critical realism points to the error of reification in suggesting that the accountancy profession exists independently of conscious human activity and also refers to the error of voluntarism in arguing that the profession is the product of human activity (Easton, 2009: 120).

The education and profession provides the conditions for necessary intentional human activity by accountants. People in their conscious human activity for the most part

unconsciously reproduce or transform the structures that govern their substantive activities of production (Easton, 2009: 121). This synergy between critical realists who postulate that education and accountants reproduce and occasionally transform the accountancy profession that governs their activities and critical accountants who recognise that the social condition and social consequence are part of the same reality (Bisman, 2010: 16). Critical realists argue that their transformational model generates a clear criterion for historically significant events, those that initiate or constitute rupture and mutation or transformations in social forms (Modell, 2015: 34). This emphasis on material continuity is said to sustain a concept of change and a historically grounded social theory of the way societies and institutions have emerged and can be understood in line with the critical tradition (Bisman, 2010: 16; Easton, 2009: 122). Since critical realism has its origins in the socialist tradition, it is explicit in acknowledging the Marxist influence as part of a project for socialism to become the enlightened common sense of our age (Bhaskar, 1998: 71). Critical realism is considered one of the vehicles for a project of "human self-emancipation". The emancipation is closely looked at by the radical alternative approach, which is commonly referred to as critical accounting research.

Radical alternative is best chosen for this study because it links accounting with the politics of emancipation. The radical alternatives draw on the ideas of Marx, the Frankfurt School and the labour process literature that highlights how the practice of accounting is implicated in the creation and perpetuation of an unequal society (Baxter & Chua, 2003: 99). Such an unequal society is a concern for the writers of radical alternatives since not all the people have equal life chances (Baxter & Chua, 2003: 99). Resources (such as justice, education, and health care, for example) are not distributed evenly or based on need. The radical alternative is deeply concerned by these disparities between resources and needs for two key reasons, firstly, it is argued that inequality undermines social stability by promoting deep-seated forms of conflict and repression. Secondly, people in the organisation and society (unwittingly), internalise and accept values that reproduce an unequal society (Baxter & Chua, 2003: 89).

Habermas, a leader from the Frankfurt School and a critical theorist, established a radical version of communication based on genuine consensus that acknowledges power and disadvantages of modern societies (Cooper & Hooper, 2007: 211). His

theory of communicative action explores conditions that permit people to understand, agree and plan for action. The theory matches the study since it allows people to voice and acknowledge them as thinking beings who can make decisions about their conditions (Roslender & Dillard, 2003: 334). The other critical theorist whose work is closely looked at is Pierre Bourdieu, who was a French philosopher. He expands the analysis of capital and social reproduction by focusing on cultural features of modern life, emphasising critical reflexivity, stresses the importance of recognising actors and develops a theory of politics to facilitate human emancipation (Cooper & Hooper, 2007: 211). Both Habermas and Bourdieu argue that contemporary society is weakened by major institutions such as the market, education as part of state institutions and organisations that employ a strategic and instrumental rationality that supplants the logic and modes of rationality of the life-world (Cooper & Hooper, 2007: 213).

The radical exploration of such conditions may possibly enable accounting. Accounting, especially in education, is critical or enabling if it aims to open up and extend a debate further on how accounting could be mobilised to promote "social betterment" – welfare, justice and emancipation. Its concern is to explore and promote the notion of accounting in the classroom that would be enabling (Roslender & Dillard, 2003: 341). The important characteristic of such accounting is its ability to act as a force for a radical emancipatory social change through making things visible, comprehensible and helping to engender dialogue and action towards emancipatory change (Cooper & Hooper, 2007: 212). It is from this premise that CAR becomes relevant to this study because it also enables a reflection of our critical theoretical stance.

Although dissimilarities among these diverse perspectives exist, a common feature amongst the authors of this tradition is that they share a common feeling for accounting research in that it needs to be considered within a broader societal context and the development of theory needs to be considered open and refutable (Lowe & Puxty, 1990:62; Laughlin, 1999: 74; Lodh & Gaffikin, 1997: 438).

2.2.4. Ontology of CAR (basis for justifying its use towards objectives)

Differences in perspectives on what is real are determined by diverse values and life experiences. In turn these values and life experiences are often associated with differences in access to privilege, based on such characteristics as disability, gender,

sexual identity, religion, race/ethnicity, national origins, political party, income level, language and immigration or refugee status (Mertens & Wilson, 2012: 172). Therefore, ontology is the study of what there is in the world (Murray & Ozanne, 1991: 132). Ontological assumptions are concerned with what we believe constitutes social reality. In CAR, different versions of reality are acknowledged because human beings are greatly influenced by the society in which they live and the context in which they work (Higgs & Smith, 2008: 69). Everything is because of what it is and not what it is not (its potentiality). In particular, human beings are not restricted to exist in a particular state. Their being and their environment is not exhausted by their immediate circumstances. Instead, people are able to recognise, grasp and extend the possibilities contained in every being. It is quality, which distinguishes a human being as a universal, free being (Chua, 1986: 619).

Ontologically critical accounting provides for multiple realities representing the economic and social world. It offers multidisciplinary objectives in freeing human potentiality by dealing with the systems of domination, which alienate people from self-realisation (Baker & Bettner, 1997: 295; Chua, 1986: 619). These systems of blockages operate at the level of consciousness and through material, economic and political relations (Chua, 1986: 619). Its objective is to make people conscious of material blockages at the economic and political relations and mostly ideological subordination that leads to the acceptance and belief of a particular social practice (Laughlin, 1995: 83). The way to attain such an objective is by allowing society to be part of the solution by working or interacting with them as humans and in the context of this study as co-researchers because once they become conscious of how the system of domination operates they learn to spot it in action and resist it (Higgs & Smith, 2008: 71). Society is present in human action and human action always expresses and uses other social forms. Society or human beings should not be treated as natural scientific objects because they are self-interpretive beings who create the structures around them, thus the nature of reality is socially produced through social interaction.

As such, the underlying substance of accounting cannot be obtained through an ever more sophisticated elaboration of quantitative methods. Its essence can best be captured through an understanding of its impact on individuals, organisations and societies. It strives for equal apportioning of resources to everybody to actively pursue

social justice and facilitate social change (James, 2008: 645; Levinson, 2011: 8). It is with this in mind that critical theorists believe that all knowledge about the world is subjective (O'Regan, 2003: 113; McPhail, 2001: 473; Neu *et al.*, 2001: 736).

2.2.5. Epistemology of CAR (basis for justifying its use towards objectives)

The need to understand the reality or external world entails a scrutiny of a pre-understanding of the world, i.e. epistemological assumptions. Epistemological assumptions decide what counts as acceptable truth by specifying the criteria and process of assessing truthful claims (Chua, 1986: 605). It is a theory relating to the study of the nature and grounds of knowledge especially with regard to its methods, validity, scope and the distinction between justified belief and opinion (Lofgren, 2013: 1). It is also referred to as theory of knowledge.

Critical accounting research is explicitly radical, politically and socially engaged. CAR is a set of discursive practices embodying a radical epistemological state, which questions objectivity in the first place, finds an accurate representation an impossible goal and seeks alternative descriptions for accounting education's purpose and accounting's role in society (Roslender & Dillard, 2003: 339). It seeks to identify the foundations of accountancy and accounting education - its underpinnings, its axioms, who it speaks for and perhaps more significantly those whose voices it excludes and what it has been developed to do (Roslender & Dillard, 2003: 334). CAR must be contextual, recognising the social, economic and political context, consequences and change emanating from evaluation made possible by the critically motivated understanding (Gaffikin, 2006: 9). Critical theorists argue that there is no such thing as objective truth. There are only opposing claims by different groups of people, all of whom are seeking various forms of power (Higgs & Smith, 2008: 66). Truth is created and uncreated by human beings and often it serves the status quo (Higgs & Smith, 2008: 66). CAR recognises that truth is not singular but that it is as multiple as there are people involved.

Some essential characteristics of critical theory are its rejection of positivism (conventional accounting) as the sole arbiter and generator of knowledge largely because of its lack of self-reflection, which leads it to reduced epistemology to a crudely mechanical methodology (Gaffikin, 2006:9). It argues that there is no world of observation that is separate from that of theory and the former may not be used to

attest to the validity of the latter, which is the rejection of empirical testability (Chua, 1986: 607). Empirical testability has two consequences. First, it leads to the search for universal laws or principles from which their lower-level hypotheses may be deduced. To explain an event is to present it as an instance of a universal law. Second, there is a tight linkage between explanation, prediction and technical control. Indeed the possibility of control and manipulation is a constitutive element of this image of empirical testability (Chua, 1986: 610). It is within such a premise that CAR sees the role of positivism as reducing knowledge to science only as it inevitably becomes no more than a tool in the hands of those technical manipulative forces that control and dominate society (Higgs & Smith, 2008: 67).

CAR rejects the value-freeness, value-neutral or objectivity in conventional Accounting by claiming to be representing reality as is but in fact, they are subjective constructors of reality presenting and representing the situation in a limited and one-sided way (Baker & Bettner, 1997: 298). The “value-free” stance is that accountants should deal only with observations of the most efficient and effective means of meeting the informational needs of a decision-maker but should not be involved themselves with moral judgements about the decision-makers’ needs or goals (Baker & Bettner, 1997: 298). This supposedly neutral position is itself a value position by recognising that the very distinction between fact and value is itself a value judgement. CAR recognises that all ideas come from human beings and are influenced by the world they live in, so neutrality becomes a worrying factor since it can be a mistake to assign tremendous importance to any one idea, including scientific ideas because all ideas are produced by human beings living within certain social circumstances (Higgs & Smith, 2008: 68). Therefore, an individual opinion is formed to a degree by their belief system and the culture to which they belong and it means the support for a neutral stance helps to legitimise extant relations of exchange, productions and forms of suppression (Chua, 1986: 611).

2.2.6. Role of the researcher (basis for justifying its use towards objectives)

My role is to create space for a joint formulation of the strategy to create sustainable learning environments for a Grade 10 accounting classroom (Mahlomaholo, 2009: 227). The researcher and the participants in this study act as equals, who think, interpret and create meaning reciprocally towards the achievements of the goals set

under the objective of the study (Kemmis, 2013: 271). The role of the researcher is the most important research instrument to lead the study and to manage the research study programme. The researcher has the task of interpreting other people's interpretations (Rosenthal & Khalil, 2010: 72). Because of his leadership role, the researcher will identify relevant key stakeholders to take part in the study (Wicks & Reason, 2009: 251). In this case, the participants come into the study with a vision and hope for improved learning attributions at their respective schools. The accomplishment of this exercise can be measured against the participants' free consent to participate, as they are free to withdraw their participation at any stage of the study. The study's coordinating team's development and commitment is to its performance. This implies that stakeholders such as parents, teachers and learners work together, engage one another and collaborate. The team is engaged through collectively reflecting and conducting situational analysis to practically identify challenges and problems necessitating the development of the strategy being proposed in this study (Nkoane, 2006: 57). These will form part of the role of the researcher when he advances the liberation and emancipatory agenda through research that advocates for freedom from distorted modes of meaning construction. Therefore, managing all operations of the study as determined and agreed upon by all involved stakeholders and learner participants.

2.3. THE RELATIONSHIP WITH THE PARTICIPANTS

CAR emphasises that participants cannot be treated as natural scientific objects. From a CAR perspective, I am a co-researcher similar to other participants because it recognises that accounting has social, political, cultural and economic consequences and allows multiple realities in this regard (Baker & Bettner, 1997: 302). The initial interaction between the researcher and participants is to establish a relationship built on trust, humility and mutual respect, achieved through openness in communication (Strickland, 2006: 221). Therefore, the interaction between the researcher and the participants is in the form of a dialogue is important, since it will provide an opportunity, to try to empower stakeholders involved as a way of paving the path to be able to work with the primary researched subject.

The researcher must not be arrogant but should strive for humility in engaging participants, which calls for the acknowledgement of them as partners and equals with

a meaningful contribution to make (Boog, 2003: 435). The participants' diverse experiences, knowledge, cultures, belief systems, socio-political variations, and economic status are viewed as complementary and are considered more important as a whole than the sum thereof. The researcher should be open to suggestions and be willing to give up the idea of control as a way of depowering while empowering others (Fournier *et al.*, 2007: 6). However, depowering does not mean the researcher should be in a comfort zone, he must be rooting beyond just observing individuals in their natural or social settings and attempt to break barriers through dialogue thereby motivating the learners to take charge of their own learning (Kincheloe & McLaren, 2002: 98). The collaboration between the researcher and participants will refurbish the educational role of conventional accounting with its underpinnings being socially exclusive through their linguistic codes that are divorced from the marginalised. The relationship intended to improve individuals' quality of life for their betterment by enhancing trustworthy communication and confirming their knowledge is powerful to the goal of enabling accounting.

2.4. RHETORIC/LANGUAGE OF RESEARCH

The language is considered important within CAR since it becomes a basis for building the relationship of mutual trust, humility and care (Mahlomaholo & Netshandama, 2012: 40). It is for this reason that CAR supports that any research that involves humans should avoid a language that tends to use connotations of reducing people into objects, numbers or sub-humans. It recognises indigenous people and their language in research. Where necessary an interpreter may be employed for the smooth running of meaningful conversations (Strickland, 2006). The benefit derived from this type of treatment is that the participants and co-researchers take ownership of their problems and together work towards finding solutions. The researcher must always be humble by depowering himself to make the co-researchers feel equal thus, accommodating the diversity of all participants irrespective of their background (Sanginga, Kamugisha & Martin, 2008: 696). The purpose of equal treatment emanates from the human and humane natures of critical theory towards people, the speaking beings (Ledwith, 2007: 599).

2.5. Definition of operational concepts

This section defines and discusses operational concepts that are used in the study. The operational concepts are defined and discussed for ease and for smoothing readerships. This also helps with the facilitation of convergence of thought and subsequent action. However the main reason is to assist in achieving the objectives of the study. The two main concepts are strategy to create sustainable learning environments and Grade 10 accounting classroom.

2.5.1. Strategy

According to *Free Merriam-Webster* (i.world.com/idictionary/strategy) strategy is defined as a careful plan or method for achieving a particular goal usually over a long period of time. They further discussed it as the science and art of employing the political, economic, psychological and military forces of a nation, to afford the maximum support to adopted policies in peace and war. *Penguin dictionary* (2004: 1392) on the other hand says it is long-term planning in the pursuit of objectives… A plan or method devised to meet a need. Both definitions are confirming the need to design the strategy in this study because the definition relates to the context in which the study operates politically, economically and socially in which psychology and word nation are encompassed. It emphasises the necessity of solving the societal issues within these contexts. The second definition supports having a careful plan to achieve the objectives of the study and it will therefore complement the needs identified in the study. This calls for the planner to be cautious at the planning stage because this is perhaps the most important stage where the needs are identified, objectives and risks are measured and approaches are defined. Therefore, if this is not done well, it could hamper the success of the strategy in realising the stated objectives of the study.

2.5.2. Conceptualisation of strategy

Hall (2008: 150) argues that for a strategy to be successful it must begin at the operational level and be moulded to suit the needs identified. The strategic theorist in accounting simply refers to their approach as strategic management accounting, as the strategy requires accountants or teachers to embrace new skills by extending beyond their usual areas and co-operating more with general management, corporate strategists and the average person. The average person may not have an image of an accountant but his knowledge is vital for forecasting and goals attainment (Roslender

& Hart, 2003: 258). They further attest that to understand the benefits sought by the customer it is necessary to look outside of the business and co-operate with them. This is in line with CAR, which emphasises the need to collaborate with people when dealing with issues that affect them because these very same thinking beings are the ones with solutions.

The above view is supported by Carter, Clegg and Kornberger (2010: 577) that strategy should be studied from a sociologically informed perspective where society is viewed as an eye opener, innovates and offers a long standing pathway between planning and end results. The importance of society's role, its voice and way of living in accounting re-define the strategy in a line with the principles of CAR. These theories in praxis could lead to consensus between theorists and profit-seeking corporate managers for an accounting that is enabling and emancipatory.

According to Yarger (2006: 6) "strategy assumes that while the future cannot be predicted, the strategic environment can be studied, assessed and, to varying degrees, anticipated and manipulated," therefore strategy opens the mind of those involved to the possibilities and forces at play, prompting them to consider costs and the risks of their decisions. In this way, strategy provides a platform to interrogate the objectives of the study, namely the need, components, conditions, risks and implementation thereof. In this study strategy offers an exact and coherent basis for investigating social phenomenon, the strategy becomes a blueprint for bridging the gap between the realities of today and desired future by opening the mind of people and intellectually liberating them (Hall, 2005: 2; Smith, 2011: 28; Yarger, 2006: 5).

2.5.3. Create

The *Oxford Advanced Learner's Dictionary* (2010: 344) define it as making something happen or bringing something into existence while *Dictionery.com* (2014) says it is to cause something to come into being, as something unique that would not naturally evolve or that is not made by an ordinary process. The *Free Merriam-Webster* dictionary (i.world.com/idictionary/strategy) says it is to design a new form, using talent or imagination and to produce or bring about by course of action or behaviour. The word has the powerful role rooted to it, which gives life to the concept to this study. Firstly, to make something happen or cause it to come into being is to offer an opportunity for existence, which is the act of humbleness and peacefulness. To allow

the use of talent or imagination in the production of something is freedom, to create is humanity because it seeks to change the current conditions of what is created to the betterment. These characteristics are in line with the study and are some of the prescripts that are compatible with the democratic constitution of a country such as equity, social justice, peace, freedom and hope. They are also inherent in the principles of CAR.

2.5.4. Conceptualisation of creation

The common role of accounting is to assist managers with decision-making. According to the business model view and business strategy view in Henry and Rosenbloom (2002:530), when creating something it is essential to direct the thinking to specific dimensions and search for the answers to certain questions to help evolve the idea from the initial thought through the various stages of innovation. They further argue that it is essential to ask question such as, what is the problem that this new idea solves, would the creation of this product bring change or solve the problem and who will benefit from the idea or product? Other questions include how the solution will be delivered to the targeted market, what are the risks involved in the creation of this product and how can it be mitigated (Henry & Rosenbloom, 2002:530)? These theorists are emphasising the importance of positioning an idea into a specific context, in this case, the market place aligned with their strategic intent. The business should explore the broad opportunities that are available to succeed with the idea. They should study the customer need and market environment, competition and strategies of the competitors in the market (Prahalad & Hamel, 2006: 277).

This is in support of the study where the focus is on adding something new, which is evident in the use of design research according to David Perkins (1986:6). He talks about knowledge as design when he refers to the design as the human endeavour of shaping objects to purposes. He argues that if building up and passing knowledge is one characteristic of the human way, another way is embodying knowledge in the form of a tool to get something done, therefore design is a structure adapted to a purpose. Knowledge and design are central to the human condition. In this study, the objectives are influenced by the work of this theorist where we first do the situational analysis, needs identification and we look at available solutions and how to improve it, what are

the conditions that will make it work, we anticipate threats and we identify indicators of success (Mahlomaholo, 2015).

2.5.5. Sustainable

The *Oxford Advanced Learner's Dictionary* (2010: 1507) defines it as something that can continue or be continued for a long time. The *Collins Concise English Dictionary* (2001: 345) on the other hand, defines sustainability as involving economic development and energy sources, which are capable of being sustained or capable of being maintained at a steady level, without exhausting natural resources or causing severe ecological damage. It continues to define 'to sustain' as to hold up or withstand or undergo or prolong something. The *World English Dictionary* (2006) gives the same definition. Fowler (1999: 930) on the other hand, defines sustainability as a system that can maintain itself despite sociological and economic changes. According to these authors, sustainability is about endurance, renewal and social justice (Fowler, 1999: 930). From the above definitions of sustainability, it becomes clear that sustainability includes improvement, fairness in terms of distribution of resources and opportunities, as in social justice. It strives for such improvements to be able to last or be sustained for a long time.

2.5.5.1. Conceptualisation of sustainable

Critical accounting theory aims to unmask the often hidden interest of those who would seek an unjust allocation of a society's scarce resources. They unmask so that all interest in society can benefit (Laughlin & Broadbent, 1994:3) which is in agreement with the above to fairly distribute and maintain the resources to the betterment of all, especially the voiceless. Furthermore, the concept of sustainability comes from the theories of sustainable development (Gadotti, 2010: 204) and sustainable education (Chalmers, 2007: 17), which argue that for one to understand this concept fully, one has to know how economic development, environmental sustainability and social inclusivity interrelate to constitute the concept under discussion (Chalmers, 2007: 18). As humans, we have to produce goods in order to improve and sustain our lives and our livelihoods with the resources and materials from the environment (Gadotti, 2010: 205; McWilliam & Dawson, 2008: 634–635). However, the use of these have to be done responsibly as such that they are not depleted but can still be used by future generations (Gadotti, 2010: 208). This describes the link between the notion of

environmental sustainability and economic development, including the two pillars of sustainability, namely sustainability for the present time and for the future (Gadotti, 2010: 9). Finally, whether it is for now or the future, it becomes even more so if it is done in a respectful manner that takes into consideration the needs of all concerned, in both economic development and environmental sustainability (Gadotti, 2010: 208). The above implies respect for the environment, which includes other human beings, objects and animals (Kemmis, 2011:19). This respect for the other includes ensuring that there is equity, social justice, freedom, peace and hope for all, at all times, so that what we have can be maintained and improved for posterity (Kemmis, 2011: 19).

In this way, the redistribution of resources including wealth and education will lead to a more sustainable economy as more people would be equipped and conscious to find ways to acquire the necessary wealth. The idea is further supported by sustainable development goals (SDGs), which are action-oriented, concise and easy to communicate, aspirational, global in nature, universally applicable to all countries while taking into account different national realities, capacities and levels of development and are respectful of national policies and priorities (Lamberton, 2005: 10).

2.5.6. Learning

The *Cambridge Advanced Learner's Dictionary* (2005: 722) defines learning as "the activity of obtaining knowledge," whilst the *Penguin Dictionary* (2004: 795) defines it as "acquired knowledge or skill, especially knowledge acquired by study or education." Another definition of learning according to the *Dictionary of Education* (2001: 1798) is that learning is a change in response or behaviour. It is related to behaviour as innovation, elimination or modification of responses involving some degree of permanence. These definitions agree that learning is knowledge obtained through a process that involves actions and behaviour. However, learning is not only the knowledge obtained theoretically but also practically, such as skills.

2.5.6.1. Conceptualisation of learning

According to Inge (2006: 92) learning is the act of acquiring new or modifying and reinforcing, existing knowledge, behaviours, skills, values or preference. Learning is not compulsory, it is contextual in that it does not happen all at once but builds upon

and is shaped by previous knowledge. Therefore, learning may be viewed as a process rather than a collection of factual and procedural knowledge. While Wood (1988: 2249) argues that human learning may occur as part of education, personal development, schooling or training, he further attests that it may be goal-oriented, may be aided by motivation and that learning may occur consciously or without conscious awareness.

The two theorists agree that learning is contextual and it builds upon and is shaped by previous knowledge. This process requires effective teaching strategies to complement learning. The teaching strategies should be more learner-centred therefore, teaching should encourage learners to construct and produce knowledge in meaningful ways. Therefore, situations should be created where learners teach each other interactively and interact generatively with their teacher and peers (Day, Kaidonis & Perrin, 2003: 599). This allows for co-construction of knowledge, which promotes engaged learning that is problem-based, self-regulated and is goal-based (McPhail, 2001: 476). Thus, teaching strategies that engage students in the learning process stimulate critical thinking and a greater awareness of other perspective.

However, Sharma (1997: 126) argued that unless we understand how students learn and the effects of the learning-teaching context on their learning outcomes, efforts to alter the learning-teaching strategies may not yield the outcomes desired. It is therefore critical that we understand how our students learn, what they conceive learning to be and how the learning-teaching context influences their learning. The close responses can be understood by reflecting on their approach to learning.

Approaches to learning are not characteristics of a student rather they represent what a learning task or set of tasks is for the learner. It is the approach that describes a relation between the student and the learning he or she is doing (Sharma, 1997: 127). Marton and Saljo (1984:41) derive two distinct approaches.

2.5.6.2. *Learning approaches*

The surface approach is characterised by learning conceptions where learning is classified as memorisation, as acquiring knowledge and where learning is application because students orientate their learning towards memorisation and reproduction. It is viewed as acquiring knowledge merely for passing examinations with little or no

focus on the processes (Sharma, 1997: 128). Learning for this type of student is externalised and less related to their lived life.

The deep approach on the other hand is for those learners whose learning understands and is insightful. They regard learning as a process whereby they not only discover the answers relating to the problems but importantly, the reasoning, or why particular answers are correct for particular problems (Wood, 1988: 2250). Thus, learning is viewed as gaining knowledge and experience in areas of interest with the objective being to gain insight into the subject matter to expand and develop one's own knowledge and experience (Sharma, 1997:128).

This approach is also for those students who are interpreting reality and construction, where learning is adding knowledge to what they already know. It means acquiring new skills and understanding why and how we do certain things (Sharma, 1997: 128). Learning can relate to many areas not only textbooks and teaching but also finding things out about ourselves and how we connect to our lives because of interactions with others through dialogue (Broadbent 2002: 433). It is gaining experience and being exposed physically and mentally to new ideas that are adding up to your lived life by offering a deeper application, critical analysis and further expansion therefore, learning becomes an exploration.

The best step in inculcating in our students the benefits and importance of adopting a lifelong learning process could be facilitated by the environments in which learning takes place. The plausibility of the argument is that learning does not take place in a vacuum.

2.5.7. Environment

The *Cambridge Advanced Learner's Dictionary* (2005:417) defines 'environment' as "the conditions that you live or work in and the way they influence how you feel or how effectively you can work," whilst the *Penguin Dictionary* (2004:464) defines it as "circumstances, objects or conditions by which somebody or something is surrounded".

The conditions you live or work in are likely to affect the quality of any production process taking place in a particular location, be it negative or positive with which the two dictionaries concur. According to Dorman, Fisher and Waldrip (2006: 2), "the

concept environment, as applied to educational settings, refers to the atmosphere, ambience, tone or climate that pervades the particular setting". There is an agreement between this definition and those in the dictionaries. The atmosphere, ambience, tone and climate are the circumstances that may characterise a particular teaching-learning situation, so the learning environment is a collection of opportunities that initiate the learning experiences (Faber & Jorna, 2010: 2). It is therefore safe to acknowledge that the quality of learning environments in schools is a significant determinant of student learning.

2.5.7.1. *Conceptualisation of Environment*

According to Sharma (2010: 129) the educational environment is usually defined as being the assessment methods, curricula and teaching methods and, to a lesser extent, the atmosphere or 'ethos' of the course, programme of study, or institution. It is the students' perceptions of these elements that influence their learning. Some assessment methods or dependency on the textbook method encourages passing examinations rather than understanding and construction of own knowledge (Sharma, 2010: 129). If a more thorough understanding is required in order to answer a question, the number of acceptable answers is very low. Complex procedures seem to be solved by the application of memorised algorithmic procedures. Therefore, in order to cope with the overwhelming curricula, the students probably have to abandon their ambitions to understand what they read and instead direct their efforts towards examinations.

Therefore, an educational environment conducive to the learning of accounting, is where teaching methods are more learner-centred, including a good rapport with students, while encouraging deep learning and the generation of a personal learning context, dialogue and feedback (Sharma, 2010: 130).

Teaching as a process and freedom to learn are likely to provide a context within which deep approaches to learning could flourish, freedom in which a learner is able to interact in dialogue with others while trying to make sense of his/her learning in relation to his/her lived life. Student learning is embedded in a social and societal context and these influence what and how can be learned (Illeris, 2007: 19; Chai & Tan, 2009: 1298). These contexts also have a historical context, which needs to be taken into consideration (Hickling-Hudson, 2006: 199; Moletsane, 2012: 2). Sharma (2010:130)

further attests that in these contexts (social and societal) learning takes place through extracting the main issues, relating evidence to their knowledge and personal experiences, critically evaluating the evidence and organising and structuring the content into a coherent and meaningful whole.

From the above definitions, it is acknowledged that 'sustainable learning environments (SuLE)' involve "the purposeful creation of situations from which motivated learners should not be able to escape without learning and developing" (Biggs, 2003: 2). According to Mahlomaholo (2010: 11), "learning taking place in these environments is learner-centred, informed by and operationalises the theories of problem-based learning, cooperative learning, collaborative learning and outcomes-based learning". The educational needs are affected by and affect certain traits within learners. Sustainable learning environments should therefore be environments that matter, endure and engage students intellectually, socially and emotionally towards social transformation (Hargreaves & Fink, 2003: 3; McGonical, 2005: 1).

In this setting (SuLE), the teacher is able to provide his learners with care that will enable them to learn confidently without fear of intimidation or anything else. In this study, a sustainable learning environment is an environment where positive transformative changes occur all the time through interaction to create quality learning. It is a place of respect, trust and validation of the learner where principles of equity, social justice, freedom, peace and hope exist (Kellner & Kim, 2010: 11). These principles guide and lead the interaction between the teacher(s) and the learners, among teachers and among learners.

2.5.8. Grade 10 accounting classroom

According to the National Education Act 27 of 1996, schools are categorised into phases or bands. Foundation phase is grade R to 2, intermediate phase is grade 3 to 5 while grade 6 to 9 falls under the senior phase. All these phases fall under the general education and training (GET) band. Under the South African Schools Act of 1996, schooling is compulsory from the age of 7 (grade 1) to age 15, or the completion of grade 9.

Grade 10 is the entry point of the further education and training band that starts from Grade 10-12. FET also includes career-oriented education and training offered in other

further education and training institutions, technical colleges and other colleges. Grade 10 sets the foundation for the choice of curriculum subjects since it is the grade where the learners start specialising in the chosen subject (DBE, 2011: 5). It forms the basis since the learners are exposed to the field of study they would wish to pursue in future. In this grade, it is important to lay a strong foundation through education guidelines and policies such as level descriptors and critical cross-fields outcomes (SAQA, 2012: 2).

2.5.8.1. Critical cross-fields outcomes (CCFOs)

SAQA defines CCFOs as "those generic outcomes that inform all the teaching and learning" (SAQA, 2012: 18). Critical cross-fields outcomes are those outcomes deemed critical for the development of the capacity for life-long learning (SAQA, 2012: 18). It is important for standard setters to incorporate some of the critical outcomes into the standards as they are developed. These are the critical outcomes in table 1.1 below as adopted by SAQA.

Table 1.1: Critical cross-fields outcomes (As adopted by SAQA, 2012: 19)

i.	Identify and solve problems in which responses demonstrate that responsible decisions using critical and creative thinking have been made.
ii.	Work effectively with others as a member of a team, group, organisation, community.
iii.	Organise and manage oneself and one's activities responsibly and effectively.
iv.	Collect, analyse and organise one's activities responsibly and effectively.
v.	Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation.
vi.	Use science and technology effectively and critically, showing responsibility towards the environment and health of others.
vii.	Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation.

CCFOs are closely linked to the developmental outcomes (DBE, 2011: 12). In order to contribute to the full personal development of each learner and the social and economic development of society, it must be the intention of the underlying programme of learning to make an individual aware of the importance of developmental outcomes as identified by SAQA.

i. Reflecting on and exploring a variety of strategies to learn more effectively;
ii. Participating as responsible citizens in the life of local, national and global communities;
iii. Being culturally and aesthetically sensitive across a range of social contexts;
iv. Exploring education and career opportunities
v. Developing entrepreneurial opportunities

The outcomes defined and identified express the qualities that should be achieved in all grades, of which Grade 10 is a part. This should also be achieved in all qualifications and to some extent in any standard unit (CAPS, 2011: 6; DBE, 2011: 5; SAQA, 2012: 18). These outcomes demand evidence of problem solving, the ability to work with others, to access information, to understand the consequences of one's actions, etc (SAQA, 2012: 17). In order to contextualise the application of these critical cross-fields in a particular grade or qualification, level descriptors are applied.

2.5.8.2. Level descriptors

Level descriptors are not learning outcomes or assessment criteria but rather provide a broad frame from which specific and contextualised outcomes and assessment criteria for a particular programme can be derived (SAQA, 2012, 19). The critical cross-field outcomes are embedded in the level descriptors (SAQA, 2012: 19).

According to SAQA, the purpose of level descriptors for level one to ten of the national qualifications framework (SAQA,2012;19) is to ensure coherence in learning achievement in the allocation of qualifications and part qualification to particular levels and to facilitate the assessment of the national and international comparability of qualifications and part qualifications (SAQA, 2012: 19). The philosophical underpinning of the NQF and the level descriptors is applied competence, which is in line with the outcomes-based theoretical framework adopted in the South African context (CAPS, 2011: 4). Level descriptors are not prescriptive but descriptive.

From the above definitions, it is acknowledged that level descriptors embrace learning in a wide variety of contexts and environments. Furthermore, CAR is compliant with all the critical cross-fields outcomes, which emphasise the cultivation of a democratic citizen who can work and live with others meaningfully towards the economic development of the country. The above is linked to the level descriptors, which CAR operationalises, as it cascades the critical cross-field outcomes in the curriculum and the accounting classroom at a suitable cognitive level of a learner (SAQA, 2012: 2). Derived from the critical cross-field outcomes are the learning outcomes for accounting, which inform the lesson outcomes by using a suitable facilitative strategy that encourages active participation by learners (CAPS, 2011: 5).

It is therefore, safe to say that the meaning of the outcomes and how they can be applied is highly context- and discipline-dependent. Their integration into learning programmes or particular grades can only be achieved through embedding these outcomes in the programme material and in the teaching methods (CAPS, 2011: 6). The teaching methods design the activities in a way that explicitly encourages some of the process skills implied by the outcomes. The emphasis would be on the promotion of active, exploratory and self-regulated learning. It is noted that more often than not, in a school context plenty of teaching and learning happens in the classroom.

2.5.9. Accounting classroom

Broadbent (2002:433) argues that accounting is an activity that involves identifying, collecting, describing, recording, processing and communicating information in financial terms about the economic events of an entity, to groups and individuals who have a need or right to the information. Therefore, accounting is a system of thought designed by humans to assist human decision-making and influence (human) behaviour. The *Oxford Advanced Learner's Dictionary* (2010: 1507) defines a classroom as a room in which classes are held. It provides a space where learning can take place uninterrupted by outside distractions. It is therefore one of those spaces where teaching and learning occurs and where knowledge is shared between a teacher and the students.

In a classroom, the teacher uses her knowledge base of teaching that is supposed to be solid in order to curb the common challenges faced by accounting teachers in the further education and training (FET) schools. In particular, there is a struggle in the

accounting classroom with content knowledge, pedagogical content knowledge, accounting knowledge for teaching and accounting classroom practice (Gorski, 2009: 317). It seems necessary to understand these types of knowledge to enable us to understand the accounting classroom practice when it is discussed below.

2.5.10. Accounting content knowledge and its challenges

Shulman (1987: 8) argued that content knowledge (subject matter knowledge) includes knowledge of the subject and its organising structures. Content knowledge (CK) is the "knowledge about the actual subject matter that is to be learned or taught" (Schmidt *et al.*, 2009: 125). Teachers must know about the content they are going to teach and the manner in which the nature of knowledge is different for various content areas.

The accounting curriculum is itself changing and will continue to change in response to rapidly changing market demands (Conradie, Ludwig & Moyce, 2007: 19). New topics are entering the curriculum and the relative emphasis among topics is altering. Member bodies may wish to add topics or alter the balance of their programmes to meet the needs of their particular environment.

Accounting is a subject that is closely allied to the book where students are supposed to know international accounting standards, as it is said to represent globalisation in the accounting arena. They are taught with the goal of developing the ability to interpret rules and principles and the capacity for analysis and judgement (Gilberto, Silvia & Edgard, 2012: 4).

2.5.11. Accounting pedagogical content knowledge

Shulman (1986:9; 1987: 8) conceptualised pedagogical content knowledge as including the most powerful analogies, illustrations, examples, explanations and demonstrations. In other words, the ways of representing and formulating the subject that makes it comprehensible for others. He further attests that it is the category most likely to distinguish the understanding of the content specialist from that of the educator.

Learning to teach accounting is not about acquiring a bag of tricks based on a set of general pedagogical strategies, it is about developing a complex and contextualised set of knowledge to apply to specific problems of practice (Abell, 2008: 1414).

In many accounting classrooms, the main goal of many teachers is mostly to finish the lesson they have prepared for the day, not necessarily the process of teaching per se. Learning to teach may be a complex process if we are going to move from the notion of regarding teaching as a mere delivery of information but to develop a complex and contextualised set of knowledge to apply to specific problems of practice (Abell, 2008: 1414, Nilsson, 2008: 1281).The foundation of PCK is thought to be the combination of a teacher's pedagogy and understanding of content such that it influences their teaching in ways that will best engender students' learning for understanding (Shulman, 1987: 7).

Since there is a little that a teacher can do to change the content, the teacher has power as supported by the policies to change how accounting is taught. Critical accounting encourages educators to strive to go beyond accounting in attempting to contribute to the development of accounting that would be more enabling and emancipatory (Baker, 2011: 208). A more critical form of accounting education would conceptualise knowledge as an active tool that students can use to "generate their own meanings" and make sense of their life-world, rather than a set of meanings or perhaps even just words that are deposited in the student (Boyce,2004: 571; McPhail,2001: 490).

The accounting teacher, using CAR, may explore the possibilities of connecting accounting to the ordinary feelings and experiences, which learners have in their lives outside the classroom and thereby experience the lived reality and bring the historical and contemporary social underpinnings of accounting practice into the classroom (Boyce, 2004: 575). CAR would involve trying to engender a critical reading of learners' existential situation, which would allow them to develop their own frame of reference while simultaneously being aware of its contingency (McPhail, 2001: 488). It will involve encouraging them to play a more active part in their becoming; using more learner-centred methods that encourage problem-based learning and critical thinking (McPhail, 2001: 489). The methods that are more learner-centred emphasise student dialogue, negotiation and knowledge building as well as student autonomy

and responsibility for learning. CAPS also support this view as a current policy, in which it is further highlighted that high knowledge and high skills are based on the belief that each individual him/herself (CAPS, 2011: 5) must discover reality. CAR answers the question confronting accounting teachers, whether to view a learner as a receiver or constructor of knowledge.

CAR requires a teacher who is a mediator between the intricacies of the curriculum and the learners, who interpret real life adequately for the latter, who is a leader in terms of knowledge and skills required, who is a researcher providing pastoral care, who is assessing effectively to enhance learning and is a subject specialist. Critical accounting abides by all the steps from the intended curriculum to the classroom practice and eventually the assessment, which is in line with the constitution to promote knowledge in local contexts, while being sensitive to global imperatives

CAR's preference to the more learner-centred approaches to teaching have multiple effects in a sense that once teaching and learning focuses on the process rather than the product, which in many cases is only the passing of an examination learners are encouraged to understand rather than memorise. The use of other teaching resources besides a textbook would be possible since the pressure to grasp only for exams may be minimised. CAR is in agreement with the critical cross-fields outcomes and the level descriptors. Non-compliance with the education policies and documents can shift the focus away from what the constitution strives to achieve in accounting (Gathara, 2014: 8; Osuji, 2009: 298; Perraton, 2010: 4). However pedagogical content knowledge alone cannot further our understanding of the relationship among teacher knowledge and teaching and student learning, hence there is a need to look at the teachers' work through an accounting knowledge for teaching (Ball, Thames & Phelps, 2008: 3).

2.5.12. Accounting knowledge for teaching

Teaching occurs in direct face-to-face interactions with students (Hill, Ball & Schilling, 2008: 373). However, teaching also involves analysing student work, making content based activities for instruction, choosing appropriate questions to ask in the classroom and explaining student progress to colleagues or parents in many other content intensive practices that support the interactive work of teaching (Ball *et al.*., 2008: 11). Therefore the accounting knowledge for teaching goes beyond content and pedagogical content knowledge since it is highly connected to teaching practice and

therefore is very specific to the subject area and grade range (Hill *et al.*., 2005: 373). It is the accounting knowledge that is required to carry the work of teaching accounting.

The knowledge for teaching is concerned with the task involved in teaching and accounting demands these tasks because teaching involves showing students how to solve problems, answering students' questions and checking work and demands an understanding of the content of the school curriculum (Hill *et al.*., 2005:374). Knowledge for teaching may be divided as common content knowledge and specialised content knowledge as a refinement to the accounting content knowledge (Ball *et al.*., 2008:5).

Common content knowledge in accounting is expected from a well-educated teacher since it is closely related to the content of the curriculum, particularly accounting and finance. It includes knowing when students have incorrect answers, recognising when textbooks give an accurate definition or calculation and being able to use terms and notation correctly when speaking and writing on the board (Bell *et al.*., 2008: 6; Grossman, Wilson & Shulman,1989: 25).

Specialised content knowledge involves interpreting student error and evaluating alternative formulas, but is not only limited to that for teachers (Ball *et al.*., 2008: 5). Teaching also involves knowing rationales for procedures, meanings for terms and explanations for concepts, not only to confirm the answers but to show what the procedures mean and why they make sense. This kind of knowledge is regarded as specialised content knowledge for teaching (Ball *et al.*., 2008: 8; Grossman *et al.*., 1989 27). The teaching of accounting demands specialised content knowledge that is needed by teachers but not needed by other careers. Accountants have to calculate and reconcile numbers where the transition of the content is not required by the next party. However, for teachers, the question "why" as asked by student in class, is a daily fare of their teaching lives. Being able to answer why things have to happen in a certain way and why they make sense is a bigger step in a transition from the teacher to the students. The demand of the work of teaching accounting creates the need for a body of accounting knowledge that is specialised for teaching.

A teacher may have this kind of knowledge as a bigger step to the transition from the teacher to the students. This transition poses more challenges to the accounting classroom practice. How does a person or somebody that really knows something

teach it to somebody who does not? This question may be answered by the classroom practice of the accounting teacher.

2.5.13. Accounting classroom practice

Classroom practice provides a space for the learning process to unfold (Gorski, 2009: 317). Classroom practice links what teachers know and how their knowing is expressed in teaching (Connelly, Clandinin & Fang He, 1997: 672). The integration of content and the pedagogical process is a theoretical prescription for success yet it is practically challenging. Many educators focus on one or the other rather than the joint process (Nagda, Gurin & Lopez, 2003: 168). Content without transformative pedagogy may be rhetorical, intellectualising, and divorced from reality while an active and engaging pedagogy without a critical knowledge base may result in temporary "feel good" emotions (Nagda *et al.*, 2003: 168). This critical knowledge base requires the teachers to emphasise and understand the ways of teaching and knowing as the bedrock for integration, application and discovery not to develop knowledge for knowledge's sake but to use knowledge effectively in a rapidly changing society (Nagda, 2003: 185). Critical accounting requires accounting classroom practice to not only be where teaching and student involvement strategies are combined creatively but where they were explicitly designed to prepare students for an active, democratic and just citizenry. Education must encourage students to become active transformers of the world around them (Nagda, 2003: 168).

However, in the accounting classroom the main problem is a lack of dialogue since too many teachers are teaching to the test (Levitt, 2008: 53). Many teachers do this in response to the competitive environment and meeting demands made by government policies and consequently have reduced teaching to a technical and micro-managed activity (Nagda, 2003: 168). The lack of dialogue is coached within the backdrop of a university education that is driven by certification and a target driven culture of its degree programmes and professional bodies that value success by the number of exam pass rates (Armitage, 2011: 108). The lack of dialogue manifests itself to the practice of the teacher in his or her class where many principals, especially in FET schools, live in anxiety or fear of being labelled dysfunctional by their district or provincial government and eventually national government. They transfer their anxiety to teachers and ultimately students and their parents. In the hope that students will

reach a 100 per cent pass rate, too many teachers are teaching to the test following a daily repetitive testing of scripts and most of the time textbooks (Levitt, 2008: 53).

CAR argues that accounting teachers have a particular responsibility that flows from the central role of their discipline in creating and sustaining social reality (Boyce, 2004: 570). For teachers to be critical is to create freedom in the form of dialogue since accounting classroom practice can only emerge from a situation of open, free and uninterrupted dialogue that takes the form of self-conscious criticism (Armitage, 2008: 105).

Aliakbari and Allahmoradi (2012: 157) refer to dialogue as a conversation with a focus and a purpose that shows that the object of the study is not the exclusive property of the teacher and knowledge is not produced somewhere in the textbook and in offices and then transferred to the students. Dialogue provides students with knowledge of the social functioning of critical accounting, which affords students with the opportunity to challenge the taken-for-granted neutrality of accounting to imagine alternative forms of accounting and see the potential role of critical accounting in the social and economic worlds (Boyce *et al.*, 2008:51).

The dialogue in critical accounting is motivated by a love for, commitment to and faith in people and the participants in dialogue would be characterised by humility and a commitment to the common task of learning (McPhail, 2004: 491). If students are empowered to engage actively in shaping and sharing their learning by connecting it to their lives, they can learn and may choose to learn.

2.6. RELATED LITERATURE

This section reviews the literature from the best practices of sustainable learning environments in Grade 10 accounting classrooms from South Africa, the Southern African Development Community (SADC), the African continent and internationally. The discussions will be given with respect to each of the five objectives and criteria formulated which succinctly explain each one. These constructs are to be used in chapter four when making sense of the empirical data.

2.6.1. Challenges in the creation of SuLE in a Grade 10 accounting classroom

In this section, the challenges in the creation of a SuLE in a Grade 10 accounting classroom will be discussed with reference to the best practices of teaching and learning. Accounting is articulated by the educational policies and theories of learning.

2.6.1.1. The necessity for a team in the creation of SuLE

The establishment of a coordinating team is critical in embracing the concept of democracy in education because good teaching leads to quality education, which is a component of social justice and equity (Reed, 2008: 2421). This implies that as many people as possible should collaborate, particularly those with an interest in education and should be involved in planning and advancing the educational interests of the child. The members of the team contribute their skills, competencies and resources to the respective projects and programmes (Bringle & Steinberg, 2010: 428). These diverse and multiplicity of resources are harmonised through agreed upon processes and systems towards a common goal (Moles Jr. & Fege, 2011: 5). The interests of the individuals are often subjugated and/or aligned with those of the organisation or project that they serve (Minkler & Wallerstein, 2003: 9). In this way, they share the vision which subsequently focusses their efforts and resources. In order to achieve this synergy, the members of the dedicated team also share a common set of values and principles. The synergy that is needed by the team indicates that a whole is greater than the sum of its parts. Therefore, it provides an opportunity to achieve what an individual could not achieve alone without a team.

A team that consists of strong involvement of the community creates a positive environment (Wicks & Reason 2009: 243). The community can provide schools with a context and environment that can either complement or reinforce the values, culture and learning the school provide for their students or can negate everything the schools strive to accomplish (Moles Jr. & Fege, 2011: 5). Therefore, it is more meaningful having them form part of the team because communities can contribute to the social and cultural values necessary for success and survival. In addition, their knowledge and experiences contributes to valued resources in the teaching and learning of accounting (Roslender & Dillard, 2003: 334). Therefore, community in the teaching and learning of accounting, take their time and invest in projects, while they explore

possible ways that they can connect to curriculum and classroom activities (Thomson & Bebbington, 2004: 612).including but not limited to, the network they can utilise to raise awareness of the needs of local children and families and always promote and foster resource sharing and collaboration (Wicks & Reason 2009: 243).

2.6.1.2. The need to foster a deep approach to learning in the accounting classroom

In recent years, the emphasis in research and government policies has been on improving the quality of teaching with a view of improving learning, more specifically critical thinking and creative thinking skills (DBE). The call is for more learner-centred methods of teaching to be employed in teaching and learning of which accounting is part. The use of a more teacher-centred method is closely linked to rote learning. According to Johnston (2000: 1), rote learning is indicative of a surface approach, which is the opposite of what has been emphasised by the policy and the research. Therefore, there seems to be a close link to the teaching and learning approaches, hence in an attempt to the development of the above-mentioned skills there is a need to ensure that there is no mismatch between the teaching approach and the learning approach in the classroom. In this study, the use of a deep approach to learning is referred to as indicative of more learner-centred methods being employed (Bates, 2010: 1; Johnston, 1995: 30; Rhem, 1995: 1). A deep approach allows learners to employ their abilities such as critical thinking skills among others, since it characterised by an inherent quest for meaning-making (Boyce *et al*., 2010:41).

However, the above call for change is made because the literature indicates that in the accounting classroom teachers are still using the methods of teaching that are more teacher-centred (McPhail, 2001: 478). In addition, these methods of teaching limit participatory learning in the accounting classroom (McPhail, 2001: 478; Sharma, 2010: 127). The basic premise on which deeper learning is based is that participatory (interactive) learning is fundamental (Johnston, 1995: 2). The notion that learners should be responsible for their own learning is seen when learning becomes a natural outcome of interaction or participation. In a sense, when learners are given a chance with peers working as a group or interacting in normal classroom activities, their learning becomes meaningful and internalised. Participatory learning requires

problem-based activities to support learners in their quest to make meaning out of facts (Sharma, 2010: 127; Wood, 1988: 2250).

In the accounting classroom, learners' knowledge is not fostered towards participatory learning because their teachers seems to be less aware of how powerful method of teaching can impact on the overall learning of a learner (Stiggins, 1994: 2). Since teaching methods are techniques used to help learners gain knowledge for intended outcomes, (Li, 1998:678) in terms of a deep approach, demonstrating the achievement of such outcomes should be the results of learning that allowed learners to interact with what is taught. However, using a more teacher-centred method of teaching such interaction may seem like a distant future. In addition, it becomes the responsibility of the teachers to choose and explore a variety of strategies for learners to learn effectively, in a sense that it fosters deep learning (Lea, Sphenson & Troy, 2003: 323). Furthermore, it is acknowledged that when the approach of teaching encourages interactive (participative) learning it may have a greater influence in the development of several abilities such as cooperation, leadership, responsibility, self-confidence, independence and the ability to make decisions and communicate in such a way that leads to deeper learning (Stiggins, 1994: 2). Thus, teaching methods have a real and pervasive effect on learning.

Furthermore, a careful selection of an approach would allow the maximum use of pre-existing knowledge of learners to make their learning meaningful. Their pre-existing knowledge can be blended using various teaching modes, making class vibrant and encouraging the learners to ask questions and share inputs and experiences with other learners and the teacher in an effort to foster deeper learning. However, in many classrooms teaching is limited to more teacher-centred methods, which are illustrated below.

All teaching methods can be classified according to a continuum from being highly teacher-centred (Telling method) to being highly learner-centred (experimentation), while others can be placed in between. The choice and utilisation of teaching methods is different for each environment due to specific characteristics such as culture and historical background.

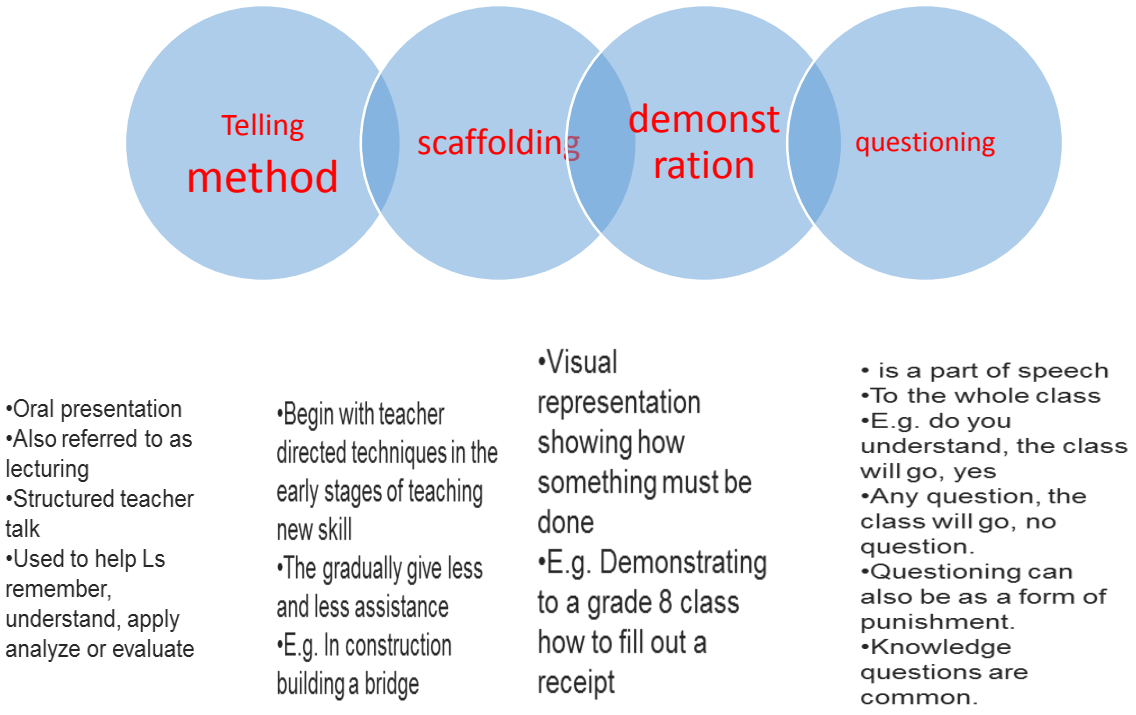


Figure 1.1. Most teacher-centred methods

Source: Jacobs, Gawe & Vakalisa, 2004: 280

From the above discussion, it seems as if the teacher-centred approaches encourage memorisation, which is closely linked to surface learning. Memorisation can also be referred to as reproduction whereby it is a process by which a person is able to retain information that s/he has been learning, knowing what formulas to apply to what situation, accepting without question what is taught (Sharma, 2010: 132). When memorisation is encouraged learning is only presented in a way that is not too strenuous and exhausting. Hence, it is referred to as a banking approach (Sharma, 2010:131). Therefore, the use of pre-existing knowledge may be seen as complicating the learning and therefore ends up being ignored.

Such, learning becomes a mere process of gathering and retaining information to be reproduced later. In many accounting classrooms, the banking analogy as described here renders information or deposits it to the passive students and frequently intrinsically demotivates them (Thomson & Bebbington, 2004: 612). Learners are said to be motivated intrinsically, if motivation itself comes from the pleasure one gets from the task itself or from the sense of satisfaction in completing or even working on a task

(Sharma, 2010:132). Therefore, learners are only passive and memorising facts deposited in them cannot be said to be motivated intrinsically.

Furthermore, the approach of teaching has a direct effect on the assessment instruments. Thus, it ends up limiting the ability of a learner to acquire a deeper approach to learning (Johnston, 2011: 4). However, the assessment instruments should therefore ensure that a variety of skills are assessed as contemplated in chapter 4 of the various Curriculum and Assessment Policy Statements (CAPS, 2011). Furthermore, accounting assessment guidelines recommend open assessment dialogue or two-way communication between the learner and teacher to engage learners in debates while challenging them to think creatively (DoE, 2008b). These requirements may seem impossible to achieve if the approach of teaching is more teacher-centred, thereby discouraging the fostering of a deeper approach to learning.

2.6.1.3. Dependency on the textbook

A normal visit in the classrooms in South Africa may probably afford one to notice that most, if not all, of those classrooms use a standard textbook series. The reasons for this are many, depending on the design and focus of the curriculum, the mandates of the administration and/or the level of expertise and experience of the classroom teachers (Broadbent, 2002: 436). There seems to be limited use of other media and tools that can be used. Even though textbooks have their advantages, the dependency can be detrimental to the viewpoints of the learner (Hanks, 2010: 133). It is important that teachers be cautioned that the textbook is just a one tool, perhaps a very important tool in their teaching arsenal (Newmark, 1998: 60). In accounting classrooms it seem as if teachers over-rely on textbooks and do not consider other materials and media in the classroom.

It is acknowledged that some textbooks may fail to arouse students' interest in that students may find it difficult to understand the relevance of so much data to their personal lives (Moran, Seaman& Kane, 2011: 5). The other challenge with the dependency on the textbook in class is that it can be old and outdated, especially in accounting where there is rapid change to the content and procedures in relation to economic and market related changes (Kaidonis, 2003: 668). In the accounting classroom, the use of plenty of supplemental materials or media is encouraged and can be fulfilling to the need for learner-centred approaches to learning. This involves

students in problem-solving activities, higher level thinking questions and engaging activities through more use of other tools (Bonk & Smith 1998: 268). Dependency on the textbook might as well encourage students to assume that learning is simply a collection of data. Therefore, textbooks may only be used as a blueprint, a guidebook or an outline (Kaidonis, 2003: 668).

2.6.1.4. The need for adequate feedback on assessment

From an educative perspective, feedback facilitates students' development and task improvement (Lizzio & Wilson, 2008: 264). Feedback also appears to be an important contributor to the quality of the student experience (Sorensen, 2008: 85). Students endorse feedback on assessment as being important in identifying their strengths and weaknesses, enhancing motivation and improving future grades. Therefore, feedback is all post-response information that is provided to a learner to inform his or her on the actual state of learning or performance (Narciss, 2008: 127; Black *et al.*, 2003: 15; Sadler 1989:130).

Policies in South Africa are pushing a student-centred approach that integrates assessment with learning. This approach assumes knowledge is not a fixed, identifiable entity to be absorbed by the learner but instead is constructed by students based on their own understanding, which is influenced by their background, perspectives and experiences (Ellery, 2008: 422). As a result, this type of assessment tends to be more flexible, integrative, contextualised, process oriented, criteria referenced and formative. This 'assessment for learning' approach encourages student independence and self-evaluation and can lead to active and deeper learning (Ellery, 2008: 422; Sorensen, 2008: 85). When assessment is done for the improvement of learning, it becomes a process that involves feedback and reflection (Wiggins, 1993: 121). At the centre of assessment is feedback that needs to be provided for the assessment process to be complete (Narciss, 2008: 127). Thus, it renders feedback a key element.

Furthermore, feedback is given in an attempt to clear misconceptions and improves learning by identifying learners' gaps and how they can alter them towards improvement for the subsequent task. Feedback is about accuracy and diagnosing what is required to answer the question (Wiggins, 1993: 121). Therefore, misconceptions are a normal part of learning and are not something to be avoided with

the hope that learners will eventually correct ideas naturally once they are exposed to them through typical forms of teaching and learning (Lizzio & Wilson, 2008: 264). In accounting where the use of unique jargon is rife, the need for feedback is crucial. Therefore identification of new or key words is crucial as part of feedback because if the learners do not understand the meaning of these particular words correctly, they are likely to misunderstand the meaning of the whole question.

Andrede (2008: 1) argues that the most productive assessment should be a dialogue. The subject of accounting has been developed to ensure that learners are equipped with critical thinking, communicating and mathematical, collecting, analysing, interpreting and organising skills (DoE, 2008b: 4). Therefore when learners engage with feedback through dialogue and discussion, it is an opportunity to develop such skills. Thus, it is crucial for teachers to provide feedback to learners timeously and adequately.

2.6.1.5. Limited use of the principles of good teaching

Prior to 1994, the South African education system was designed to produce a racially skewed labour market (Jewison, 2008: 9). Once that era was passed and the system was defeated, the stakeholders such as students, teachers, employers, unions, education academics and community representatives were determined to ensure the development of a free, democratic and equal society (Jewison, 2008: 9).

Certain principles guided the development of education and training policy in South Africa after 1994 (Jewison, 2008: 10). These included the need for quality, equity, improved access, redress, portability of qualifications and recognition of prior learning, all to be achievable within a unified system of integrated education and training. The NQF was established as one of the cornerstones of a radical new policy. NQF came into being through the South African Qualifications Authority Act (no. 58 of 1995, Government gazette, 1995) which provides for the development and implementation of this NQF (SAQA, 2012: 2).

The NQF is not a curriculum framework. Hence, its primary focus is not how outcomes are achieved. Its primary focus does however include what it is that curricula or more specifically, learning programmes, should aim to achieve – the desired learning outcomes and the assurance that learners accredited with particular standards and

qualifications have demonstrated their ability as specified in the standards and qualification. The most important document in this study is therefore, the level descriptors because they are the representation of good teaching and they are the most advanced internationally as they are the most recently created (SAQA, 2012:7).

The philosophical underpinning of the NQF and the level descriptors is applied competence, which is in line with the outcomes-based theoretical framework adopted in the South African context (CAPS, 2011: 4). Level descriptors aim to ensure coherence across learning achievement at a particular level (SAQA, 2012: 3). Its purpose is to facilitate the assessment of the international comparability of qualifications (DBE 2011: 7; SAQA 2012:4). Level descriptors are not prescriptive but descriptive. Level descriptors are not learning outcomes or assessment criteria but rather provide a broad frame of reference with specific and contextualised outcomes in education that serve as requirements for a good teaching (Jewison, 2008: 9). The descriptors below will be used as a basis for good teaching in this study.

Table 1.2. NQF level four

a. **Scope of knowledge**, in respect of which a learner is able to demonstrate a fundamental knowledge base of the most important areas of one or more fields or disciplines, in addition to the fundamental areas of study, and a fundamental understanding of the key terms, rules, concepts, established principles and theories in one or more fields or disciplines.
b. **Knowledge literac**y, in respect of which a learner is able to demonstrate an understanding that knowledge in one field can be applied to related fields.
c. Method and procedure, in respect of which a learner is able to demonstrate the ability to apply essential methods, procedures and techniques of the field or discipline to a given familiar context, and the ability to motivate a change using relevant evidence.
d. **Problem solving**, in respect of which a learner is able to demonstrate the ability to identify, evaluate and solve defined, routine and new problems within a familiar context, and to apply solutions based on relevant evidence and procedures or other forms of explanation appropriate to the field, discipline or practice, demonstrating an understanding of the consequences.
e. **Ethics and professional practice**, in respect of which a learner is able to demonstrate the ability to adhere to organisational ethics and a code of conduct, and the ability to understand societal values and ethics.

f. **Accessing, processing and managing information**, in respect of which a learner is able to demonstrate a basic ability in gathering relevant information, analysis and evaluation skills, and the ability to apply and carry out actions by interpreting information from text and operational symbols or representations.
g. **Producing and communicating information**, in respect of which a learner is able to demonstrate the ability to communicate and present information reliably and accurately in written and in oral or signed form.
h. **Context and system**s, in respect of which a learner is able to demonstrate an understanding of the organisation or operating environment as a system within a wider context.
i. **Management of learning**, in respect of which a learner is able to demonstrate the capacity to take responsibility for their own learning within a supervised environment, and the capacity to evaluate their own performance against given criteria.
j. **Accountability**, in respect of which a learner is able to demonstrate the capacity to take decisions about and responsibility for actions, and the capacity to take the initiative to address any shortcomings found.

Source: SAQA (2012: 7)

Analysis of a need for good teaching in reference to other countries

Accounting education, as part of education in general, is the process of becoming the best anyone or nation can be. It is imperative to use the principles of good teaching as emphasised in every country effectively. However, the study by the UNESCO institute for lifelong learning (2002: 2) found that Botswana's accounting and other learning areas, as part of education lack credibility due to the absence of clear learning pathways. UNESCO further recommended that a pathway could be cleared by a strong focus on the descriptors as a right to education. On the other hand, a study by Okoroma (2012: 68) regarding the falling standard of education in Nigeria found that Nigerian accounting education standards are so low that many school have decayed, others are congested while others exist under their own shadows (Okoroma, 2012: 4). In many instances, all services at all levels of education have fallen. The factors that were found to be responsible were poor use of the guiding principles of good teaching. Therefore, it is worth noting that changing our role towards the teaching of accounting may contribute to the role of education in the development of every society and take

possible measures in ensuring acceptable standards in terms of good teaching. The principles of good teaching manifest themselves in every society's quality of life. Lastly, Bevins' study (2012: 2) indicates that Brazil's education standards contribute to the learning crisis. The study found that through an educational survey, which measured 15-16 year olds' (equivalent to Grade 10) literacy, accounting and maths skills, Brazil ranked 53rd out of 65 countries. Therefore, a suggestion by World Bank (2012: 11) that Brazil, as the world's sixth largest economy, does not need to increase in education spending but it requires the provision of good education to all children (Bevins, 2012: 2).

From the above-mentioned countries, it suggests that bad teaching contributed to the poor quality of education not only for accounting learners but also for society as a whole.

2.6.2. Components of the strategy in the teaching and learning of accounting

2.6.2.1. Dedicated team approach in fostering sustainable accounting learning environments

The space provided by the team to encourage collaboration between different stakeholders in the teaching and learning of accounting enhanced collaboration between teachers, among learners and learners and teachers, the school and other stakeholders with a direct interest in the teaching and learning of accounting.

Collaboration between various stakeholders can take various forms, including collaborative lesson planning, team teaching, cooperating, sharing resources and reflecting on the teaching and learning.

Collaborative lesson planning

Lesson preparation provides a foundation for a focused systematic lesson presentation (Thomson & Bebbington, 2004: 611). It therefore encompasses the previous lesson reflection and entails an overview of what is going to happen in the current lesson (Ranjan, 1995: 2). Cordingley *et al.*, (2003: 3) suggest that collaborative lesson planning, whereby colleagues, learners and parents are invited to give inputs

has ripple effects in which preparation reaches out to cover a wider scope of work and help learners to understand the content with relative ease. Planning collaboratively and prior to the lesson helps teachers with practical teaching problems through evidence of student learning inside and outside the classroom (Adelman & Taylor, 2006: 6). Thus, good preparation provides a frame of action for classroom teaching. Because, it assists teachers to focus on practical teaching and learning problems with the experience generated inside and outside the classroom, it lays a strong foundation for action. Therefore, from the above discussion it seems as if good practice is that lesson preparation be done well in advance of the class. For it to be effective, it should be designed collectively, including the learners themselves, bringing expertise and experiences from other teachers and parents.

Furthermore, because frequently a planned lesson does not always fit in a scheduled time, primarily because teaching thinking beings would always involve discussion which may sometimes go beyond the planned time, it seems advisable for a team to prioritise through models like understanding by the design egg model, as shown in figure 1.2 below:

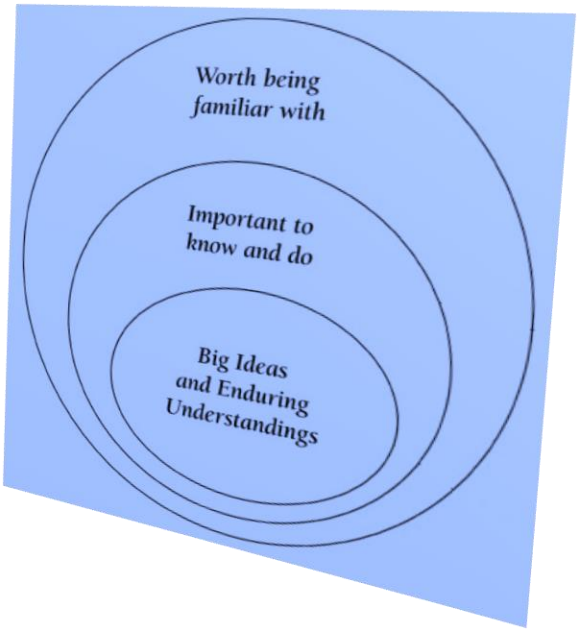


Figure 1.2 Design Egg Model

Source: Mctighe &Wiggins (2012:3).

To help prioritise content of the lesson, UBD is used to consider how your content fits in the egg-shaped model. The understanding by design framework is a model for

developing the curriculum “backward” from outcomes to activities (with a few stops along the way). In broad terms, UBD is a three-stage process.

At the heart of the model above are the big ideas and enduring understandings. The big ideas refer to a conceptual framework allowing the learner to explore answers to the essential questions involving a unit of study. Big ideas inform the whole (or significant pieces) of the teacher’s lesson content. It is important to understand that this process does not usually produce precisely linear results. One big idea will likely lead to many questions which can lead to more or fewer unit questions, therefore a teacher might have one assessment that covers many questions just as when a teacher might have many activities all oriented to helping students understand a single concept. The circle in the middle can determine what is ‘important to know and do’ and finally things that are ‘worth being familiar with’. Teachers would require the bulk of time, the focus of their assessments and the activities on the part of their learners to focus most on the centre of the egg from which learners can synthesise information together to form big ideas. Therefore, when a lesson is carefully planned through collaboration it provides an atmosphere and open space for ideas and discussion, giving teachers the courage and the ability to face and manage their lesson presentations more flexibly.

Lesson presentation on the other hand, may require a team to collaborate using strategies such as team teaching in the accounting classroom to create opportunities to improve learning. In the team, a group of teachers work together to plan, conduct and reflect on the lesson presented. In practice, team teaching has many different formats but in general, it is a means of organising staff into groups to enhance teaching and learning. Team teaching provides a supportive environment that overcomes the isolation of working in self-contained classrooms. By being exposed to the subject expertise of colleagues, to open critique, to different styles of planning and organisation as well as teaching strategies or methods of class presentation, teachers can develop their approaches to teaching and acquire a greater depth of understanding of accounting.

In addition, a team with diversity, creativity and focus creates a team synergy. Therefore, when individuals come together their unique perspectives merge, new dynamics are formed and the team becomes an entity of its own with a stronger and

more nuanced perspective to approaching the task. Thus, a synergistic mix of interest and expertise is the best catalyst for success.

Team teaching benefits learners in a sense that they are exposed to different views and skills of more than one teacher, which may lead a learner to a mature understanding of knowledge. They are afforded an opportunity to enter into conversations between teachers as they debate, disagree with premises or conclusions, raise new questions and point out consequences (Armitage, 2010:4; Laughlin, 1987:479). Contrasting viewpoints encourage more active class participation and independent thinking from students. Team teaching is particularly effective when it accommodates the pre-existing knowledge of learners and when it moves beyond communicating facts to tap into their life experience.

However, it is only through reflection that a team or stakeholders in collaboration may be able to influence the results. If a team takes the time to reflect on their teaching and reflect on how different parts of what they do works well, where aspects of their teaching can be improved and how problems which arise could be solved, that is bound to help them to improve their collaborative efforts to the teaching and learning of accounting.

The other component essential to teaching and learning that requires a dedicated team to implement is the use of a more learner-centred method of teaching. Because, in the SA curriculum, it is well stated in the CAPS document that the teaching of accounting should be related to the lived life of learners and encourage critical thinking rather than rote learning that promotes passive learning instead of active participation (CAPS, 2011: 8) in a way that is compatible with the prescripts of a democratic constitution of the country such as equity, social justice, peace, freedom and hope. The teaching and learning of accounting should be more learner-centred. Figure 1.3 below shows some of the most learner-centred methods of teaching.

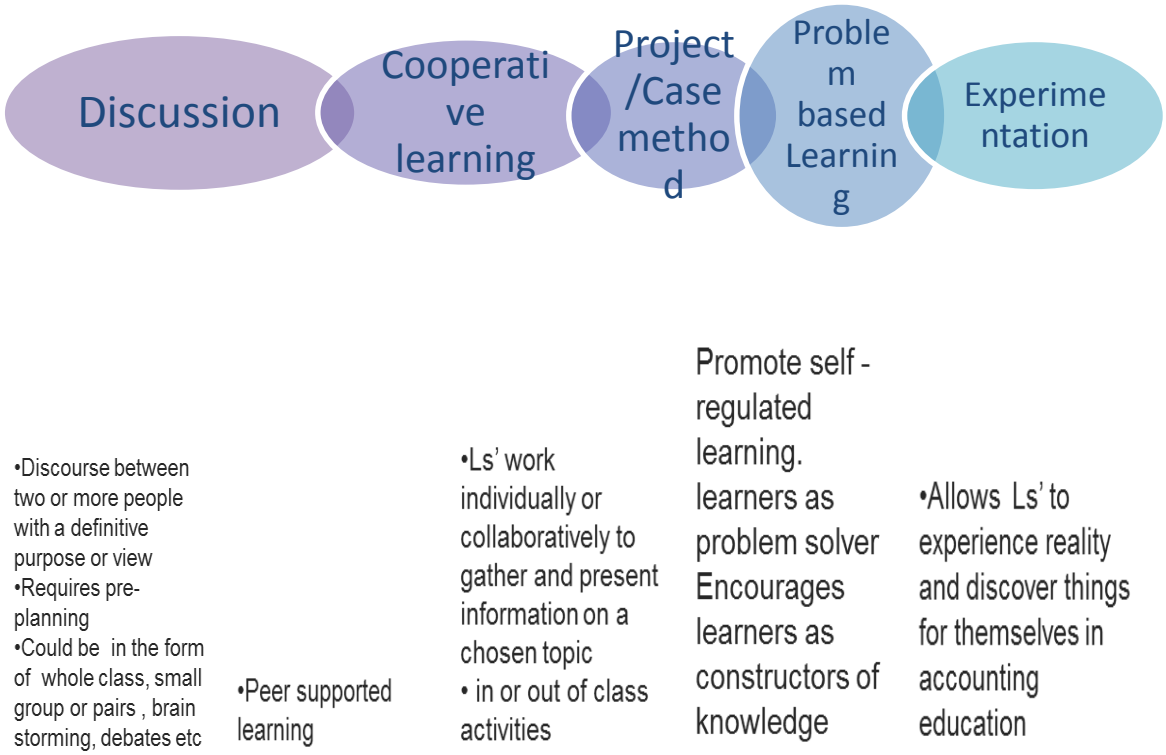


Figure 1.3. Most learner-centred methods

Source: (Jacobs, Vakalisa & Gawe, 2004:280)

It is critical of the team to ensure the use of a more learner-centred method of teaching because as illustrated above, they allow learners to use their experience and reality to discover and construct knowledge themselves. These approaches encourage the increased involvement of other stakeholders in an effort to improve learning and minimise the abstractness of accounting through exploratory learning provided by their community.

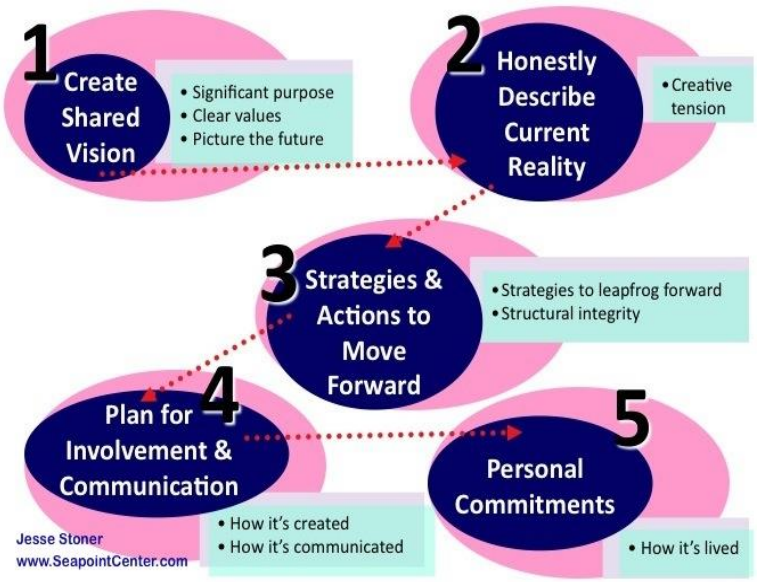
2.6.2.2. The shared vision in teaching and learning

The future is not a result of a choice among alternative paths offered by the present, but a place that is created, first in mind and will and then it is created next in activity of those who share it. Therefore, a shared vision is an optimal desired future state that provides guidance and inspiration of what the school would achieve in the future as a collective (Helling, 2015: 1770).

The teaching and learning of accounting is goal directed (Wang & Kreysa, 2006: 1-25) because the participants and the coordinating team members work towards a vision

that unifies their efforts. The unifying vision of the participants clarifies the nature of the problem that brought them together. The processes of working together toward the unifying vision foster and deepen the participants' understanding of complexities and of the multitude of factors, which embed their current reality. This understanding of the current reality compels the team to formulate plans that will correspond with the nature and extent of the complexities they found (Zuber-Skerrit, 2011: 1-239). Therefore, such a plan becomes their guidance and inspiration towards improving their current situation for the better.

Furthermore, it is important to recognise that a team consists of different members with different backgrounds. Therefore, it requires a planned process to internalise and ensure that all the members share a unified sense of purpose. The process can be illustrated in figure 2.5.2.2a below.



Source: Blanchard & Stoner (2011: 34)

The above steps assist in structuring the priorities among members. It becomes a tool for opening the communication and being realistic of what a team actually requires. Therefore, it leads to a clean and clear start, where members have gone out of their way to explore and create a picture of what a team wants to achieve and what it takes to get there. The above process encourages opening up about personal commitments so that it enables the planning to be in accordance with the lived life of the members. In this way, a vision stands in a good position to influence harmonious relationships within a team.

2.6.2.3. Fostering a deep approach to learning in the accounting classroom

Thomson and Bebbington (2004: 610) argue that education is always a political process in that it either functions as an instrument that is used to facilitate the integration of the younger generation into the logic of the present system and bring about conformity to it or it 'becomes the practice of freedom'. In a sense, men and women deal critically and creatively with reality and discover how to participate in the transformation of their world (James, 2008: 648). Therefore, persistent use of approaches of teaching that encourage surface learning is in denial of the latter. Therefore, leave some room for learners' experiences and opportunities to create knowledge through an organic process backed up by the use of more learner-centred approaches to teaching that upholds deeper learning. (Sharma, 2010: 132).

A problem-based learning approach seems to be suitable in the development of deeper learning in accounting. In terms of problem-based learning, learners learn about a subject through the experience of solving an open-ended problem (Wood, 2003:321). The goals of PBL are to help students develop flexible knowledge, effective problem solving skills, self-directed learning, effective collaboration skills and intrinsic motivation. Problem-based learning is therefore a style of active learning (McPhail, 2001: 487).

Therefore, an accounting teacher who uses PBL serves to teach content by presenting the students with a real-world challenge similar to one they might encounter through various experiences (Wood:2003: 322). The opportunity to use their prior knowledge in the classroom in an effort to make sense of the new knowledge assists learners to see that to find a possible solution to a problem requires a deeper understanding of the problem at hand (Gallagher, 1997:335). Reasonable solutions are based on the application of knowledge and the skills deemed necessary to address the issue. In order for the deeper approach to be encouraged through PBL in the accounting classroom, the solution is partly dependent on the acquisition and comprehension of facts but also based on the ability to think critically (Savery & Duffy, 1995:33). Critical thinking refers to the ability to analyse, synthesise and evaluate information, as well as applying that information appropriately to a given context. Critical and creative thinking also leads to the ability to synthesise, in particular, since it requires the learner

to take the information that is known to them and reassemble it with unknown information in order to derive a new body of knowledge (Kilroy, 2004:411).

Furthermore, in the accounting classroom where deeper learning is encouraged using PBL, teachers prefer more group activities. PBL addresses the need to promote lifelong learning through the process of inquiry and constructivist learning (Savery & Duffy, 1995:33). PBL is also considered a constructivist approach to teaching, emphasising collaborative and self-directed learning and being supported by the assessment instruments used. Therefore, according to Schmidt *et al.* (2011: 372) when learners are presented with a problem and through discussion within their group, it gives them an opportunity to activate their prior knowledge because they then feel the need to develop or refer to possible theories to explain the problem.

Furthermore, group activities require learners to present feedback and arouse learners' interest, in such a way that they feel the need not only to discover the answers relating to the problem but the reasoning behind such problems (Sharma, 2010: 127; Wood, 2003: 323). Therefore, construction of knowledge becomes the results of intrinsic motivation. Therefore, learners tend to develop a deeper approach to learning through more learner-centred approaches to learning such as problem-based learning.

2.6.2.4. Sufficient use of teaching media and tools

The challenge for many teachers today is to develop an approach to learning that is engaging, meaningful and relevant (Pilato & Ulrich, 2014: 541). Accounting education has to be more than the regurgitation of information. Educators need to find techniques that promote deep learning and retention (Romney, 1984: 150). The focus should be on real life application rather than memorisation. The learning environment is most effective for the learners when it is less formal and enables students to interact freely with the teacher and their peers (Knyviene, 2014: 158). Therefore, when choosing an approach to learning it should be oriented towards what learners are currently embracing. For instance, what is known to them and can capture their interest while, fostering a less formal learning environment, relating the lessons to real life situations using the experimental nature (Knyviene, 2014: 159).

The above characteristic fits well with the case study method because involving students in real-world simulations (an approach known as experiential learning) as part of their classroom experience (through the medium of case studies) is one way to develop a higher level of thinking through open-ended problems as supported by problem-based learning (James, 2008: 648). Case study is a central element in ensuring the development of a deeper understanding of accounting, the learning process, modernisation and innovation in many parts of accounting practices (Stewart & Kamins: 1993: 6).

The case study method is intellectually engaging for students because they acquire the knowledge, skills and tools to deal with the kind of problems they will encounter in their lives (Riccio, 1998:5). Therefore, it tends to bridge the gap between theory and practice. Because they go through the inductive reasoning process to arrive at answers, the learning process is more powerful (Pilato & Ulrich, 2014: 541).

However, it requires adequate research to identify and design the case studies relevant to a particular topic (Pilato & Alrich, 2014: 542). Thus, accounting teachers should develop the interest in research to enable them to access the needed information relevant to the lived lives of their learners. (Libby, 1991:195. The case study method requires learners to identify relevant issues, gather necessary evidence, identify appropriate arguments, exercise judgement in order to arrive at a conclusion, defend a particular position in the classroom situation, evaluate the position or perspectives of other students and modify their position, if necessary (Scapens, 1990: 266).

The case is a real life situation which requires some judgement that makes the student think and integrate their existing knowledge in the decision-making process, assess the possible decision alternatives, causes problems and then have them make decisions and justify those decisions (Knyviene,2014: 157;Riccio, 1998: 5). Therefore, a case study approach is closely linked with problem-based learning because of its ability to develop problem-solving skills in the accounting classroom.

2.6.2.5. Adequate feedback on assessment

Formative assessment creates a responsive and agile learning environment where teachers and students can self-correct based on assessment information to increase

the likelihood of all leaners improving their learning and meeting their learning goals Rodgers, 2006: 218). One of the key elements of such assessment is descriptive feedback. Descriptive feedback should highlight gaps in understanding and specifically inform students on how they can improve their learning rather than listing what they got wrong, thus facilitating a reciprocal learning process between teachers and learning (Walker, 2010: 360). When learners receive clear and descriptive feedback on their work, they have the opportunity to analyse what they have done well and which part(s) need improvement. Therefore, it should be ongoing feedback. It should be clear, specific, meaningful and timely to support improved learning and achievement (Rodgers, 2006: 218).

Feedback in the accounting classroom should be on what needs to be done and should encourage all learners to believe that they can improve. It should build on their previous achievement rather than only focus on grading and performance (Spiller, 2009: 40). Depending on the nature and delivery of the feedback, it can have powerful positive effects on student learning and engagement (Hattie & Timperley, 2007: 90). Therefore, ongoing descriptive feedback linked specifically to the learning goals and success criteria is a powerful tool for improving student learning and is fundamental to building a culture of learning within the classroom.

Feedback is an essential practice of assessment for learning, “a process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go, and how best to get there” (Bennet, 2011: 8). It enables learners to identify their misconceptions and clear their gaps while they reflect on it. Misconceptions, inaccurate or incomplete ideas about a concept or a process are common (Savion, 2009: 45). Indeed, they can arise in any discipline in which accounting is included. Our theories about the world and everything in it are based on our experiences, which are woefully incomplete (Spiller, 2009: 56). However, in accounting misconceptions are more common because of unique jargon that is used. Therefore, the only way to identify such misconception is through feedback.

Furthermore, the teacher can use feedback in the form of peer feedback during learning while providing learners with opportunities to develop peer and self-assessment skills. (Black & William, 2009: 12). These practices work together to help

students become better able to monitor and direct their own learning. Therefore, they will gain greater autonomy over their learning and acquire lifelong habits of mind that develop higher-level critical thinking skills, engaged in a process of continuous review and reflection of their knowledge and understandings (Walker, 2010: 1). This may well then represent the greatest benefit of formative assessment and render it a tool of empowerment.

Furthermore, descriptive feedback enables the learner an opportunity to reflect. Where, reflection can promote deep, lasting learning (Suskie, 2009: 60) and it can be used to assess whether a teacher's lesson was successful or requires more emphasis. Alternatively, it can be used to determine whether a lesson achieved what was intended (Walker, 2010: 2). Often, accounting teachers use reflection as a method for learners to make meaning of what they are learning and as a way for them to give feedback on that meaning making. When it is oral and led by peers, it has more high-impact for students.

Oral and peer feedback can be used to promote and provide evidence of the development of generic skills and attributes such as working cooperatively with other learners (Suskie, 2009: 60). Furthermore, it provides them with the ability to think critically, contributing or defending an argument. In addition, learning from critical appraisal received from others is a benefit of such an approach to feedback while the learners also learn to manage their own learning autonomously. Furthermore, they develop interpersonal skills and develop an awareness of group dynamics (Walker, 2010: 2).

2.6.2.6. Effective use of the principles of good teaching

The principles of good teaching represent proven teaching practice, however, different institutions implement good practice depending on their learners and their circumstances (Allais, 2007: 523). Moreover, the intention with these principles are to guide teachers to practise good teaching. In addition (SAQA, 2012: 7), in terms of legislative frameworks in South Africa, the basic education landscape is informed by legislation promulgated by the Department of Basic Education (DBE) and the subsequent guidelines published by statutory bodies tasked with overseeing higher education (Chisholm, 2003: 275). Of particular importance are the level descriptors published by the South African Qualifications Authority (SAQA), which describe the

kind of learning and competencies expected from each NQF level. Therefore, for Grade 10 accounting, the level descriptor specified is level four, as outlined in Section 2.5.8.2.and 2.6.1.5.

The study uses such expectations as legislated in the level descriptors, specifically for education as minimum requirements for good teaching.

Knowledge literacy

Literacy is primarily something people do; it is an activity, located in the space between thought and text. Literacy does not just reside in people's heads as a set of skills to master, and it does not just reside on paper, captured as texts to be analysed. Like all human activity, literacy is essentially social and it is located in the interaction between people (Hofstetter *et al*, 1999:60; Sherman, 2008: 5). As a whole, literacy is everything that surrounds a human being. The magnitude of literacy is "grounded in social, cultural, historical, and political practices" (Larson & Marsh, 2005: 1).

Through experiences that fall within a team-teaching environment, a learner derives knowledge literacy from the exposure to multiple perspectives as highlighted in Section 2.5.8.2. and also 2.6.1.5. Team teaching benefits learners in a sense because of the exposure to different views and skills of more than one teacher, which may lead a learner to a mature understanding of knowledge (Hofstetter *et al,* 1999:61). They have an opportunity to enter into conversations between teachers as they debate, disagree with premises or conclusions, raise new questions and point out consequences (Armitage, 2010: 4; Laughlin, 1987: 479). Therefore, the synergistic mix of interest and expertise provides opportunities for leaners to derive the knowledge and widen their scope (Spaull, 2013: 4).

Scope of Knowledge

According to Oxley and Wada (2009: 636), the scope of knowledge is concerning the study of knowledge and justified belief. It questions what knowledge is, in what manner it can be acquired and to what extent that knowledge is pertinent to any given subject that can be acquired. However, provision four of the level descriptors requires a learner to show a fundamental knowledge base of the study and the understanding of key terms, rules, concepts and principles in the learning of accounting (SAQA, 2012: 7), as highlighted in Sections 2.6.2.4 and 2.6.2.3.

The case method is intellectually engaging for students because they acquire the knowledge, skills and tools to deal with the kind of problems they will encounter in their lives (Riccio, 1998:5). Therefore, it tends to bridge the gap between theory and practice. Because learners go through an inductive reasoning process to arrive at answers, the learning process is more powerful (Pilato & Ulrich, 2014:541). Therefore, the case study method creates an opportunity for learners to develop a knowledge base of the most important areas in accounting.

On the other hand, the opportunity to use their prior knowledge in the classroom in an effort to make sense of the new knowledge assists learners to see that to find a possible solution to a problem first requires an understanding of the problem at hand (Wood, 2005: 330). It is necessary to address this since knowledge and skills be applied in order to find reasonable solutions. A solution to the problem is dependent on the acquisition and comprehension of facts but also based on the ability to think critically. Therefore, it is possible to acquire a knowledge base of accounting through problem-based learning.

Problem solving

Problem solving is the process of working through the details of a problem in order to reach a solution. Problem solving may include systematic operations and can be a gauge of an individual's critical thinking skills. In addition, NQF level four in terms of problem solving expects learners to be able to use their own knowledge to solve common problems within a familiar context, or the ability to adjust an application of a common solution in response to a small change in the problem, as explained in Sections 2.6.2.3, 2.6.2.4 and 2.6.2.5.

A problem-based learning approach seems to be suitable in the development of problem solving skills in accounting (Gallagher, 1997: 1). In terms of problem-based learning, learners learn about a subject through the experience of solving an open-ended problem (Wood, 2005: 330), which leads to the ability to develop flexible knowledge, effective problem skills, self-regulated learning and collaborative learning, to mention but a few (McPhail, 2001: 487). On the other hand, the case study approach can enhance learners' problem solving skills. The case study method provides a real life situation that requires some judgement from the learner. This forces the learner to think and integrate his existing knowledge in the decision-making process, assess

possible decision alternatives, causes of problems, make decisions and justify these decisions (Knyviene, 2014: 157; Riccio, 1998: 5). Furthermore, the teachers may develop problem-solving skills in learners by the use of oral and peer feedback on assessments, since it tends to encourages discussion and dialogue. It furthermore provides them with the ability to think critically contributing or defending an argument (Suskie, 2009: 60; Walker, 2010: 2).

Management of information

According to Marakas (2003: 103), this is the collection, responsibility and management of information from one or more sources and the distribution of that information to one or more audiences. This sometimes involves those who have a stake in, or a right to that information. Management means the organisation of and control over the structure, the processing and the delivery of information. However, NQF level four, in terms of management of learning, states that it is where a learner is expected to demonstrate the capacity to take responsibility for his own learning within a supervised environment and the capacity to evaluate his performance against given criteria, as highlighted in Section 2.6.2.5.

The teacher may also use feedback in an attempt to meet the requirement for the management of information, where the focus would then be peer feedback and self-assessment (Black & William, 2009: 12). The learners will therefore be encouraged to acquire greater autonomy and lifelong habits of monitoring and control over their lives, while they develop higher-level critical thinking skills, engaged in a process of continuous review and reflection of their knowledge and understandings (Walker, 2010: 1). This may well then represent the greatest benefit of descriptive feedback on formative assessment and renders it a tool of empowerment.

2.6.3. Conditions for favourable sustainable accounting learning environments

The components of the framework for sustainable accounting learning environments were discussed in Section 2.6.2. This section will present the contextual factors corresponding to each of the mentioned components. The section will further discuss the conditions as follows: conditions that enhance dedication in the team, conditions

that are conducive for a shared vision and conditions that support the effective use of principles of good teaching.

2.6.3.1. Conditions that enhance dedication in a team

One of the most important conditions that contributes optimally to the dedication in the team is the commitment to the concept of working as a team (Wenger, 2000: 230). Commitment is a devotion or long-term promise you make and keep with yourself and others to dedicate yourself fully to your task, even and especially when times are tough (Pearce & Herbik, 2004: 297). Furthermore, commitment means not only promising to do something but more importantly, actually investing the necessary effort and actions to make it happen (Mahony, Madrigal & Howard, 2000: 17). Commitment to a team is a critical factor as it firstly begins with a commitment to each other, secondly, commitment to the team and its success and finally, commitment to the school and the goals of the school (Bishop, Scott & Burroughs, 2000: 1114). Therefore, commitment to a team seems to lead to dedication.

Furthermore, a team consisting of members from diverse backgrounds and with diverse perspectives creates an atmosphere conducive for the team to accommodate and create different perspectives (Labonte & Laverack, 2001: 130). Diversity is about empowering people. Thus, bringing people together to share their knowledge and experiences and learn from each other creates an empowering experience (Kurtzberg & Amabile, 2000: 286). This helps to create a synergy effect in a team and renders a team dedicated with the main goal of seeing the team accomplishing its mission (Liemhetcharat & Veloso, 2012: 368). Therefore, diversity is what builds a dedicated team - a collection of individual experiences, backgrounds and cultures that can view problems and challenges from a wide variety of lenses.

However, a team also requires an open line of communication to function properly (Carlson & Sullivan, 1999: 20). Communication is vital in a team because it raises the opportunity to share good ideas and best practices openly (Bokhour, 2006: 350). When a team comprises a variety of people from different backgrounds, it may lead to the feeling of inferiority to some team members, in the sense that they can be hesitant to provide input for fear of being criticised or having their ideas dismissed (Hambley,

O'Neil & Kline, 2006:58). Teams that can establish an open, positive and supportive environment among team members are in a better position to hear good ideas and learn from the best practices of the group. Therefore, communication is a vital condition for a dedicated team.

In addition, commitment to a team, the synergy from the diverse backgrounds and an open communication line are sustainable when there is a strong sense of collective leadership. The reason being that collective leadership is about embracing and marshalling human, cultural and technological resources in ways that enable stakeholders to work together to improve their communities for the collective wellbeing of all (Martin, 2007: 5). In addition, collective leadership becomes possible when a common purpose motivates the members of a team (West *et al*, 2014: 3). Furthermore, they begin building relationships with each other that are genuinely respectful enough to allow them to co-construct their shared purpose and knowledge (Martin, 2007: 13).

Therefore, collective leadership is relational in a sense that the group as a whole is a leader in the community, just as members of the group can be leaders within the group (Cullen *et al.*, 2014: 17). Collective leadership is fluid because it emerges out of specific situations. The process of defining vision and setting direction as well as exercising influence over other people and organisations becomes a shared function of the group (Martin, 2007: 12). Collective leadership is transformational because it begins with a belief in and a commitment to social advocacy and social justice (West & Steward, 2014: 4). Therefore, collective leadership is one of the cornerstones of a dedicated team.

2.6.3.2. Conditions conducive to a shared vision

A shared vision reflects the team members' mutual purpose (West *et al*, 1998: 296). It is a necessary condition for exchange to occur as identification and combination of knowledge as a resource can only be realised if the team has a greater desire and mutual purpose strong enough to facilitate coordinated action (Dyer & Singh, 1998: 661). Shared values and understandings between members in a committed relationship facilitate meaningful communication that is essential for sharing and is required for knowledge creation. According to Nahapiet and Ghoshal (1998: 251), shared norms and identity increase the level of mutual understanding among organisational members, which in turn acts as a resource influencing the anticipation

of value to be achieved through collaboration and the motive to combine and share knowledge. This leads to a strong sense of ownership.

2.6.3.3. Conditions that support the effective use of principles of good teaching

The presence of a dedicated team with a shared vision is the primary condition that ensures that the effective use of good teaching principles is sustainable (Carlson & Sullivan, 1999: 20). Therefore, a team with a desired future state may provide a space conducive to the following conditions: conditions that support the fostering of a deep approach to learning, conditions that support sufficient use of teaching media and tools, and conditions that support the provision of adequate feedback. Conditions conducive to fostering a dedicated team, as well as designing a shared vision, are presented in Sections 2.6.3.3.1 and 2.6.3.3.2 respectively below.

2.6.3.3.1. Conditions that supports the fostering of deep approach to learning

In Section 2.6.1.2 reference is made in line with the principles of good teaching, namely that deeper learning may occur through learner-centred approaches to learning, as the basic premise on which deeper learning is based, is that participatory (interactive) learning is fundamental (Johnston, 1995: 2). The notion that learners should be responsible for their own learning is seen when learning becomes a natural outcome of an interaction or participation. In other words, when learners are working as a group, or interacting in normal classroom activities their learning becomes meaningful and internalised.

Furthermore, carefully choosing the best approach would allow the maximum use of learners' pre-existing knowledge in order to make their learning meaningful. Their pre-existing knowledge can be blended though the use of various teaching modes, making class presentations vibrant and encouraging the learners to ask questions and share inputs and experiences with other learners and their teacher in an effort to foster deeper learning.

2.6.3.3.2. Conditions that support sufficient use of teaching media and tools

In Section 2.6.1.3, there is a reference in line with the principles of good teaching, namely the most effective learning environment for learners. The learning environment is most effective for learners when it is less formal and enables learners to interact freely with their teacher, and their peers (Knyviene, 1993: 5). Therefore, when choosing an approach to learning the teacher must ensure that it is oriented towards what learners are currently embracing and that they find familiar. In other words, capturing their interest while fostering a less formal learning environment, relating the lessons to real life situations and using the experimental nature of learning (Knyviene, 1993: 157).

The above characteristics can only fit well in an environment that embraces a case study approach (James, 2008: 648). The case study is a real life situation that requires some judgement, forces the students to think and integrate their existing knowledge in the decision-making process, while a learner is able to assess the possible decision alternatives, then have to make a final decisions and justify them (Knyviene, 2014: 157; Riccio, 1998: 5).

2.6.3.3.3. Conditions that support the provision of adequate feedback

In Section 2.6.1.4 there is a reference to conditions that support the provision of adequate feedback, in line with the principles of good teaching. Dialogue and discussion are the key means by which teachers open opportunities for effective oral feedback (Savion, 2009: 45). Through these discussions and engagements, they can determine what students already know, identify gaps in their knowledge and understand and scaffold the development of their understanding towards learning (Walker, 2010: 2). Thus, planning ways for learners to discuss and to explore their understanding makes learners' participation more active (Black & William, 2009: 12). Therefore, the atmosphere would give teachers opportunities to promote engagement in critical thinking, problem solving, to notice misconceptions and plan to address any problems in the next phase, thus modelling effective feedback that the learners can then use in peer and self-assessment.

Therefore, the above-mentioned skills makes oral peer feedback and by extension dialogue and discussion in an accounting classroom a necessary condition for the effective feedback on assessment.

In conclusion, the above discussion reveals the conditions that support the effective use of the principles of good teaching as an environment with the presence of a dedicated team, with a shared vision in accounting, and where such a team would create opportunities for the optimal use of learner-centred approaches of teaching. In addition, the environment should encourage dialogue and discussion, while acknowledging and accommodating the knowledge that the learners acquire from their home background as important in understanding accounting as the subject matter in a classroom.

2.6.4. Factors that threaten the implementation of the emerging framework

The previous section explored in detail the conditions conducive to the successful implementation of the strategy for a sustainable learning environment in a Grade 10 accounting classroom. However, it is important that one keeps in mind the possible threats and risk factors that might prevent the strategy for sustainable accounting learning environments from being as effective as planned. As a result, this section presents a detailed discussion of possible threats and gives an account of how to circumvent these risk factors for the framework to produce desirable results.

2.6.4.1. Threats towards a dedicated team

Collaboration can be particularly challenging when the school lacks the strategies and structures necessary to support the inclusion of a team, and clarity of their roles, at the school. Some teachers may feel threatened by the presence of the team as they may think that they are incapable teachers (Dearman & Alber, 2005: 636). This may lead to the team feeling unwelcome when teachers resist their efforts to bring their actions to the classrooms.

However, the school leadership may circumvent the threats to an extent by placing significant emphasis on teacher professional development and support with collaborative practice. However, this should take place after the formation of the team but prior to setting up the collaborative teaching classes (Ocholla, 2007: 468). Teachers may then realise that the team is there to empower them rather than destroy them, hence the necessity of a platform for open discussion within a school (Dearman & Alber, 2005: 636).

2.6.4.2. Threats towards a shared vision

Van Schaik (2005: 52) have found that the reality of a shared vision actually involves shared planning, decision-making and shared power, and therefore is different from the ideal. Given the context of inter-professional teams, members will automatically come from different professions or others with no professions at all. Therefore, in practice, shared decision-making is likely to conflate individual team members who make decisions within their own scope of practice, with the ideal being all team members sharing in all decision-making processes, in other words, "appropriate" decision-making. Shared power and leadership may also be a challenge when complex traditional hierarchical relationships come into play. This is particularly true when some members feel inferior or that think that they are invaluable, because of a lack of a profession. This can lead to a failed vision (Dearman & Alber, 2005: 636).

Similarly, individuals who possess great power but who for some reason refuse to use it, lack effective power (Van Schaik, 2005: 52). Therefore, team members should be willing to share power in a sense that they have common ground in terms of how the team operates, and emphasis should be on collective power with mutual respect.

2.6.4.3. Threats towards the effective use of the principles of good teaching

Teachers tend to work independently and are often unaware of what goes on in neighbouring classrooms. Thus, fostering collaboration is a challenge for most schools. When it does occur, collaboration depends on establishing trust among teachers, and between teachers and the newly established team (Zaidieh, 2012: 19). In short, a two-pronged approach is necessary in this regard. Firstly, schools must implement structures, routines and protocols to establish and facilitate teacher interaction focused on instructional issues (Johnson, 2003: 341). Secondly, specific

attention must be devoted to nurturing school-wide behavioural norms that undergird collaborative practices, such as collective responsibility for student learning. In such a school environment, a more holistic view of student learning where all adults are committed to working together to achieve shared goals can emerge (O'Mara & Gutierrez: 2010: 41).

Teachers' timetables should be reorganised and new structures created in order to support collaborative planning and instruction (Johnson, 2003: 342). The school should ensure that the progress of the team be shared not only with the relevant department but also with the school in general in order to increase buy-in and trust (Zaidieh, 2012: 19).

2.6.5. Indicators of success on the formulated strategy

Presented in this section, is a detailed discussion on the indicators of success, namely the milestones that signify the achievements of the framework. In order to discuss the indicators of success, special reference regarding the principles of good teaching whereby provision four of the NQF level descriptor is used as minimum requirements for good teaching in this study (SAQA, 2012: 7), will be made.

However, when the information derived from literature was used in conjunction with these requirements, a number of indicators, already presented in Section 2.5.2, were revealed. Therefore, in this section those indicators will be used as the milestones that will signify achievement of the strategy since the study would have achieved the minimum requirements as per the NQF level descriptors.

2.6.5.1. Knowledge literacy

The presence of a dedicated team with a common vision

In terms of team teaching, learners will benefit from the presence of a dedicated team because of the exposure to the views and skills of more than one teacher. This may guide a learner to grow a mature understanding of knowledge because of the exposure to multiple perspectives. This also develops the ability to gather evidence and create perspectives for a given problem, rather than assuming that there is only one possibility or the single truth (Armitage, 2010: 4; Laughlin, 1987: 479). Furthermore, collaboration between other stakeholders, including the community, becomes a

powerful contribution through their ordinary experiences and feelings (Spaull, 2013: 4). Thus, a synergistic mix of interest and expertise is the best catalyst for success and a greater distributor of the knowledge literacy, hence the collaboration of stakeholders in a team creates a network where knowledge literacy is located (Sherman, 2008: 5).

2.6.5.2. Scope of Knowledge

Utilisation of approaches of teaching that create opportunities to foster deep learning

The use of a case study as a teaching method would likely foster deeper learning as it intellectually engages learners to solve real life scenarios and ends with learners acquiring knowledge, skills and tools that they can use to solve similar problems, should they face it again in their lives (Riccio, 1998: 5). Thus, a case study widens the scope of their knowledge, while it simultaneously bridges the gap between theory and practice. In addition, learners have to follow a logical process of exploring multiple premises in an effort to find a suitable answer (Pilato & Alrich, 2014: 541). Therefore, the case study method creates an opportunity for learners to develop a knowledge base of the most important areas in accounting.

On the other hand, teachers can also create opportunities for learners to use their prior knowledge in the accounting classroom by using problem-based learning (PBL), where a learner receives a problem and has to find a solution to the specific problem. This approach may naturally encourage the learner to use pre-existing knowledge as a first point of reference in solving the problem. The learner will do so, in an effort of making sense of the new knowledge and at the same time trying to find a possible solution to the identified problem (Wood, 2005: 330). The process may assist a learner in realising that reasonable solutions based on the application of prior knowledge and skills are necessary to address the issue at hand, since a solution to the problem depends on the acquisition and comprehension of as well as the ability to think critically. Therefore, problem-based learning may widen a scope of knowledge through the accommodation of pre-existing knowledge that provides opportunities and becomes a base, not only to the new concepts, principles and rules, but also to the content as a whole.

2.6.5.3. Problem solving

When the approaches of teaching encourage adequate use of teaching media and tools

When the teacher uses media and tools in the accounting classroom, it spurs learners' interest and their inquisitiveness, while motivating them to look beyond mere answers to the reasoning behind the solution, which is a problem solving skill. Thus, the use of problem-based learning seems suitable in the development of problem solving skills (Gallagher, 1997: 1) as learners learn about a subject through the experience of solving an open-ended problem (Wood, 2005: 330). In addition, the goals of PBL are to help learners develop flexible knowledge, effective problem solving skills, self-directed learning, effective collaboration skills and intrinsic motivation. Problem-based learning is therefore a style of active learning (McPhail, 2001: 487), hence adequate use of media and tools in an accounting classroom may lead to the development of problem solving skills.

On the other hand, the case study approach provides a real life situation that requires some judgement, forcing learners to think and integrate their existing knowledge in the decision-making process, while they assess the possible decision alternatives in an effort to gather enough evidence to motivate their final decision (Knyviene, 2014: 157; Riccio, 1998: 5). Therefore, the case study approach links closely to problem-based learning because of its ability to develop problem-solving skills in the accounting classroom.

Furthermore, using oral feedback provides learners with the opportunity to develop problem-solving skills as they are encouraged to think critically when they contribute or defend an argument (Suskie, 2009: 60). In addition, they also learn from critical appraisal received from others. Thus, such an approach to giving feedback provides an opportunity to the development of problem solving skills in an accounting classroom (Walker, 2010: 2).

2.6.5.4. Management of information

When the process of feedback on assessment allows interaction among learners

The use of peer feedback in the accounting classroom may create such a space where learners are the ones leading the process through self-assessment or peer assessment (Black & William, 2009: 12). It gives them a sense of control by providing them with the ability to monitor and direct their own learning. Therefore, when they have a sense of being in control they tend to be more accountable for their actions (Walker, 2010: 1). In other words, when they have a sense of accountability, they tend to realise their responsibility to reflect on the feedback in order to prepare for subsequent tasks. Therefore, they tend to manage their accessed information.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY TOWARDS THE FORMULATION OF THE STRATEGY TO CREATE A SUSTAINABLE LEARNING ENVIRONMENT FOR A GRADE 10 ACCOUNTING CLASSROOM

3.1. INTRODUCTION

The study seeks to formulate a strategy to create a sustainable learning environment (SuLE) for a Grade 10 accounting classroom using principles of critical accounting research. In order to achieve this aim, this chapter discusses the methodology followed such as the research methodology, the participants, instrumentation, data collection and data analysis. The research design that is chosen and followed in this study is participatory action research, which is a means of operationalising the critical accounting research (CAR) that was discussed in chapter two. Therefore, the study uses participatory action research (PAR) as its approach to design and methodology for data generation and its analysis. The fundamental components and themes defining participatory action research and the PAR cyclical steps are highlighted. These include the following: identifying and clarifying the problem; developing a plan for improvement, implementing the plan, observing and documenting the effects of the plan and reflecting on the effects of the plan for further planning and informed action.

It also discusses how the researcher became involved in the project, how participants identified their problems and how the structure and the coordinating team was chosen in order to create the intervention strategy that was executed, implemented and monitored. The chapter discusses the discourses and the plan of action that was conducted by the chosen coordinating team in order to identify the need and components of the framework and determine conditions that are conducive for the formulation of a strategy to create sustainable learning environment for a Grade 10 accounting classroom. The threats to the framework were identified and looked at with the aim of trying to circumvent or work through them where possible.

The chapter also describes how participants of the research gathered data as a collective unit. McGregor (2010: 420) argues that the gathering of data is the responsibility of all the participants and to this end, collective work and collaboration were encouraged for all participants. The data collected was categorised into constructs emerging from each objective, then analysed and interpreted, using critical

discourse analysis (CDA). Cohen *et al.* (2013: 298) and Van Dijk (2008: 250) view CDA as the construction of meaning in a social context, not simply sentences that are disjointed from the context. CDA will be more thoroughly unpacked in chapter four. Lastly, the chapter concludes by summing up the processes implemented herein in terms of restating the purpose and aim of the chapter and highlighting important points, therefore tightening all the loose ends.

3.2. PARTICIPATORY ACTION RESEARCH (PAR)

PAR is the relevant methodology for this study as it views participants as human beings (Moloi, 2014: 32). PAR pays careful attention to power relationships, advocating for power to be deliberately shared between the researcher and the researched (Baum, MacDougall & Smith, 2006: 854), blurring the line between them until the researched become the researcher. PAR aims to achieve empowerment of those involved. The empowerment is said to be achieved as a shifting or dynamic quality of power relations between co-researchers, so that the relationship tends towards equity by reducing inequalities and power differences in access to resources (Baum, MacDougall & Smith, 2006: 854).

The section briefly discusses the historical origin of PAR, objectives of PAR, formats of PAR, steps in PAR including the spiral process of PAR, ontology, epistemology, role of the researcher in PAR, the relationships with participants in PAR and rhetoric in PAR.

3.2.1. Historical origin of PAR

PAR is considered a subset of action research, which is the systematic collection and analysis of data for the purpose of taking action and changing it by generating practical knowledge (McDonald, 2012: 35). Ideally, the purpose of all action research is to impart social change with a specific action as the ultimate goal (McDonald, 2012: 35). The origins of PAR can be traced to the work of Kurt Lewin who is considered as the founder of action research (Gillis & Jackson, 2002: 264). It is said that Lewin, a Prussian psychologist and a Jewish refugee from Nazi Germany, embodied the philosophy “that people would be more motivated about their work if they were involved in the decision-making about how the workplace was run” (McNiff & Whitehead, 2006: 36). The term action research was coined by Kurt Lewin in about

1944 and was used to describe a form of research, which could marry the experiential approach of social science with programmes of social action in response to major social problems of the day (Kemmis, 1980: 1-22).

Lewin was considered the founder of action research and focused on issues of workplace democracy. Action research (AR) and PAR are interpretive and qualitative methods that combine social investigation, educational work and action (Brydon-Miller, 2001: 77). Lewin's form of action research addressed problems of segregation, discrimination and assimilation and assisted people in resolving issues and initiating change while studying the impact of those particular changes (McDonald, 2012:37). PAR operationalises the principles of CAR that emphasise the unmasking of hidden agendas when coming to the distribution of scarce resources, especially in accounting classrooms whereby the teaching of accounting is more reliant in the methods that encourage memorisation. PAR allows the researchers to work hand in hand with the community to solve the community's problem, especially the voiceless and the marginalised.

The roots of PAR can also be traced back to Paulo Freire who suggested that the key to social change is through dialogue and conscientisation (Ozanne & Saatcioglu, 2008: 431; McDonald, 2012: 37). In this instance, the marginalised community get involve by critically analysing their situation and organising actions to improve it (Baum *et al.*, 2006: 866). PAR is committed to Paulo Freire (1974), who referred to it as community action research (Ozanne & Saatcioglu, 2008: 431). He further emphasised the significance of critical consciousness to social change (McDonald, 2012:37). PAR considers its alignment with CAR because CAR also recognises the power relations between the teacher and a student, which is the power relations between those who teach and those who are taught (Armitage, 2011:112), these being central to the learning process for truly democratic, empowering and emancipatory practices both for the student and teacher alike (Armitage, 2011:113). For teachers to be critical is to create freedom in the form of dialogue, since accounting classroom practice can only emerge from a situation of open, free and uninterrupted dialogue that takes the form of self-conscious criticism (Armitage,2008:105). The PAR approach of Freire was concerned with empowering the poor and marginalised, encouraging them to take

action in changing the oppressive elements of reality and as such liberate oppressed individuals (McDonald, 2012:37).

It is thus understandable that PAR also emerged from movements that shared a vision of society free of dominance, which occurred within the fields on international development, the social sciences communities and adult education (Maguire, 1987: 60-69). This is a view of adult education as an empowering alternative to traditional approaches to education and the on-going debate within the social sciences over the dominant social science paradigm (Baum *et al.*, 2006: 866; McDonald, 2012:38). For this reason, other groups of researchers, such as feminists, extended participatory research by analysing power differences based on gender and supported the importance of collaboration between the researcher and participant (Maguire, 1987: 63). It is therefore acknowledged that PAR was developed as a means of improving and informing social, economic and cultural practice which in principle is a group of activities whereby individuals with differing power, status and influence, collaborate in relation to a thematic concern (McDonald, 2012: 37).

3.2.2. Objectives of PAR

The ultimate aim of PAR is the empowerment of the oppressed individuals to collaborate in social change, which encourages capacity development and capacity building of all who participate (McTaggart, 1997: 585). By bringing different stakeholders with different expertise to help mould learners much more than when there is only one teacher role modelling to too many learners in the classroom. From this premise, PAR is an approach that we postulate to be best suited to the formulation of a sustainable learning environment for a Grade 10 accounting classroom because such learning environments are those where teachers, parents and all stakeholders go out of their way to encourage, collaborate and cooperate and are underpinned by problem-based learning strategies.

Using PAR, co-researchers are not passive but actively involved in the pursuit for information and ideas to guide their future actions. This also enables scholars to become catalysts connecting the collaborative learning community's study (Chapman & Dold, 2009: 1). As such, the aim is to make sure that knowledge gained on a daily basis is applied to shape the lives of ordinary people (Cameron & Gibson, 2005: 317). PAR provides space for all the participants to comprehend the importance of the

compliance with all the critical cross-fields outcomes which emphasise the cultivation of a democratic citizen who can work and live with others meaningfully towards the economic development of the country. That is why individuals with different power practices are collaborating in this study to share knowledge and empower each in the process of learning.

The purpose of PAR is to foster capacity, community development, empowerment, access, social justice and participation (Vollman, Anderson & McFarlane, 2004: 129). We chose to use PAR as a research method to illustrate and challenge inequality and exploitation of the research subjects referred to and help to change their social reality (Kindon & Elwood, 2009: 20). Therefore, PAR gives the co-researchers an opportunity to engage in acknowledging the existence of the problem, studying the problem, analysing it and designing ways of addressing it. This can only be achieved by taking part in the act of change (McDonald 2012: 38; Lybeck, 2010: 91). As such, the study is said to be informed by the co-researchers, enabling them to become experts in solving problems and also bringing about a change in their respective behaviours through a set of developed skills and gained knowledge (Boog, 2003: 426). The study therefore, matches the principles of PAR, that each individual has different values that must be acknowledged and valued as there are no right or wrong suggestions. Etmanski and Pant (2007: 283) assert that in the participatory research process people are engaged in the research to do things simultaneously. They enhance their understanding and knowledge of a particular situation and take action to change it to their benefit. Knowledge for the sake of knowing is de-emphasised; knowing is linked to a concrete action (Etmanski & Pant, 2007: 282).

McDonald (2012:39) argues that PAR has common characteristics and principles that distinguishes it from other research methodological approaches. Firstly, PAR is democratic, thus enabling the participation of all people. The principle of democracy is needed in an accounting classroom since it allows learners the freedom to participate in dialogue and engage with the subject matter in pursuit of constructing their own knowledge, therefore the collaboration between the co-researchers has a powerful contribution to the creation of a sustainable learning environment for the Grade 10 accounting classroom. Secondly, it is equitable, as it acknowledges equity of people's worth (Sherman, 2008: 5). In this study, equity is about the state of equilibrium between the co-researcher, as the contribution of each participant is

valued and no contribution is undermined because of the socio-economic status of a participant or his/her level of education (Armitage, 2010: 10 & McPhail, 2001: 474). Thirdly, it is liberating in that it provides freedom from oppressive and debilitating conditions and is life-enhancing, which enables the expression of people's full human potential, through processes that accent the wealth of assets that community members bring to the process of knowing and creating knowledge and acting on that knowledge to bring about change (McDonald,2012:39). Fourthly, PAR is a political process; it requires that people put the practices, ideas and assumptions about institutions to the test. It involves record keeping, requires participants to objectify their own experiences and involves critical analysis (McTaggart, 1989: 561). These principles are regarded as a vital part of making accounting an instrument of democratic function and by taking into cognisance the democratic principles, such as peace, freedom, equality, hope and social justice (Levitt, 2008: 48).

From the foregoing paragraphs, we can deduce that the primary objective of PAR is participatory as opposed to only extracting information from the research population but permits divergence leading to a common vision. With this in mind, PAR goes beyond identifying and assessing difficulties and theorising on them by monitoring the process of teaching and learning and engaging with solutions in order to accomplish what the study entails (Levitt, 2008: 49). PAR processes can be used to improve local situations through valuing discourses from a broad range of intellectual origins. PAR is rooted in an "especially strong concern for social justice and equality" (Pant & Odame, 2009: 160-172). On the basis of the above the researchers acknowledge the objectives of PAR in enabling the study to achieve its stated objectives, since PAR recognises and values that people are social beings, within political, economic and social contexts (McTaggart, 1989: 562).

3.2.3. Formats of PAR

PAR is considered a subset of action research (McTaggart, 1989:562). Action research discourse includes myriad terms, such as participatory action research, participatory research and community-based participatory research, feminist participatory action research, participatory appraisal, participatory and action, and other forms of participative inquiry (McDonald, 2012: 35). Ideally, the purpose of all action research is to impart social change with a specific action as the ultimate goal.

There are five themes identified in analysing the responses concerning the benefits and drawbacks of PAR (Chapman & Dold, 2009: 10). The first theme concerns itself with giving a voice, thereby making the voice of the voiceless heard (Nkoane, 2010: 317) especially to set equal power relations, fairness, freedom and hope amongst the researcher and the co-researchers (Lind, 2007: 372; Netshandama & Mahlomaholo, 2010: 79). PAR is a way for people to gain support from others facing similar issues and challenges. Becoming involved with PAR provides the opportunity to meet and learn from individuals who have lived through experiences with similar issues to your own. Co- researchers not only feel connected to the topic area but to the people who form the team as well. According to Kemmis and McTaggart (2007:271-329), participatory action research opens communicative space between participants. The process of participatory action research is one of mutual inquiry aimed at reaching inter-subjective agreement, mutual understanding of a situation, enforced consensus about what to do and a sense that what people achieve together will be legitimate not only for themselves but also for every reasonable person. A sense of community and the opportunity to form relationships are possible amongst participants.

Networking with others is a skill that can be acquired and refined through your involvement with PAR (Watters & Comeau, 2014: 9). Throughout the PAR process, there are many opportunities to communicate with research participants, a variety of professionals, government officials and community organisations. Gaining experience in communicating with a variety of people allows you to build your professionalism and confidence in your ability to interact and relate with the people in the research process. Networking with a variety of people also gives all the participants an opportunity to learn more about the specific issue being researched (Watters & Comeau, 2014: 9).

The third theme to define PAR is empowerment as acquiring skills can lead to growth and development as a person. PAR is intrinsically empowering in that you are directly involved in a process that affects the quality of life of others through social change. Being involved in your community can foster a sense of empowerment (Chapman & Dold, 2009: 10). PAR allows everyone on the team to have power and control over the research process and the findings (Levitt, 2008: 49). Participants are able to take issues that they feel helpless about and bring more awareness to the situation in order to create social change for the betterment of society. Experiencing empowerment can lead to the development of increased feelings of confidence, self-efficacy and self-

esteem. Feelings of empowerment may influence the person's quality of life and allow him/her to become more involved and proficient with her contribution to the PAR process (Watters & Comeau, 2014: 10).

Fourthly is collaboration which involves uniting as a community (Watters & Comeau, 2010:10). The beginning stages of PAR involve individuals or groups coming together around a common issue (Flicker *et al.*, 2008: 287). Gathering information and seeking to improve current issues within a community leads to a greater understanding and knowledge of that community. Having the community involved in the process to create change can lead to more cohesion and collaboration amongst members (Watters & Comeau, 2014: 10). PAR creates circumstances in which people can search together collaboratively for more comprehensible, true, authentic and morally right and appropriate ways of understanding and acting in the world. It aims to create circumstances in which collaborative social action in accounting is not justified by an appeal to authority (and still less to coercive force); rather, as Habermas puts it, it is justified by the force of a better argument (Kemmis & McTaggart, 2007: 271-329).

A community that faces challenges together can become more united to advocate for the needs of the community. A united community is more organised and efficient in voicing their concerns.

Lastly, social change, an ultimate goal of conducting PAR, is using the results and findings of the study to take action towards making improvements within society (McDonald, 2012:40). Social change can be through awareness, creating or improving resources like the new strategies and also new programmes and consciousness of the community. (Flicker *et al.*, 2008: 287) The results of the research study can be used to lobby the government officials to advocate for policy implementation such as the case in accounting where policies are encouraging critical thinking and more leaner-centred methods of teaching.

Therefore, the success of PAR depends on collaborative participation amongst all the involved co-researchers, originality of facts, education and collaborative action. As such, it is an active intervention amongst all the involved co-researchers aimed at enhancing lives (Macaraan, 2013: 5). The collaboration of individuals with diverse knowledge, skills and expertise fosters the sharing of knowledge development. Individuals also learn by doing, which according to Maguire (1987: 660) strengthens

their belief in their abilities and resources, as well as further develops their skills in collecting, analysing and utilising information. The PAR process is potentially empowering, liberating and consciousness-raising for individuals, as it provides critical understanding and reflection of social issues (Greenwood, Whyte & Harkavy, 1993: 1778; McTaggart, 1997: 36, Kemmis, 2008: 121).

3.2.4. Steps in PAR

The stages in PAR are necessary, dynamic and fluid allowing appropriate community and cultural adaptations (Kemmis & McTaggart, 2003: 338). These steps are also flexible in that they may be repeated or skipped as required. Seven components were identified by Selenger in McDonald (2012: 39). The first component acknowledges that the problem originates in the community itself and is defined, analysed and solved by the community. This is seen as the starting point. People, especially those who have experienced historical oppression possess profound knowledge about their lives and experiences and should help shape the questions and the interpretations of research.

Secondly, the ultimate goal of PAR research is the radical transformation of social reality and improvement in the lives of the individuals involved; thus, community members are the primary beneficiaries of the research (Selenger, 1997: 4). PAR seeks to identify and change the root sources of oppression through participating collaboratively, thereby, involving all the involved co-researchers in the process of change (Ledwith, 2007: 599; Mahlomaholo, 2009: 226).

Thirdly, PAR involves the full and active participation of the community at all levels of the entire research process. Community members must have an egalitarian role in PAR. They themselves are active researchers in all stages of the process, including how the community should proceed with the research outcomes (Baum *et al.*, 2006:856). As a grassroots science, PAR "can help give people a historical perspective, showing them where they have come, where they are, where they want to go and how to get there" (Baum *et al.*, 2006:856). The fourth component of PAR encompasses a range of powerless groups of individuals, the exploited, the poor, the oppressed and the marginalised. PAR is often used to try to relay alternative knowledge and opinions to powerful groups in terms of lived experiences (Chapman & Dold, 2009: 11). When people are offered participation in research agendas and

seek to be active in research, they are establishing themselves as agents that are more powerful.

The fifth component of PAR cited by Selenger (1997: 3) is the ability to create a greater awareness in individuals' own resources that can mobilise them for self-reliant development. "PAR is more than a scientific method, in that community participation in the research process facilitates a more accurate and authentic analysis of social reality". It links well with CAR whereby the resources may be in a form of wealth or any other form. However, we may as well refer to it as a distributive justice, whose premise is that money and/or any other resources ought to be distributed in such a way as to lead to a socially just and possibly more financially egalitarian, society (Rawls, 1999: 0). In this way, the redistribution of resources including wealth and education will lead to a more sustainable economy as more people would be equipped and conscious to find ways of acquiring the necessary wealth.

Lastly, PAR allows the researcher to be a committed participant, facilitator and learner in the research process, which fosters militancy, rather than detachment (MacDonald, 2012: 39). PAR emphasises the importance of the researcher linked with the roles of the teacher as supported by CAR. It requires a teacher who is a mediator between the intricacies of the curriculum and the learners, who interpret real life adequately for the learners, who is a leader in terms of knowledge and skills required, who is a researcher providing pastoral care, is assessing effectively to enhance learning and is a subject specialist (DBE 2011: 4; CAPS, 2011: 1).

Although the process of PAR is mainly described in terms of a mechanical sequence of steps (Kemmis & McTaggart, 2006: 339), it is generally thought to involve a spiral of self-reflective cycles as indicated in figure 3.1 below:

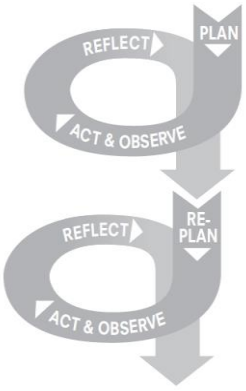


Figure 3.1: The spiral process

The spiral or cyclical process involved a “non-linear pattern of planning, acting, observing and reflecting on the changes in the social situations” (Voccarino, 2007: 5). The figure presents this spiral in diagrammatical form but in reality, the process might not be as neat as this spiral of self-contained cycles suggests. The stages overlap and initial plans quickly become obsolete in the light of learning from experience (Kemmis & McTaggart, 2007: 276-277). Since the process is cyclical, it is not always possible to know the end from the start as each cycle is partly determined by the previous one. In terms of social change, there is no end to the number of cycles or stages that might be possible (Boog, 2003: 427). Each stage may precipitate a return to an earlier stage and ‘spin off’ actions might emerge in the course of implementation of some other action (Bostock & Freeman, 2003: 465). Furthermore, the time needed for each stage cannot be predicted in advance. Kemmis and McTaggart (2007: 277) further attested that the criterion of success is not whether participants have followed the steps faithfully but rather whether they have a strong and authentic sense of development and evolution in their practices, their understandings of their practices and the situations in which they practice. Co-researchers in the PAR process guided by the research objectives best undertake each of the steps outlined in the spiral of self-reflection collaboratively.

At its best, PAR is a social process of collaborative learning realised by groups of people who join together in changing the practices through which they interact in a shared social world in which, for better or for worse, we live with the consequences of one another’s actions (Kemmis & McTaggart, 2007: 276-277). The process unfolded in the following stages, Kemmis (2008: 127) encapsulated that the planning process set the base for the communicative action for the study. As such, in the case of PAR, before planning many additional tasks including locating co-researchers and formulating a coordinating team was required. The coordinating team was responsible for advising on a study, arranging the logistics of communication, conducting the communication, allowing sufficient time in advance for the communication for preparation by co-researchers and allowing sufficient time after the communication for adequate reflection and feedback (McDonald, 2012: 40 ;Macaraan, 2013: 5; Cahill, 2007: 331). PAR involves investigating actual practices and not abstract practices.

3.2.5. Initial planning stage

This was important since gaining entry into communities that are unfamiliar to the researcher or a marginalised community who were made to believe that only those with a sound educational background do research. PAR is based on the relationships between the researcher and the participants. Good relationships are based on the principles of trust and respect (McDonald, 2012: 45; Moles Jr. & Fege, 2011). To work well with the people one does not know, one must win their trust and respect and convince them that one is not only interested in writing about their stories but actually wishes to help them bring real change to their lives. By sympathising with the parents, we managed to establish a harmonious relationship of respect that was non-judgemental, non-threatening and non-directive (Dworski-Riggs & Langhout, 2010: 227). These relationships were strengthened by being honest with one another and by treating one another professionally also helped us to advance the objectives of CAR, which are respect, humility, peace and social justice (Hill & Tyson, 2009: 741). It also allowed the participants to feel free to contribute as much as they could to the research study.

According to Kelly (2005: 69), “PAR involves a balance between presenting ideas developed from a formal community assessment and working with community groups on the creation of priorities or strategies”. The focus of the planning cycle in essence is to identify community members and to involve as many different groups as possible within the community. The information session set a base for the coordinated team to firstly start by being trained on how to conduct the PAR project, what was expected of them and their freedom to take part in the study and to withdraw anytime when necessary. Then a sustainable learning environment for a Grade 10 accounting classroom strategy was further defined in detail which was, describing the components of such a strategy, how it could be successfully formulated, who were the responsible persons for the task, anticipating the threats that may have hampered the project and reverting back to see if the project had succeeded or failed. During this stage, the coordinated team worked through the formulation of the SuLE strategy by identifying the key aspects and issues in order to ensure a common vision amongst the team and

further structuring weaknesses, strengths, opportunities and threats (SWOT) pertaining to their involvement in the study.

During the planning stage, co-researchers decided which issues needed to be dealt with first and which will be dealt with incrementally so as to have a clear way forward. Those issues were debated upon and they resulted in the decision to draw up the action plan in which those prioritised issues or components of the framework were dealt with systematically. The main aim was to collectively develop, adopt and implement the plan. Therefore, it was humbling to hear co-researchers calling requesting a special meeting to give feedback, some of them were meeting even if it was not the date set for the meeting, just to discuss the tasks given to them; this was indeed the sign of commitment. Whyte, (1991: 21) asserts that PAR involves commitment from all participants and "requires mutual respect, trust, humility, adaptability and holistic approach to problem solving". The coordinated team has collectively conducted all the activities agreed upon providing all the necessary tools, delegating relevant duties to the responsible persons, determining due dates for activities and agreeing on the appropriate methods for data generation and analysis. After proper planning, co-researchers began to put into practice all that has been planned for during the information session.

3.2.6. Implementation stage

At this stage, it is important to address firstly the issues warranting creative problem solving in enhancing the quality and quantity of the PAR implementation stage (Turnbull, Friesen & Ramirez, 1998: 183). These issues involve a time factor, identifying and valuing expertise, clarifying the decision process.

Time factor – every kind of collaborative problem solving approach requires time, in the case of PAR, we found ourselves needing more time to locate other stakeholders who could advise on a project. We also required time to arrange the logistics of communication, conduct the communication, allow sufficient time in advance of communication for preparation by co-researchers and allow sufficient time after the communication for adequate reflection and feedback.

A particular critical element related to time which we were not aware of was the amount of time needed to develop trusting relationships with stakeholders who have had

negative experiences with researchers, they perceive it as an exploitative exercise (Turnbull, *et al.,* 1998: 187). It took us some time before we won their trust to a sufficient level for a genuine collaboration to evolve. Although time was invested heavily on the exercise on the front end, the collaboration led to advantages on a long-term basis.

Identifying and valuing knowledge – learning to appreciate the knowledge (expertise) that the other brings is fundamental to establishing and maintaining respectful collaboration. It also takes attention and effort (Turnbull, 1998: 187). For our research team, a central issue was to understand the value of the rich histories, experiences and perspective that co-researchers bring by virtue of their personal, societal and cultural situations. It was helpful for co-researchers to accrue to the beneficial advice at the outset of the planning because they learnt to value the knowledge and insights of the participants. The process was made possible by the researchers who were required to acknowledge the limitations of their perspective and to be open to diverse points of view.

Clarifying the decision process – We realised establishing clear expectation about how co-researchers will work together includes how decisions will be made. The process made it easier to enable implementation because it is important to address the issue of ultimate responsibility early to avoid misunderstanding later in the process. We were guided by the research aim and objectives. The researcher was constantly reminding co-researchers that they are in mutual relationships, they were also all decision makers in all the stages of project and all of them have an equal stake in the pie.

After bridging the gap by addressing the three (3) issues above that have a direct impact on the implementation stage, we then broke the implementation process in three stages namely: initial implementation: whereby we expected the unexpected, full implementation: the programme was now in motion and lastly the programme sustainability: mainly maintaining the project's success. This was done In order to run the project effectively avoiding clumsiness, performing and implementing new skills.

In the initial implementation stage, the coordinated team coordinated the whole process and made sure that the changes in the project were managed superbly

helping to mitigate the fear of the unknown and resistance (Mertler, 2013: 37). As the team worked to remove barriers, it addressed issues of power that surfaced helping to maintain the momentum of the initiative. The coordinated team helped to set realistic goals and expectations regarding the project progress, time lines and the generation and use of the right data at the right time.

Maintaining momentum was crucial at this stage since laying a strong foundation is vital to all the projects, therefore, the on-going consistent preparation of the researcher and the co-researchers was critical to the success of the project. As it minimised resistance, increased positive perceptions of the project, proper implementation and enhanced skills development. There were also challenges faced during the initial implementation stage whereby resistance to change was noticed as initially, the majority of co-researchers were not on-board with the whole idea so it started on an unstable position as it was criticised. However, eventually there were major adaptations towards the improvement of the project. As such, the project became operational and led us to the full implementation stage.

The full implementation stage: At this point, the coordinating team noticed several improvements on their project, they commented that to them the creation of sustainable learning environments becomes easier, since they realised it is closely related to their lived life. The project was integrated into the service, organisation, and system settings. The processes and procedures to provide the selected activities were now in motion. The aim was to maintain and improve the facilitation of the activities through excellent monitoring and purposeful improvement to avoid a failure to create a sustainable learning environment due to a lack of commitment. At this stage, the activities that were performed were evaluated with a focus of assessing project reliability and determining if the project has been delivered as intended. The collaboration among the coordinating team and other participants benefited from open communication, a commitment to flexibility and the interactive process of evaluation design and implementation and a shared focus on determining the information that would be most useful to the project.

Programme sustainability: In this stage, the aim was to maintain the project's success creating a positive sustainable learning environment. The situation exemplified a key aspect to PAR, which is that different communities will experience things differently

and assign different meaning to them. It was envisaged that if teachers, learners and other stakeholders' perception and consciousness towards teaching and learning could change then the enhancement and ease of acquiring knowledge and skill could lead to sustainability of the programme. This was a challenging stage to achieve because the participants doubted their capability. The constant reminder and more education into what constitute sustainable learning environments alleviated this. It was at this stage where we realised the importance of having being able to clarify issues before the initial implementation stage had been done to our progress. Clarification made it easy for us to refer to that stage and as a reassurance that all knowledge and contributions are valuable to the success of the project.

The researcher constantly emphasised the fact that participants are truly co-researchers whose insider 'local knowledge' is as necessary for scientific sense making as the outsider researchers' technical expertise and abstract general knowledge. As soon as that was recovered everything went accordingly and the co-researchers were indeed the owners of the project. Therefore, sustainability was ensured through their commitment to the core of activity components. As such, the best approach to circumvent the obstacles and challenges was to continue to monitor results and be alert to changes that might affect the progress of the project. This, in turn, led to researchers evaluating their own work and making relevant changes, if necessary (Voccarino *et al.*, 2007: 3). In order words, co-researchers reflect on their own work.

3.2.7. Reflection stage

Reflection is a key element within PAR and allows researchers to plan what changes can be made, implement these changes and then reflect once again (Voccarino et al., 2007: 3). It is a tool for promoting actions and as Selener (1997: 105) points out, PAR is intended to lead to actions which promote improved educational practices. According to Baum *et al..,* (2006: 856), PAR perceives that action and reflection must go together, even temporarily so that praxis cannot be divided into a prior stage of reflection and subsequent stage of action. He points out that when action and reflection take place at the same time they become creative and mutually illuminate each other. Ideally, action as described by Lewin in McDonald (2012: 37) is an on-going process of reflection and action.

Kemmis and McTaggart (1988) reiterate that action research involves a self-reflective spiral of activities of planning; action; observation; reflection; re-planning; and action. In the case of this study project, the results were moderate; some activities were done perfectly beyond expectations whereas other activities were not done to satisfaction and were reviewed and implemented with a different approach. Therefore, this reflection lead to in-depth learning as it encouraged a dialogue that included a strong reasoning power among the co-researchers and judgement about their knowledge on the subject matter through recapturing and connecting the experience and evaluating it. Reflective process helped us to see the world in alternative ways by enabling us to focus on different aspects of our experiences. Reflective processes are stages of thoughtful activity that we need to grow when we consciously decide to explore or reflect upon it. There are six fundamental stages of reflective processes as illustrated in the figure 3.2 below.

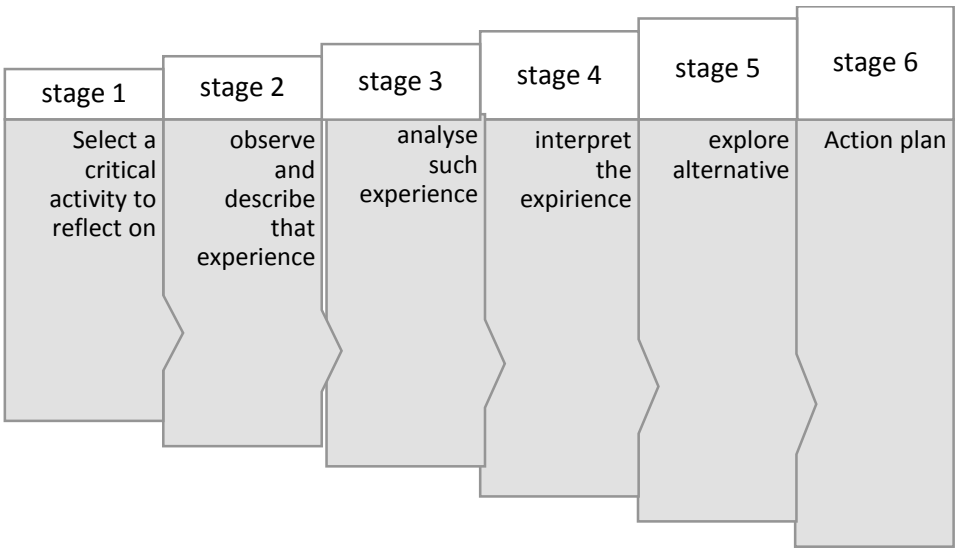


Figure 3.2: Reflective process stages (Bulman & Schultz, 2004: 232)

The figure above shows the interconnectedness of the stages in a reflective process. Firstly, the selection of a critical activity that genuinely needed some attention that was not successfully implemented was made and agreed upon. The activity was carefully described and reviewed by clearly exploring where there might have been a problem and what the activity entailed as well as the achieved results on such an activity. The results were then evaluated with great consideration of what was done perfectly on

such an activity and what went wrong leading to its downfall. This effort was further synchronised by analysing all the areas involved, as a result learning from the previous mistakes aiming to do it better by following a process of re-inventing. This process enhanced knowledge and skill to manoeuvre around the activity to better exercise the acquired knowledge and skills.

Freire in Baum *et al.* (2006: 854) maintained that human consciousness brings a reflection on material reality, whereby critical reflection is already action. Freire's concept of praxis flows from the position that action and reflection are indissolubly united. Similarly, PAR sees that action and reflection must go together even temporally so that praxis cannot be divided into prior stages of reflection and a subsequent stage of action (Baum, *et al.,* 2006: 856). Through praxis, critical consciousness develops, leading to further action through which people cease to see their situation as a "dense, enveloping reality or a blind alley" and instead as a historical reality susceptible of transformation. This transformative power was central during all the stages of the reflection.

3.2.8. Ontology of PAR

The term ontology is used to designate the theory of being. Its mandate is the development of strategies that can illuminate the components of people's social reality, regarding what exists, what it looks like, the units that it is made up of and how these interact with each other. Within action PAR, researchers would consider this reality as socially constructed and not external and independent. The meaningful construction occurs through understanding of researchers' experiences and communication. Their shared knowledge will be based on subjective accounts from the people who live within the environment. In this study, the ontological stance is made clear at the start and also at the dissemination stage.

The philosophical underpinnings of PAR are congruent with postmodern tradition that embraces a dialectical shifting of understandings whereby objectivity is impossible and multiple shared realities exist (McDonald, 2012: 36). PAR philosophy embodies the concept that people have a right to determine their development and recognise the need for local people to participate meaningfully in the process of analysing their own solution over which they have or share power and control in order to lead to sustainable development (McDonald, 2012: 36). PAR sees all human beings as

dynamic agents capable of reflexivity and self-change. PAR acknowledges that intellectual labour is essential to being human. In this study, locals are experts in their own lives and localities. PAR is chosen as an appropriate method for this study because it discourages domination, alienation and narrowness of knowledge. The research participants were seen as human beings not as objects without feelings or ideas, to be manipulated in a controlled environment. Participants' ideas and voices are acknowledged and they feel free to make useful contributions to the deliberations (McGregor, 2010: 423; Lybeck, 2010: 91). By using PAR there may be the formation of public spaces whereby participants and researchers can reshape their knowledge of how political, social, economic and familial contexts in communities may impact daily life (Predota, 2009: 3).

3.2.9. Epistemology

The term epistemology is used to designate the theory of knowledge and its presents a view and justification for what can be regarded as knowledge – what can be known and the criteria that knowledge must satisfy in order to be called rather than belief. For PAR, the nature of knowledge and what constitutes knowledge are different (Koshy, Koshy & Waterman, 2011: 13). The type of data collected is more subjective where the experiences and insights are of a unique and personal nature. What people say and how they conceptualise what they do and say are important for action researcher knowledge creation (Koshy et al., 2011: 18). In any reporting of our research, we acknowledged the epistemological stance with regard to our knowledge generation.

PAR draws on diverse forms of knowledge. It emphasises that local knowledge is valuable in its own right and that knowledge is the result of collaborative work by people in relationships (Predota, 2009: 6). In this study, experiential knowledge is valued and fundamental to all knowledge. The process of creating sustainable learning environments embraces PAR since knowledge production is a cyclical process moving from action/experience to reflection and back again. It emphasises that knowledge is for sharing with all people in ways that they can understand. PAR embraces the notion that knowledge claims are socially constructed, embedded within the systems of values and understood through the mental processes as well as promoting human interaction (Khan& Chovanec, 2010: 34). Accordingly Chilisa (2012: 103) and Pretty

(1995: 1250), both argued that PAR is open to various interpretations but knowledge and understanding are socially constructed. What each of us knows and believes is a function of our own unique contexts and pasts, thus, there is no single or correct understanding. Having collaborated with the community is an indication that indeed social research should be about social justice and have as its purpose and product practical benefits for co-researchers and their communities.

3.2.10. Role of the researcher

As the study coordinator and subsequently the coordinating team leader, I identified relevant key coordinating team members. I was responsible for coordinating the activities of the coordinating team. I humbly made my expertise, competence and experience of teaching accounting at school level and at the higher education level available to the coordinating team. As the coordinator, I also executed management and leadership duties of the study which were closely linked to my experience of heading the Commerce Department at school level. I was responsible for securing permission from the Free State DoE to conduct this study and also identified and engaged potential team members. Other responsibilities included organising resources such as venues for meetings, keeping study records, issuing agendas and participating in the implementation of the coordinating team resolutions. My other duties included providing guidance and training for the teachers, SMTs SGBs and learners around the issues of sustainable learning environments. My role was to convene, facilitate, monitor and document all these activities with the help of the other research participants (Lincoln & Guba 1985: 202). I also led the process of analysing and interpreting data, though the structure assisted with the verification of the interpreted data (MacMillan & Schumacher, 1997).

In a nutshell, the roles played by the researcher were convener of the research team, ‘workshopper’ of the team on CAR, PAR, FAI and CDA, initiator of the research and conductor of research with the research team. The research was also the coordinator of the activities of the research team, participant in meetings, collector and analyst of data with the research team and engaged with the participants and parents of the learners.

3.2.11. Relationship with participants

The relationship between the researcher and other participants was one of the co-researcher thereby allowing input in the definition of the problem and suggestions of tackling such a problem. The collaboration between the researcher and the co-researchers dictated that a particular form of relationship should exist. The relationship that was established was one that was based on mutual trust and respect (Grant, Nelson & Mitchell, 2008: 591). The researcher invested adequate time and effort to earn the respect and trust of the co-researchers. The researcher made preliminary visits where he interacted intimately with principals, deputy principals, HODs and other members of the school communities. Through these interactions, the co-researchers bought into the story of collaborative participation and the potential of PAR to empower, liberate and create consciousness for individuals and the community. (McDonald, 2012: 40). Collaborative and cooperative approaches to learning will encourage parental and other stakeholders' involvement while acquiring knowledge of CAR fostered in PAR. Their relationship acknowledges that collective inquiry builds ownership of information, and therefore, the research process becomes demystified, creating space for trust to be developed.

From the onset, the researcher adopted an approach of working with and for the co-researchers. This approach helped the researcher not to treat the co-researchers as objects or means to the instrumental end (Nkoane, 2012: 9). He viewed them as full human beings who were to be treated as equals in the research process. PAR is a reflexive and deliberate process through which participants aimed to transform their situation and teaching and learning capabilities. These activities were performed through spiral cycles of critical and self-critical action as well as reflection (Kemmis & McTaggart, 2007: 282). Throughout the study the researcher refrained from monopolising the communicative space but allowed the co-researchers to speak freely, to interpret, to reflect and to construct meaning together with the researcher in a relationship anchored on "compassion, kindness and respect" (Joubert & Van Gogh, 2007: 21). In some instances, I adopted the 'observer-participant' role (Mertens, 2010: 367), in order to give the participants the opportunity to talk and construct solutions to their problems. Solutions to challenges were mutually arrived at in a non-coercive manner through dialogue (Hooley, 2005: 72) and this enhanced the chances of the implementation of the solutions (Adair, 1998: 86). Therefore, the treatment of the co-

researchers as equal partners was closely linked to prescripts of the democratic constitution of the country, namely, humility, peace, democracy, hope, freedom, transformation and social justice.

PAR does not promote distance between the researcher and the co-researchers. Instead, it encourages mutual involvement and closeness between the two. To foster this closeness the coordinating team organised monthly meetings (Hooley, 2005: 71) wherein the researcher and co-researchers interacted on a frequent basis. The coordinating team collaboratively carry out the process of fact finding, conceptualisation, planning, implementation and evaluation to simultaneously create the sustainable learning environments strategy and generate new knowledge. This was made possible by the researcher who privileged local knowledge by allowing the co-researchers to narrate their lived experiences. The researcher stimulated the co-researchers to think in new dimensions which was important for the development and expansion of the critical consciousness of the co-researchers (De Vos, 2002: 420). The reflexivity gave the coordinating team the opportunity to authenticate the data collected because everybody participated in reflecting on it. Establishing rapport, trust and reciprocal relations with the participants is essential if the researcher wants to gather data that will help him/her understand the participants' own world (MacMillan & Schumacher, 1997: 402).

3.3. Rhetoric in PAR

The language of participatory action research is emotive and loaded (Wadsworth, 2006: 327). The term itself implies that one group (the participants) are being invited/allowed/encouraged to participate in the activities, processes or systems. Power is a crucial underpinning concept of PAR. Power is a language of PAR, which aims to achieve empowerment of those involved (Baum, 2006: 7). It is important to address the issues of power imbalances and the establishment of egalitarian relationships prior to initiating PAR research. This is important in view of the fact that all participants must feel accepted in spite of their different social standing in the community to get inputs from different perspectives that will harness the sense of ownership of the project among the participants (Wadsworth, 1998: 324). In terms of ownership, the co-researchers were given the right to receive feedback about the

research findings, return of raw generated data and control over the publication of results in any format. PAR posits that the researched has an impact on the process of research and brings to the inquiry a set of values that will influence the study. In this study empowerment was conceptualised as a shifting or dynamic quality of power relations between two or more people such that the relationship tends towards equity by reducing inequalities and power differences in access to resources

3.4. Ethical considerations

Winter in McDonald (2012: 45) outlines a number of ethical principles that researchers must consider when conducting PAR. First, the researcher must ensure that all relevant persons, committees, and authorities have been consulted and that the principles guiding the work are accepted prior to commencing the research. In the case of this study, the ethics committee and title registration committee granted ethical clearance while on the other hand the research office of the Department of Basic Education in the Free State granted permission to conduct research in the selected school. All participants must be allowed to influence the work and the wishes of those who do not wish to participate must be respected (McDonald, 2012: 45). We identified participants and informed them of the nature and purpose of the research as well as the procedures to be used and its benefits. The consent forms were made available for learners' parents to complete and sign. They were also made aware of their right to withdraw and anonymity was assured. These forms were made available in two languages, one of which is English as an official medium of instruction and also in Sesotho, in order to accommodate everyone even those parents who may not be able to express themselves in any other language except their own Nguni language. Thus, they are enabled to become familiarised with the contents of the consent forms. Furthermore, the development of the work must remain visible and open to suggestions from others throughout the research process (Baum *et al.,* 2006: 5). The use of audio and video tape was clearly explained and agreed upon as well as deciding who should get to see the captured information. Descriptions of others' work and points of view must be negotiated with all those who participated in PAR before publishing any of the work (McDonald, 2012: 45). After every meeting, we summarised key points and actions and circulated this to everyone verifying if all points were

captured. In the case of data storage, as it was about people, we complied with the Data Protection Act to respect the concerns that the participants may have. The researcher must accept responsibility for maintaining confidentiality throughout the research process (Baum *et al.,* 2006: 6). The researcher remained responsible for the ethical quality of the study. Anonymity is to be kept as the names of the co-researchers and the school where the research is conducted will not be revealed. According to O'Brien in McDonald (2012: 46) the ethical principles of PAR are clear that all decisions regarding the direction of the research and probable outcomes are collective. Research findings and results will be open and available to the public in a written form. It is important that the researcher be explicit about the nature of the research process from the beginning, including all personal biases and interest, while ensuring that there is equal access to information generated by the process for all participants. We therefore anticipated having good working relationships through careful discussion and planning as well as initiating how best we can maximise the potential benefits the study may lead to. O'Brien in McDonald (2012: 47) further attested that the researcher and the coordinating team create a process that maximises the opportunity for involvement of all participants.

3.5. DATA GENERATION PROCEDURES

Data that becomes relevant to the study was generated from interactions with various stakeholders and or participants. The nature of the study necessitated interactions with teachers, parents, subject advisors, other stakeholders and learners, preceded by certain stipulations that needed to be observed before commencement. It is important to gather data that is relevant to the research study as raw as possible. Unprocessed and un-manipulated data must be organised and processed to derive meaning (Wynn, 2009: 10) then use it to substantiate, elucidate or nullify statements made in the continuum of the research. Data was enhanced by paying attention to the extent to which it was relevant and accessible, and the participants fully engaged (Kellner, 2000: 293; Mahlomaholo & Netshandama, 2012: 38).

Through our meetings data was generated and stored as per our discussion and we agreed that all events and activities would be recorded and videotaped using tape-recorder and a video camera. The extract of these texts were to be analysed (chapter

four) using critical discourse analysis (CDA). These spoken or written words are seen as primary data (Toolan, 2002: 21), which are used to obtain deeper meaning and repertoires of each participant (Mahlomaholo, 2012: 51). It is however important before analysis of such data to understand the research site and co-researchers who contributed their powerful knowledge towards generation and the sustainability of the study.

3.6. RESEARCH SITE PROFILE

The school is situated in the town of Phuthaditjhaba in QwaQwa. Phuthaditjhaba is a Sesotho name that means “meeting place of the tribes”, the majority of the learners come from around Phuthaditjhaba and other rural areas in QwaQwa. The area where this school is situated became the capital of QwaQwa in 1974. This should not be confused with urban status but rather more of a homeland. The service provision in the area is difficult. The school is a home to 607 learners. The school starts at Grade 10 to 12, meaning it falls under the FET phase. It is a Sesotho/English medium and Sesotho speaking learners are dominant. The school is well known around QwaQwa and neighbouring towns of its disturbing history of being classified as underperforming based on their matric results. This may have an impact on attracting learners mainly from the disadvantaged or marginalised families. Even though the school is unfairly categorised as quintile 2, the learners here survive the school day through the feeding scheme or as it is better known as national nutritional school programme (nnsp) provided by the Department of Education. The school has 20 teachers and 4 non-teaching staff. The support of the school towards the project showed dedication and the willingness to bring change through action. Besides poverty and other disadvantaging factors in this school, the lasting impression is cultural and environmental uniqueness of an alternative lifestyle in this school and around the area.

3.7. THE CO-RESEARCHERS

This section discusses the participants’ profile and the roles they play in the study as the coordinating team members. This is a representation of a wider group of people affected by the identified need. There were however other stakeholders who were consulted based on their expertise when the need arose for a different opinion. For

the purpose of this study only the coordinating team is highlighted in the section below, namely, Grade 10 learners, accounting teachers, subject advisors (learning facilitators), parents, accounting education lecturers, SAIA representative and NAFCOC.

3.7.1. The study coordinator

As the study coordinator and by extension, coordinating team leader, my roles as outlined in terms of CAR as the theoretical framework coaching the study and also in 3.2.7 above in relation to PAR includes but is not limited to, the convener of the research team, workshopper of the team on CAR, PAR, FAI and CDA. I am also the initiator of the research, conductor of research with the research team, coordinator of the activities of the research team, participant in meetings, collector and analyst of data with the research team and engaged with the participants and parents of the learners. Furthermore, I persevered the ethical clearance processes.

3.7.2. The Grade 10 learners

The learner participants gave their informed consent in writing, freely as an indication of their willingness to participate in the study. They also played a role in seeking their parents and guardians' permission to participate in the study, in line with the written request to do so. Since this school starts at Grade 10, these learners had attended the previous grades at other schools, so this was their first year at this school. They contributed well to the discussion and believed the use of more learner–centred approaches to teaching and learning would bring the home environment to the classroom setting, which was too formal and intimidating at times. Learners communicated the information amongst their peers and smoothened communication between the coordinating team and their parents. The learner-participants engaged and interacted freely with one another to assist with the work under their consideration. Learners were consequently supported in addressing their respective personal situations regarding their perceptions about themselves as individuals and as members of the team. Learners benefitted when they made a sincere commitment to learning and to the development of cooperative skills in the classroom. They cautioned

the researcher that she should not ask questions as if s/he is cross-examining someone in court. Knowledge exchange takes place in an atmosphere that is less formal.

One learner said *“ka nako enngwe ekare motho o ya utlwisisa ha a mametse empa ha a fihla hae o tlameha ho ngola, ho ba thata. Empa ke bona tsela ena ya ho bua e etsa re hopole le ha rele bang”*. Which means, we tend to think that we are following when taught in class but when we are at home and have to do the task we experience difficulties but it seems as if with these approaches that encourages dialogue in class we are able to deeply understand not only remembering. Critical accounting would involve the interaction that is guided by the condition of mutual respect, since the will be dialogue and transformative practices within the sphere of pedagogy and communication between teachers and learners (Armitage, 2010: 5 & McPhail 2004: 491).

Therefore, interaction and dialogue in critical accounting acknowledges that transformation is central to emancipatory practices and is central to an individual awareness that the learners exist in and with the world but being knowing subjects who have an engagement of social, political and cultural it nullifies powerful discourses (Armitage, 2010: 5). The dialogue in critical accounting is motivated by a love for, commitment to, and faith in people and participants in dialogue and would be characterised by humility and a commitment to the common task of learning (Freire & Ramos in McPhail, 2004: 491).

The learners mentioned the fact that seeing all participants including the parents being comfortably involved in engagements of accounting eradicated the fear of accounting as a difficult and abstract subject. The interactions and communication brought closer the lived life to the accounting classroom. CAR would involve trying to engender a critical reading of learner’s existential situation, which would allow them to develop their set of criteria that will enable them to base their judgement in terms of their lived life, while simultaneously being aware of its contingency (McPhail, 2001: 488).

3.7.3. Accounting teachers

Before talking about these teachers we thought a brief profile of the school's principal and the HOD for commerce in this school is of crucial importance since through their leadership and commitment so much has been generated by these teachers.

3.7.4. The principal

Principals are enjoined to manage, guide, develop and support all educators at schools under their jurisdiction. They are therefore, a vital component of any strategy that is aimed at sustainable learning environments. The principal brought into the research a wealth of leadership and teaching experience, which he garnered over the years as he rose through the ranks of the teaching profession. Such experiences was complimented by his passion for knowledge. He provided valuable advice to ensure that the research did not contravene the acts and prescripts that govern schools. In all matters of the research, he ensured that the best interests of learners came first. The greatest capital that the principal brought to the study was his invaluable chain of networks and bonds with various members of the school communities. These bonds were built on the bedrock of respect, empathy and democracy. It was therefore easy for us in this study to access other stakeholders such as entrepreneurs and other community leaders for different opinions in which their inputs were invaluable in that they helped to bridge theory and practice. His community engagement experience in this regard was critical as it enhanced the coordinating team's unity and unity building capacity. We cannot forget his constant encouragements to the teachers and HOD to sustain the project for the benefit of the learners and community at large.

3.7.5. The Head of Commerce Department

HODs are that stratum that links school management with educators and learners. The HOD is also a leader by virtue of his position. His skills and competencies in leading the department at school are critical in the creation of sustainable learning and teaching environments (FSDoE, 1998: 9). His support and dedication were evident by taking part in the discussions and contributing to the planning of lessons and

presentations. He also monitored the implementation of the sustainable accounting learning environments according to the proposed plan and the school's departmental policy so that the study should not interrupt its normal activities. His continuance of motivating his teachers to contribute and partake in the study was indeed humbling and ensured sustainability, as far as the study is concerned.

3.7.6. Teachers

They were invited to participate in the study so that they actively engaged in endeavours that were aimed at enhancing their effectiveness. They became co-constructors of knowledge and co-generators of solutions to their problems. They became empowered and developed critical consciousness. Their involvement in this study is about their vast knowledge and patience in working with the most disadvantaged learners who come from different backgrounds with different socio-economic conditions. In Grade 10, a young female teacher is presently teaching accounting to all the Grade 10 learners. She indicated that she was delighted to be part of this group, as she felt the strategy would help in the teaching and learning of accounting. Most of the learners did not see the connection of accounting and the daily lived life but through the implementation of this strategy, she could see changes. The other teacher is male and teaches Grade 11 but felt the need to partake in the study since the knowledge acquired in this project would contribute to the betterment of his grade as well. Their other role was to communicate the progress of learners with their parents through reports and parent-learner meetings. Such positions foster leadership experiences and provide the individual an opportunity to develop positive leadership traits

Their biggest fear however was time and they said that it was never easy to allow learners more time for dialogue because they work with schedules. However, through these activities and workshops amongst others, they realised the impact of more learner-centred approaches as encouraged by the CAPS policy documents. Accounting is taught by hurried coverage of information with learner assessment based on the ability to reproduce correct answers and apply standardised procedures in independent testing situations (Bonk & Smith, 1998: 268). This places huge pressures on teachers to place developmental efforts upon learners by using the

education as an agent of emancipation rather than of domination (Baker, 2011: 208). CAR argues that teachers at all levels have to be seen at their well-deserved roles of mediators, to legitimate the work, be pastoral carers and producers of ideas and social practices while they remember their pedagogical function that is eminently political, social and economical in nature (Boyce, 2004: 583).

3.7.7. Subject advisors

One advisor is responsible for the school, where we are conducting research. She made school visits in supporting accounting educators in content, assessment and classroom management. Her experience and expertise would help strengthen the strategy development and after it has been operationalised they would be in a position to popularise the model to be implemented in schools that are not performing well in accounting.

Having been my subject advisor during my years of teaching, we had good case studies to refer to as we progressed in the development of the project. She also had good relationships and contacts to other stakeholders who could contribute their expertise towards sustainable accounting learning environments. The other facilitator was not directly involved with the school but was still in the same district and felt the need to share his knowledge and expertise with the team throughout the stages of the research. Subject advisors' commitment to the sustainability of this project was seen as their ability to share their methodologies especially in the classroom presentation and ways of assessment reflections.

3.7.8. Parents

The majority of the parents of the learners at this school were unemployed and received government social grants. Coming from the marginalised background, they were at the beginning not confident that their experiences and knowledge were valuable in the school or education context. It was through interaction and workshops about their powerful knowledge and its relevance to the study that they started opening up, sharing more and more every time we interacted. They said they felt empowered

by the project and contacts because they are more conscious and felt closer through the created space of the education of their kids. Parental support and involvement are the most important factors in effective teaching and learning. Thus, it is true what they say that a healthy parent-school relationship fosters lifelong learning (Du Plessis, Conley & Du Plessis, 2007: 2; Ndamani, 2008: 178). Parental support is an approach of maintaining a physical bond and psychological closeness between a parent and a child. PAR, through parental involvement, bridges a gap between the researchers and the intended beneficiaries of research (Turnbull *et al.,* 1998: 178).

It was perhaps self-evident that when parents are involved in all the stages of research, the research is more likely to be relevant in solving the problems that they face. Therefore, parental involvement in their children's education made an enormous difference to their children's chance of success at school, at home and later in their lives. Hence, when we invited parents to give them an overview of what the study entails, they were so eager to start with the study in making a change in their children's lives. Working collaboratively with their children's school helped learners to work hard and succeed in their learning.

It makes sense that when parents have participated and have access to information sharing on topics that are especially high priority to them, such as the success of their children, they are more likely to utilise the findings or strategy (Turnbull *et al.,* 1998: 179). In this study, parental support was vital not only to individual children but also to the greater society as parents used positive means to motivate and guide them. Thus, as such, children became better family members, partners and citizens. It was through the increased knowledge contribution and inputs of the parents that the researchers had a significant learning opportunity about the lived reality of the learners and the nature of parental support. The deeper understanding of such information and more made the co-researchers expand their sense of collective power through their collaboration with each other.

3.7.9. Accounting education lecturers

The core responsibilities of higher education institutions are teaching and learning, community engagement and research. They brought in various ways of teaching as

recently researched and new developments in their practices and experiences. The principles of PAR illustrate that as we enter into partnerships with school communities we work together as colleagues and equal partners on problems that schools face, not as authorities who are going to give instructions and orders. The learners benefited a lot in terms of extra resources brought by these lecturers during classroom presentation. It was discussed during our meetings that resources in terms of teaching tools were a problem to teachers. Teachers did not understand the importance of using teaching media in accounting as an effective way of enhancing their teaching strategy, as an alternative way of enhancing the presentation to be more learner-centred on the particular activity being taught. During one presentation accounting lecturers brought their tools, they used “YouTube” to present a case study and learners enjoyed it and connected with the activity with much enthusiasm. The emphasis is increasingly placed on integrating community engagement with research, teaching and learning activities instead of approaching community engagement as a freestanding entity.

3.7.10. SAIA representative

It is a consumer education initiative project by the South African Insurance Association (SAIA) in collaboration with the national and provincial Department of Basic Education (Dror, Jenkins & Motegi, 2011:87). Their project for accounting education is called iCount.

The project includes the colourful posters to add to the classroom wall, resource books for Grades 10-12 and an entertaining and educational DVD with episodes of accounting support that can be used directly with the learners in class.

The meeting and exposure to such an initiative is beneficial to the accounting classroom where learners are accessing such resources and teachers were also informed about the training that is offered across the country. This information greatly contributed to the realisation of our objectives towards the creation of sustainable learning environments for a Grade 10 accounting classroom since in SAIA they aim for financial competences focusing on broad and lifelong financial literacy and competencies for the consumer. Therefore, the resources assist in developing

knowledge, skills and changing behaviour in an attempt to develop learners into critical consumers.

3.7.11. NAFCOC representative

The National African Federated Chamber of Commerce and Industry (NAFCOC) have been advancing the cause of black businessmen and women that were marginalised by the apartheid system in the past. NAFCOC is a voluntary association and business support organisation started in 1964 that serves small to medium business in township and village economies.

Its main objective is to promote and encourage the development of the small business sector and black businesses in general in South Africa and thereby draw the marginalised majority into the mainstream of economic activity and decision-making in South Africa. It therefore aims to promote unity among black business organisations and business formations in general.

The relevance of this association to the study was through a shared vision of emancipating the marginalised and the fact that the organisation was not shy of exposing such conditions in existence. It was confirming to the study that there is hope for the marginalised through collaboration with other stakeholders. The platform was created for the learners to interact with the representation, ask question and suggest ways forward. The participants felt that they were indeed empowered by the knowledge gained, in particular the fact that so many stakeholders that they did not even know are behind them regardless of their socio-economic background. He contributed his knowledge in our meetings and workshops held for the creation of sustainable learning environments for a Grade 10 accounting classroom.

3.8. THE PLAN OF ACTION

This part of the project left participants perplexed when they indeed saw that the practical, critical accounting is exactly what the policies in education are saying and encouraging. This shed light to the further understanding of what critical cross-fields and level descriptors are trying to achieve. Teachers were reminded that it is

through their teaching approaches that the accounting classroom could become sustainable learning environments. It is a known fact that there is little we as teachers and the community can do to change the curriculum but there is more powerful knowledge contributed that can alter our teaching and learning approach towards what is encouraged by the CAPS policy, which is exactly what critical accounting is striving for. CAPS states in the policy document that the accounting teacher should encourage active and critical learning: encouraging an active and critical approach to learning rather than rote and uncritical learning of given truths (DBE 2011: 4 & CAPS, 2011: 1); High knowledge and high skills based on the belief that reality must be discovered by each individual himself or herself.

These can be achieved using methods and strategies that are more learner-centred, emphasise student dialogue, negotiation and knowledge building as well as student autonomy and responsibility for learning (DBE, 2011: 6). The plan of action was agreed upon by the team and was adjusted to suit the project. Moloi (2014: 123) asserts that the community action plan should show the goal of the research project, the objectives to be achieved, strategies to achieve the objectives, timeframe, person's responsible, resources required and monitoring and evaluation framework. Therefore, participants' activities are outlined in the table below:

Table 3.1: Plan of action

Activities	Person responsible	Monitoring	Evaluation	Timeframe
<u>Phase 1</u> **Identifying** Teaching and learning approach	Coordinating team	Accounting teachers and other participants	Alignment to the CAPS document, critical cross-fields as embedded in the level descriptors	45 minutes

Phase 2 Teaching of budgets: lesson presentation	Subject teachers: The researcher/Grade 10 teachers/accounting subject advisors	Accounting teachers and other participants	Lesson plan	60 minutes
Phase 3 Reflection on the lesson presented	Grade 10 learners and coordinating team	Accounting teachers and other participants	Presenter as he concludes, consolidating the feedback given	30 minutes
Phase 4 Assessment of the lesson	Teacher, peer, and parent assessment	Accounting teachers and other participants	Appropriate assessment tool in line with the teaching approach as guided by the policy document	45 minutes
Phase 5 Feedback on the assessment	Subject teachers: The researcher/Grade 10 teachers/accounting subject advisors	Teachers, subject experts, and parents monitor the completion of the activity	Feedback is given on the classwork or homework done.	45 minutes

As illustrated in the plan, each activity was to be executed in five phases, coherently structured in a manner that diverse dimensions or facets would be implied. These facets are viewed by Godino, Batanero and Font (2007: 130) as ontological. In other words, looking at the types and nature of the objects in the teaching and learning of accounting epistemological and cognitive facets and looking at how knowledge is accessed when doing accounting activities. Furthermore, it also entails looking at how teaching and learning approaches, methods and strategy processes impact the teaching and learning of accounting in general and how the role of a teacher and his assessment method impacts the quality of accounting in the school institutions and society.

3.8.1. Phase one: Identification of teaching and learning approach

The team began at the common grounds that teaching accounting should encourage learners to construct and produce knowledge in meaningful ways. Thus, situations should be created where learners, if need be, can teach each other interactively and interact generatively with their teacher and peers. This allows for the co-construction of knowledge, which promotes engaged learning that is problem, project and goal based. Therefore, teaching strategies that engage students in the learning process stimulate critical thinking and a greater awareness of other perspectives.

The team agreed that movement towards a more learner-centred method of teaching could provide such spaces. This can be achieved by putting less focus on the lecture method by making learning environments more interactive to integrating technology into the learning experience and to collaborating learning strategies where appropriate. In this learning environment, active learning is the order of the day. Therefore, active learning can be thought of as learning environments that allow students to talk and listen, read, write and reflect as they approach course content through problem–solving exercises, informal small groups, simulations, case studies, role-playing and other activities. It then becomes an enhancement of teaching and learning when learners become actively involved in the learning process (Shankar & Seow, 2010: 79).

When an approach is more learner-centred, the role of the teacher in the classroom shifts from the primary role of information giver to that of facilitator (guide and learner). A facilitator provides the rich environments and learning experiences needed for collaborative study (Shankar & Seow, 2010: 80). Furthermore, a teacher is also required to act as a guide – a role that incorporates mediation, modelling and coaching. To top it all, very often, the teacher is also a co-learner and co-investigator with learners.

On the other hand, learners learn best when they are engaged in a variety of learning and active and experiential learning strategies as they tend to retain knowledge for longer periods and to develop meaningful skills (Bonk, 1998: 266). In those learning environments, a learner is an explorer, where the interaction with the physical world and with other people allows learners to discover concepts and apply skills. It is necessary that learners should be encouraged to reflect upon the discoveries.

In this activity, the team uses a problem-solving approach. It has evolved from the theories of John Dewey (Shankar & Seow, 2010: 80). It has been used in commerce education as a way to relate classroom learning to real life situations or problems. A problem is any situation where you have an opportunity to make a difference, to make things better and problem solving is converting an actual current situation into a desired future situation (the goal-state).

This approach should not be confused with an individual method or technique; it is an approach to teaching that utilises many methods while focusing on problems to be solved, decisions to be made, situations to be improved and reasoned thinking. The approach is employed in phase two below.

3.8.2. Phase two: Lesson presentation: Budgets

Preparation of the lesson was done in such a way that it follows the steps of the chosen approach with the intention of provoking opinions and encouraging dialogue (Bonk, 1998: 263). The following steps were applied during this lesson.

1. Identification of the problem situation: what is happening?

2. Definition of the problem: what must be done?

3. Search for information: what do we need to know?

4. Analysis of data: what are the important considerations?

5. Testing possible solutions: what will happen if this action is followed?

6. Conclusion: what action is most promising?

When presenting the lesson using the problem-solving approach, the lesson becomes effective when the teacher is able to alter the balance of power in the classroom and the focus of attention and his/her teaching skills.

Activities games, projects and case-based learning are some of the teaching strategies that can be applied under this approach because these strategies do not only promote participation but also help them to socially negotiate a common understanding of the task and methods (Shankar & Seow, 2010: 79). Activity games were particularly employed in this activity because in this activity it supports conversational processes by connecting learners with each other in which teaching provides contexts and assistance that will aid individuals in making sense of the environment as it is encountered (Bonk, 1998: 264). Therefore, learners should be able to bring together from various knowledge sources an appropriate ensemble of information suited to the particular problem-solving needs of the situation at hand.

3.8.3. Phase three: Reflection on the lesson presented

Often students jump into an activity with little prior instruction in order to stimulate their curiosity, become familiar with the instructional materials and formulate early understandings of the task. Learners can then reflect upon ideas and revise, reorganise and expand upon their understanding with further knowledge exploration and debriefing.

Learners in small groups are given a chance to share with the whole class what they have learnt in the activities. The teachers and parents play a key role in guiding the process of reflection, and provide input on issues that are confusing to learners (Shankar & Seow, 2010: 81). The exciting moments during this session are when learners find ways to take the centre stage in the learning and teaching, making excellent contributions. In essence, all the parties need to be prepared for the lesson presentations, not only the teacher. In this activity, the team reflects with the following critical features of problem-based learning in mind (Bonk, 1998: 265).

1. Engagement: the problem raises concepts and principles relevant to the content area and addresses real issues that connect to the larger social context of the learner.

2. Inquiry: no right answer – it requires exploration to define and refine the question and ideas surrounding the problem.

3. Solution building: learners are problem solvers and engage in observation, inquiry and investigation and formulate conclusions that are consistent with the problem, while teachers are acting as coaches.

4. Reflection: assessments, as authentic companions to the problem, offer a structure for reflection.

This concurs with the claim of Booker (2004: 20), that this session of feedback encourages learners to work independently and enhances instructional group teaching. In this way, instructional games induce learners to make sense of their ideas and the interpretations of others. It is a social process of sense-making and understanding rather than a set of rules handed down from an authority on high (Booker, 2004: 20).

3.8.4. Phase four: Assessment

It is understood that assessment is conducted throughout the phases, as a way of integrating it with teaching and assessment (DoE, 2003: 63, 64). Assessment tasks are performed as a way of reinforcing the understanding of accounting. We assigned assessment tasks, which afforded learners opportunities to develop

creative thinking and analytical skills used to analyse and interpret financial information to solve financial problems (Booker, 2004: 21). Such skills required learners to apply knowledge they acquired in their daily lives and from their lower grades. This is evident in the following extract from the lesson where learners were asked to defend their solutions. Learners were analysing a scenario on the analysis and interpretation of a cash budget. They gave different answers and were asked to give reasons to support their answers.

PAR Teacher: *We are on number 5. You are given the figures below. Explain what you would say to Moipone who is the owner of a business about each of the following items at the end of October. Comment by quoting the figures and give advice. Let us start with telephone. Budgeted amount is R1100 and the actual amount is R2800. What can you say about telephone?*

Learner 1*: Actual is more than budgeted.*

PAR Teacher: *Why? What can you say about that?*

Learner 1: *They are overspending. Telephone was used more than in other months.*

Learner 2: *No. They are not overspending.*

PAR Teacher: *Why do you say that because budgeted are more than actual figures?*

Learner 2: *The business is selling furniture and during October more people want to buy because they know that they are going to get bonuses. They are making calls to their old customers informing them about special offers for the end of the year.*

Learners gave different answers which were justified by their reasons based on their analysis of the financial information in the Cash Budget. Learners were engaged in a reasoned argument where they had to explain and extend their thinking by expressing their own opinions and advice (Ngwenya, 2012: 114). Thus, the development of critical skills allowed learners to engage with the content, and encouraged them to give their views and to argue their points. Their responses were based on their understanding and interpretation of the scenario.

According to Sullivan and Liburn in Ngwenya (2012: 134) open-ended and high order questions have the potential to uncover the unintended conception from the learners by giving them an opportunity to explain their responses. Open-ended questions provoke dialogue and the quality of classroom talk. Such questions transform teaching into a more discursive pedagogy where learners ask questions, state points of view and comment on ideas, which arise in lessons. Burns (2005: 56) found that asking learners to explain their answers during questioning helped to clear up misunderstandings on the side of the learner and to help the teacher to improve his or her teaching strategies for future lessons on the topic (Shankar & Seow, 2010: 79). Teachers may use open-ended questions to engage students in higher-order thinking and to support students in making their accounting thinking explicit by asking them to share their ideas in class (Ngwenya, 2012: 135). Such questions scaffold students' engagement with the task while creating opportunities for learning new knowledge (Shankar & Seow, 2010: 81). The teacher's intention is to elicit what students think, to encourage them to elaborate on their answers and ideas and to help students construct their own knowledge. Thus, questioning is used to diagnose and extend students ideas and to scaffold students' thinking.

Teachers explicitly prompt an explanation by requesting students' explanation and elaboration on their explanation (Ngwenya, 2012: 136). Probing sequences of questions and leading questions were used to prompt students to clarify or elaborate on their initial explanations. Probing sequences were sometimes used when a teacher was unclear about a student's explanation and was trying to understand the student's thinking that underlay an ambiguous initial explanation (Bonk, 1998: 266). Asking for further elaboration from the student gave them the opportunity to articulate a correct and complete explanation when the initial student explanation was ambiguous, incomplete, or incorrect. After the assessment, the team had an opportunity to reflect on the assessment and give feedback to the leaners as indicated in the next phase.

3.8.5. Phase five: Assessment feedback

In this project, assessment marking refers to the whole process where solutions to questions are provided and learners correct their work. In accounting, learners use workbooks (special answer sheets) to do their daily activities.

During this phase, the importance of giving feedback was to help learners to identify their mistake. It was therefore important to give learners time to use the feedback. Teachers mentioned that feedback helped in clarifying misunderstandings by informing learners about what needed to be improved and by providing learners and teachers with information on how to make improvements. While giving feedback learners who needed assistance were identified and time was created for further explanation (Ngwenya, 2012: 146). Accounting uses unique jargon and teachers believed that identification and clarification of those complex terms was crucial. They believed that if the learners did not understand the meaning of these particular words correctly, learners were likely to misunderstand the meaning of the whole question. Therefore, they provided feedback not on incorrect answers only but on the requirements of the questions. What was evident from teachers' practices and responses was that teachers used different forms of feedback to help learners to identify and correct their mistakes. This can be seen in the next discussion.

The other important form of feedback to the assessment according to subject teachers includes but is not limited to, the situation where teachers value working with the whole class to assess the work and provide the solutions. While learners were working teachers could do a number of things. They could observe learners, provide assistance, and walk around marking and checking their work. Teachers pointed out that giving feedback was a shared responsibility. Teachers structured the feedback process by allowing the whole class discussion to proceed under the leadership of learners while they were working with individuals who had problems. Only when the whole class was experiencing difficulties did the teachers move away from the individuals to work with the whole class. What was evident was that teachers could give individual and whole-class feedback simultaneously and still maintain discipline in the classroom. During the process of providing solutions, verbal and visual feedback was provided while learners were writing corrections in

their workbooks. All the activities, meetings and workshops provided the powerful data towards the creation of sustainable accounting learning environments in grade 10. Data collected throughout the study had to be analysed and interpreted in order to make sense of it so that the research could contribute to knowledge creation.

3.9. DATA ANALYSIS

According to Van Dijk (1993: 252), critical discourse analysis (CDA) does not primarily aim to contribute to a specific discipline, paradigm and school or discourse theory. It is primarily interested and motivated by pressing social issues, which it hopes to understand better through analysis. Therefore, this is a type of discourse analysis that studies the manner in which social power abuses, dominates and the manner in which inequality is enacted, reproduced and resisted by text and talk in the social and political context. As such, this approach seeks to identify instances of discursive injustice in text and talk and signifies a form of resistance to unethical and unjust social power relations. (Saghaye-Biria 2012: 509 & Van Dijk 2003: 352). Furthermore, CDA is used to understand, expose and ultimately resist social inequality (Van Dijk, 2008: 85). Based on this, it becomes critical that participants' utterances and actions not be taken for granted. People are able to influence others' minds directly or indirectly and may control some or all of their actions (Van Dijk, 2008: 89).

CDA is tied to CAR, which is the theoretical framework couching the study. It is interested in and leans towards emancipatory praxis for social justice, democratisation and transformation of society (Baker & Bettner, 1997: 298; Gaffikin, 2006: 9). Accounting, especially in education, is critical or enabling if it aims to open up and extend further a debate on how it could be mobilised to promote "social betterment", welfare, justice and emancipation. Its concern is to explore and promote the notion of accounting in the classroom that would be enabling (Roslender and Dillard, 2003: 341). The important characteristic of such accounting is its ability to act as a force for a radical emancipatory social change through making things visible, comprehensible and helping to engender dialogue and action towards emancipatory change (Cooper & Hooper, 2007: 212). This is a shared sentiment to CDA because its stance also leans towards social

transformation in that it forms part of a social and political life based on its aims, especially those relating to its social problem or issue orientation.

CDA is opposed to value free scientific approaches as it is guided by the principles of freedom, equity, hope, social justice and peace (Mahlomaholo & Netshandama, 2012: 43). It is operationalised through the values of mutual respect, trust and humility (Kellner, 2003: 3; Steinberg & Kincheloe, 2010: 140). Van Dijk, (1993: 252) argues that science and especially scholarly discourse are inherently part of and influenced by social structure and are produced in social interaction. This is in line with CAR in its rejection of the value-freeness or value-neutrality or objectivity in conventional accounting by claiming to be representing reality as is but in fact they are subjective constructors of reality, presenting and representing the situation in a limited and one–sided way (Baker & Bettner, 1997: 298).

CDA is seen as a political intervention with its own socially transformative agenda. It lights discursive aspects of societal disparities and inequalities, which deprive learners of access in understanding accounting in the classroom because of biasness towards the use of a variety of resources whereby the dependency weighs heavily on the use of textbooks (Wodak and Meyer ;2009: 3). Even the methods of teaching used by teachers made it difficult for learners to comprehend accounting content, which is in contrast with the critical cross-fields emphasising the cultivation of citizenship (DBE 2011: 4; CAPS, 2011: 1 & Yosso, 2006: 76). Wodak and Meyer (2009: 3) maintain that CDA entails systematic analyses, self-reflection at every point of one's research and distance from the data being investigated. In addition, it encourages new questions, new responses and new thoughts. Hence, the theoretical and conceptual frameworks and research methodology of this study matches with that of critical discourse analysis.

From the discussion above, it may be safe to declare that CDA like CAR is concerned with power relations within society. This is done mainly to investigate ways in which language forms correlations at the utterance-type level and situated meanings that are associated with social practices (Gee, 2014: 68). Therefore, they are ideologically shaped by relations of power and struggle over power and explore how the difficulty of these relationships between discourse and communication tend to reproduce existing inequality power relations (Fairclough, 1993: 135).

Foucault spoke of power in Levitt (2008: 54), where he referred to relations of power in which one person attempts to control the conduct of the other. He further attested that power relations exist at various levels, in various forms and can be changed. In this study, change is seen possible using CDA in which it aims at primarily focusing on social problems and political issues. It is multidisciplinary and therefore empirically adequate. Its explanation of discourses in terms of properties of social interaction and especially social structures and its focus on ways discourse structure enact, confirm, legitimate, reproduce or challenge relations of power and dominance in society. In other words, it asks questions about the way specific discourse structures are deployed in the reproduction of social dominance (Van Dijk, 2008: 85).

The critical stance of CDA would enable the study to achieve its objectives. CDA thus seeks to foreground the perspectives of those who are the victims of abuse of power, dominance and equality (Wodak, 2002: 10). Therefore, three levels of discourse analysis are used to treat the findings of this study (Van Dijk, 2008: 87). Ruiz (2009: 5) writes that CDA makes it possible to apply three levels of analysis when interpreting a text, namely textual, contextual and sociological. These levels form a unified whole in everyday interactions and experience (Tladi, 2013: 154). CDA has the capacity to bridge the gap that might exist between these levels and to arrive at a unified critical analysis of member-groups, action-process, context-social structures and personal and social cognition (Van Dijk, 2008: 354-358). CDA was thus used to identify and analyse potential areas of weakness and disunity among these levels and for each of the five study objectives. This was done at the textual analysis level, the cognitive analysis level and finally at the social analysis level.

As a result, Fairclough argues that at a textual level, analysis involves critical linguistics, while at contextual level analysis is of text production, distribution and interpretation, especially in terms of the way in which the readership is guided to a preferred reading. Finally, the social practice analysis explores the extent to which the text upholds or reproduces hegemonic discursive or social practices and how it stands in relation to certain prevalent conditions (Fairclough, 1993: 138; Van Dijk, 1993: 250). Such an analysis is done with the aim of understanding, exposing and resisting social inequality (Ruiz 2009: 5). Thus, the objective of uncovering issues

relating to power and domination and its concern is to open up spaces in which people can identify dominant ideology and escape from such oppressive discourse (Fairclough, 1993: 138). It is therefore evident in this study that a central notion of the critical discourse is on power and more specifically, the social power of groups or institutions.

3.10. CONCLUSION

In this chapter PAR as the methodology, was discussed with reference to the stages and phases that distinguish this type of approach from other related research approaches. As a result it was demonstrated how the elements of the PAR cycle were used to initiate the activities that made it possible to gather data from the communicative engagements of the participants from the different and diverse backgrounds. Profiling of research participants has been presented. Using PAR was appropriate for generating large amounts of useful data, which will be analysed using Van Dijk's CDA in the next chapter because of its critical stance that may enable the study to achieve its objectives since it seeks to foreground the perspectives of those who are the victims of abuse of power, dominance and equality.

CHAPTER 4: ANALYSIS AND INTERPRETATION OF DATA, PRESENTATION AND DISCUSSION OF RESULTS TOWARDS THE CREATION OF SUSTAINABLE LEARNING ENVIRONMENTS FOR A GRADE 10 ACCOUNTING CLASSROOM

4.1. INTRODUCTION

This study designs a strategy to create sustainable learning environments for a Grade 10 accounting classroom using principles of critical accounting as the approach. In order to operationalise this aim the chapter presents, analyses and interprets the generated data towards the creation of a sustainable learning environments strategy. In order to systematise this discussion, the chapter uses the five objectives of the study to organise this analysis in terms of the generated data. The first objective looks into the challenges that exist in the creation of sustainable accounting learning environments. The second objective of the study relates to the components of the strategy. The third objective entails conditions that enable the implementation to be successful. The fourth objective focuses on threats that mitigate against the successful implementation of the strategy and how we circumvented them and lastly the indicators of the successful implementation of the strategy are discussed.

Each of the five objectives are further divided into appropriate subheadings that are chosen and formulated in correspondence to the respective constructs that define the various sub aspects of the respective objectives arrived at in chapter two.

Each subheading or construct that makes up an objective is discussed by referring to expectations in terms of good practices as indicated by the educational policy, previous research and theory of learning. Reference is made to legislative imperatives that support the unpacking and analysis of the specified objective in the creation of sustainable accounting learning environments and demonstrate how each of the said aspects (construct) constitutes respective objectives to the effective teaching of Grade 10 accounting. In substantiating the argument that a construct is viewed as a particular objective, evidence in the form of spoken words, written words, pictures and scenarios painted by co-researchers are provided. Thus, the relevant extracts of the empirical data generated that highlight the origins of the objective in question are cited as text. I then analyse the texts to develop understanding of discursive practices and related social structure factors underlying the production of a particular text (Sheyholisami,

2009: 1-13; Van Dijk, 2008: 86). This analysis enables the study to consistently 'search deeper' for issues of emancipation, empowerment and transformation towards the creation of SuLE. Furthermore, CDA is used to understand, expose and ultimately resist social inequality that may have prevented the quality teaching of accounting (Van Dijk, 2008:85). The evidence is interpreted using critical accounting research (CAR) in order to make sense of the empirical data, as the theoretical framework of choice. A brief conclusion is made looking at the findings of the empirical data, whether they correlate or refute the literature reviewed. Lastly, observations are made as to the contribution of the findings in the body of knowledge.

4.2. ANALYSIS OF THE CHALLENGES

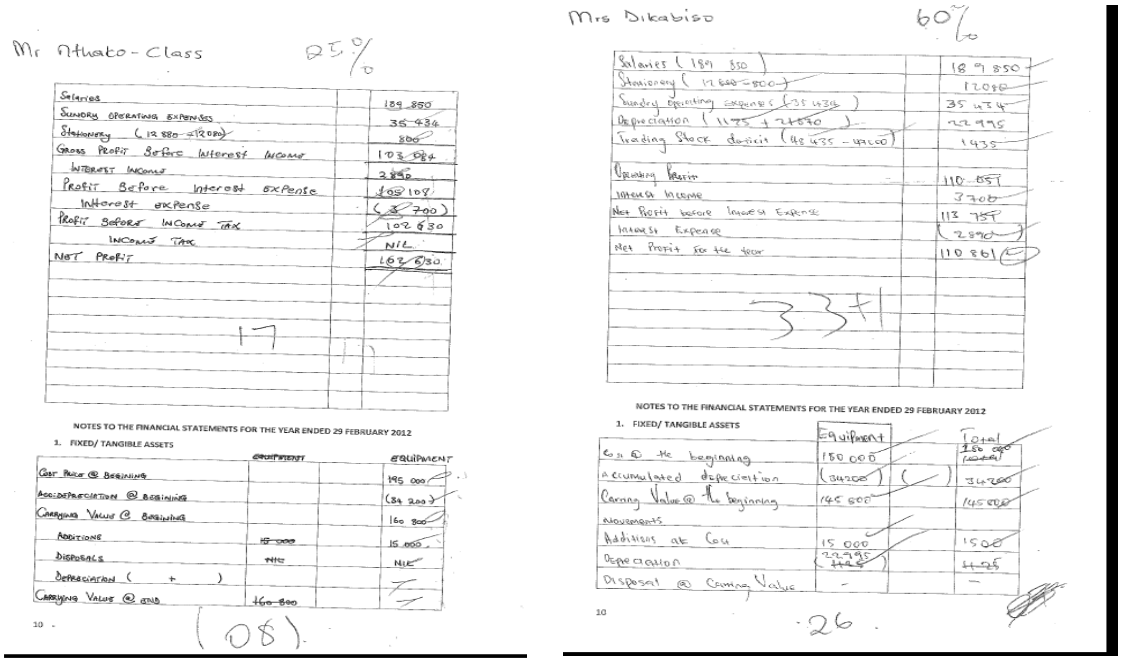
The learning and facilitation of learning of accounting practices before we intervened at the school did not embrace the creation of sustainable learning environments for the accounting classroom. In addressing the first objective the research team held their initial meeting with the purpose of identifying the challenges that are experienced in the teaching and learning environment and their solutions. The following challenges were identified: there seems to be lack of a dedicated team, a lack of fostering a deep approach to learning in the accounting classroom, limited use of teaching media (dependency on the textbook), inappropriate feedback and a lack of effective principles for good teaching. As such, I use the identified challenges as subheadings below.

4.2.1. A lack of a dedicated team to foster sustainable accounting learning environments

Collaborative learning theorists argue that a team provides a space for collaboration between teachers, learners and other stakeholders (Roslender & Dillard, 2003: 334). When teachers are working as a team, it provides opportunities to draw on a synergistic mix of interest and expertise. This could possibly cover areas including environmental, social, critical, pedagogy, indigenous, policy and other perspectives on accounting (Boyce *et al.*., 2012: 50). In addition, provision four of the NQF level descriptors attests that various perspectives derived from a team, provide a learner with an ability to identify, evaluate and apply solutions based on relevant evidence and procedures (SAQA, 2012: 8). Wicks and Reason (2009: 243) found that a team

creates (positive climate) an environment of active, involved, exploratory learning through an increased involvement in the community**.**

In the school under investigation, there are two Grade 10 classes and in the process of identifying challenges, I asked for scripts of the recent test that was set at the district level. Below is a sample of one script from each class.



Mr Nthako - Class

Salaries	189 850
Sundry operating expenses	35 434
Stationery (12 880 - 12 080)	800
Gross Profit before Interest Income	103 084
Interest Income	2850
Profit Before Interest Expense	105 109
Interest expense	(3 700)
Profit before Income Tax	102 830
Income Tax	Nil
NOT PROFIT	102 830

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 29 FEBRUARY 2012

1. FIXED/ TANGIBLE ASSETS

	EQUIPMENT		EQUIPMENT
Cost Price @ Beginning			195 000
Accdepreciation @ Beginning			(34 200)
Carrying Value @ Beginning			160 800
Additions	15 000		15 000
Disposals	Nil		Nil
Depreciation (+)			
Carrying Value @ end	160 800		

10

Mrs Dikabiso

Salaries (189 850)	189 850
Stationery (12 880 - 800)	12080
Sundry operating expenses (35 434)	35 434
Depreciation (11 475 + 11 520)	22 995
Trading Stock deficit (48 435 - 47 000)	1435
Operating Profit	110 851
Interest Income	3700
Net Profit before Interest Expense	113 751
Interest Expense	(2890)
Net Profit for the year	110 861

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 29 FEBRUARY 2012

1. FIXED/ TANGIBLE ASSETS

	Equipment		Total
Cost @ the beginning	150 000		150 000
Accumulated depreciation	(34200)	( )	34200
Carring Value @ the beginning	145 800		145 800
movements			
Additions at Cost	15 000		1500
Depreciation	22995		11495
Disposal @ Carring Value	-		-

10

From the above scripts, we see the huge difference in the performance of the learners. These differences were typical in all the scripts, whereby on average learners' results in one class range between 40-78%, Mrs Dikabiso's class, while in the other class its range is 13–52%, Mr Nthako's class. Furthermore, the fact that this test was set externally means that none of the teachers could have influenced the outcome. Therefore, it seems as if one teacher is more knowledgeable or had a different approach during his teaching, especially in section B that deals largely with financial statements and carried more marks, than the other sections. The fact that section A had few marks disadvantaged Mr Nthako's learners because that was their strong suit compared to other sections. It seems as if had these two teachers worked collaboratively, the performance of both classes could have been better off, which would benefit the child. They could have collaborated on lesson preparation, engaged in team teaching and had continuous reflection on their lessons, while they share strengths and challenges in the teaching of accounting.

A lack of collaboration between different stakeholders in accounting was further confirmed when in one of the classroom observations the following took place:

On the day of the presentation, the coordinating team arrived early for Mr Saki's lesson. We were provided with the copy of the lesson plan as shown in figure 4.2.1.1a below:

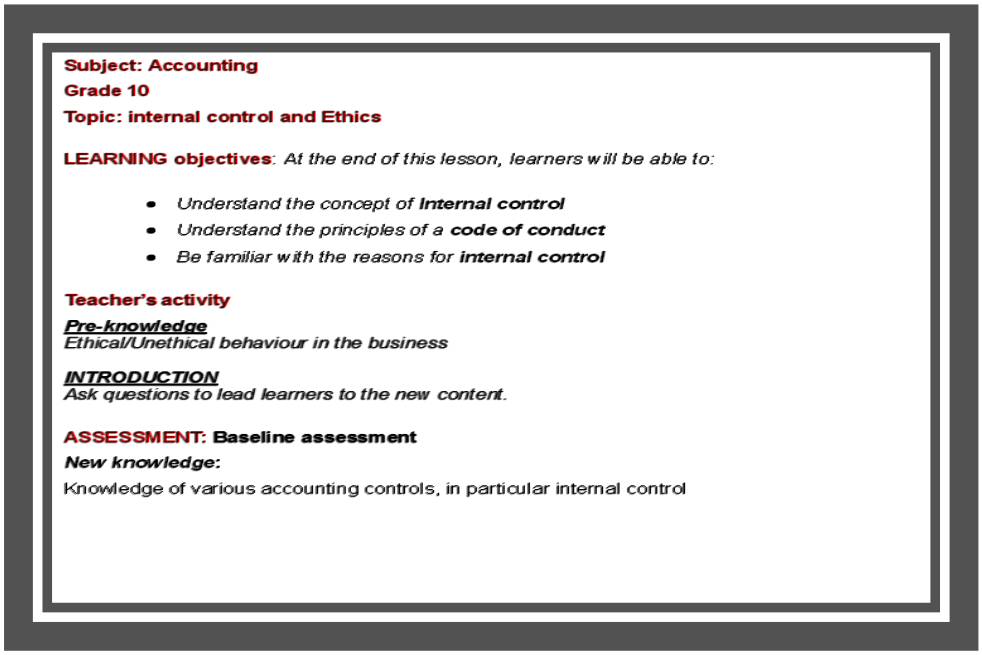


Figure 4.2.1.1a: Lesson Plan

The above plan does not show any collaborative activity for learners as part of collaborative learning since in the above plan no space is provided/allocated for collaborative learning. The teacher could have planned his lesson in such a way that it accommodates collaborative learning groups because when learners work together to solve a problem or reach a common goal, they get an opportunity to learn about diversity, how to work with others and be part of a team, while trying to learn how to communicate effectively. Furthermore, it does even show how teachers could collaborate with learners as a team, which is a necessity for things such as accounting labs and field trips. No creativity was stimulated in this lesson plan and it was unclear how the prior knowledge of learners would be utilised in such way that they could reflect on their social life to integrate the marginalised knowledge into acquiring the

new knowledge. This may suggest that the teacher's approach to teaching does not encourage collaboration among and with learners.

Synergistic mix of ideas and expertise

During the presentation itself, by Mr Saki, the coordinating team observed the necessity of the accounting teachers in this grade to practise team teaching. Mr Saki was teaching the learners how to do adjustments.

It reads: Insurance amount of R11000, on the pre adjustment trial balance included the amount of R3000 paid on 1 July 2012 for the year. The financial year-end is 28 February 2013.

Mr Saki's approach to this adjustment was that:

Mr Saki: What is the year-end?

Learners all sang Feb 2013

Mr Saki: So the money was paid in on the 1 July 2012 for the year neh? Can anyone of you tell me when will its year end?

Thabo: February

Mr Saki: No the period in which the insurance is paid for how long?

Learners were quiet and trying to figure it out…

Mr Saki: if they say it was paid for the year it means 12 months okay,

Mpho: sometimes they say per annum

Mr Saki: Yes, so it means the money will cover the 1st of July 2012 until the end of June 2013 that is our 12 months, however the end of June 2013 is beyond our accounting period which you said it ends on the 28 February 2013, isn't so?

Learners: yes it is Sir

Mr Saki: it means the company have even paid for the few months beyond the current accounting period neh? If this happens, is there anyone of you who remembers what we call this type of payment?

Seipati: Payment in advice Sir

Mr Saki: No, it's a prepaid expense and is an asset to the business, remember?

Learners: Yes sir

Mr Saki: So how many months did the company paid for that do not fall under the current accounting period..? Let's see, after Feb until June is 4 Months. So let's calculate much was actually paid prepaid.

Prepaid expense = 3000 X 4 /12

= R1000

Therefore, it means we pay R1000 for 4 months, so how much is a monthly premium?

The approach Mr Saki is using seems dense and quite confusing. His focus and emphasis is mainly on the dates while underplaying the important accounting principles like GAAP. These principles work as methods or guidelines about measuring, recording, classifying and disclosing financial events and transactions (Beneish, 2001:7). The GAAP are contained in an international set of accounting standards known as the International Financial Reporting Standards simply referred to as IFRS (Botha, 2012: 4). The International Accounting Standards Board (IASB) issues these standards. They are issued with a view to facilitate global harmonisation. Therefore, it is crucial from the beginning, where concepts are introduced that a teacher emphasises the issue of such policies and guidelines, which Mr Saki did not do.

Mr Saki's content knowledge developed without a contextualised set of knowledge to apply to specific problems of practice and seems to have limited the transition of what he is teaching to the learners (Abell, 2008: 1414). Accounting policy and procedures play a vital role and they are consistently changing due to economical imperatives. Had accounting teachers formed a team, there could have been a possibility of different perspectives and approaches. Through such engagements, the policy becomes the main thing that resolves the majority of misunderstandings in accounting. By working together teachers share their synergistic mix of interest and expertise while on the hand are encouraged to refer to the guidelines, policies, pedagogies, social and indigenous knowledge to be able to defend or contribute better to the team. Working alone limited the teacher to explore the other parts of accounting, in which if it was combined with his knowledge, it would have afforded the learners a much-concretised base of adjusting.

He could have used the principle of GAAP, of which his learners have already learnt with other accounting concepts. The relevant principle in this case is the matching principle or simply accrual basis concept. The principle requires the income and the expenses incurred to earn that income be shown for the same financial period, e.g. 12 months. This is emphasised by accrual basis concept that says the effects of transactions and other events are recognised when they occur rather than when money is received or paid.

Working as a team could have possibly afforded them many methods like time line approaches as briefly discussed below, since it is elaborated deeply under objective two, however, it may be easy for the learner to recognise that something falls outside the accounting period if they understand the underlying principle guiding that. Therefore, through the timeline approach, when using the accrual basis, the money for the month of March until June (4 months) falls outside the accounting period therefore it must not be taken into account yet. Such bases become convincing and logical for a learner to perform the calculation, whereby he knows why we have to calculate and subtract the prepaid expense like this:

> Prepaid expense = 3000 X 4/12
>
> = R1000
>
> So, from here it can be shown with ledger accounts and accounting equations how the adjustment is completed.

It is evident from the above approaches that working alone can alienate teaching and impose ideas that are not always the only effective approaches rather than being exposed to the synergistic mix of ideas and subject expertise of colleagues, open to critique, different planning and organisation, as well as methods of class presentation in a team.

Furthermore, the above presentation by Mr Saki has not only denied him the opportunity to draw on a synergistic mix of ideas from other colleagues but also continue to be evidence that a single perspective denies learners an ability to identify, evaluate and apply solutions based on different preservatives. In his approach as illustrated below:

> A further loan of R50 000 was received from Abu Bank, on 31 August 2013. Provide for the outstanding interest on loan.
>
> Therefore, 1/03/2013 to 31/ 08/ 2013 = 200 000 x 13/100 X 6/12 = 13 000
>
> And, 1/09/2013 to 28/02/2014 = 250 000 x 13/100 X 6/12 = 16 250, how much is the outstanding interest?

Learners were, working hard to try use the approach that the teacher is using but found it difficult to justify the answer through that approach.

From the above illustration, we see Mr Saki maintaining a single approach to calculating the interest. This is simple interest but learners were struggling with this method even at the end of the period. He could have provided learners with evidence, through different perspectives or he could have taken advantage of using a compound interest method as a integration with other subjects such as maths, maths literacy and business studies of which learners were exposed to calculation. However, most importantly it could have formed a powerful tool to understanding the calculation of the interest rate in accounting. Good teaching principles requires the teachers to emphasise and understand the ways of teaching and knowing as the bedrock for integration, application and discovery not to develop knowledge for knowledge's sake but enable learners to use knowledge effectively in a rapidly changing society (Nagda, 2003: 185 & SAQA, 2012: 8). It is therefore as if Mr Saki failed to develop such skills as stipulated by the policy.

Community involvement

It was further evident in the reflection meeting where, the concern was to increase the community's involvement as a way of reinforcing teaching and learning of accounting. However, from the learners' workbooks the teaching did not seem to accommodate the community's involvement adequately as sampled in the activity below in table 4.2.1: Bookkeeping.

Table 4.2.1: Make a comparison between bookkeeping systems of the informal sector and formal sector

No.1	**CONCEPT**	**INFORMAL SECTOR**	**FORMAL SECTOR**
1.	How is money raised?	Capital is own money, loans, from micro lenders or stockvel contributions.	Own money/or loans from banks provide capital
2.	Fixed Assets	Items like a table, chairs, an umbrella, a gas stove, vehicle, etc.	Land and buildings, vehicles and equipment.
3	Bookkeeping system	a.	b.
4	Cash float	c.	d.

From the above activity, it seems as if the teacher required learners to use their basic knowledge to compare the two sectors, since he even provided simple and straightforward explanations of accounting concepts in the form of examples in which he expected learners to follow in no.1 and 2 above. However, the nature of this activity required an involvement of the community or other stakeholders such as the entrepreneurs etc. in an effort to ensure that accounting education is not confined to the classroom but can be more meaningful with the increased involvement of the community and other stakeholders. The teacher could have provided the learners with only the accounting concepts and asked the learners to investigate in their communities how those concepts are employed in real life. Therefore, this activity could have been a powerful investigation through an increased involvement of the community. It seems as if Mr Saki has failed to collaborate with other stakeholders and involve the community adequately

Analysis from CAR perspective

The above is contrary to critical accounting research in a sense that from the beginning, the notion of a single 'expert' teacher has been avoided (Thomson & Bebbington, 2004: 612). Because, the ultimate end of accounting education as with any process of education, is the interior development of personality, the formation of character and empowering them to know themselves consciously (Gramsci, 1991: 37). However, this can only come from the strengths of multiple viewpoints in a synthetic endeavour of a team, that no single member of the project may possibly complete independently (Boyce *et al.,* 2012: 68). In contrast, the above did not happen in the class of Mr Saki (see section 4.2.1a). CAR further highlights that working as a team can be approached in a number of ways to maximise the benefits to the learners. If all members are aware that it requires more than just coordination of classes, topics and teaching activities and requires commitment from all stakeholders, that is characteristic of greater collaboration (McDaniel & Colarulli in Boyce *et al.,* 2012: 63). CAR observed that accounting influences our everyday life and our duty as the school and other stakeholders is to have learners deliberate about the impact of accounting on society. By working as a team encourages learners that individual facts are not to be learnt merely for their immediate practical professional end (Gramsci 1971: 37).

The absence of a team denied the teachers an opportunity to share ideas with regard to the teaching of accounting, in terms of planning; teaching and reflection of lessons (see section 4.2.1.1), as seen when two classes that wrote the same test got two different results (DoE, 2012: 8). The minimal involvement of the community within the school seems to deny learners an ability to bridge theory and practice, which could be derived from getting the lived experiences from the community or other stakeholders involved. Such exclusion perpetuates the emancipatory agenda of social justice (Adelman & Taylor, 2006: 43 & UNICEF, 2011: 4). Teachers are seen to be less aware about the power of collective capacity and that working together by all stakeholders generates commitment and multiple resources towards the attainment of quality education. Their failure to see that may result in a lack of equitable distribution of resources to learners and a violation of learners' right to quality education (DoE, 2012: 10).

The results of the study pointed out that the school does not create a collaborative space between/among teachers, learners and other stakeholders in accounting. In confirmation of the above finding, literature on collaboration by all stakeholders emphasises the requirement of the shared governance in terms of power, authority, decision-making and accountability (Adelman & Taylor, 2006: 39). The study finds that the teachers in this school are not working as a team, thus, limiting the several benefits to learners. In particular, the opportunity towards the development of critical-thinking, resulting from exposure to multiple perspectives provided by the team and the ability to see that there is no single truth but a multiplicity of perspectives that normally are contextual or depend on a status quo (Boyce *et al.,* 2012: 65). This study contributed that the development of individual teachers may not be visible if they fail to collaborate internally before they can look for external intervention to their development. This may be done through collaborative efforts within the school, where teachers would assist and motivate each other in the areas that are challenging to them and once they are aware of their position they may be able to win the trust of other stakeholders. Furthermore, Boyce *et al.* (2012: 64) argue that the state of affairs comes as no surprise to those who accept the view that "it is not the consciousness of a man that determines his being but, on the contrary, it is his social being that determines his consciousness" (Boyce, 2012: 64). Therefore, it is confirmed that the community involvement is minimal when the learners are left without a crucial support system and

the social values necessary for the creation of the positive climate in our schools and accounting that is beneficial to the broader society. In conclusion, the lack of a team contributed to the lack of a common vision in the teaching of accounting.

4.2.2. The lack of fostering a deep approach to learning in the accounting classroom

The deep approach to learning, which has its basic premise on participatory (interactive) learning approach (Rhem, 1995: 2), allows learners to be responsible for their own learning in such a way that learning becomes a natural outcome of interactive learning (Boyce *et al.,*, 2010: 41). Social constructivist theory regards a deep approach to learning as a constructive, not receptive, process of transferring information to passive learners (Hense & Mandl, 2012: 21). Furthermore, this theory holds the view that understanding comes through experiences and interaction with the environment, and that the learner uses a foundation of previous knowledge to construct new understanding (Wirth & Perkins, 2008: 11). Learners in the accounting classroom, where deep learning is enhanced, regard learning of accounting as a process whereby they do not only discover the answers relating to the problems but importantly, the reasoning behind those answers (Sharma, 2010: 127; Wood, 1988: 2250). Moreover, Bates (2010: 3) found that the learners might only be interested in discovering the reason why a particular answer is correct if they are intrinsically motivated in the sense that they have developed the expectations that give confidence in the future. It is further supported by NQF level four in advocating that deep learning provides learners with an ability to motivate a change using relevant evidence (SAQA, 2012: 7). Therefore, according to Johnston (2000: 4) particular attention should be given to the assessment instruments because in order to adequately influence the deeper learning such instruments should be developed in a way that requires a greater degree of analysis and synthesis.

Contrary to the above discussion, we analyse a lesson observed by the coordinating team members and that Ms Hobela facilitated. What follows is the treatment of ratios, observed as not problematic in the schools under investigation. The teacher, Ms Hobela, gave each learner in her class a copy of the formulae at the beginning of her lesson. Ms Hobela started the presentation in this manner:

Ms Hobela: Right, today, we are going to do ratios. Who can tell me, what are ratios or analysis and interpretation of financial statements?

Ms Hobela: I know you did not do them in grade 9 but who can try?

The teacher waited a few minutes for learners to respond. None of the learners did. Ms Hobela gave learners the correct answer, as follows,

It is when the business has to assess whether they have been successful or not and to determine the areas in which they can approve.'

Ms Hobela: In order to assess whether the business achieved its goal, the analysis follows the three steps. Okay?

Learners were quiet and looked as the teacher wrote on the board.

Ms Hobela: ehh! Right,

1. Write down the formula
2. Do the calculations and determine the answer
3. Interpret the results

Ms Hobela: the last step of interpreting the results is when you comment by giving possible reasons, either you compare with the previous year or give recommendations meaning how to improve. Are we together class?

The other group of learners were quiet, staring at the teacher or scribbling down the information given by the teacher. At that point, there was no active engagement by Ms Hobela. This happened to be a pattern that was seen throughout the lesson. The teaching and learning approach that was used was not interactive. The majority of the learners were passive, whilst others were taking notes. It could be read from their faces that they were struggling to understand why the ratios were only done at the end of the year and why they were called ratios. The teacher failed to use the facial expression of learners to change the way she was conducting her presentation. She did not spend enough time unpacking the reasoning behind these ratios and why they were called ratios. The teacher could have used the accounting cycle to show the learners the movements along the cycle. As shown below in figure 4.2.2a.

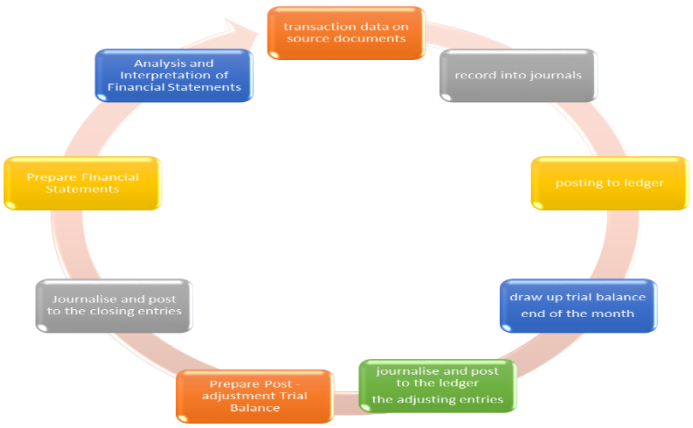


Figure 4.2.2a: Accounting cycle

As dictated by good teaching, a teacher could have started from the beginning of the cycle, reminding them of the fact that all they had been doing for the entire the year was move along the cycle preparing for the last phase which was analysis and interpretation of the results. Therefore, this phase is done only at the end of the accounting period. She could have referred to it as a reflection phase, where a business makes sense of the results found, in the sense that they look at what worked and what did not work as a way of starting a new cycle. While reminding them of the topics done in the classroom, which are actually those phases in the cycle, she could have asked the learners to come and show on the cycle where each of the topics done during the year fits in the cycle. Alternatively, she could have allowed them in groups with peers to do an activity that requires them to debate the importance of the analysis and interpretation phase or any probing open-ended question that would involve discussion among peers. This approach to teaching would seem to be more logical and participatory or interactive in support of a deeper learning, had Ms Hobela used it.

Regardless of the above non-interaction between the teacher and the learners, Ms Hobela proceeded with the presentation as follows:

Table 4.2.2b: Financial Statements

	2008	2007
Gross profit on sales	45%	40%

Net profit on sales	20%	15%
Gross profit on cost of sales	70%	60%
Total expenses on sales	29%	33%
Return on owner's equity	18%	15%
Current ratio	2,8 : 1	1,9 : 1
Acid-test ratio	0,9 : 1	1,3 : 1
Solvency ratio	4,1 : 1	2,9 : 1

REQUIRED

1.1 Comment on the liquidity situation. That is current ratio and acid-test ratio

1.2. Will the business experience problems in the future?

> *Mpho: Ma'am, how do we know that we should comment negatively or positively towards a ratio because they sometimes change?*
>
> *Ms Hobela: like I said in the beginning the key is to know your formula, e.g. can anyone tell me what makes current ratio?*
>
> *Lebohang: (Reading on a copy given) is current assets: current liabilities*
>
> *Ms Hobela: yes, current ratio has increased from **1,9:**1 to **2,8:1.** The business is able to use its current assets to pay off short-term debts.*

From the above extract "…how do we know that we should comment positively or negatively…" shows that learners were still unclear about the analysis and interpretation. Ms Hobela continued to explain to the learners but it seems that even after the explanation of how the calculation is done and the emphasis on the importance of the formulae, in response to Mpho's question learners still seemed to be struggling to organise their own thinking effectively, evident in Lebohang's question:

> *"So, Mme are we going to be given the copy of formulae every time we do the ratio or we have to know memorise them?"*

From the above extract it seems as if in order to cope with the overwhelming concepts, numbers and formulae learners were passive and probably had to abandon their ambitions of understanding what they were learning and instead direct their efforts towards following the pattern and format and memorise as much as possible. The question seems to suggest that the learners started viewing the copy of the formulae as the only hope to pass the ratios. Thus, failing to learn, understand and develop

insights. As knowledge constructors, learners need space to negotiate meaning through their experiences and restructure it using previous understanding. Ms Hobela could have given them an abridged version of the income statement and balance sheet under the heading of an accounting equation since they are familiar with financial statements and accounting equations, connecting it to the analysis might not have been treated as isolated information but as a continuation of what they already know. As illustrated below on figure 4.2.2c

	Assets					=	**Liabilities**			+	**Equity**			
	Equipment	+	Receivables	+	Cash	=	Payables	+	Loan	+	Capital	+	profit	
	10 000	+	2000	+	13000	=	4000		12000	+	21 000			

Figure 4.2.2c

Based on the above financial statements, Ms Hobela could have asked learners to calculate the difference between total assets and total liabilities. She could have further asked them to tell her whether the business would be able to pay all its debts if it sells all its assets. In answering this, she could ask them to compare two things that need to be calculated. Learners may be able to identify them as follows:

Total Assets (R10 000 + R2000 + R13 000 = R25 000) and Total Liabilities (R4 000 + R12 000 = R 16 000).

At this point Ms Hobela could tell learners that the act of comparing TA: TL is called a ratio. From their previous knowledge they usually check the difference by subtraction, whereby 25 000 – 16 00 = 9000, this would be completely right if they were not doing ratios because the very same amount left after they have paid all the debts is the amount that is going to remain when we use ratios.

The teacher has not said anything about the formulae. However, the teacher is uncovering the reasoning behind analysis and interpretation, while linking it to the previous knowledge and experiences of the learner. She can further do the calculation with them as follows:

Total Assets: Total Liabilities

25000 : ~~16 000~~

16000 ~~16 000~~

1.56: 1

The analysis of the above comparison is that, if we sell all our assets (tangible and intangible) we will be left with money (cash and cash equivalents) only and be able to pay all our liabilities. So, from the above results we can say that for every R1 we owe, we have R 1.56 to cover it, therefore the business is able to pay all its liabilities and still remain with R0.56 cents. Furthermore, we can say that, R0.5625 X 16 000 = R9000 balance in monetary terms. The business is solvent. Hence, the ratio is called a solvency ratio. At this point, the learners would be able to organise their thinking effectively through the basis of an accounting equation and financial statements and now they have to use such background to make sense of the new information. The teacher may introduce the list of formulae as readily available to save time but for learners having been taken through step-by-step before seeing the formulae would be able to see them not as isolated ideas and facts but part of the process towards making sense of the results at the end of accounting period. Thus they become a powerful meaning behind the analysis and interpretation of financial statements. However Ms Hobela did not take her take time to accommodate previous knowledge or explain the "how" and "why" questions as she presented the lesson. Her lesson was more of a receptive process than a constructive process since the learners are not even able to analyse how such comment is relevant to that particular ratio and why. This is in contrast with the constructivist learning that views learning as an active process of constructing knowledge and teaching as a process of supporting that construction rather than transmitting knowledge (Duffy & Cunningham, 1996: 172).

Furthermore, the activity on ratios was conducted as she was concluding the lesson. Ms Hobela lesson continued to prove the lack of fostering a deep approach to learning as follows:

> *Ms Hobela: let's quickly do **1.3** .Return on owner's equity Remember this percentage indicates the earnings by the owner on his or her investment in the business. Thabo give me the answer.*
>
> *Thabo: who was busy talking to the other learner hence he was directly questioned (Looking at his copy) its 15% Ma'am*
>
> *Ms Hobela: You will get it wrong because most of you are not listening you are busy talking there…*

From the above extract, it seems as if there is a loss of interest on the side of the learners because, the majority of the class were already talking amongst themselves and trying to explain to each other while others were busy taking notes. The class was noisy. Ms Hobela confirms this in her response to Thabo:

"…most of you are busy talking..."

From the above it becomes evident that learners do not have intrinsic motivation to continue with this lesson. Intrinsic motivation simply refers to an inner drive to engage in an activity for its own sake because it is interesting and satisfying in itself (Bieg, Backes & Mittag, 2011: 124). Furthermore, the learners may seem to be talking because they required a sense of relevance from what was presented to their lives and the world, a sense of accomplishment in mastering it and a sense of control over this particular lesson, hence they seemed less interested and demotivated to listen. Puleng further proved it when the teacher asked her why she talking to the next person, as she said:

"…I was only asking the time, sorry Ma'am..."

The above extract, seems to point to the fact that learners were looking forward to the end of the period, due to the lack of interest. Therefore, the kind of learning acquired in that lesson may not be said to be deeper since deeper learning requires learners to have intrinsic motivation that may be long lasting and self-sustaining with the focus on the subject rather than rewards or punishment (Bieg *et al.,* 2011: 126). Ms Hobela could have started at the preparatory level where she would prepare her lesson to allow learners to engage directly with the material through problem-based learning and cooperative learning as prepared and researched in her lesson plan. Further she could have designed her lesson to provide space for previous knowledge at the beginning and during the lesson and activities and when concluding her lesson. Since learners (constructors) use previous knowledge to construct new understanding. It is therefore further supported by the theory of Zoped Vygotsky that a teacher should start with what learners can do without support, based on their prior knowledge and then expand to the knowledge that requires support or assistance (Siyepu, 2013: 5). These could have given the learners an ability to apply knowledge to problem solving since it requires learners to be able to synthesis the appropriate knowledge. However, it may be difficult for a learner to recall isolated facts (previous and new knowledge) if the

teacher did not teach it in a way that links the two. Therefore, learners may remain with isolated knowledge and be demotivated towards a particular lesson. Lastly, through the above strategies to stimulate intrinsic motivation in learners, the teacher could have managed to afford them enough control over their learning because a significant proportion of learners' learning takes place away from the contact hours, at home or in discussion with peers (Johnston, 2000: 5). Therefore, by affording them control over their learning it would seem to educate them on how best they can utilise their independent study time while developing motivation and structures which may enhance deeper learning even in their own time. Ms Hobela seems to have failed to instil such motivation in her class and therefore failed to have encouraged a deep approach to learn.

In her closing remarks, where she was presumably supposed to emphasise key points, she issued homework and emphasised the importance of formulae and asked learners to familiarise themselves with examples they treated in the classroom at home. The extract from the homework as an assessment instrument is illustrated below in figure 4.2.2d.

1. Calculate the percentage operating profit on sales.
.....
2. Calculate the current ratio for 2013. Is it satisfactory?
.....
3. Calculate the return on the average owner's equity
.....
4. Calculate the degree of solvency at the end of the year
.....

Figure 4.2.2d: Assessment instruments

From the above extract, it is evident that the above assessment is not fostering active and long-term engagement with the learning task (Rhem, 1995: 2). Since it is only covering the lower level of Bloom's taxonomy from remembering to applying, the other phases of Bloom's taxonomy such as analysis, synthesis and creating are not covered (DoE, 2008: 8). It seems as if the assessment instrument above seems to encourage much more limited goals. It seems to encourage only the reproduction of the content or memorisation of the formulae since no interaction with the calculated results is required. Therefore, the assessment may seem irrelevant since the topic is about

interpretation and analysis of the results, thus the kind of instrument used may not foster deeper learning. The influence of such an assessment instrument is that where assessment tasks elicit factual or descriptive responses, learners will tend to adopt a surface approach to learning (Bates, 2010: 5). In this activity even if the learners wanted to do more than what is required, they would not be rewarded, thus limiting them to what is required only while abandoning deeper learning since is relatively unrewarded.

Ms Hobela could have made it clear during her lesson that figures in the financial statements have to be interpreted to have meaning. However, analysis and interpretation is more meaningful if the results are compared to something depending on what is analysed, it can be the previous year's results or against the interest rate, etc. then only are you really able to make a judgement call as to whether there was an improvement or not. However, the need to analyse and make a judgement is directed to the kind of question posed. Below in figure 4.2.2e is the list of possible probing questions she could have asked to cater not only for the lower level of the Bloom's taxonomy but other levels in order to foster deeper learning.

1. *Provide two possible reasons for the change in the ratios calculated in 2013 considering the economic climate.*

……

2. *The total assets of the business amount to R385 000 while total liabilities amount to R120 000. The net profit for the year was R75 000. There were no drawings. Calculate the return on average owner's equity. Make a sound judgement by comparing it to the interest rate on fixed deposit.*

……...

Figure 4.2.2e: Analysis and Interpretations in comparison to the factors like, economic climate

The above does not only cater for calculation of results, it encourages learners to bring various pieces together and look beyond numbers and the meaning as compared to other factors such as economic climate and interest rate. The use of such assessment instruments assist in equipping learners with critical thinking, communicating, collecting, analysing, interpreting and organising skills, thus contributing towards an

approach to learning that is deeper had it been employed by Ms Hobela. She therefore, seems to have failed to design the task that requires a greater degree of analysis and synthesis in order to foster such an approach to learning.

Analysis from a CAR perspective

Critical accounting research (CAR) is violated in this classroom because CAR recognises that accounting is a social science and not a mere collection of abstract mathematical manipulations or calculative routines (Lowe & Puxty, 1990: 54; Burchell *et al.*, 1980: 6) as is illustrated in the class of Ms Hobela above (see section 4.2.2a). Therefore, accounting as a social science should allow participatory learning, where learners are engaging and sharing ideas as a group, in a quest for meaning making. The opposite is evident in the over emphasising of formulae by the teacher. Ms Hobela did not create enough space for discovery and justification of ideas in an attempt to enhance critical thinking skills, as is emphasised by social constructivists (see section 4.2.2b). Furthermore, education in which accounting is a part would be more emancipatory if the students and teachers are actively interacting with what is taught. In this sense there are conditions of mutual respect through the open exchange of ideas and proliferation of dialogue while providing students with the lived experience of empowerment, active interaction and engagements that did not take place in Ms Hobela classroom as seen when she was about to conclude her lesson above (Boyce, 2004:575). The fact that even towards the end of the period learners were still confused and more demotivated about the basic principles regarding the ratio cannot symbolise empowerment. A more critical form of accounting education would conceptualise knowledge as an active tool that students can use to "generate their own meanings" and make sense of their life-world rather than a set of meanings or perhaps even just words that are deposited in the student (Boyce,2004: 571; McPhail, 2001: 490). Furthermore, such a critical form of accounting education regards assessment as an important part of learning not only for monitoring and for accountability (see section 4.2.2d) but also to support learning itself (see section 4.2.2e). Therefore, the instruments used should fit accordingly (Gipps, 1994: 2).

From the above discussion, there seems to be a likelihood that Ms Hobela prefers a more teacher-centred method of teaching since in her class she employs the telling method and encourages memorisation to the passive learners. This leaves the

treatment of ratios still abstract to learners. Nothing was done by Ms Hobela to complement the copying of formulae treatments of ratios. This could mean the teacher was violating her role as a learning mediator that requires her to be sensitive to the diverse needs of her learners while demonstrating sound knowledge of her learning area (Potenza, 2002: 1). Therefore, the teacher preference could be said to be failing the principle of the DoE of a more learner–centred method of teaching, which accommodates a deep approach to learning in an effort to allow learners the opportunity to develop and employ their abilities and such as develop critical thinking skills among others (DBE, 2011:4).

In closing, the findings seemed to correlate with the finding from the literature that when the learner performance is poor, in many instances, it is because the teachers have failed to engage learners optimally (Appel, 1995: 1; Gipps, 1994: 4; Sharma, 2010: 133). It follows that teachers are dominating class presentations, as learners are passive throughout the lesson presentation with less participation on the side of learners. Such teachers believe that it is enough to simply cover the work prescribed in the departmental policy documents and opt to foster surface learning. The study revealed that teachers often assume that, because they are teaching, learners must be learning and on the same note making learners believe that, because they have read their text and memorised facts they have learned something. This is confirmed by the study of Wirth and Perkins (2003: 1), about learning to learn which states that classroom lessons are not interesting and that students fail to recognise the value of what they are learning, mostly because many teachers rely heavily on teacher-centred methods of teaching for transmitting information only. The study further concludes that the Grade 10 accounting teacher should be focusing on fostering deep learning as it forms the basis since the learners are specialising compared to Grade 9, where it was a general introduction to economic and management sciences not accounting as a subject. In this grade it is important to lay a strong foundation through education guidelines and policies such as level descriptors and critical cross–fields' outcomes to the field of study they would wish to pursue in future (DBE, 2012: 4; SAQA, 2012: 2). These guidelines are aimed at ensuring coherence and development of a basis to lifelong learning.

4.2.3. Limited use of teaching media and tools (dependency on the textbook)

The use of media and other tools in accounting is consistent with the role of the teacher in terms of research (Kaidonis, 2003: 668). James (2008: 652) found that when media and tools are used in accounting as educational resources, they offer a powerful opportunity to bridge theory and practice. It stimulates their interest since they can easily relate with various media and tools for the simple reason that it forms part of their pre-existing knowledge as observed by the study of Ouyang and Stanley (2014: 166). It is further supported by the provision four of the NQF level descriptors, which envisages a learner who is able to apply essential methods, procedures and techniques of a discipline to a given familiar context (SAQA, 2012: 7). The use of media and other tools in accounting renders a teacher who accepts and understands that learners learn in different ways. Some learners may be more visually oriented, while others require text or sound presentations (Bonk & Smith 1998: 268). A learner-centred environment allows the teacher to supplement the textbook with other resources and engaging activities through more use of other tools. It is further supported by the problem–based learning theory, which holds the same view that in a learner-centred environment where media and tools are used learners learn about the subject through the experience of solving an open-ended problem (Savery, 2015:7). This involves learners in problem-solving activities, higher level thinking questions and engaging activities through more use of other tools. (ELRC, 2003: H-48; Garcia & Sylvan, 2011:396).

Contrary to the above-mentioned policy and good practice, in the classroom of Mr Saki, his lesson presentation did not highlight the above-mentioned practice as observed by the coordinating team. Mr Saki was teaching informally also referred to as indigenous bookkeeping and ethics and internal control.

During his presentation with regard to the topic ethics in accounting, he was specifically demonstrating the purpose of a code of ethics in financial professions. In particular, primary institutional adherence to morally and ethically accepted practices, in particular cartel and collusion in businesses. As he continued teaching, he used an example to explain cartel and price-fixing in the business.

> Mr Saki: let us turn to page 56 of our textbook and read the case study there to give us more of an understanding on collusion.

The case study in the textbook was for a 1999 USA case where a cartel prize fixed the animal feed addictive lysine. Below in figure 4.2.3.a is an extract from the case study:

It involves American, Japanese and Korean companies, who had an organised effort to raise the price of the animal feed addictive called lysine. After investigations, they were criminally fined close to $105 million, setting a record on antitrust penalties, with some of the executives from those companies convicted in September 1998 after a ten-week jury trial. Buyers of lysine in the United States and Canada sued and recovered $80 to $100 million in damages from the five cartel members…

Figure 4.2.3a: Cartels and Collusions

The above extracts, as taken from the prescribed textbook by the teacher, shows a lack of research. Case studies used by Mr Saki are more than a decade old, as they are from 1999. There may be more recent cases that can be used with more recent information and developments in the business world. The content of the case study is approved but the context may seem to be irrelevant to the learners in this particular class. The currency itself, "$105 million", will require great effort for learners to make sense of the actual value of that fine when converted to rand. This will still leave a grey area in demonstrating an impact of such a fine to learners. The teacher could have done the research on cartel and price fixing in his particular country and gradually move to other countries later. However, the lack of research forced him to use the out-dated information. Mr Saki's research could have included media like newspaper articles, YouTube, search engines like Google and business magazines to mention a few (DBE, 2011: 9; James, 2006: 652). The recent trading cases include the construction cartel that were fined R1.46bn in 2014 and are facing yet another beating. Those companies include WBHO, Raubex, Basil Read and other big companies during the construction of the 2010 stadium or the recent one being SA banks facing Forex fines from the article in May 2015 (Lloyd, 2015). Based on the above, it seems as if Mr Saki failed in his teaching role as a researcher.

Moreover, he failed to bridge the gap between theory and practice. Because, had he used the names like WBHO in his lesson, his lesson could have made more sense to the learners since they know about the 2010 soccer world cup events and they see

these companies in their everyday lives. Again, R1.42bn immediately affects the learners on how harsh the penalty was. Therefore his lack of research leads his lesson to remain abstract and failed to bridge the gap between theory and practice through the use media and other tools

Informal (indigenous) bookkeeping

Furthermore, his limited use of media and tools in accounting continued to be evident in his presentation when he was treating the informal (indigenous) bookkeeping. In presentation he was using his textbook and used the activity in the textbook to present his and ask the learners to do the remaining part as homework (see extract below).

Activity 8

1. Work with a partner. Choose one business from the list and discuss what you would do to make the business successful, siting these headings:

Products sold, storage needed, fixed assets
Ethics, internal control measures recommended

Figure 4.2.3b: Indigenous bookkeeping

Important: The list of informal traders and their products were part of the activity.

From the above extract, it shows a high dependency on the prescribed textbook in such a way that a teacher failed to use various resources available to him. In his question above, he asked learners to choose from the provided list of traders and their products. Mr Saki could have afforded learners a chance to use their experiences and the kind of traders they know in their communities. He could have created an accounting laboratory for that day, converting his class by putting up posters and the necessary tools that he may need to role-play the types of traders known to learners from their community. The role-play using many tools could have stimulated the interest of learners. For many reasons including the fact that it forms part of their pre-existing knowledge he failed to accommodate other learners who may be more visually oriented, by only using the text. Thus allowing learners to role-play would accommodate them with various tools could allow for the diversity (Bonk & Smith 1998:268).

Furthermore, the homework provided more evidence of the limited use of media and tools in this classroom. The homework is shown below:

2. Design a simple bookkeeping system that would show calculation of the cost price, selling price and the profit.

Figure 4.2.3.c: indigenous bookkeeping part(2)

The above extract, when read in the context of indigenous traders, does not encourage learners to link the calculation with the informal traders they know. A simple bookkeeping system can also be taken from the textbook itself. The learner can do this without creativity or critical thinking. Mr Saki could have asked the learners to go and investigate through interviewing the community traders as to how they realise their profits, i.e. selling price less cost of sales as indicated above. Learners could collect vast and relevant information to enable them to prepare a simple bookkeeping system. In that way the activity could have been more of a problem solving activity and make more sense to them (Bonk & Smith, 1998: 268). Mr Saki seems to have insufficiently enhanced the creative and critical skills of the learners through problem solving activities that would have required from them more than just copying and reading a text. A simple bookkeeping system cannot probe higher order thinking abilities. Such thinking ability may only be acquired when a learner is empowered to conduct research, integrate theory and practise and apply knowledge and skills to develop a viable solution to a problem (Savery & Duffy, 1995: 137). Therefore, the teacher seems to have failed in enhancing such learner-centred principles through his dependency on the textbook while limiting the use of other media and tools available to them.

Analysis from a CAR perspective

The above approach to teaching is contradictory to CAR because one of the objectives of CAR is to explore the possibilities of connecting accounting to the ordinary feelings and experiences, which learners have in their lives outside the classroom (James, 2008: 671). Mr Saki failed to explore these through the failure to conduct research (see section 4.2.3a). Striving to explore those possibilities is done in order to get in touch with the lived reality and bringing the historical and contemporary social underpinnings of accounting practice into the classroom (Boyce, 2004: 575; Broadbent, 2002: 436). In the accounting classroom, the use of plenty of supplemental materials or media is encouraged and can be fulfilling to the needs of learner–centred

approaches to learning. This involves students in problem-solving activities, higher level thinking questions and engaging activities through more use of other tools. The above did not seem to happen in the classroom of Mr Saki (see section 4.2.3.b). CAR acknowledges that some textbooks may fail to arouse students' interest in that students may find it difficult to understand the relevance of so much data to their personal lives (Thomson & Bebbington, 2004: 612). Mr Saki failed to arouse interest of learners even when the topic was directly demanding the engagement of their community or a role-play with the use of accounting tools.

From the above discussion, Mr Saki perpetuates acts of poor teaching practices as advocated for during the apartheid era (Nkoane, 2012: 98), his lack of research limits the exposure on the side of learners, thus, promoting poor quality teaching. It is evident (see section 4.2.3c) from Mr Saki's lesson that he does not incorporate or value the knowledge that learners bring from home or previous grades in his lesson (Moloi, 2013: 483). This kind of teacher is not cautious that the educational environment is not confined to the classroom but instead extends into the home environment, the community and around the world (Murray & Ozanne, 1991: 129). The limited use of media and other tools in accounting present the teachers who seem ignorant of the power that they have as educators of contributing positively to social transformation agenda (Van Dijk, 2006: 360).

The results of the study revealed that inappropriate research is detrimental to the quality of education and the development of a teacher as a person (see section 4.2.3.a, b). The results are supported by the study of Armitage (2010: 3) in that even though a textbook has its advantages, the dependency on it can be detrimental to the viewpoints of the learner. It is important that teachers be cautioned that the textbook is just one tool, a single view to the disadvantage of a learner, since it seems adequate to bridge the gap between theory and practice. This is confirmed by the study of Armitage (2010: 3) whereby they see the challenge with the dependency of the textbook in class as it can be old and out-dated, especially in accounting where there is a rapid chance of the content and procedures being out-dated in relation to the economic and market related changes. The study contributes to the fact that in the accounting classroom the use of plenty of supplemental materials or media is encouraged and can be fulfilling to the need for learner–centred approaches to learning because an educational environment is not confined to the classroom or

textbook but instead extends into the home environment, the community and around the world. (Murray & Ozanne, 1991: 129).Thus, it is important to involve students in problem-solving activities, higher level thinking questions and engaging activities through more use of other tools.

4.2.4. Inadequate feedback on assessment

Feedback is all post-response information that is provided to a learner to inform him or her on the actual state of learning or performance (Narciss, 2008: 127). Black *et al.,* (2003:15) and Sadler (1989:209) found that when feedback is given in an attempt to clear misconceptions it improves their learning by identifying their gaps and how they can alter them towards improvement for the subsequent task. Furthermore, feedback is a crucial part of assessment and when it is descriptive and provided continuously, it becomes a tool for empowerment (Carver & Scheier, 1990: 87). Thus**,** research (Andrade & Du, 2005: 2) lends support to the empowering view of feedback in that when peer feedback is incorporated into the assessment process, dialogue around learning can also be enhanced and the power differential between teacher and learners can be lessened. NQF level four supports the view of dialogue in feedback in such a way that when a learner communicates information it enables him/her the ability to produce and present information reliably and accurately in written and in oral or signed form (SAQA, 2012: 7). In Dewey's concept of reflective thinking, when learners are given descriptive feedback they are afforded an opportunity to reflect on their learning (Roger, 2006: 676). It is therefore, further supported by the theory of educational assessment in which it argues for the move towards an assessment as a process, which plays an instrumental role in facilitating learning for the learners, through feedback that creates an opportunity for reflection (Gipps, 2012: 4).

Contrary to the above good practices regarding the feedback on assessment, the manner in which Ms Mohanwe was giving feedback in her classroom did not seem to be in line with such good practices.

During Ms Mohanwe's class she provided feedback for the homework previously given to learners. As she was writing the correct answers on the board directly from her memo, she asked learners:

> Let's mark the homework… "… Make sure that you write these correct answers down, so that you can see where you went wrong…" and write remedial work

From the above context, where the teacher directly copied from her memorandum straight onto the board without affording learners an opportunity to engage with the answers, as a way of enabling them to identify where they went wrong or misinterpreted was what was expected of them. This may seem to have the potential to perpetuate the misconceptions or misinterpretations. It is worth noting that learners come to school with considerable knowledge, some correct some not, either way this is based on intuition, everyday experience, what they might have been taught in other settings or just a mere misunderstanding (Andrade, 2008: 2). These misconceptions happen to be a normal part of learning and it seems are not something to be avoided with the hope that learners will eventually adopt the correct ideas naturally once they are exposed to them through copying a teacher's "memo" as a truth serum. Ms Mohanwe could have given feedback in collaboration with learners, in a sense that while writing answers on the board, she verbally asks learners questions and expects answers from them. In that way she was going to see the misinterpretation and be able to identify those learners who still need more attention and provide time for them. From the above extract

> "Write down the remedial"

It became evident when she was about to complete writing the answers that all Ms Mohanwe could do was provide the memo and expect the learners to write it as remedial, however that act of "providing the memo" cannot be seen as remedial since accounting as a subject uses unique jargon. Therefore, it may be possible for learners to misinterpret the questions because of a lack of understanding resulting from the unique terminology of the subject. Therefore, feedback should not only be related to incorrect answers but is also important in providing learners with the skills to analyse questions and particular words in a question. Because the learners did not understand the meaning of these particular words correctly, they were likely to misunderstand the meaning of the whole question. Having provided the answers to the questions without diagnosing the problem or assisting them to understand the requirements of the question may not be seen assisting in clearing misconceptions they may have.

The inadequate feedback continued to be further proven by Ms Mohanwe when after writing all the answers with a sample below:

A	= O	+ L
R946 000	= R910 000	+ R54 000

With the above answer on the board, Molemo asked Ms Mohanwe if his way of answering was correct since he could find the right answer in this way:

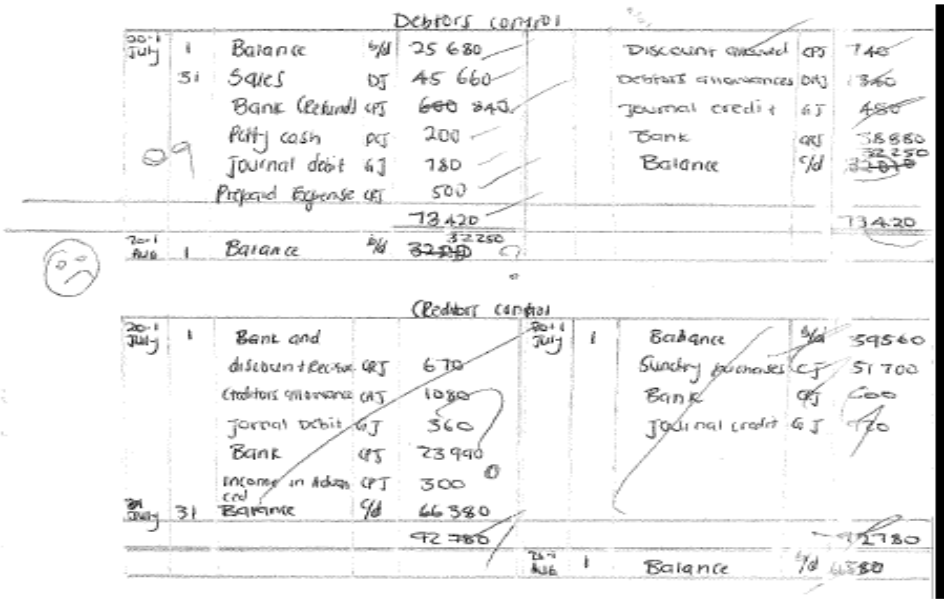
O	+ A	= L
R910 000	+R946 000	= R54 000

From the above extract, it is clear that Molemo is not able to identify his gap. He seems unable to see his mistake. It seems as if Molemo requires more attention since even arithmetically, when we disregard the formula, R910 000 + R946 000 ≠ R 54 000. Furthermore, coming to accounting, the formula is wrong since assets is a combination of owners' equity plus liability according to the rules of accounting equation. However, Ms Mohanwe's response was that the formula is wrong and she read the formula from the board and advised Molemo to read his notes on the definition of the three terms well and learn to practise the formula well.

Ms Mohanwe could have taken her time to ask Molemo why he is writing the formula in that manner. At the same time, she could have explained the reason why assets can never be added to owners' equity since owners' equity is already part of assets. She could have further showed the other possible forms and that it will never be possible to add O + A = L but we can say that L = A – O or that O = A – L. Looking at both alternatives on top of what she has written as the answer on the board it is clear that using any method, we cannot add A+O. By engaging with Molemo, Ms Mohanwe could have seen that Molemo might have tried to use the alternative form where he was supposed to say O – A = L but ended up adding the two instead, this way the feedback might be said to have identified the gap and improved his learning. Therefore it shows a teacher whose focus is on error correction rather than assisting a learner to identify his gap and the manner in which she can alter it for a subsequent task. Therefore, if the information is not used to provide a clear direction on how to alter the gap then it is not a "feedback". In addition, it should be noted that each learner has his

or her unique answer and by only giving a general and single view, does not give a learner a state of her actual performance with the aim of assisting her in preparation for her subsequent task. She could have engaged with them through questioning and through presenting other possible ways of doing the accounting equation to assist them in altering the gaps and by extension improving their learning.

Furthermore, it was decided that the remaining portion of that period would be used to provide feedback on the assessment (test) that was done the previous week. All learners were given back their marked scripts with written feedback. However, the inappropriate feedback continued to be apparent when we managed to see the scripts of learners as sampled below:



From the above extracts, it seems as if the scripts had mostly ticks, smiley faces, question marks and sections where she cut across with the red line. The above indications from the learners' scripts, if can be called feedback, is not descriptive since it is not specific and is not task related. Furthermore, it does not encourage or construct the way forward (Carver & Scheier, 1990: 88) but it is vague and mostly negative. Feedback is communication between a teacher and a learner about a particular task. If the communication is not clear, it cannot be said to enhance the teaching process. The fact that the feedback on the formative assessment was given in the last only 15 minutes of the period was further supported by the fact that it was only for the issuing

of those scripts with no descriptive written feedback on them. Ms Mohanwe could have issued the scripts and opened the platform for peer oral feedback since it might not be possible to write descriptive feedback to each learner because of time constraints. She could have afforded peers the opportunity to engage with the feedback and facilitate the process. In this way, she would have encouraged and enabled learners to acquire critical skills like analysis and critical thinking because when peers are giving feedback it may not always be that other learners would take it as is without double-checking and further interrogating thus rendering them empowered. By taking a back seat, suggests a teacher who is able to depower in order to empower her learners through feedback. In addition, putting learners at the centre of their feedback builds their confidence and allows them to engage more freely when they are peers, while lessening power differentials between the teacher and the learner. It seems as if Ms Mohanwe failed to provide descriptive feedback, therefore it cannot be said to have empowered her learners.

Furthermore, the inadequate feedback was evident when even at the end of the period still no intentions to reflect on the assessment feedback were shown by Ms Mohanwe. It became evident when she cautioned learners to ensure that all of their marks are correctly counted and recorded. She further moved on and said:

> "…tomorrow we are introducing unit 3, value added tax, please go through the prior knowledge activities at home..."

From the above we see Ms Mohanwe only becoming concerned with the efficiency in calculation and recording while paying little attention to the feedback, which would assist her learners in reflecting in order to improve their learning. It becomes evident in her phrase “Tomorrow we are introducing….” It seems to suggest that the end of assessment on that particular topic has ended with the issuing of the script and nothing more. Thus, becoming contrary to the theory of educational assessment, which emphasises the assessment as a process with a prime purpose of supporting teaching and learning, simply referred to as assessment for learning (Roger, 2006: 677). The process of assessment would involve assessing, providing feedback and reflection on the feedback by the teacher and the learners. The latter phase of the process may not be possible if the feedback is not descriptive. Which is what happened in Ms

Mohanwe's class where she only relied on the simple ticks of right or wrong, cutting across with the red line and putting in a question mark. This would not be wrong if it was supplemented with more task related comments whether verbally or otherwise. Reflection is beneficial to the learners in that it allows them to build on their previous work as a way of improving their learning and preparing for a subsequent task. As supported by contrasting the concept of Dewey regarding critical reflection. When learners are given descriptive feedback, they are afforded an opportunity to reflect on their learning (Roger, 2006: 677). It is also worth noting that reflection is important to the teacher since it plays a crucial role in determining whether there is a need for further attention on the topic or to continue to the next topic. However, in the case in point, Ms Mohanwe does not seem to have reflected. Hence, she is smoothly introducing the other topic about tax.

Ms Mohanwe seems to have limited the ability of learners to reflect since there is not enough feedback to assist learners with their reflection. Ms Mohanwe could have dedicated a fair amount of time to do the feedback, be it in the oral form in the classroom immediately after giving them their scripts or as homework, where learners are given an added opportunity to go back with the help of any other resource at their disposal. At the end of the day Ms Mohanwe would have encouraged them to revisit their scripts and reflect on their previous shortfalls as they could have managed to give descriptive feedback when they brought it to the discussion with new answers and ideas from their homework. On the other hand, through feedback, the teacher could have been able to identify aspects that still need more attention while she tries to learn from the previous lesson in improving the next lesson. As a result, this does not seem to be contributing to the improvement of teaching and learning in the accounting classroom.

The above discussion is in contrast with the CAR, which advocates for descriptive feedback since it identifies what needs to be done to further improve and give learners clear guidance on how to improve. This gives clarity on what was asked and reminds students about how to correct their mistakes (Roger, 2006: 678). CAR values oral feedback as a communicative learning tool, which is intended to communicate problems and suggest ways to correct mistakes. It should be done to engage learners

in problem solving and to develop learners' thinking skills. Ferris and Roberts (2001: 175) argue for descriptive feedback and oral feedback where errors were indicated by writing and given further elaboration in class since it is believed that a higher level of explicitness is more conducive to reflection and cognitive engagement on the part of students (Ferris, 2002: 34).

From the above discussion, it seems as if Ms Mohanwe has a tendency of not giving learners adequate feedback, which leaves learners with misconceptions and unidentified gaps in learning which is disempowering to them. Therefore, she seems to be directly violating learners' right to quality education (DoE, 2012: 8). Furthermore, failure to encourage dialogue through peer feedback seems to construe Ms Mohanwe as a person who prefers to use her power to dominate learners who are more passive. On the other hand, failure to give descriptive feedback limits the possibilities of reflection to the teacher and learners thus rendering learners hopeless and disempowered.

The results of the study reveals that learners come to the class not as blank slates but rather come to school with considerable knowledge, some correct and some not, so through feedback the teacher is able to identify misconceptions and identify learning gaps. Furthermore, the study contributes that peer feedback is crucial for the development of critical skills since when learners are engaging with one other it is a common practice for them to re-check the given answers or critique it while giving an alternative opinion, thus reducing the power differentials between a teacher and learners. The study further reveals that reflection is a crucial phase of assessment to a learner and a teacher.

4.2.5. A lack of effective principles for good teaching

Good teaching in Grade 10, of which accounting is a part, is well represented in provision four of the NQF level descriptors (SAQA 2012: 5). Therefore, any teacher who aspires to achieve or do more out of teaching and learning of accounting should first meet the minimum requirements as stated in the NQF level 4. Therefore, in this sub-topic I am going to use level descriptors as the most advanced internationally as it is the most recent to be crafted (SAQA, 2012: 7). These descriptors are used in

conjunction with the above challenges that necessitates the formulation of the strategy in the school under investigation.

Level descriptors aim to ensure coherence across learning achievement at a particular level (SAQA, 2012: 3) and its purpose is to facilitate the assessment of the international comparability of a qualification (DBA 2011: 7; SAQA 2012:4). Therefore, in terms of provision four of the NQF level descriptors in accounting, a demonstration of an understanding by the learner requires that knowledge in one field can be applied to related fields, as highlighted as knowledge literacy (SAQA, 2012: 2). Furthermore, provision four of NQF, in terms of scope of knowledge requires learners to show a fundamental knowledge base of the study and the understanding of the key terms, rules, concepts and principles in the learning of accounting (SAQA, 2012:7 & Sharma, 2010:127). In addition, NQF level four in terms of problem solving expects a learner to be able to use their own knowledge to solve common problems within a familiar context or the ability to adjust an application of a common solution in response to a small change in the problem. Which agrees to another NQF level four descriptor about accessing, processing and managing information, where a learner is able to demonstrate the ability to apply and carry out actions by interpreting information from text and operational symbols or representations (SAQA, 2012: 7). The other issue supported by the NQF level four is in terms of management of learning, where a learner is expected to demonstrate a capacity to take responsibility for their own learning within a supervised environment and a capacity to evaluate their own performance against given criteria. Furthermore, the above highlighted good practices require accountability and ethics, where a learner is able to demonstrate the ability to adhere to the code of conduct and the ability to understand societal values and ethics. On the other hand, a learner must be able to make decisions and take responsibility for actions as well as capacity to take initiative to address any shortcomings.

Knowledge literacy

The above-mentioned good practices in terms of knowledge literacy were not seen in the school under investigation as evidenced under subheading 4.2.1, regarding dedicated team. The results of the study pointed out that the school does not create a collaborative space between/among teachers, learners and other stakeholders in accounting. It is further evident under subheading 4.2.3 regarding limited use of

teaching media and tools that the study found that in the accounting classroom was limited to the use of such tools. This confined the educational environment to the classroom or textbook while failing to fulfil the need for learner-centred approaches to learning that requires an extension into learners' home, their community and around the world.

The above evidence as used against but is not limited to level descriptors seems to suggest that in terms of knowledge literacy in the school under investigation, the principles of good teaching are not effectively used. Because learners were limited to the capacity to acquire and demonstrate the ability to show that knowledge in school content can be applied in their real life situation when blended with their lived experiences. Therefore, the approach of the teacher seems to suggest the bad teaching of accounting.

Scope of knowledge

Furthermore, the lack of effective teaching seemed to be evident under the scope of knowledge in the provision of level four NQF. It seen under subheading 4.2.2, learners were poorly performing because the teachers failed to engage them optimally. The Grade 10 accounting teacher should be focusing on fostering a deep approach to learning, as it forms the basis upon which the learners are specialising in for the first time, compared to the previous grade, where it was a general introduction to economic and management sciences not accounting as a subject. The study found that the teacher failed to expose learners to the fundamental base before attempting to introduce further knowledge. Furthermore, subheading 4.2.2 of the study revealed that teachers often assume that because they are teaching, learners must be learning and on the same note making learners believe that because they have read their text and memorised facts they have learned something.

From the above evidence, it seems as if accounting teachers in the school under investigation had failed to use the principles of good teaching effectively. Because accounting is a subject that has specific jargon if learners are not fully exposed to the key terms, rules and concepts and also current policies and principles, it does not widen the scope of learners' knowledge. Therefore, failure to widen the learners' scope

of knowledge, as an indication of progression from one level to the other, is closely linked to the bad teaching of accounting.

Problem solving

The lack of effective use of principles of good practice was further seen when problem solving as a principle of such teaching, under provision four of NQF was not used effectively. Evident under subheading 4.2.1 the study finds that the teachers in this school are not working as a team. Thus, limiting the several benefits to learners, in particular, the opportunity to develop critical-thinking, resulting from exposure to multiple perspectives provided by a team and the ability to see that there is no single truth but a multiplicity of perspectives that normally are contextual or depend on a status quo. Furthermore, subheading 4.2.3 found that the teacher failed to involve students in problem -solving activities, higher level thinking questions and engaging activities through more use of media and other tools in the teaching of accounting. In addition subheading 4.2.4 of the study contributes that the accounting teachers failed to create a space for peer feedback which is crucial for the development of critical skills. This is when learners engage with one other, It is a common practice for them to re-check the given answers or engage and critique it while giving an alternative opinion.

From the above evidence, it seems as if accounting teachers have failed to develop the adequate analytical and creative skills to work through the detail of the problem to reach a solution or alternative thereof. Developmental problem solving requires in addition, accessing, processing and managing information, where a learner is able to demonstrate the ability to apply and carry out actions by interpreting information from the text and operational symbols or representations. The independent problem solving is mainly achieved through the use of a more learner-centred approach which promotes self-regulated learning, where all stakeholders go out of their way to encourage collaborative and cooperative approaches and are underpinned by problem-based learning strategies to mention a few. The approach focuses on such skills and practices to enable lifelong learning. Therefore, in the area of the study there seems to be a lack of development of such skills by the teacher, which is related to bad teaching.

Management of learning

The lack of effective use of good principles was further evident when findings were used against a management of learning as a principle. Under sub-heading 4.2.2, it was found that the teachers are dominating class presentation, as learners are passive throughout the lesson presentation with less participation on the side of learners. Furthermore 4.2.2 revealed that classroom lessons were not interesting, and that students failed to recognise the value of what they were learning, mostly because teachers rely heavily on teacher-centred methods of teaching for transmitting information only.

From the above evidence, the management of learning in the school under investigation seems to be centred around teachers rather than learners. Because learners are not actively involved in the teaching and learning they fail to see the value in what is taught in accounting, therefore they fail to gain capacity to control their learning. Furthermore, failure to give learners autonomy and independence using more learner-centred methods that put learners first, acknowledges their voice as central to the learning experience while recognising individual difference in learners is denying them the management and control of their learning. When learners are in control they learn to be accountable for their actions while demonstrating the ability to adhere to the code of conduct and the ability to understand societal values and ethics. Therefore, it may be safe to say that in the school under investigation, management of the learning principle was not effectively used, which then becomes the opposite of good teaching.

From the above principles, it provides evidence that bad teaching contributes to poor quality education, of not only accounting learners but the entire society. From the above discussion, it is evident that if the principles of good teaching are not effectively used they may lead to disempowerment and social injustice in accounting. Therefore, in conclusion, this study revealed that, the effective use of good teaching could be best referred to but not limited to the NQF level descriptors.

4.3. COMPONENTS OF THE STRATEGY FOR THE SUSTAINABLE ACCOUNTING LEARNING ENVIRONMENTS

In section 4.2, numerous challenges were identified in the teaching and learning of accounting. For each challenge, I discussed the components of the solutions, which our team formulated based on the actual classroom practices in an attempt to resolve and circumvent it. Consequently, the components of the strategy, which respond to the challenges identified in section 4.2 are as follows. A dedicated team in fostering sustainable accounting learning environments, the shared vision in the teaching and learning of accounting, fostering a deep approach to learning in the accounting classroom, sufficient use of teaching media and tools, appropriate feedback and the effective use of principles of good teaching. Each of these components of the solutions will be thoroughly discussed as indicated in the introduction (4.1).

4.3.1. Dedicated team in fostering sustainable accounting learning environments

The presence of a team as stated in 4.2.1 provides a space for collaboration between all stakeholders in the teaching and learning of accounting (Roslender & Dillard, 2003: 334). In addition, it provides opportunities to draw on a synergistic mix of interest and expertise, when teachers are working as a team (Boyce *et al.*, 2012:50). Furthermore, various perspectives derived from the team provide a learner with an ability to identify, evaluate and apply solutions based on relevant evidence and procedures (SAQA, 2012: 8). It also creates an environment of active, involved, exploratory learning through an increased involvement of the community (Wicks & Reason, 2009:243).

After several meetings with various stakeholders in the school under investigation, a team was formed with the dedication to implement the above requirement of a dedicated team in teaching and learning of accounting. Their dedication became evident when the Grade 10 teachers worked as team, collaborated with learners and eventually with other stakeholders in the treatment of financial statements. Grade 10 teachers met for their collaborative planning prior to the introduction of the new topic. These, teachers were concerned that there was a huge difference in performance between Grade 10 classes. The highlights of their meeting are below:

Mrs Dikabiso: "I suggest we try to use the understanding by Design Egg Model, in prioritising the content to be covered in this new topic. It has always worked [in] my class."

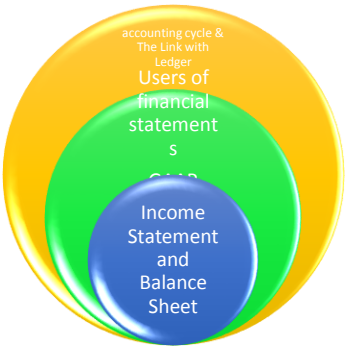


Figure 4.3.1a: Understanding by design in accounting

(Source: Mctighe &Wiggins 2012: 3).

- Worth being familiar with – Accounting cycle and the link with final accounts and closing transfers
- Important to know and to do – Users of financial results and GAAP
- Main focus & enduring understanding – Income Statements and Balance Sheet

The above model by Mrs Dikabiso allows a teacher to prioritise what requires more of a focus and what can be briefly addressed. As used in the context of the topic above, Mrs Dikabiso seems willing to share her approach to the teaching of this topic that may be complex if not planned well. From the above it seems to make sense that final/control accounts and the accounting cycle have been dealt with previously so it requires a brief address. While the introduction of users of financial results are and GAAP principles are applicable to the financial statements since they are crucial in making it easier to compare one business to a similar business in the world. The blue circle is a main focus of the unit, introducing the format, how to write the balance sheet and balance as well as its notes. This seems to be a better approach since it is not possible to fit everything in a one shot teaching session.

Furthermore, Mr Nthako felt that the focus could further be divided into adjustable pieces to enable learners a better understanding of them.

Mr Nthako: "Let us further unpack the main focus…"

He suggested the following as shown in figure 4.3.1b below:

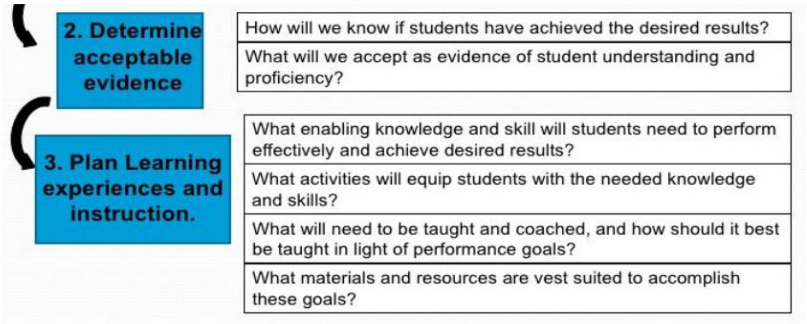


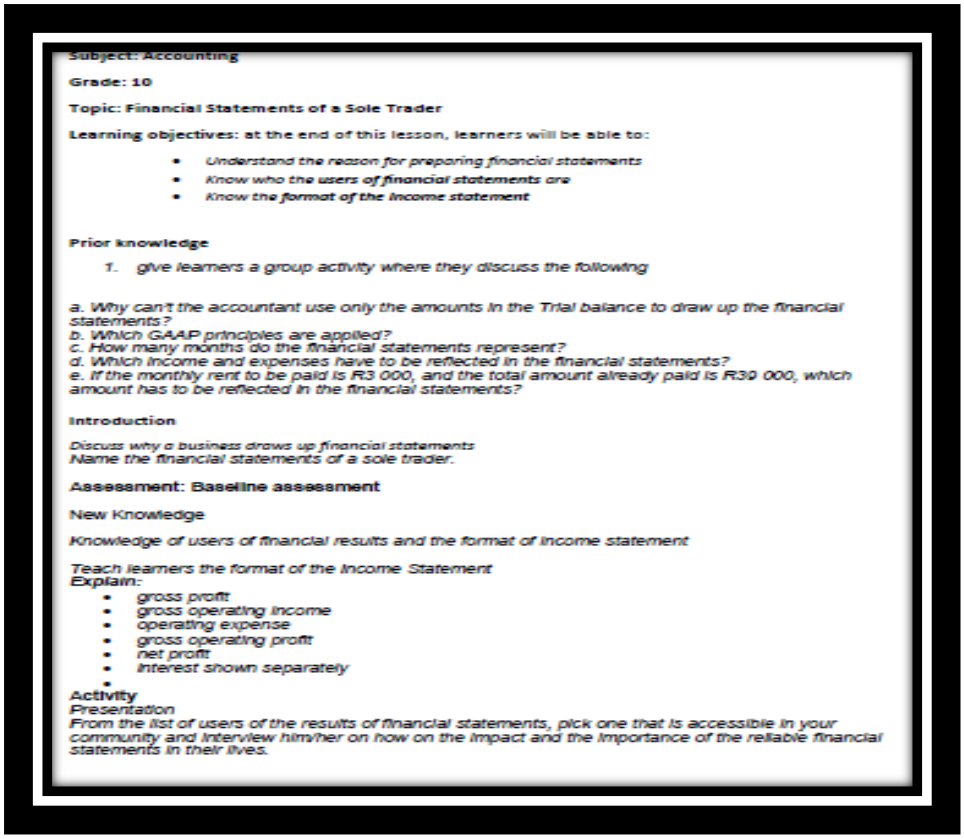
Figure 4.3 1b: Understanding by design: A detailed plan

(Source: Mctighe &Wiggins 2012: 4).

The above figure shows that Mr Nthako has looked at the priorities with a specific eye of what can be achieved through the process, his focus seems to be centred on the learners. Therefore, he suggests specific questions with a detailed plan that is coupled with a model by Mrs Dikabiso that indicates priorities.

From the above it seems as if the teachers are working in collaboration and use the different approaches to the betterment of the accounting learner. These teachers seem to have vast knowledge of teaching and they are sharing it accordingly. Therefore, it seems that if these two teachers work collaboratively, the performance of their individual classes will be better off through sharing their strengths and challenges in the teaching of accounting.

Furthermore, after extensive discussion, teachers decided to put all the preparation in writing, as sampled below:



Subject: Accounting

Grade: 10

Topic: Financial Statements of a Sole Trader

Learning objectives: at the end of this lesson, learners will be able to:

- *Understand the reason for preparing financial statements*
- *Know who the users of financial statements are*
- *Know the format of the income statement*

Prior knowledge

1. *give learners a group activity where they discuss the following*

a. Why can't the accountant use only the amounts in the Trial balance to draw up the financial statements?
b. Which GAAP principles are applied?
c. How many months do the financial statements represent?
d. Which income and expenses have to be reflected in the financial statements?
e. If the monthly rent to be paid is R3 000, and the total amount already paid is R30 000, which amount has to be reflected in the financial statements?

Introduction

Discuss why a business draws up financial statements
Name the financial statements of a sole trader.

Assessment: Baseline assessment

New Knowledge

Knowledge of users of financial results and the format of income statement

Teach learners the format of the Income Statement
Explain:

- *gross profit*
- *gross operating income*
- *operating expense*
- *gross operating profit*
- *net profit*
- *interest shown separately*

Activity
Presentation
From the list of users of the results of financial statements, pick one that is accessible in your community and interview him/her on how on the impact and the importance of the reliable financial statements in their lives.

Figure 4.3.1c: Lesson preparation indicating collaboration with/among learners

From the above plan it shows group activities, which may be said to encourage collaborative learning groups among learners because when learners are working together to solve a problem or reach a common goal, they get an opportunity to learn about diversity, how to work with others and be part of a team, while trying to learn how to communicate effectively. It further shows particular prior knowledge that is required in a detailed and specific form. In addition, there seems to be a planned presentation that accommodates collaboration with other stakeholders. Therefore, it may now be said that there seems to be collaboration between all stakeholders in the teaching and learning of accounting in this school.

Synergistic mix of ideas and expertise

Furthermore, the members continued to show their dedication to their team, as is seen in the classroom where Mr Saki and Ms Mohanwe do the presentation through team teaching. One teacher was presenting while the other would add on. Until his turn to present, he will keep order in class. The adjustments were treated as follows:

It reads: Insurance amount of R11000, on the pre-adjustment trial balance included the amount of R3000 paid on 1 July 2012 for the year. The financial year-end is 28 February 2013.

Mr Saki used the approach that is consistent with accounting guidelines and procedures he seemed to be able to maintain logic and coherence while being sensitive to the operating cycle of accounting. Therefore, he used the principle of GAAP, which his learners have already treated with other accounting concepts. The relevant principle in this case is the matching principle or simply accrual basis concept. The principle requires the income, and the expenses incurred to earn that income, to be shown for the same financial period, e.g. 12 months. This is emphasised by accrual basis concept that says the effects of transactions and other events are recognised when they occur rather than when money is received or paid. During this process, Ms Mohanwe was also contributing and offering more clarity, she then presented the approach below:

Timeline approach

Company's accounting period															
M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J

The above company's financial year begins on the **1 March 2012 and ends 28 Feb 2013.** Thus, at the end all books are closed off for the year.

While the highlighted part shows the period in which insurance is paid for. That is the 12 months.

Using Matching principle (accruals) as a base for understanding it says income and expenses that are not for this accounting period may not be taken into account yet. That is why adjustment for accrued or prepaid has to be made before the net profit can be calculated. These are called year-end adjustments.

Therefore, it seems easier for learners to recognise that something falls outside the accounting period when they understand the underlying principle guiding that. Therefore, from the timeline above, using accrual basis the money for the month of

March until June (4 months) falls outside the accounting period therefore must not yet be taken into account.

Such bases becomes convincing and logical for a learner to perform the calculation

Whereby he knows why we have to calculate and subtract the prepaid expense like this:

Prepaid expense = 3000 X 4 /12

= R1000

From here it can be shown with ledger accounts and accounting equation how the adjustment is completed.

From the above presentation, it is evident that teachers are sharing their expertise and exposing learners to the synergistic mix of ideas with the support of their colleagues. By working as a team, they provided the space for the development of the learners' ability to identify, evaluate and apply solutions based on different preservatives. Through such expertise and ideas, they used teaching and knowing as the bedrock for integration, application and discovery not to develop knowledge for knowledge's sake but to enable learners to use knowledge effectively in a rapidly changing society (Nagda, 2003: 185; SAQA, 2012: 8).

Community involvement

Working as a team was further evident when learners were given the previous homework that was modified as follows:

No.1	**CONCEPT**	**INFORMAL SECTOR**	**Advantages/Disisadvantages**	**Formal Sector**	**Advantages/Disadvantages**
1.	How is money raised?				
2.	Fixed Assets				
3	Bookkeeping system				

4	Cash float				

Figure 4.3.1d: Community Involvement part(2)

Instructions

1. *In a group of four, identify two businesses, one in a formal sector and the informal sector and conduct an investigation on the concept listed in the table above.*
2. *The information gathered in this assignment will further a class debate about which sector has more advantages when coming to the bookkeeping, your arguments should be based on facts.*

From the above task, it is evident that working as a team has increased the possibility of involving the community in the teaching and learning of accounting because the task requires working with the community to find their way of doing things. This seems to highlight the fact that education is not confined to the classroom but it becomes meaningful with the increased involvement of the community and other stakeholders. The task requires learners to gather enough evidence to use when they conduct a debate. This seems to arouse the interest of the learner to engage actively with the community to get enough evidence to defend one argument.

Analysis from CAR perspective

The approach is in line with CAR because CAR believes that working as a team can be approached in a number of ways to maximise the benefits to the learners. All the members are aware that it requires more than just coordination of classes, topics and teaching activities but requires authentic team teaching that is characterised by greater collaboration and involvement between colleagues sharing their synergistic mix of interest and expertise (Boyce *et al.*, 2012:63). On the other hand, it requires commitment from all stakeholders, which is characterised by greater collaboration. CAR observed that accounting influences our everyday life and our duty as the school and other stakeholders is to have learners deliberate about the impact of accounting on society. It was evident in the school under investigation (see section, 4.3.1d). Therefore, by working as a team encourages learners that individual facts are not to be learnt merely for their immediate practical professional end (Gramsci 1971:37).

The presence of the team provided teachers with the opportunity to plan collaboratively through team teaching. Teachers seem to be using their different approaches collaboratively to minimise the abstractness of accounting through the

increased involvement of other stakeholders in the teaching and learning of accounting. Therefore, teachers are more aware of their resources and that through working with other stakeholders may lead to the attainment of quality education in accounting.

In closure, through a preceding discussion the study contributes that by collaborating with other stakeholders in the teaching of accounting as a team provides an ethos of trust and acceptance while it reduces the abstractness of the content to the learners. In addition, the study points out that there are other approaches that encourage team teaching or collaborative lesson planning but that the contribution of this particular study is that, all knowledge contributed by members is equally valuable. Therefore those ordinary experiences and feelings assist in making it possible for the learners to see that accounting is not confined to the classroom but is a social science.

4.3.2. The shared vision in the teaching and learning of accounting

Shared vision is an optimal desired future state that provides guidance and inspiration of what the school would achieve in the future as a collective (Helling, 1998: 335). Osborne (1991: 26) argues that the presence of a shared vision, is becoming conscious of where you are (current reality) and seeing clearly where you want to be (vision). Therefore, creating a shared vision is a recognition that an entire organisation consists of many parts that came together through a unified sense of purpose that is complemented by collaborative commitment to change (Gray, 1989:5). In addition, it enhances the harmonious relationships through a shared understanding of priorities (Allen & Allen, 1987:40). Pursuant to make a change in the teaching and learning of accounting, members agreed to come with a shared vision during their initial meeting.

After a lengthy discussion, members agreed with what Ms Hobela and Mrs Dikabiso were suggesting below.

> Ms Hobela, “What we seek is enabling accounting in grade 10… emancipatory in nature…”
>
> While on the other hand, Mrs Dikabiso said
>
> “Accounting that benefits the community at large as an instrument of a democratic function...”

From the above extracts when read in the context of the study, enabling accounting seems to be more about the ability of accounting education to mobilise in order to build community awareness and taking more seriously the concern to foster personal development and growth. In being concerned, the character of accounting would reflect an enriched set of values for the benefit of society (Gallhofer& Haslam, 1997:83). Therefore, it was agreed that the vision is “an enabling accounting in Grade 10”.

The description of the vision above provides a clear guidance as to how accounting should be when the desired outcome is achieved. Furthermore, it shows an aspiration to bring change in the accounting classroom through community awareness, personal development and growth. In addition, the above, shared vision indicates that the team is aware of their actual reality and has a clear picture of where they want to be. Because, their desired goal of enabling accounting seems to suggest that their current accounting is not yet enabling and that becomes evidence of their consciousness.

Furthermore, team members agreed that the change they wish to achieve in the accounting classroom is centred around a learner therefore, Ms Mabe suggested that:

> “…the key to influence the teaching of accounting should come from approaches that favours learners…”

The above extract seems to emphasise the use of teaching approaches that are learner-centred to achieve the shared vision. The team seems to recognise the fact that they come with different experiences and may form powerful knowledge to influence change through commitment to the use of more learner-centred approaches. Learner-centred methods require the approaches of teaching that promote self-regulated learning, collaboration and cooperative learning and are underpinned by problem-based learning strategies, to mention a few. Thus, they require an increased level of creativity and out of the box thinking, where each member offers an alternative perspective to the problem and potential solution to the task. It is therefore evident that the team is clear on what they want to achieve in the teaching and learning of accounting.

Furthermore, towards the end of the meeting, Mr Moabi, the principal of the school, emphasised the issue of mutual respect and commitment when he said:

> "*Ha re hlomphana re tsitlalletse, reka fihlela tse ngata ka hara accounting* (when we respect each other and we are committed we can achieve more in accounting)."

From the extract, the principal seems to suggest that the key ingredients to the attainment of the vision are the relationship of mutual respect and commitment from all members of the team.

Analysis from CAR as perspective

The vision is complementing CAR's mission of an enabling accounting in that, CAR has an emancipatory intent and recognises that there are marginalised groups of people in the global economy (Bronner, 1994: 337). Therefore, CAR seeks a renewed identification with the marginalised and the disempowered, such that identity should have an ability to act as a force for social change through making things visible and comprehensible and help engender dialogue and action towards emancipatory change (Gallhofer & Haslam, 1997: 82). Therefore, the vision of the team is within the bigger mission of the CAR in the sense that the team is also striving for emancipatory change not only within the classroom but to the community at large.

From the above discussion, it seems as if teachers are more conscious of their reality and are willing to work together to achieve the desired goal. Therefore, the team seems to have clear guidance as to where they want to get, which is to an enabling accounting in Grade 10.

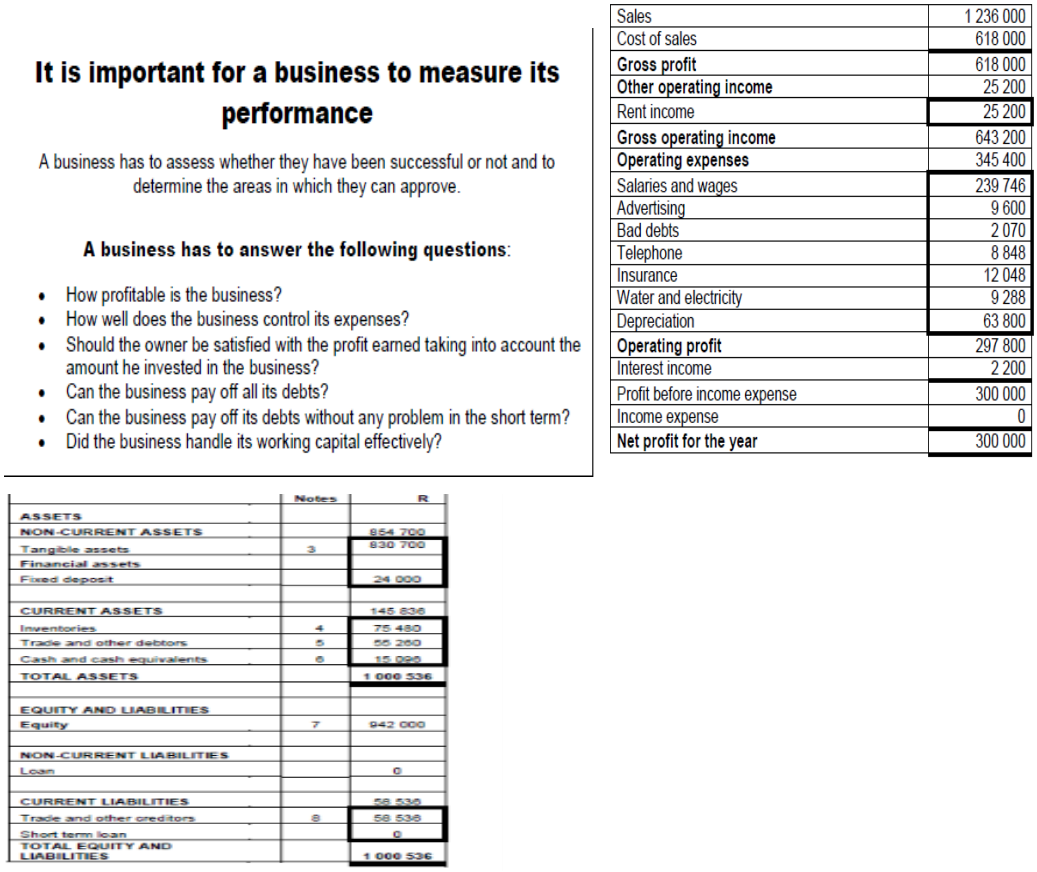
In conclusion, through the above discussion, the study points out that a shared vision in the teaching and learning of accounting should render accounting a democratic function through the approaches of teaching and learning that are compatible with the prescripts of a democratic constitution of the country such as equity, social justice, peace, freedom and hope. Therefore, the study contributes to the fact that in the Grade 10 classroom the vision should be towards "an enabling accounting".

4.3.3. Fostering a deep approach to learning in the accounting classroom

A deep approach to learning as stated in 4.2.2 of objective one, allows learners to be responsible for their learning through a participatory (interactive) learning approach

(Rhem, 1995: 2). It is further supported by the constructivist theory which regards learning as a constructive not a receptive process of transferring information to passive learners (Boyce *et al.*, 2010: 41). The theory holds the view that uses a foundation of previous knowledge to construct new understanding (Wirth & Perkins, 2008: 11). Through the approaches of teaching that enhances deep learning, learners are intrinsically motivated to not only discover the answers relating to the problem but the reasoning behind these answers (Sharma, 2010: 127; Wood, 1988: 2250). According to Johnston (2000: 4) particular attention should be given to the assessment instruments because in order to adequately influence deeper learning such instruments should be developed in a way that requires a greater degree of analysis and synthesis. The view is supported by the NQF level four, in advocating that deep learning provides learners with an ability to motivate a change using relevant evidence (SAQA, 2012: 7).

The coordinating team met the previous day to prepare for the treatment of ratios as a lesson for that day, the lesson was to be presented by Ms Mafahla, an accounting subject specialist. The team had prepared a prior knowledge activity to introduce the lesson as sampled below in figure 4.3.3a.



It is important for a business to measure its performance

A business has to assess whether they have been successful or not and to determine the areas in which they can approve.

A business has to answer the following questions:

- How profitable is the business?
- How well does the business control its expenses?
- Should the owner be satisfied with the profit earned taking into account the amount he invested in the business?
- Can the business pay off all its debts?
- Can the business pay off its debts without any problem in the short term?
- Did the business handle its working capital effectively?

Sales	1 236 000
Cost of sales	618 000
Gross profit	618 000
Other operating income	25 200
Rent income	25 200
Gross operating income	643 200
Operating expenses	345 400
Salaries and wages	239 746
Advertising	9 600
Bad debts	2 070
Telephone	8 848
Insurance	12 048
Water and electricity	9 288
Depreciation	63 800
Operating profit	297 800
Interest income	2 200
Profit before income expense	300 000
Income expense	0
Net profit for the year	300 000

	Notes	R
ASSETS		
NON-CURRENT ASSETS		854 700
Tangible assets	3	830 700
Financial assets		
Fixed deposit		24 000
CURRENT ASSETS		145 836
Inventories	4	75 480
Trade and other debtors	5	55 260
Cash and cash equivalents	6	15 096
TOTAL ASSETS		**1 000 536**
EQUITY AND LIABILITIES		
Equity	7	942 000
NON-CURRENT LIABILITIES		
Loan		0
CURRENT LIABILITIES		58 536
Trade and other creditors	8	58 536
Short term loan		0
TOTAL EQUITY AND LIABILITIES		**1 000 536**

Figure 4.3.3a: Prior knowledge activity on Ratio's

From the above activity learners were supposed to use their prior knowledge of accounting, which is made up of accounting concepts (assets, liabilities, owners' equity, income and expenses), classification of accounts and the basic knowledge that profit is sales less cost of sales.

Lesson presentation

Learners were given the above activity for 10 minutes and divided into groups of three. Eventually, learners' answers included amongst others

: Sales – cost of sales =

R1 236000 – 618 000 = 618 000

As well as: the expenses of the business seem to be limited to R345 400, etc.

These typical answers were coming from their prior knowledge and Ms Mafahla made them aware that unless we know how the business worked previously it can be difficult

to say that in the current year the business has managed to control its expenses or increase its profit. She further told them that the act of comparing the current year performance with the previous year, one in accounting year is called a ratio, therefore, the activity uses a ratio and in other instances it uses percentages to compare the results of a different year. She asked the learners to read on her chalkboard where she had written the topic, which reads:

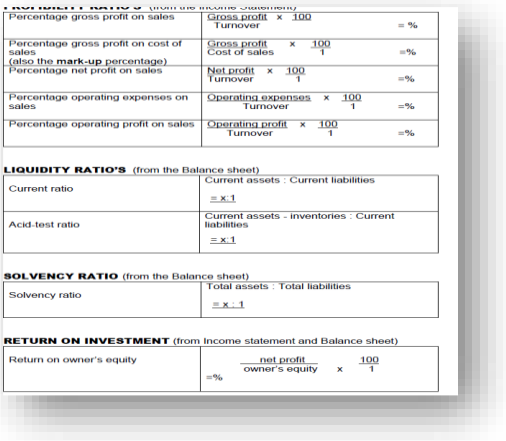
Analysis and interpretation of financial statements

She immediately pasted the poster with the accounting cycle below and asked the learner to show on the poster which stage it was. Likewise, learners managed to point at the right stage because they already knew that accounting from the previous lesson.

Accounting cycle

Figure.3.3.4.a. Role Play on Accounting Cycle.

She then explained to learners that at this stage in the business, the business tries to make sense of the results of the financial statements and to do that by using a standardised procedure in the form of formulas that are standard for all the businesses across the globe. She then introduced the formulae and how interpretations are done.



Percentage gross profit on sales	Gross profit x 100 / Turnover = %
Percentage gross profit on cost of sales (also the **mark-up** percentage)	Gross profit x 100 / Cost of sales 1 =%
Percentage net profit on sales	Net profit x 100 / Turnover 1 =%
Percentage operating expenses on sales	Operating expenses x 100 / Turnover 1 =%
Percentage operating profit on sales	Operating profit x 100 / Turnover 1 =%

LIQUIDITY RATIO'S (from the Balance sheet)

Current ratio	Current assets : Current liabilities = x:1
Acid-test ratio	Current assets - inventories : Current liabilities = x:1

SOLVENCY RATIO (from the Balance sheet)

Solvency ratio	Total assets : Total liabilities = x : 1

RETURN ON INVESTMENT (from Income statement and Balance sheet)

Return on owner's equity	net profit / owner's equity x 100/1 =%

Figure 4.3.3b: List of Formulae

From the above we see Ms Mafahla building from the previous knowledge the learners possess, gradually introducing the formulae and explaining to them why these formulae are universal. Her approach seems to allow learners to make learning a participative process because from the beginning they were divided into groups to come with answers based on the evidence they possess from the previous knowledge as is further supported by the theory of a social constructivist.

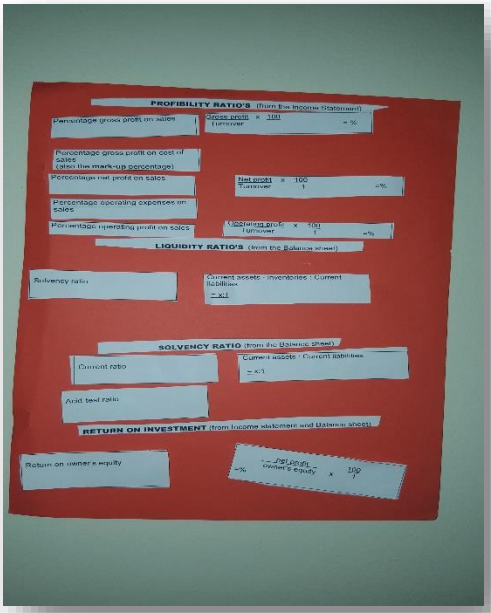
Furthermore, with the help of the team she divided the class into four, allocating a colour to each, e.g. red, yellow, orange and blue team. She then gave each group a bowl filled with formulae. The team assisted as well.

Instruction

> Each team is expected to fill the space with the required formula using their own colour. The team who filled many spaces wins. I am giving you 5 minutes.

She then distributed posters accordingly, one per group.

Figure 4.3.4c. Role Play-Interpretations and analysis of financial statements



As learners were fully engaged and motivated to win, they discussed amongst themselves, argued which one was right and why and eventually the winner was announced.

From the above activity learners seemed to be having an inner drive to engage with an activity for its own sake because it is interesting and satisfying in itself. They seemed to have control and a sense of accomplishment to master and win it. Therefore, they seemed intrinsically motivated and willing to learn more.

Furthermore, towards the end of the lesson, Ms Mafahla gave them the homework activity as indicated below:

3. *Provide two possible reasons for the change in the ratios calculated in 2013 considering the economic climate.*

……

4. *The total assets of the business amount to R385 000 while total liabilities amount to R120 000. The net profit for the year was R75 000. There no were drawings. Calculate the return on average owner's equity. Make a sound judgement by comparing it to the interest rate on fixed deposit.*

……..

The above does not only cater for the calculation of results, it encourages learners to bring various pieces together and look beyond numbers and the meaning as compared to other factors such as economic climate and interest rate. The use of such an assessment instrument assists in equipping learners with critical thinking, communicating, collecting, analysing, interpreting and organising skills, thus contributing towards an approach to learning that is deeper. The timing for the above activity was perfect since learners have been exposed to most of the basics that made up the analysis and interpretations. Furthermore, the lesson itself has been centred on them, so the task above was a step higher from what they have been doing in the classroom. Hence, it was appropriate for homework, where they can actually go to the library or ask the community and also Google the financial indicators like interest rate, inflation rate, etc.

Analysis from the CAR perspective

The above approach to teaching fulfils the requirement of CAR in a sense that Ms Mafahla ensured that the lesson is learner-centred and learners were fully interacting while constructing their new knowledge, as a build-up from their previous experiences. She further used the relevant instrument as an assessment that supports learning (see section 4.3.3c) not only for monitoring but also for accountability. Therefore, she seemed to have recognised that accounting is a social science and not a mere collection of abstract mathematical manipulations or calculative routines (Love & Puxty, 1990: 54; Burchell *et al.*, 1980: 6).

From the above it seems that teachers are being mindful about a learner-centred method of teaching (see section 4.3.3b). The team seemed to have critically planned the lesson and its activities accordingly (see section 4.3.3a) furthermore, the team seems to have used the tools at hand, their expertise and experiences with regard to accounting.

In conclusion, from the preceding discussion the study contributes to the approach in the teaching analysis and interpretation of financial statements. For instance, after a prior knowledge activity that would be more about concepts and classification beginning with an accounting cycle to make meaning of the topic and then, gradually

introducing the necessity (rationale) of the formulae, through group activities. Building from one activity to the next, taking into consideration the economic climate to make it meaningful to them, since it will directly relate to their lived lives.

4.3.4. Sufficient use of teaching media and tools

For sufficient use of teaching media and tools in accounting, the following components are important: the role of the teacher in terms of research (Kaidonis, 2003: 668) and media and tools create an opportunity to bridge theory and practice (James, 2008:652). It stimulates their interest since it relates to their pre-existing knowledge (Bonk & Smith 1998: 268) and it is in line with the problem-based learning theory, which holds the view that involving learners in problem-solving activities and higher level thinking offers a learner an experience of solving an open-ended problem (Savery, 2015: 7). In an effort to ensure the above components are met, the team held a meeting where members brought together their research information as part of the preparation on the topic that was to be presented the following day in the classroom. After a long and detailed discussion, the team agreed that it is important at the beginning of the lesson to highlight the impact of a cartel as part of the presentation so that learners can be able to develop a deeper understanding of why cartels and collusions are illegal in many countries including South Africa. The information was based on the information researched by Ms Mohanwe, taken from the report of the United Nations conference on trade and development held in Geneva on 8-12 July 2013 on the impact of cartels on the poor. Below is the synopsis of her discussion to be presented in class:

> The impact of cartels on the marginalised people, it has an adverse effect on all consumers but the marginalised suffer disproportionately from the effects of collusion in commerce and public procurement. Because high prices, particularly in essential goods and services, force the marginalised to consume less or none of these goods. Moreover, as small entrepreneurs, the poor might be denied access to markets or subject to exploitative conduct by cartels (UNCTAD, 2013:2).

Figure 4.3.5a: Impact of cartels on the marginalised people

From the above synopsis, it is evident that team members took their time to find plenty of information concerning the topic. The above information is not only recent but also relevant, in such a way that many learners could relate to it since many of them are

from the marginalised groups themselves (see section 3.5 research site profile). Through research made by the team, the above information does not only make a lesson interesting and give it more value but also benefits the whole community, since learners can use the information learnt to educate other members of the community about the impact of cartels. Therefore, it will not be necessary for a learner to memorise the explanation because when they understand the nature and the impact it becomes easier to talk about or explain it in their own words.

Furthermore, the team agreed on the following case study to be given to learners, figure 4.3.4b below:

The case study was taken from a peer-reviewed article, titled; a cartel in South Africa is a cartel in neighbouring countries (Kaira, 2015: 4).

Bread/flour/wheat milling Cartel

In March 2010, the Cartel Commission of South Africa, subsequent to its investigation into collusion in the wheat milling market, referred its findings to the Competition Tribunal of South Africa against Pioneer Foods Limited, Foodcorp Limited trading as Ruto Mills, Godrich Milling Limited. Premier Food Ltd and Tiger Brands LTD. The case was initiated following revelations by Premier Food during the bread cartel investigation that the cartel, which involved largely the same companies also covered their milling operations, the flour cartel fixed the price of flour and allocated customers from 1999 to 2007 (Kaira, 2015:4).

Figure 4.3.5b: Case study on Cartels

Instructions

Read the case study carefully

1. Describe the link between the bread/flour/wheat milling market.
2. Identify which name falls under which market from the names stated above
3. Use magazine, drawing or any other tool to put a logo next to the name, this can be done with the help of chart or distribution channel. Tell us the benefits that can be brought by these market to your household when there is no collusion
4. Investigate the reasons why SA's neighbours must be worried about cartels unearthed in South Africa

The above case study requires from a learner not just a mere understanding of the cartel but it seems to brings the theory closer to practice in a sense that it requires a learner to investigate the relationship between the different markets. So that once they understand the link, they can begin to see the reason why these markets formed a cartel. Furthermore, at question two if a learner has to put a face on the name

mentioned in the case, it seems to require more than just understanding the link but really, a need to analyse the different markets and be able to grow their understanding while minimising the gap between theory and practice. In addition question three encourages a learner to use his existing knowledge because he is probed to think about the benefits of lower prices, how it could have assisted his community, for instance, to have cheaper bread or flour. The question encourages him to link the topic to his lived life. It also allows him to use other media and tools, to find a logo or trademarks of these companies; learners had an opportunity to use their experience or familiarity, where for instance a learner had seen the tiger brands logo in his home, among others. He can cut it out and use it, while on the other hand a learner can just draw it using their knowledge of drawing. It should be said at this particular juncture that by asking learners to use flow charts or distribution channels integrates other learning areas like business studies, therefore a learner would be using their pre-existing knowledge

Question four is open-ended, it requires a learner to think beyond South Africa and it requires a learner to investigate the role of South Africa with regard to its neighbours. In addition, it requires learners to identify those neighbours and their cartel policies compared to our policies in order to see the impact if any, in their countries. This, involved learners in problem-solving activities and higher-level questions.

Analysis from CAR perspective

The above approach to teaching is complementing CAR because one of the objectives of CAR is to explore the possibilities of connecting accounting to the ordinary feelings and experiences which learners have in their lives outside the classroom (James, 2008: 671). The team chose the contents of the lesson (see section 4.3.4a, b) through adequate research, media and tools that do not only cover the content but goes beyond by connecting the topic to their daily lived lives. The activities prepared are probing and encourages the learners to look beyond textbooks to be able to find adequate evidence to use, as a basis of finding a possible solution. The use of open-ended questions that require learners to go beyond the borders of the country while understanding the impact of cartels encourages learners to use their problem solving skills and bring the historical and contemporary social underpinnings of accounting practice into the classroom (Boyce, 2004: 575; Broadbent, 2002: 436).

From the above, it seems as if the team arouses a deeper interest in the teachers, as seen when Ms Mohanwe was interested in her use of other media and tools to find another way of understanding cartels, through the analysis of its impact on marginalised people. It seems as if the teachers have started to realise their role as researchers, lifelong learners and mediators between the intricacies of the curriculum and the learners.

In conclusion, through the above discussion, the study contributes to the approach of teaching the topics that may seem abstract in an accounting classroom. Like, cartels and collusion as used in the study, for instance, a prior knowledge activity will precede with the terminologies and concepts such as a code of ethics, financial professions, morally and ethically accepted practices, etc. At the early stage of the lesson, explaining the impact of the cartels to arouse interest and deepen understanding by bringing cartels to the practical view. This can be done through consultation with various media and tools. Once learners have developed an interest in a topic, it seems to be easier to explain or use their own words with regard to cartels and not necessarily be compelled to stick to a single view in the textbook and choose the activities that do not only cover the content, but are related to their ordinary feelings and experiences. Teachers should use the maxims of teaching, build from the known to unknown, blending what the learners already know with the new knowledge (from SA to beyond the borders), to make it clearer and more definite in an effort to make it less abstract. The use of probing open-ended questions encourages analysis and synthesis.

4.3.4. Adequate feedback on assessment

For adequate feedback on assessment as stated in 4.2.5 of objective one, the following components are vital; when feedback is given, it assists in clearing misconceptions and improves learning (Sadler, 1989: 209). When descriptive feedback is provided, it becomes a tool for empowerment (Carver & Scheier, 1990: 87). Such an empowering view is that when peer feedback is incorporated into the assessment process, dialogue around learners may also be enhanced and the power differential between the teacher and learners will be lessened. In addition, descriptive feedback creates an opportunity for reflection (Roger, 2006: 676).

Pursuant to implement the above principles, a team member, Mr Saki, facilitated a lesson where the crucial part was marking the homework that was given to learners. Some of the questions are sampled below:

Post to the General Ledger accounts or use the T-Form to show the basic understanding of the double entry principle

4 Donate stock to the amount of R 560 to a local crèche.

7 The broken windows of the building were replaced at a cost of R4 200.

Mr Saki did not write the answers from his memo but instead he asked learners to assist him in doing the remedial.

"…Dineo tell us how of recording the transaction that took place on the 4th…"

Below is how she did it:

Donation

Dr	Cr
Trading stock 560	

Trading stock

Dr	Cr
	Donation 560

Mr Saki: can you tell us how you got your answer, through accounting effect…"

The effect on the accounting equation was as follows as per Dineo:

Day	Account debited	Account credited	Assets	Owner's equity	Liabilities
4	Trading stock	Donation	-500		-500

From the above, Dineo's answer on the T-form is correct and she got full marks for it, hence she seemed confident to share her knowledge. However, the follow up question by the teacher probing her to share how she got it right, reveals that Dineo did not understand the question. Simply because the effect on the accounting equation tells us that according to Dineo, donation is a liability, therefore when the owner donates the stock he increases his debts, which is not true. Donation, like drawings, has a negative relationship with the owners' equity. Therefore, donation is a deduction that affects directly on the owners' equity.

When writing remedial is done in collaboration with learners, it assists learners like Dineo to clear the misconceptions in her case, taking donation as a liability. Therefore, below Mr Saki provides a remedial after clearing up the misconception:

Day	Account debited	Account credited	Assets	Owner's equity	Liabilities
4	Trading stock	Donation	-500	-500	

The above transaction shows that when stock is donated assets decrease and the owners' equity is negatively affected, it decreases the net worth of the owner. Therefore, from the above it becomes evident that feedback should not be about the incorrect answers but the logic behind the answers in an attempt to clear the misconception and improve the learning,

Furthermore, the importance of feedback was evident when the feedback was given on the test that was written and was returned to the learners. Below are some questions asked in the test:

The following are transactions of Shabba Services for July 2015. The results of the transactions were recorded in the Accounting Equation. The equation was balanced after the last transaction for July:

	Assets					=	Liabilities			+	Equity			
	Equipment	+	Receivables	+	Cash	=	Payables	+	Loan	+	Capital	+	profit	
	10 000	+	2000	+	13000	=	4000			+	21 000			
a		+	3000									+	3000	Sales
b	+12000						+ 12 000							
c				+	7000			+	7000					
d		-	1000	+	1000									

Figure 4.3.5c: Accounting equation part (2)

Required

1. *Give a description of each transaction from (a) to (l)*
2. *Support your answer by the use of T–Form*
3. *What are source documents in each transactions*
4. *Identify the GAAP principle on each transaction and motivate as to why that principle*

From the above, learners are given the solution, they are expected to reverse it into a question and Ms Mabe, a coordinating team member was facilitating learning on this day.

"…I need a learner who will be leading the feedback as am taking a backseat to allow you to come with possible answers..."

Thabo led the feedback discussion under the supervision of the team. As learners were engaging, a particularly heated debate was with regard to no. b of figure 4.3.5b, where some learners were arguing that the GAAP principle was a going concern instead of historical cost principle, while others were saying prudence concept. Learners were deeply engaged and others even referred to their different resources for instance, mostly textbooks. They brought adequate evidence and managed to critique accordingly when some learners were not as convincing or lacked facts. Learners were very comfortable to engage with their peers, the team was there providing guidance as needed. I then, intervened with the point that:

" the principle affected would be, the going concern/historical cost concept because all assets are valued in accordance with the historical cost rule not what the business would be likely to receive for those assets should they be sold at short notice. Therefore it cannot be prudence"

As the discussion continues between peers, the dialogue seemed to have met the requirement of the descriptive feedback because the feedback information is used to provide a clear direction on how to alter the gap. While, acknowledging that each learner has his or her unique answers and it is only through dialogue and discussion not a general view that a learner may identify the state of her actual performance with the aim of assisting her in preparation for her subsequent task. Therefore, the space created by the teacher for the descriptive feedback did not only encourage dialogue but became a tool for empowerment. In a sense that when a teacher takes a backseat it would suggest that s/he is able to depower in order to empower her learners through feedback thus, encouraging and leading learners to the possibility of acquiring critical skills like analysis and critical thinking. In addition, placing the learners at the centre of their feedback built their confidence. It allows them to engage more freely when they are peers while lessening power differentials between the teacher and the learner.

Furthermore, the team met for the reflection session where they discussed amongst others, what worked and what did not work and also the way forward.

Ms Mohanwe: I think we need to do one more activities on the GAAP principles…

The above extract, suggests that, teachers were starting to understand the process of assessment that involves assessing, providing feedback and reflection on the feedback by the teacher and the learners. Therefore, in terms of teachers, reflection on the feedback provided plays a crucial role in determining whether there is a need for further attention on the topic or to continue to the next topic as suggested by Ms Mohanwe above. On the side of the learners, reflection is beneficial in that it allows them to build on their previous work as a way of improving their learning and preparing for a subsequent task.

Analysis from CAR perspective

The above approach to teaching is in line with CAR because CAR encourages educators to explicitly strive to go beyond just covering the scope of accounting in an attempt to contribute to the development of accounting that would be more enabling and emancipatory (Baker, 2011: 208). Mr Saki and Ms Mabe's classes both went beyond covering the scope by creating a space for feedback that seems to have allowed learners to identify their gaps and clear the misconceptions (see section

4.3.5a). Furthermore, teachers seem to have complemented their assessment with the use of more oral feedback (see section 4.3.5.b). Thus, being in agreement with CAR since it values oral feedback as a communicative learning tool, which is intended to communicate problems and suggest ways to correct mistakes. It should be done to engage learners in problem solving and to develop learners' thinking skills.

From the above discussion, it seems teachers have developed a particular will to change their approach to be more learner-centred to enable accounting learners to improve their learning. Teachers seem to have realised that empowerment is possible when one depowers to empower others. In addition, accounting teachers seem to acknowledge that accounting is a practical subject that requires adequate time to treat activities, therefore feedback may add to the required practise needed in the accounting classroom.

In conclusion, the preceding discussion emphasises that feedback should not only be about incorrect answers but when it accommodates the uniqueness of each learner's response through discussion feedback, it becomes descriptive because its information is used to provide a clear direction on how an individual learner can alter his/her gap in an attempt to improve his/her learning. Therefore, the study contributes that assessment processes in accounting should be in a circular form, in a sense that reflection forms a crucial part in the circle to make meaning or highlighting the importance of adequate feedback.

4.3.5. Effective use of principles of good teaching

As discussed in 4.2.6 of the objective one, any teacher who aspires to achieve or do more in the teaching and learning of accounting should first meet the minimum requirements as stated in the NQF level 4 (SAQA,2012: 5). Therefore, good teaching in Grade 10, of which accounting is part, is well represented in provision four of the NQF level descriptors (SAQA 2012: 5). In terms of provision four, the following components are important in ensuring the effective use of principles of good teaching: knowledge literacy, scope of knowledge, problem solving, accessing, processing and management information, management of learning and accountability (SAQA, 2012: 5).

Pursuant to ensure that the above requirements are met, the components of the study are used in conjunction with the above-mentioned principles of good teaching.

Knowledge literacy

The above good practices were seen in the school under investigation as evidence under subheading 4.3.1 regarding a dedicated team. The study contributes that by collaborating with other stakeholders in the teaching of accounting as a team provides ethos of trust and acceptance while it reduces the abstractness of the content to the learners. Furthermore, the study revealed that all knowledge contributed by members in the area of the study is equally valuable, therefore those ordinary experiences and feelings, assist in making it possible for the learners to see that accounting is not confined to the classroom but is a social science.

From the above evidence, as used against but is not limited to provision four of the NQF level descriptors, seems to suggest that the principle of knowledge literacy is adhered to because learners were exposed to different perspectives through collaboration with different stakeholders. These stakeholders contributed vast amounts of knowledge to enable learners to acquire an ability to demonstrate that knowledge in a field can be applied to the related field if the abstractness is reduced through the acknowledgement of lived lives of learners as contributed above. The teaching in the school under investigation seems to be linked to the use of principles of good teaching.

Scope of knowledge

Furthermore the effective use of the principles of good teaching, were evident in subheading 4.3.2. The study contributes to the approach in the teaching analysis and interpretation of analysis of financial statements. For instance, after a prior knowledge activity that would be more about concepts and classification began with an accounting cycle to make meaning of the topic and then gradually introduced the necessity (rationale) of the formulae, through group activities. Building from one activity to the next, taking into consideration the economic climate to make it meaningful to them since it will directly relate to their lived lives.

From the above evidence, it seems as if the study paid particular attention to the fundamental knowledge base of accounting through the link with prior knowledge of

learners, it seemed to have assisted them in building new knowledge in an attempt to understand accounting jargon such as concepts, rules, terms and classifications. A process was built gradually using cooperative learning and using lived examples to make learning meaningful to them. Therefore, the teaching of accounting in the area of the study seems to have covered the scope as a principle of a good teaching.

Problem solving

The effective use of principles of good practice was further seen, when problem solving as a principle of such teaching, under provision four of NQF seems to have been used effectively. Evident under subheading 4.3.4, the study contributes to the approach of teaching the topics that may seem abstract in an accounting classroom. Similar to, cartels and collusion as used in the study, for instance, a prior knowledge activity will precede with the terminologies and concepts such as, code of ethics, financial professions, morally and ethically accepted practices, etc. At the early stage of the lesson, explaining the impact of the cartels to arouse interest deepens an understanding by bringing cartels to a practical view. This can be done through consultation with various media and tools. Once learners have developed an interest in a topic, it seems to be easier to explain or use their own words with regard to cartels and not necessarily be compelled to stick to a single view in the textbook and consequently choose the activities that do not only cover the content but are related to their ordinary feelings and experiences. Using the maxims of teaching builds from the known to unknown, blending what the learners already know with the new knowledge (from SA to beyond borders), to make it clearer and more definite in an effort to make it less abstract. The use of probing open-ended questions encourages analysis and synthesis while developing analytical and creative skills in accounting.

From the above evidence, accounting teachers have seemingly managed to provide an opportunity for learners to develop adequate analytical and creative skills that enable them to work through the detail of the problem to reach a possible solution or alternative.

Accessing, processing and managing the information

Furthermore, the effective principles of good teaching seem to have been effectively used in terms of accessing, processing and managing the information as is evident

under subheading 4.3.5. The study revealed that a shared vision in the teaching and learning of accounting should render accounting an element of a democratic function through the approaches of teaching and learning that are compatible with the prescripts of a democratic constitution of the country such as equity, social justice, peace, freedom and hope. Therefore, the study contributes that in the Grade 10 classroom the vision should be towards “an enabling accounting”.

From the above evidence, it seems as if the principle of accessing, processing and managing information, is in line with the study’s vision of an enabling accounting, where, the opportunity is created to develop the learner’s ability to apply and carry out actions by interpreting information from the text and operational symbols or representations. Therefore, in this study such an ability seemed to have been accessed through the development of problem-based learning (see also 4.3.4) that is mainly achieved through the use of a more learner-centred approach which promotes self-regulated learning where all stakeholders go out of their way to encourage collaborative and cooperative approaches. The focus on such approaches is to create opportunities to develop the skills and practices towards lifelong learning.

Management of information

The effective use of good principles was further evident when findings were used against a management of learning as a principle. Under sub-heading 4.3.5, where studies reveal that feedback should not only be about incorrect answers but it should accommodate the uniqueness of each learner’s response through discussion, it becomes descriptive because its information is used to provide a clear direction on how an individual learner can alter his/her gap in an attempt to improve his/her learning. Therefore, the study makes a contribution that assessment processes in accounting should be in a circular form, in a sense that reflection forms a crucial part in the circle to make meaning or highlight the importance of adequate feedback.

The above evidence seems to suggest that in terms of management of learning, lessons seemed to have been centred on learners, where feedback was mostly descriptive being given by peers or with the assistance of a teacher but it seemed to have encouraged dialogue and encouraged active participation while learners were clearing their misconceptions and identifying their gaps. Therefore, through the descriptive feedback learners were encouraged to reflect and improve their learning.

However, the feedback seemed to have carried more value to them because it accommodated individual responses through dialogue and discussion, thus rendering learners at the centre and in control of their learning. Furthermore, when feedback is provided it becomes a responsibility of a learner to reflect and prepare for the subsequent task developing the sense of control and accountability in a learner.

From the above discussion, it is evident that the components of the study seem to meet but are limited to the minimum requirements of provision four of the NQF level descriptors in terms of the effective use of the principles of good teaching and learning of Grade 10 accounting. Therefore, it becomes the crux of the study in an effort to create a sustainable accounting learning environment for a Grade 10 classroom.

4.4. CONDITIONS CONDUCIVE FOR THE DESIGNED STRATEGY

The data provided here outlines the conditions conducive to the implementation of the solutions or components discussed in 4.3. This is done because the solutions and strategies are to be implemented beyond the scope of the duration of the study, therefore, it becomes necessary to find conditions that are conducive for the purpose of sustaining the solution even after the study has reached its conclusion. The section discusses the conditions as follows: conditions that enhance dedication in the team; conditions that are conducive for a shared a vision and conditions that support the effective use of principles of good teaching.

4.4.1. Conditions that enhance the dedication in a team

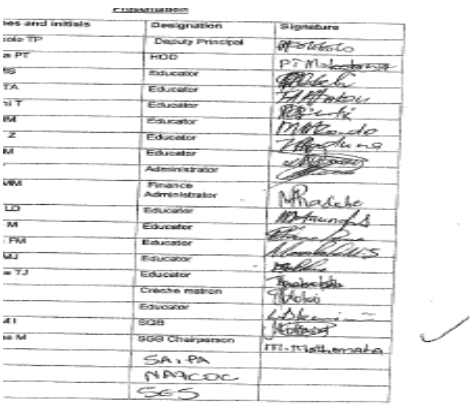
The environment that contributes optimally to the dedication of the team is the commitment to the concept of working as a team (Wenger, 2000: 3). In that, team members understand what it means to work as a team. The team members bring along with them a diversity of backgrounds and perspectives (Laverack & Labonte, 2001: 117). In addition, open communication is an important aspect to the proper functionality of the team, therefore when team members have a strong sense of collective leadership it leads to the reduction of power differentials within the team (Carlson & Sullivan, 1999: 20).

The above-mentioned conditions were seen in the school under investigation, as is evident in the meeting where Ms Mabe, who was the chairing the meeting, emphasises the issue of commitment when she said:

> …Our survival as a team mostly based on a members' readiness and the understanding that a team is a desired process that requires commitment..."

From the above extract, it seems as if Ms Mabe is passionate and ready to take a journey with other members, she seems to be aware that working as a team requires more than joining and requires more of a person's readiness to put aside their individual interests in order to accomplish the team's goals. Therefore, it requires members to be willing to compromise. In addition, the commitment is sustainable when the members are able to maintain a team atmosphere of civility and mutual respect.

Furthermore, the conducive condition appeared to be visible when members of the team were successfully gracing the meetings with their attendance as attached below:



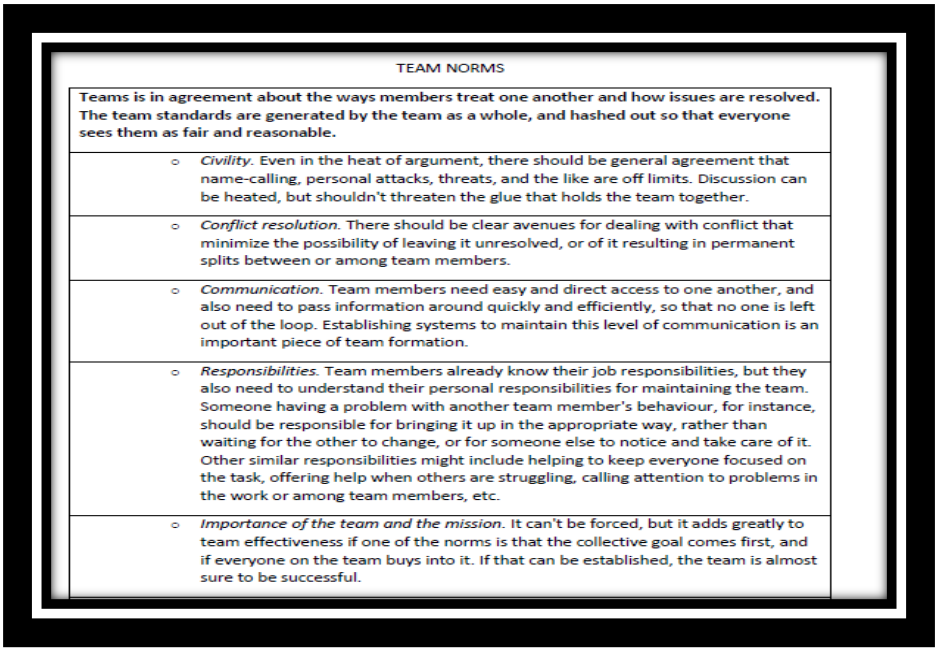
Designation	Signature
Deputy Principal	
HOD	
Educator	
Educator	
Educator	
Educator	
Educator	
Educator	
Administrator	
Finance Administrator	
Educator	
Educator	
Educator	
Educator	
Educator	
Creche matron	
Educator	
SGB	
SGB Chairperson	
SA: PA	
NAPCOC	
SGS	

From the above register, it seems as if members are willing to come and share with each other. This suggests that there is a diversity of background and perspectives from various stakeholders. Therefore, these diverse skills, competencies and experience are a necessary condition for enhancing dedication in a team.

Furthermore, in line with the requirement of conditions necessary to enhance the dedication in a team, it became evident in a meeting that was chaired by Ms Dikabiso, she said:

> "…I suggest that we need a team norms and learn them…. It will enable open communication and maintain mutual respect …"

The team engaged extensively on the issue and ended up with the terms below:



TEAM NORMS
Teams is in agreement about the ways members treat one another and how issues are resolved. The team standards are generated by the team as a whole, and hashed out so that everyone sees them as fair and reasonable.
○ *Civility.* Even in the heat of argument, there should be general agreement that name-calling, personal attacks, threats, and the like are off limits. Discussion can be heated, but shouldn't threaten the glue that holds the team together.
○ *Conflict resolution.* There should be clear avenues for dealing with conflict that minimize the possibility of leaving it unresolved, or of it resulting in permanent splits between or among team members.
○ *Communication.* Team members need easy and direct access to one another, and also need to pass information around quickly and efficiently, so that no one is left out of the loop. Establishing systems to maintain this level of communication is an important piece of team formation.
○ *Responsibilities.* Team members already know their job responsibilities, but they also need to understand their personal responsibilities for maintaining the team. Someone having a problem with another team member's behaviour, for instance, should be responsible for bringing it up in the appropriate way, rather than waiting for the other to change, or for someone else to notice and take care of it. Other similar responsibilities might include helping to keep everyone focused on the task, offering help when others are struggling, calling attention to problems in the work or among team members, etc.
○ *Importance of the team and the mission.* It can't be forced, but it adds greatly to team effectiveness if one of the norms is that the collective goal comes first, and if everyone on the team buys into it. If that can be established, the team is almost sure to be successful.

Table 4.4.1a Team Norms

From the above, the fact that norms were designed seems to suggest that the team is willing to start positively and is ready to tackle issues that may arise in a harmonious manner. This opens the line of communication and guidance to a dedicated team in accounting.

Furthermore, it became evident that conditions seemed to be conducive to support a dedicated team when Ms Mafahla, who is an accounting subject specialist, said:

“In this team we are all leaders, we should all do our best to succeed...”

From the above narrative, it is evident that even Ms Mafahla in her position as their subject advisor had already depowered herself to ensure that all the people feel valued and therefore reduces the power differentials through a collective leadership.

Analysis from CAR as perspective

Successful implementation of the principles of critical accounting research requires effective planning, collaboration between teachers with different expertise in accounting, twinning between schools that are performing differently to share facilitation methods and suitable assessment strategies (Griffiths & Williams, 2009: 35; Znet, 2013: 3). Therefore, the dedicated team forms a crucial part to ensure that the above is conducive to ensure the success of the study.

From the above discussion, it seems as if members of a team do not regard themselves as members only but are aware of what a dedicated team requires. It requires compromise, commitment and open lines of communication as well as mutual respect, collectiveness, equality and humility.

4.4.2. Conditions conducive for a shared vision

A shared vision reflects the team members' mutual purpose (West & Unsworth, 1998: 296). So, when members are aware that it is a reflection of them, both individually and collectively, they become more committed to the outcome (Darbi 2012: 93) and have a greater desire to make things happen (Preston & Karahanna, 2009: 160). Therefore, a true sense of ownership emerges (Mather, 1993:562). Thus, they become more accountable.

In line with the above, the factors necessary in the creation of the conducive, shared vision became evident when members were in the meeting for their monthly reflection when Ms Mohanwe said:

"It is only through us that accounting can be a success in this school…"

From the above, it seems the teachers have aligned themselves around the common purpose of seeing a change in accounting through their desired goal. Ms Mohanwe seems to have a positive spirit and energy to do everything in her power to ensure the success of the project because she does not seem to shift the responsibility to anyone but is willing to go out of her way to make things happen. In addition to what Ms Mohanwe said, Ms Mabe added:

"The success or failure of the project will be carrying our name so..."

From the extract above the team members have started to embody the values and beliefs and internalised the goals in the sense that they see the vision of the project as their reflection, thus they seem to have internalised their vision, which is a conducive condition for a desired goal shared among team members. Furthermore, Mr Saki also added that:

"Nnete feela letshwele le hlola poho" (reference to the power of the collective)

The above narrative seems to suggest a team that possesses a sense of belonging, which in turn becomes a stabilising force within the team. When a team feels rooted in the values and the vision that it has created together, the team is better able to produce a set of principles that will guide behaviours. This, in turn, leads to the creation of effective practices and processes.

Analysis from a CAR perspective

The above discussion is in line with CAR since it also believes in creating the environment that fosters the capacity of the team to create a shared vision. The environment needs to be one that contains a great amount of trust, openness and communication. Furthermore, it needs to promote interaction and collaboration. CAR believes a team should have an atmosphere of collegiality, a space in which to come together. However, it is the responsibility of the collective to create and hold that space.

From the above discussion, it is evident that the team has the sense of a mutual purpose, which is encouraged by a strong sense of belonging, a true sense of ownership and a greater desire to achieve their shared vision, which seems to be a conducive condition for shared goal.

4.4.3. Conditions that support the effective use of principles of good teaching

The presence of a dedicated team, with a shared vision is the primary condition that ensures the effective use of good teaching and is sustainable (Carlson & Sullivan, 1999: 20). Therefore, a team with a desired future state may provide a space for the following conditions to be conducive, conditions that support the fostering of a deep approach to learning, conditions that support sufficient use of teaching media and tools and conditions that support the provision of adequate feedback.

In line with the requirements of the necessity for the use of principles of good practice, the study has already discussed the conditions conducive for a dedicated team and a shared vision in 4.4.1 and 4.4.2 respectively. Therefore, below is how the conditions that are seen to be depended on a presence of and a shared vision were evident:

4.4.3.1. Conditions that support the fostering of a deep approach to learning

The environment should allow learners to discover and reflect on realistic experiences. The teaching and learning session needs to happen in the learners' terrain, full of play and enjoyment, which will encourage learners to take an active part (Moloi, 2013:301), furthermore, this is line with how Du Toit (2013: 19) views learning, that is, as constructive, accumulative and goal-directed. In addition, a deep approach allows learners to employ their abilities such as critical thinking skills among others, since it is characterised by an inherent quest for meaning making (Boyce *et al.*, 2010: 41).

From the above discussion it seems to be evident that every requirement regarding a deep approach mentioned above centres around a learner. It thus suggests the conditions conducive to supporting such learning is through learner-centred methods and approaches of teaching.

4.4.3.2. Conditions that support the sufficient use of teaching media and tools

The environment conducive to the use of teaching media and tools should acknowledge the knowledge that the learners acquire from their home background as important in understanding the subject matter in a classroom. Therefore, it is important for the conditions in the accounting classroom to feature in the experiences and prior knowledge of the learner. This will result in the learner having an interest in learning and being an active participant in the learning process. Therefore, Boyce *et al.*, (2010, 32) argue for the increased use of media and tools in order to bridge the gap between theory and practice.

From the above discussion, it seems evident that the requirements necessary to promote the effective use of media and tools requires an increased feature of a learner lived life (pre-existing knowledge) in the accounting classroom.

4.4.3.3. Conditions that support the provision of adequate feedback

The environment in which learners are at the forefront of all feedback through dialogue or discussion is conducive for the provision of adequate feedback. When feedback is descriptive, especially oral, it leads to learners using social and collaborative skills that enable them to interact well and appropriately with others to acquire communication,

decision and analytical skills (Sadler, 1989: 209). The feedback also provides teachers with insight into learners' current levels of understanding and adjusting subsequent activities accordingly to focus on problem areas (Roger, 2006: 676).

From the above discussion, it seems evident that dialogue and discussion with learners at the forefront are necessary conditions to support the provision of adequate feedback.

In conclusion, through the preceding discussion the study reveals the conditions that support the effective use of the principles of good teaching as the environment where there is the presence of a dedicated team in accounting with a shared vision, where such a team would create the possibilities for the optimal use of a learner-centred method approaches of teaching. In addition, the environment should encourage dialogue and discussion while acknowledging and accommodating the knowledge that the learners acquire from their home background as important in understanding accounting as the subject matter in a classroom.

4.5. FACTORS THAT THREATEN THE IMPLEMENTATION OF THE EMERGING FRAMEWORK

In section 4.3, components of the emerging strategy for the sustainable accounting learning environments were comprehensively examined. In this section, discussion will centre on the threats to the implementation of the emerging framework and how they were circumvented. The components of the framework such as the dedicated team, a shared vision and the effective use of the principles of good teaching are discussed below.

4.5.1. Threats towards dedicated team

When collaborations are not well conceived and carefully developed they tend to generate barriers to the success of the project. However, in the school under investigation it was neither the case of ill-conceived nor carefully developed collaboration but the following barriers.

During the meetings, some members of the staff in that school raised the fact that:

> It seems as if this team is here to prove that we are not good enough...

The above extract suggests a teacher who feels the presence of a team as a threat to his job, which if not clarified, could mean outsiders (team) were not going to be appreciated or supported.

Through the support of the school principal, the staff meeting was held where the coordinating team was making a presentation to clarify and to further sell the idea. The presentation was a success and managed to circumvent the threat.

4.5.2. Threats towards a shared vision

In an attempt to bring the school and community agencies to the same table through a shared vision, the biggest threat was the power differentials as described below.

During the discussion in one of the complete meetings, a team felt unhappy with how she was named:

> …being called “a stay at home mother… makes me feel unappreciated”

From the above extract, it seems to suggest that when people from different credentialed and titled professions are at the same table most of the time they end up being confronted by power differentials. Therefore, if it were left unresolved it would mean some members of the team would have felt they had made no contribution, which could have led to their withdrawal and by extension reduced the strength of a team.

However, the team resolved the issue by committing to move beyond names such as those above, to the use those of *Mme* (Madam) and *Ntate* (Sir) and a person’s surname.

4.5.3. Threats towards the effective use of the principles of good teaching

4.5.3.1 While striving to maximise learner-centred methods to increase dialogue and to accommodate learners’ existing knowledge is was almost completely won until the following barriers arose:

In one of the lesson presentation that was held, there was a complaint by one of the staff members who said:

> “A person doesn’t have a confidentiality since this team has started here, I no longer want them in my class…”

The above extract, suggests that the teacher felt her privacy was invaded in a sense that outsiders would come and use her classroom, if left unresolved it could have left the team without a classroom and by extension with no learners.

However, the coordinating team and the SMT resolved the issue in that there would be two classes that would be used and teachers would not rotate but learners would come to the teachers.

Furthermore, the other issue was time, where members felt that there is not enough time to accommodate pre-existing lives of learners however, it was resolved through the encouragement of adequate lesson planning.

In addition, the other issue was the restriction on the dialogue with the following concern:

> “These kids tend to think discussion is entertainment, so I don’t allow that most of the time it disrupts the lesson and we end up not completing the lesson...”

From the above extract the teacher seemed to suggest that allowing discussion is a disruption to her lesson and if left unresolved it could mean that learners would be left passive with the teachers depending on the method of teaching that was teacher-centred or more telling in nature. This risked restricting the ability of learners to use their creative and problem solving skills.

It was resolved through the workshop that was organised by the coordinating team in an attempt to expose teachers through the different activities and tasks that encourages discussion with the presentation as to why dialogue fosters deeper learning in accounting.

In conclusion, the study points out that the success of circumventing the above threats was actually the part that strengthened the sustainability and growth of the study.

4.6. INDICATORS OF SUCCESS ON THE FORMULATED STRATEGY

The previous sections 4.2, 4.3, 4.4 and 4.5 were in the process of developing the strategy for sustainable accounting learning environments. These sections were respectively as follows: the first objective looked into the challenges that existed in the creation of sustainable accounting learning environments. The second objective of the study related to the components of the strategy. The third objective entailed conditions that enabled the implementation to be successful. The fourth objective focused on threats that militated against the successful implementation of the strategy and how they were circumvented and lastly the indicators of the successful implementation of the strategy are discussed below:

In order to discuss the indicators of success in this study, a special reference is made in terms of the principles of good teaching, whereby provision four of the NQF level descriptor is used since it is the most advanced internationally as it is the most recently crafted (SAQA, 2012: 7). Therefore, if the school under discussion was able to meet the minimum requirements as guided but not limited to such advanced descriptors it seems to be fair that they serve as indicators of success as highlighted in the following sections.

4.6.1. Knowledge literacy

The principle of knowledge literacy is adhered to because learners were exposed to different perspectives through collaboration with different stakeholders who contributed vast amount of knowledge to enable learners to acquire an ability to demonstrate that knowledge in one field can be applied to the related field. This is possible if the abstractness is reduced through the acknowledgement of lived lives of learners as contributed above. The teaching in the school under investigation seems to be linked to the use of principles of good teaching.

4.6.2. Scope of knowledge

It seems as if the study paid particular attention to the fundamental knowledge base of accounting through the link with prior knowledge of learners. It seems to have assisted them in building new knowledge in an attempt to understand accounting jargon such as concepts, rules, terms and classifications. A process was built gradually using cooperative learning and the lived examples to make learning

meaningful to them. Therefore, the teaching of accounting in the area of the study seemed to have covered the scope as a principle of good teaching.

4.6.3. Problem solving

Accounting teachers have seemingly managed to provide an opportunity for learners to develop adequate analytical and creative skills that enable them to work through the detail of the problem to reach a possible solution or alternative. Teachers chose the activities that do not only cover the content but are related to their ordinary feelings and experiences using the maxims of teaching, building from the known to unknown, blending what the learners already know with the new knowledge (from SA to beyond the borders) to make it clearer and more definite in an effort to make it less abstract. The use of probing open-ended questions encourages analysis and synthesis while developing analytical and creative skills in accounting.

4.6.4. Accessing, processing and managing the information

It is in line with the study's vision of an enabling accounting where the opportunity is created to develop the learner's ability to apply and carry out actions by interpreting information from text and operational symbols or representations. Therefore in this study such ability seemed to have been accessed through the development of problem-based learning (see also 4.3.4) that is mainly achieved through the use of a more learner-centred approach which promotes self-regulated learning where all stakeholders go out of their way to encourage collaborative and cooperative approaches. The focus on such approaches is to create opportunities to develop the skills and practices towards lifelong learning.

4.6.5. Management of learning

In terms of management of learning, lessons seemed to have being centred on learners where feedback was mostly descriptive being given by peers or with the assistance of a teacher but it seemed to have encouraged dialogue and encouraged active participation while learners were clearing their misconceptions and identifying their gaps. Therefore, through the descriptive feedback learners were encouraged to reflect and improve their learning. However, the feedback seemed to have carried more value because it accommodated individual responses through dialogue and discussion, thus rendering learners at the centre and in control of their learning.

Furthermore, when feedback is provided it becomes a responsibility of the learner to reflect and prepare for the subsequent task and develops the sense of control and accountability in a learner.

In conclusion, the full implementation of the study as mentioned earlier is going to overlap beyond the duration of the study.

CHAPTER 5: FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1. INTRODUCTION

This chapter provides a summary of the findings of the study. The findings are organised in accordance with the study objectives, the components of the strategy, favourable conditions for its applicability, and risks and threats that could potentially threaten its operationalisation in relation to the evidence of its applicability. The recommendations are made with regard to each finding. The summary of the study is outlined and represents a summary of the strategy for creating sustainable accounting learning environments. The conclusion also reflects briefly on the value of the study to the teaching and learning of accounting.

5.2. BACKGROUND

While SA policies encourage the creation of sustainable accounting learning environments and talk about principles of Critical Accounting, current classroom practices regarding the teaching of accounting, especially at Grade 10, reflect the direct opposite (Broadbent 2002:433). Memorisation through surface learning is still common practice in these classrooms. Focus is still on teaching for success in the national and provincial examinations, and most of the time without any clear understanding of the concepts and processes informing and couching accounting as a subject (Boyce, 2004: 569). In accounting classrooms more teacher-centred approaches to the learning of accounting are widespread, leaving little room for more learner-centred approaches (Armitage, 2010:4; Laughlin, 1987:479). There also tends to be a dependency on the textbook method, which is most often a single view or a general statement, giving only general guidelines in violation of a teacher's other roles, namely being a researcher, a leader and a provider of pastoral care (Ackers & Hardman, 2001: 250). Content in the classroom is mainly abstract and learners struggle to meaningfully relate it to their lives. This results in accounting being in contradiction with the critical cross-fields emphasising the cultivation of citizenship (DBE 2011: 4; CAPS, 2011: 1; Yosso, 2006: 76). ANA results reveal below average learners who progress to Grade 10 accounting. This is in contrast with the level descriptor of applied competence in the Outcomes–based framework (DBE 2011: 7; SAQA, 2012: 4). This means that often an

accounting learner who is not cognitively ready to move to the next level is promoted to that level despite not being ready (UNICEF, 2008:4; Levin & Young 2000:189). The problem statement that emerges as a result of the above discussion will be presented next.

5.2.1. Problem statement

Emanating from the discussion on the background it is evident that in many countries the manner in which accounting is taught in the Grade 10 classroom leads to a challenge with regard to pedagogical content knowledge. More teacher–centred methods, where memorisation and insufficient feedback on assessment are common practices, are widely used, and the textbook often is still the only primary source of teaching. Content is mainly abstract with the result that learners struggle to meaningfully relate it to their lives The manner of teaching accounting contradicts with key documents that are constitutionally derived. The roles of teachers are compromised intensively in a way that undermines facilitative strategies and the ability to use suitable assessment strategies. This eventually results in unsustainable learning environments.

5.2.2. Research question

‘How can we create sustainable learning environments for Grade 10 accounting classrooms using Critical Accounting as a teaching and learning approach?’

5.2.3. The aim of the study

The aim of the study is to formulate a strategy to create a sustainable learning environment (SuLE) for a Grade 10 accounting classroom using Critical Accounting as a teaching and learning approach.

5.2.4. The objectives of the study

The objectives of the study were to:

- Analyse and understand the challenges in the creation of SuLE for a Grade 10 accounting classroom;

- Explore strategies in the creation of SuLE using the principles of critical accounting as a teaching and learning approach;
- Investigate the conditions that allows the creation of SuLE through the use of the principles of critical accounting as a teaching and learning approach;
- Anticipate possible threats that might hamper the creation of SuLE through the use of the principles of critical accounting as a teaching and learning approach; and
- Identify the indicators of success and failure.

5.3. FINDINGS AND RECOMMENDATIONS

5.3.1. Lack of a dedicated team to foster sustainable accounting learning environments

The researcher discovered that there was no team dedicated towards fostering sustainable accounting learning environments. In fact, there was no team of people who would coordinate all the activities to make possible the formulation and implementation of the strategy. The need for the intervention emanated from the initial meeting that was held with the purpose of identifying challenges in the teaching and learning of accounting. The lack of collaboration between teachers, among learners and with other stakeholders was prevalent, thus denying learners an opportunity to be exposed to multiple perspectives. This further denied learners the ability to draw from those perspectives in order to develop the ability to identify, evaluate and apply solutions based on relevant evidence and procedures, hence the need to establish a dedicated team.

Taking the above into account it can be concluded that the absence of a team led to lack of opportunity to expose learners to the synergistic mix of expertise and experiences that could have been derived from collaboration. This furthermore resulted in the inability to acquire adequate knowledge literacy as per the NQF level descriptors. Such literacy could have been derived from social interaction

enriched with the magnitude of literacy grounded in social, cultural, historical and political practices. Therefore, the study makes the following recommendations.

5.3.1.1. Recommended strategies for the formulation of the team

After several meetings with various stakeholders in the area of the study, it was therefore, recommended that the coordinating team members be selected from all the sectors of the community, as well as other stakeholders with a direct interest in the teaching and learning of accounting. A team was then formed with the dedication to create and implement a strategy to create a sustainable learning environment in the accounting classroom. The team should ensure collaboration between the teacher and the learners, and also among learners themselves. The team should further ensure collaboration with other stakeholders while also maintaining and increasing community involvement.

In conclusion, the study recommends that the team should align the teaching and learning of accounting with the principles of good teaching, as per provision four of the NQF level descriptors. The presence of a dedicated team has ensured that all stakeholders contribute vast amounts of knowledge. To enable learners to acquire knowledge from various stakeholders, so that they are enabled to demonstrate that knowledge in field can be applied to the related field. The process reduces the abstractness since it acknowledges the lived lives of learners. While growing their knowledge literacy. However, this can only happen if the conditions are conducive to the establishment of a dedicated team.

5.3.1.2. Recommended conditions for a dedicated team

The smooth running of the framework is possible because the dedicated team comprises like-minded people with a common vision and who are committed to the concept of a team. When there is commitment in the team, members can reach a compromise when necessary. The commitment becomes the result of collective leadership and open communication. Collective leadership is transformational because it begins with a belief in and a commitment to social advocacy and social justice. Therefore, collective leadership should be the cornerstone of a dedicated team. However, open communication enables sharing of ideas and provides a positive atmosphere in the team. It is further recommended that the team should

have a common vision as the basis for all conditions to be conducive to the success of the team.

5.3.1.3. Threats and risks regarding the creation of the dedicated team

When staff members are not well informed regarding the purpose of the team in the school, it could lead to resistance and unwelcoming behaviour towards the team.

The study recommends that the management of the school should initially hold a meeting during which the team can present their strategy and staff members can ask questions. This must be done in an effort to increase buy in from staff members. Emphasis should furthermore be placed on professional development of staff members where management should encourage staff members to take advantage of the available opportunity for personal development through participation with a team. These initiatives can change the focus of the staff and win adequate support to enable the team to successfully implement its strategy.

5.3.2. The need for a shared vision

The study further found that it was necessary that the team develop a common vision that unifies their efforts, because, without such vision, individual members of the team may advance personal agendas that may derail the whole process of implementing the strategy for a sustainable accounting learning environment. The unifying vision was seen as a critical issue because it clarifies the nature of the problem that brought the team together and it would foster and deepen the coordinating team members' understanding of the inherent challenges of the implementation of the strategy. The vision was going to ensure that the team is conscious about their current reality, providing them with a clear picture of where they want to be. The shared vision was also needed to enhance harmonious relationships through an understanding of priorities.

From the above it can be concluded that lack of a common vision will not contribute to the sustainability of the dedicated team towards the teaching and learning of accounting. It will rather lead to the ineffective use of the principles of good teaching

since it hampers the sustainability of the team that is supposed to ensure the successful implementation of the strategy, and is thus in contrast with Provision four of the NQF level descriptors.

5.3.2.1. Recommended strategy for formulating a shared vision

In order to formulate a shared vision the coordinating team looked at all the issues raised in the meeting and the challenges that were identified by all stakeholders through a planned process (see Section 2.5.2.2). In the end, the team agreed on the following as their shared vision: “to seek for an enabling Accounting” (see Section 4.3.2). The team decided on this vision because accounting is enabling when it has the ability to act as a force for radical emancipatory social change through making things visible and comprehensible, and helping to engender dialogue and action towards emancipatory change (Cooper & Hooper, 2007: 212). The presence of a shared vision brings the elements of commitment and collaboration, and a sense of belonging since all members were involved in the development of such vision. Therefore, a shared vision becomes the foundation of the dedicated team since it guides and inspires the members throughout the process.

5.3.2.2. Recommended conditions conducive for a shared vision

An atmosphere conducive for a shared vision should provide a greater sense of ownership. In other words, members should embody the values and beliefs and internalise the goals in the sense that they see the vision of the project as their reflection. When they see it as a reflection it means they feel rooted in the vision they have created together and team commitment is enhanced. On the other hand, a team requires meaningful communication to enhance mutual respect among team members as the presence of a strong sense of mutual understanding and respect promotes interaction and collaboration in a team. Therefore, the condition should enhance a sense of common purpose through communication that is meaningful and encourages commitment, while ensuring that a greater sense of ownership emerges as it leads to a greater sense of accountability.

5.3.2.3. Threats and risks with regard to the development of a shared vision

The team that comprises people from different backgrounds, with different credentials and titled professions brought in strong differences in the sense that some members may feel uncomfortable being addressed or referred to in a certain way. Furthermore, if members are too focused on their professional titles it affects the participation in the decision making process where other people ended up feeling unworthy to decide and end up supporting any motion on the house. The situation should not be left unresolved since it will lead to members leaving the team and the team becoming weak.

In order to circumvent this, the team should agree on the mode of operation from the start. In other words, the team should agree on how to address or refer to each other. However, the issue of collective ownership and leadership should be highlighted and members should be made aware that all knowledge contributions are valuable and equally important. Furthermore, focus should be on the vision in the sense that members should realise that they are there for the purpose of providing possibilities for an enabling accounting and that the vision requires knowledge and experiences brought by everybody, irrespective of their background and titles.

5.3.3. Teachers' lack of fostering a deep approach to learning in the accounting classroom

The study found that teachers are failing to engage learners optimally through teaching methods that would foster deeper knowledge. The notion of deeper knowledge requires learning to be a natural outcome of interactive learning. In other words, learners should be able to construct the own knowledge through participation. Therefore, teachers should provide the opportunities for such interaction to take place. However, the study found that the teachers preferred methods of teaching that were limiting interaction, resulting in learners mostly being passive observers and intrinsically demotivated. Therefore, teachers failed to motivate learners to recognise the value of what they are learning, mostly because teachers rely heavily on teacher-centred methods of teaching that merely transmitted information. Teachers failed to bring the foundation of learners'

previous knowledge in the classroom in an effort to make sense of the new knowledge, thus providing a sense of relevance to their lived lives and affording a sense of control over a particular lesson. Affording them control over their learning tends to educate the learners on how best they can utilise their independent study time at home while developing motivation and structures that may enhance deeper learning, be it at school or in their own time.

Furthermore, the assessment instruments used in the accounting classroom encouraged the reproduction of content and memorisation, without fostering active and long-term engagements with the learning task at hand. Teachers encouraged memorisation through covering only the lower phase of Bloom's taxonomy, which includes the remembering phase up to the applying point only, while the other phases of Bloom's taxonomy, such as analysing, synthesising and also creating were not covered. Therefore, the above resulted in surface learning in the accounting classroom.

As a result of the above, it can be concluded that the teaching approach did not foster deeper learning in the accounting classroom. The reason for this is because, learners were mostly passive and intrinsically demotivated to the extent that they did not see the value in what they were learning since it was far removed from their lived lives. Learning became more of a transmission process that did not assist in widening their scope of knowledge. Furthermore, assessment instruments should allow a build-up from a knowledge base, such as the concepts, terms and procedures that are covered by the lower phases of Bloom's taxonomy of learning, in order to form the basis of the higher phases, such as analysing, synthesising and creating, as a way of broadening the scope of knowledge. Failure to ensure progress from one level to the other by sticking only to a certain phase, limits the scope of learners' knowledge, and may lead to failure to effectively use the principles of good teaching, as per the NQF level descriptors.

5.3.3.1. Recommended strategies for fostering deeper learning in the accounting classroom

The study recommends the use of the learner-centred method as it has suitable approaches that can foster deeper approaches to learning. In a classroom where a learner-centred like problem approach is employed, the teacher can use a prior

knowledge activity as the base to introduce new concepts, procedures and classifications. Prior knowledge activities should be done through group work so that the ideas from learners' pre-existing knowledge can be shared and linked to new knowledge through peer discussion in their particular groups. Therefore, through their engagements they will develop an inner drive to engage deeper and learn more about the activity, for the sake of its own. Discussions will further enable them to develop interest and a sense of control. Learners will then possess the will to learn more, which is an intrinsic motivation that is derived from the interactive learning where they were actively engaged with the task at hand.

A teacher who builds a foundation through a link with prior knowledge has the advantage of a strong foundation where learners feel that they can relate to the study. Therefore, the abstractness of the new content would be minimised. When the foundation base is firm the lesson should gradually be built through group activities, building from one activity to the next while taking into account the examples that are linked to the learners lived lives to make it meaningful to them. These activities should carefully be chosen in an effort to ensure progression from one level to the next, with the teacher using the maxims of teaching, namely from simple to complex and from analysis to synthesis.

5.3.3.2. Recommended conditions conducive for fostering a deep approach to learning

A deeper approach to learning requires an environment where the teacher is willing to share his power with his learners by giving them some control over the learning process. Control comes when learners are motivated and can see the value of what they are learning because it relates to their lives. This environment should further develop structures that promote shared commitments to learning, which can be best achieved through cooperated learning where group work is encouraged. The environment should encourage participative learning, and assessment and teaching that develop problem solving skills.

From the above discussion it can be concluded that all indicators and characteristics of an environment conducive to the fostering of a deeper approach to learning point to learner-centred approaches of teaching, therefore,

necessitating a dedicated team with a shared vision to ensure optimal use of such approaches in the teaching and learning of accounting.

5.3.3.3. Threats and risks with regard to fostering a deeper approach to learning

When learners are active they may seem playful and noisy, and if not well controlled they can waste quite some time before they actually engage with the task at hand. Many teachers, in an effort to minimise noise and movement in the classroom and for fear of losing time, tend to limit learner-centred approaches and rather follow teacher-centred approaches.

Teachers should be re-introduced to the benefits of an interactive classroom and how it enhance deeper learning. The team can take the opportunity to remind the staff members about the pros and cons of each method, and also to keep in mind that the CAPS policy strives towards learner-centred methods of teaching.

5.3.4. Teachers' insufficient use of teaching media and tools in the teaching and learning of accounting

The study determined that teachers depend on the use of textbooks because they fail to use teaching approaches that are engaging, meaningful and relevant. One of the reasons why teachers depend on text books is because other approaches require them to act as researchers as well. However, a teacher should conduct research as part of lesson preparation in order to identify the most suitable approach and tools necessary for a particular lesson. Therefore, failure to do research leaves them with the only other option, namely to depend on the textbook, which is usually a general view or may even be an outdated copy or be out of context in relation to the learners' everyday lives. Therefore, teachers failed to carefully choose an approach of teaching that is orientated towards what learners are currently embracing, for instance, what they know and captures their interest, while fostering a less formal learning environment, relating the lessons to real life situations and using the experimental nature of the lesson. The gap between theory and practice can be bridged in this manner. The dependency on the textbook failed to provide opportunities for the use of learner-centred approaches of teaching that require learners to identify relevant issues, gather the necessary evidence, identify appropriate arguments, and exercise judgement in order to arrive at a conclusion.

This should be done to enhance the development of problem-based skills in the teaching and learning of accounting.

From the above discussion it is clear that failure to, through research, identify suitable teaching approaches and tools leads to teaching approaches that limit the use of media and tools in such a way that it does not capture what learners know and what they find interesting. Therefore, it becomes abstract in terms of their real life situations, which should actually be captured, through real life simulations, and further allow the development of analytical and creative skills to work through the detail of the problem to reach a solution. In other words, leading to the development of problem solving skills. The failure to develop such skills resulted in a failure to use principles of good teaching effectively since it requires the development of problem solving, in the accounting classroom, that includes the accessing, processing and managing of information, where a learner is able to demonstrate the ability to apply and carry out actions by interpreting information from the text and operational symbols or representations.

5.3.4.1. Recommended strategies to promote the sufficient use of teaching media and tools

The coordinating team created collaborative spaces where members meet and prepare for an upcoming lesson. Members presented the information that they gathered through different ways of research. The information would then be discussed and analysed in an effort to link it to the lived lives of the learners. In an effort to establish the link, the team had chosen the case study method of teaching since it involves learners in real-world simulations as part of their classroom experience. This makes the learning process engaging, meaningful and relevant for learners because they acquire the knowledge, skills and tools to deal with the kind of problems they will encounter in future. Therefore, the gap between theory and practice is bridged.

Furthermore, because of its nature, a case study does not only make a lesson interesting and gives it more value but also benefits the whole community, since learners can use the information that they have learnt from the case study to educate other members of the community. Therefore, through the use of approaches such as the case study method teachers create and explore the

possibilities of connecting accounting to the ordinary feelings and experiences that learners have in their lives outside the classroom. It is important that teachers assist learners in seeing that accounting is not only confined to the classroom. Since the case study makes use of a real-life situation, which requires some judgment, and allows learners to think and integrate their existing knowledge in the decision, it provides opportunities to develop problem solving skills in the accounting classroom.

5.3.4.2. Recommended conditions conducive for sufficient use of teaching media and tools

The atmosphere conducive to the use of teaching media and tools, is accommodative of learners' pre-existing knowledge and uses a real life situation to connect accounting to learners' ordinary feelings and experiences outside the classroom. This is done in an effort to bridge theory and practice and to make the lesson meaningful to the learners so that they can enhance their problem solving skills as they engage with the problem. Therefore, the conditions necessary to promote the effective use of media and tools require an increased feature of the learners' lived lives (pre-existing knowledge) in the accounting classroom. This condition requires a dedicated team with a shared vision to ensure optimal use of such approaches in the teaching and learning of accounting.

5.3.4.3. Factors threatening the promotion of sufficient use of teaching media and tools in the accounting classroom

Many teachers think that gathering information and identifying relevant approaches that would accommodate learners' pre-existing knowledge are time consuming and therefore should be limited in the classroom. However, they leave the lessons to become abstract and meaningless to the learners. In order to circumvent this, the school should pay specific attention to the nurturing of school-wide behavioural norms and provide support for firm collaborative practices, such as collective responsibility for learners' learning. In addition, teachers should dedicate time for lesson planning since it is through sufficient planning that a teacher can consult different tools to provide the opportunities to accommodate learners' pre-existing knowledge in the lesson.

5.3.5. Teachers inadequately providing feedback on assessment

The study further discovered that teachers failed to provide sufficient feedback on assessment, resulting in learners being left with misconceptions and an inability to identity gaps in their knowledge. Teachers were merely copying answers directly from the memorandum without engaging learners in the process. By discussing the answers, learners would be afforded an opportunity to identify gaps in their knowledge as they can see what mistakes they have made. Learners come to school with considerable knowledge, whether correct or incorrect, based on intuition, from everyday experience, what they might have been taught in other settings or mere misunderstanding. Therefore, a teacher should afford them time to discuss their unique answers so that they can identify misconceptions, especially in a classroom where there is use of unique terminology that, if not well understood can lead to the whole question being misinterpreted. Teachers should thus not provide feedback only for the purpose of giving learners the correct answers according to the memo, but most importantly to provide them with skills to analyse questions or particular words in a question in an effort to improve learning.

Furthermore, the study also discovered that when teachers are merely providing feedback on formative assessment in the form of ticks, smileys, question marks or crossing a line with a pen, the possibility of reflection from the side of the learner is limited. Since the feedback is not related to the task, in other words, not being descriptive, it cannot tell the learner where or what he did wrong. Therefore, it fails to be a communication tool between the teacher and the learner, fails to improve their learning, and by extension also fails to empower learners.

Form the above discussion, it can be concluded that feedback is inadequate if it is not descriptive, in the sense that descriptive feedback allows learners not only to identify and clear their misconceptions but also a clear path on how to bridge their learning gaps. The study further concludes that discussion and dialogue provide possibilities for learners to engage with the feedback, not only to correct the incorrect answers, but also to understand the logic behind given answers. In doing so descriptive feedback becomes a tool for empowerment since it improves learners' learning in that they can refer to the descriptive feedback for reflection purposes. Therefore, the lack of discussion and dialogue limits the learners' ability

to develop analytical and critical thinking, which are necessary for problem solving skills, and also a requirement for the principles of good teaching. In addition, lack of dialogue and peer feedback limits the ability to develop a sense of control and accountability by learners in the accounting classroom, which are in contrast to the management of information as per NQF level four, representing the principles of good teaching.

5.3.5.1. Recommended strategies for adequately providing feedback on assessment

The study recommends that assessment should also be for the purpose of improving learning and not for grading purposes only because assessment improves learning where in remedial a teacher involves learners in the process not only using his ready-made answers from his/her memorandum as a truth serum. Thus, remedial action should be done in collaboration with learners, where teachers and learners discuss the reasoning behind specific answers. The discussion on how the learners ended up choosing a specific answer will enable the teacher to identify gaps and misconceptions. Therefore, this process should not only be followed with those who got wrong answers but also with the other learners in an effort to clear misconceptions as learners often choose the right answer without really knowing why the answer is correct. It is important that the teacher should open a discussion and ask follow-up questions when a learner gives an answer, irrespective of whether the answer is correct or not. By probing the learner to share how he arrived at the answer the teacher can also identify gaps and clear misconceptions, since it is not only about giving correct answers but also about understanding the logic behind the question.

Furthermore, identifying the gap and clearing misconceptions should not only be the only concern but how to alter the identified gap in order to improve learning is also vital. This is among the reasons why feedback should be descriptive as it will provide them with clear direction on how to alter the gap. In addition, the teacher should allow learners to be on the forefront of their learning with an opportunity to acquire analytical and critical thinking skills, while on the other hand, they develop a sense of control that will lead them to having a greater sense of accountability. Therefore, a teacher should allow oral or peer feedback from learners. Learners

tend to be more attentive when they are engaging with their peers since most of the time, at peer level, learners do not take answers provided by other peers without re-looking or verifying it first. The process of verification can be done by providing alternative answers, or critiquing the given if it lacks facts. Learners can also refer to their available resources to back their argument. Thus, this process provides learners with the ability to identify, analyse and gather evidence to defend or justify their arguments, developing analytical and critical thinking skills. With teachers intervening where necessary, the process would provide learners with clear information on how to alter their gaps, thus meeting a requirement of descriptive feedback. Teachers who provide the opportunity for learners to be at the forefront of their learning, display the ability to share their power with their learners in order to empower them. Therefore, it also minimises power differences between the teacher and learners, thus building learners' confidence and giving them a sense of control and greater sense of accountability towards their learning.

Furthermore, descriptive feedback enables learners to use the feedback to reflect in order to prepare for the next task. Descriptive feedback also plays a crucial role in determining whether there is a need to spend more time on the topic or if they can continue to the next topic. Therefore, it also enables the teacher to reflect and plan accordingly. Reflection plays a central role in the assessment process but that role can only be achieved when descriptive feedback is employed.

5.3.5.2. Recommended conditions that support the provision of adequate feedback

Oral and peer feedback create conditions necessary to put learners at the forefront of their learning. This further allows them to develop communication, interpersonal and problem solving skills that result from engaging with the feedback in an effort to find ways to alter their unique gaps that were identified. Thus, when they engage with the process it renders feedback descriptive and therefore enables them to reflect in order to improve their learning while it also assists teachers to keep track of learners' learning. When learners are allowed to engage through dialogue and discussion they are afforded an environment that will enable them to have a sense of control and accountability towards their learning.

Therefore, an environment conducive to supporting adequate feedback is when oral and peer feedback are used to put learners on the forefront of their learning through dialogue and discussion in the accounting classroom.

5.3.5.3. Factors threatening the provision of adequate feedback on assessment

In most cases when dealing with learners and particular rules and norms are not emphasised they may feel that dialogue and discussion are mainly for entertainment. Therefore, teachers tend to limit discussion and dialogue in the accounting classroom as they think it is beneficial to the smooth running of the lesson. However, this can be detrimental to learners' overall learning if they are passive and not engaging with the lesson.

In order to circumvent these beliefs and practices, teachers should be exposed to the processes of conducting dialogue, which normally starts with setting rules that should be applied consistently throughout the year. They should also be exposed to the benefits of dialogue in developing problem solving skills in learners, which are the skills necessary for lifelong learning.

5.3.6. Summary of the strategy

The summary outlines critical factors in the creation of SuLE and also, outlines the purpose that renders those factors critical, as they were thoroughly discussed throughout the study. Furthermore, the summary outlines necessary approaches or tools that will enable the implementation of the strategy and finally what could be derived from such good teaching. The summary is illustrated in the form of a table 5.3.6a below:

Figure 5.3.6a: Summary of the strategy

Critical factors for SuLE in grade 10 accounting classroom	The purpose of such factors as per Provision 4 NQF level descriptors	Necessary approach/tool to allow the implementation	The good teaching derived:
Dedicated team with a shared vision	**Knowledge literacy** • Dedicated team provides the opportunities to expose learners to the synergistic mix of expertise and experiences that are derived from social interaction enriched with the magnitude of literacy grounded in social, cultural, historical, and political practices collaboration. Resulted to the ability to acquire sufficient knowledge literacy • Where a vision is to seek an enabling accounting that will society at large as vision.	Ensuring learner- centred method of teaching are adequately used. collaboration	Social justice hope Equity peace Freedom
Deep Approach to learning	**Scope of knowledge** • Participative learning where pre-existing knowledge of learners brings value to their learning, because learning relates to the everyday lives. Thus, providing an intrinsic motivation that is supported by the process of	Maximum use of pre-existing knowledge to make learning meaningful Problem-Based Leaning Approach	Active participant Lifelong learner Team member

	their learning, because learning relates to the everyday lives. Thus, providing an intrinsic motivation that is supported by the process of building from forming a strong a strong base through prior knowledge and build up by suitable assessment instruments until the level where a learners can move from simple to complex and also analysis to synthesis. To show progression. Thus a confirmation of widen scope of his/her knowledge	Problem-Based Leaning Approach	Team member
Sufficient use of media and tools	**Problem solving** • The sufficient preparation that includes a research in an effort to identify a method of teaching that enables a sufficient use of teaching media and tools, in order to make a lesson relevant and interesting to	Link between theory and practise Case study method of teaching	Decision maker Ability to provide alternatives and defend them

	learners so that there is a bridge between theory and practice. Such approach should allow real life simulations that are experimental in nature and therefore can allow the development of analytical and creative skills to work through the detail of the problem to reach a solution or alternative thereof.		
Adequate feedback	**Management of information** • Peer feedback, in an effort for a descriptive feedback that will enable reflection. allows learners to be in the forefront of their learning, it boosts their self-confidence, create sense of control and accountability • Descriptive feedback provided in the form of oral provides possibilities for learners to engage with the feedback not only to correct the incorrect answers but to understand the logic behind given answers. Through such engagements,	Dialogue and discussion	Problem solver Ability to continue learning without supervision. Independent learning

	through dialogue and discussion. there is a provision for the development of communications, analytical and critical thinking and are necessary for problem solving skills		

5.4. CONCLUSION

The factors that have been used throughout the objectives of the study, have led the researcher to design a strategy that is compatible with the prescripts of a democratic constitution, namely equity, peace, hope and freedom. Such strategy provides possibilities for sustainable accounting learning environments where learning contexts and opportunities are optimal as a result of effective teaching and learning strategies. These strategies are learner-centred, promote self-regulated learning, provide a space where teachers, parents and all stakeholders go the extra mile to encourage collaborative and cooperative approaches and are underpinned by problem-based learning strategies, to mention a few. Such learning environments are also compatible with, and fostered by principles of critical accounting as a teaching and learning approach.

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APPENDIX A: ETHICAL CLEARANCE

UFS-UV

Faculty of Education

08-Mar-2016

Dear **Mrs Makeresemese Qhosola**

Ethics Clearance: **Creating Sustainable Learning Environments for a Grade 10 Accounting Classroom: A Critical Accounting approach**

Principal Investigator: **Mrs Makeresemese Qhosola**

Department: **School of Social Sciences and Language Education (Qwaqwa Campus)**

APPLICATION APPROVED

With reference to you application for ethical clearance with the Faculty of Education, I am pleased to inform you on behalf of the Ethics Board of the faculty that you have been granted ethical clearance for your research.

Your ethical clearance number, to be used in all correspondence is: **UFS-HSD2015/0241**

This ethical clearance number is valid for research conducted for one year from issuance. Should you require more time to complete this research, please apply for an extension.

We request that any changes that may take place during the course of your research project be submitted to the ethics office to ensure we are kept up to date with your progress and any ethical implications that may arise.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours faithfully

Dr. Juliet Ramohai

Chairperson: Ethics Committee

Education Ethics Committee
Office of the Dean: Education
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Winkie Direko Building | P.O. Box/Posbus 339 | Bloemfontein 9300 | South Africa
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APPENDIX B: LETTER TO PRINCIPAL

Researcher:

Makeresemese R. 'Qhosola

25 Brand Street,
Lindley

9630

Study Leaders:

Prof M.G.Mahlomaholo

Dr. M.M Nkoane

Faculty of Education
University of the Free State
BLOEMFONTEIN
9300

Date: June 2014

The Principal

Botle Secondary School

Phuthaditjhaba

9860

Dear Sir

Re: Permission to undertake Research in Your School

I hereby request a permission to undertake research study in your school. I am a PhD student at the University of the Free State presently working on my thesis. I am involved in a project which intends to design a strategy to create sustainable learning environments for a Grade 10 Accounting classroom using principles of critical accounting as the approach. Sustainable Accounting learning environments are those learning contexts and opportunities where the learning of Accounting is optimal as a result of effective teaching and learning strategies which are learner-centred, promote self-regulated learning, and are compatible with the prescripts of a democratic constitution of the country such as equity, social justice, peace, freedom and hope. Such learning environments for grade 10 Accounting are those where teachers, parents and all stakeholders go out of their way to encourage collaborative and cooperative approaches and are underpinned by problem-based learning strategies, to mention a few.

Thus, the project is likely to provide interesting and useful information which could be of a supportive nature to Free State Department of Education in general, and teachers and learners in particular. Permission to undertake the study from Free State Department of Education is being applied for at the same time. This project will be done outside working hours. The name of your school, teachers and learners involved will remain completely anonymous. . Furthermore, the use of video and tape recording may will be used In the process of data generation and kept accordingly in terms of Data protection Act.

Your assistance in this regard will be greatly appreciated.

Yours sincerely

_____ ----------

Makeresemese R. Qhosola Prof .G.Mahlomaholo- Promoter

APPENDIX C: PARENT LETTER

Researcher:

Makeresemese Qhosola

25 Brand Street
Lindley
9630

Study Leaders:

Prof M.G.Mahlomaholo

Dr. M.M Nkoane

Faculty of Education
University of the Free State
BLOEMFONTEIN
9300

Date: June 2014

Dear Parent

I would like to invite you to take part in this research project: A Sustainable Learning Environments for Grade 10 Accounting Classroom. We would like you to participate and share your knowledge, views and expertise around this project.

The aim is to design a strategy to create sustainable learning environments for a Grade 10 Accounting classroom using principles of critical accounting as the approach. Sustainable Accounting learning environments are those learning contexts and opportunities where the learning of Accounting is optimal as a result of effective teaching and learning strategies which are learner-centred, promote self-regulated learning, and are compatible with the prescripts of a democratic constitution of the country such as equity, social justice, peace, freedom and hope. Such learning environments for grade 10 Accounting are those where teachers, parents and all stakeholders go out of their way to encourage collaborative and cooperative approaches and are underpinned by problem-based learning strategies, to mention a few.

Your contribution will add value to this field of teaching and help to deepen the understanding of educational value of the discipline. While I greatly appreciate your participation in this important study and the valuable contribution you can make, your participation is entirely voluntary and you are under no obligation to take part in this study. If you do choose to take part, and an issue arises which makes you uncomfortable, you may at any time stop your participation with no further implications.

The nature of the study necessitated interactions with teachers, parents, subject advisors, other stakeholders and learners, through meetings and through our meetings data was generated and stored as per Data protection Act, that will be discussed further. All events and activities would be recorded and video-taped using tape-recorder and video-camera. The extract of these texts was to be analysed using critical discourse analysis. All participant are expected to participate in these meeting to share their knowledge and experiences, since as stakeholders, parental support and involvement are the most important factors in effective teaching and learning.

If you experience any discomfort or unhappiness with the way the research is being conducted, please feel free to contact me directly to discuss it, and also note that you are free to contact my study supervisors (indicated above).

Your real name will not be used in my publications or reports on the study

Yours sincerely

_____ ----------

Qhosola Makeresemese Rosy Prof M.G.Mahlomaholo-Promoter

Please fill in and return this page. Keep the letter above for future reference

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Study: Sustainable Learning Environments for a Grade 10 Accounting Classroom: Critical Accounting Approach

Researcher: Qhosola Makeresemese Rosy

Name and Surname: _____

Age: _____

Contact number: _____

- I hereby give free and informed consent to participate in the abovementioned research study.
- I understand what the study is about, why I am participating and what the risks and benefits are.
- I give the researcher permission to make use of the data gathered from my participation, subject to the stipulations he/she has indicated in the above letter.

By placing your signature below, you declare that you are fully informed about the research project, and give your permission that the information may be used for research without identifying you as an individual.

Signature: _____ Date: _____