TEACH AND ASSESS: A STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

by

MOTHOFELA RICHARD MSIMANGA
STD (TSHIYA); FDE (RAU); B.Com (VISTA); B.Com-HONS (UNISA); B.Ed.-HONS (NWU); M.Ed. (UNISA)

Thesis submitted in fulfilment of the requirements for the degree

Philosophiae Doctor in Education (Ph.D. Education)

SPECIALISATION: CURRICULUM STUDIES

in the

SCHOOL OF EDUCATION STUDIES

FACULTY OF EDUCATION

at the

UNIVERSITY OF THE FREE STATE BLOEMFONTEIN

2017

PROMOTER: PROFESSOR D.J. HLALELE
CO-PROMOTER: DOCTOR M.D. TSHELANE

DECLARATION

Student no.: 2015282391

I, MOTHOFELA RICHARD MSIMANGA declare that *Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences,* submitted for the Doctorate degree, is my own independent work and that I have not previously submitted it for any qualification at another higher education institution and that all the sources that I have quoted have been indicated and acknowledged by means of complete references.

_____ _____

Signature Date

(Msimanga M.R.)

ACKNOWLEDGEMENTS

My sincere appreciation and gratitude to the following people who contributed to the completion of this research:

- My promoter, Prof Dipane Hlalele, for his mentorship, motivation, unwavering support and guidance throughout this study.
- Co-promoter, Dr Molaodi Tshelane, for his support.
- Dr Bekithemba Dube, for his advice and support during the finalisation of the document.
- My former colleagues, Lomlani Khathi, Dr Hlengiwe Mhlongo, Sydney Miya, Nuwejaar Radebe and Thokozile Motloung for their encouragements and moral support during this study.
- Dr Tshele Moloi, for continuously checking my progress in this study and Dr Cias Tsotetsi, for his support.
- The Principal, HOD, EMS Teachers, Subject Advisor, University Lecturer, University Student Teacher, Teachers' Unions Representatives, RCL member and Learners who participated in this study, for their participation.
- The principal and the school community of the research site, for allowing me to carry out this study at the school.
- The Free State Department of Education, for granting me permission to conduct this study at the school.
- Khethiwe Biyo, for transcribing the recordings.
- Dr Lariza Hoffman, for editing my work.
- The teachers who taught me at Sentebale Primary, Ithlahaneleng Primary, Intabazwe Intermediate and Harrismith Senior Secondary, for giving me a good foundation in education and unlocking my potential.

- The members of Intabazwe Baptist Church, for continuously supporting me with prayers.
- The University of the Free State, for funding my studies through their Post-Graduate Studies Funding.
- The National Research Fund through Prof Dipane Hlalele's research grant, for the research bursary and that the bursary does not have any condition for this study. Opinions expressed in this study may not be attributed to the NRF.
- My wife, Nonhlanhla, for allowing me to spend family time and money on this study.
- The Almighty God, who provided me with everything I needed to complete this study.

DEDICATION

This thesis is dedicated to my wife, **Nonhlanhla**, for her sacrifices, support and encouragement during this study.

My mother, **Mametsing**, my brother, **Motsamai**, and my sisters, **Mavis**, **Mosela**, **Palesa** and **Tshepiso**, for their continued encouragement and support before and during the study.

My sister-in-law, **Montsheng**, who motivated me to study at higher education institutions; when I was still at school I accompanied her when her diploma was conferred and that ceremony motivated me to study beyond matric.

My nephews and nieces, **Selloane**, **Mohale**, **Thabisile**, **Kgotso**, **Lerato**, **Maselesele**, **Masentle**, **Thapelo**, **Owami** and **Nozibusiso**, who should take this study as a challenge for them to focus on the positive things in life.

ABSTRACT

This study aims at proposing “teach and assess” as a strategy for effective teaching and learning in Economic and Management Sciences (EMS). In order to achieve the aim of this study, the following objectives have been identified to guide the study:

- To explore what the “teach and assess” strategy entails.
- To demonstrate how the “teach and assess” strategy will contribute towards effective teaching and learning in EMS.
- To determine the conditions under which the “teach and assess” strategy can be successfully implemented in EMS.
- To identify possible challenges that might hamper the implementation of the strategy in order to put mechanisms in place to overcome them.
- To propose the “teach and assess” strategy as the strategy for effective teaching and learning in EMS.

Critical Emancipatory Research (CER) is the theoretical framework of this study. CER is relevant because it emphasises that research must be emancipatory. It promotes social justice and the empowerment of the co-researchers. CER encourages collaborative and active participation. The views of the marginalised are considered and the voiceless have a voice in this study. Data were generated at one school in one of the Qwaqwa villages in the Thabo Mofutsanyana Education District.

Participatory Action Research (PAR) is used as the data generation method for this study. PAR is compatible with CER because they are both based on collaborative participation and giving the voice to the

marginalised and voiceless. PAR emphasises the involvement of those affected by the issue studied for their own benefit. The co-researchers in this study are the subject advisor for Economic and Management Sciences (EMS), the school principal, the EMS Head of Department (HOD), EMS teachers, teachers' unions' representatives, a member of the Representative Council of Learners (RCL), learners, a university lecturer and a university Commerce Education student.

Critical Discourse Analysis (CDA) is used as data analysis method. CDA is compatible with CER and PAR because it emancipates by allowing the marginalised to participate in a discourse in order to shape the society. Discourse negotiates power among individuals involved in the discourse. This study manages to achieve all the aforementioned objectives of CER, PAR and CDA.

Literature is reviewed on approaches to learning, approaches to teaching, the purpose of assessment, and EMS as a subject. Literature is also reviewed regarding the objectives of the study. Data generated are consistent with literature in most cases. The conditions which should be met for successful implementation of a strategy are identified. "Teach and assess: a strategy for effective teaching and learning in EMS" is proposed.

The key components of the proposed strategy are as follows: dynamic integration of teaching, learning and assessment; creatively applying facilitative approach during the teaching and learning process; observing multiple intelligences and considering different learning styles in the teaching and learning process; learner-guided teaching and learning process; significant and creative use of small groups; constructive

application of peer tutoring; connecting classroom activities to big ideas; structured reflection for constructive feedback; time spent on task; teaching and learning mirrored in learners' books; intelligently applying formative and diagnostic assessment; careful consideration of administration processes before embarking on assessment activities; recent and relevant assessment coupled with quality assessment tasks; purposeful application of peer assessment; conscientiously planning homework; diversifying and varying assessment tasks; contextualising teaching and learning activities; and recognising multiple forms of expression. The main contribution of this study was to develop a unique strategy that can be used for effective teaching and learning in EMS.

LIST OF KEY CONCEPTS

Assessment

Critical Discourse Analysis

Critical Emancipatory Research

Executive approach

Economic and Management Sciences

Effective learning

Effective teaching

Facilitative approach

Learning

Learning styles

Liberationist approach

Multiple intelligences

Participatory Action Research

Peer tutoring

Teaching

Teaching and learning process

LIST OF ACRONYMS AND ABBREVIATIONS

BCM	Business, Commerce and Management
C2005	Curriculum 2005
CA	Creative Arts
CAPS	Curriculum and Assessment Policy Statement
CDA	Critical Discourse Analysis
CER	Critical Emancipatory Research
CL	Critical Linguistics
CPJ	Cash Payments Journal
CRJ	Cash Receipts Journal
DBE	Department of Basic Education
DoE	Department of Education
DSTV	District Support Team Visits
DVD	Digital Video Disc
EAC	English Across the Curriculum
EMS	Economic and Management Sciences
FET	Further Education and Training
FP	Foundation Phase
HL	Home Language
HEI	Higher Education Institution
HOD	Head of Department
IP	Intermediate Phase
LA	Learning Area
LF	Learning Facilitator
LO	Life Orientation
LoLT	Language of Learning and Teaching
NCS	National Curriculum Statement
PAR	Participatory Action Research

PLC	Professional Learning Community
RCL	Representative Council of Learners
RNCS	Revised National Curriculum Statement
SBA	School Based Assessment
SMT	School Management Team
SP	Senior Phase
SWOT	Strengths, Weaknesses, Opportunities, and Threats

LIST OF APPENDICES

LIST OF TABLES

TABLE OF CONTENTS

CHAPTER TWO

THEORETICAL FRAMEWORK AND CONCEPTS INFORMINGTEACH AND ASSESS: A STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

CHAPTER THREE

RELATED LITERATURE INFORMING TEACH AND ASSESS: A STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

CHAPTER ONE

OVERVIEW OF THE STUDY ON A STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

1.1 INTRODUCTION AND BACKGROUND TO THE STUDY

The purpose of this study was to formulate a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of a teach and assess approach. Unlike most studies which emanate from literature, this study emanates from practice. The researcher observed that the Thabo Mofutsanyana Education District in the Free State Province uses what is termed the "teach and assess strategy" to promote effective teaching and learning in classrooms. The following disadvantages regarding this strategy have been noted: Firstly, the strategy has not been scientifically researched. Secondly, it is applied uniformly across all the grades in the district, although different subjects in different grades have different time allocation and different requirements for assessment and curriculum delivery. The uniqueness of different subjects impacts on the implementation of what is termed the teach and assess strategy in its current form.

The presentation by Sempe (2014) discussed the purpose of what is termed the teach and assess strategy as the way to make teachers understand the value and importance of daily activities in their teaching. It further discussed the five pillars of what is termed the teach and assess strategy as the quality of daily activities, the frequency of daily activities, marking of daily activities, corrections of daily activities, and monitoring and control by the School Management Team (SMT). These pillars of what is termed the teach and assess strategy, guide teachers on how to implement the strategy in their classrooms.

I contend that what is termed the teach and assess strategy in the Thabo Mofutsanyana Education District follows a formative assessment approach. According to Van der Merwe (2011:2), formative assessment is used to enhance learners' performance, while summative assessment is used to summarise learners'

performance. Wylie and Lyon (2012:1) also defined formative assessment as process that takes place before or during instruction with the explicit purpose of eliciting evidence that can be used to improve the current learning. This form of assessment is used while teaching and learning take place to improve learners' performance, and not to judge learners' performance.

This study developed the strategy for EMS. The Department of Basic Education (DBE, 2011**a**:15) indicated that the learners in Grade 7 to Grade 9 must offer and complete nine subjects, of which EMS is one. This indication makes EMS a compulsory subject in Grade 7 to Grade 9. The Department of Education (DoE, 2002:1) stated that the curriculum summarises the vision for teachers and learners who are knowledgeable and multi-faceted, sensitive to environmental issues and able to respond to and act upon the many challenges that will still confront South Africans in the twenty-first century. In addition, DBE (2011b:8) said EMS deals with the efficient and effective use of different types of private, public or collective resources to satisfy people's needs and wants. The study will impact all Grade 7, Grade 8 and Grade 9 learners because EMS is an obligatory subject in these grades.

Moreeng (2009:13) stated that teaching takes place though complex interactions among teachers, learners and classroom tasks, while Coe, Aloisi, Higgins and Major (2014:2) contended that real teaching is that which leads to improved student achievement using outcomes that matter to their future success and the progress being made by students. In addition, Suleman (2012:325) stated that effective and fruitful learning depended upon the quality of teaching which demands academically competent individuals, who care about the wellbeing of children and youth. On the other hand, Pia (2015:823) highlighted that the teaching-learning process is a planned interaction that promotes behavioural transformation. Based on the preceding discussions, I conclude that teaching is an interaction between the teacher, the learner and the subject content, and that the quality of instruction leads to effective teaching, which can be measured through students' success in the subject and in future life.

Mege (2014:20) emphasised that assessment is done to determine how much teaching and learning have taken place during the process of teaching and learning. In congruence, Coggshall, Rasmussen, Colton, Milton and Jacques (2012:6) purported that the results of a formal evaluation give feedback on whether or not instructional practices are working, while Wiliam (2013:15) contended that it is only through assessment that it can be discovered whether the instructional activities for learners resulted in the intended learning. The DBE (2012:3) stated that assessment is a process of collecting, analysing and interpreting information to assist teachers, parents and stakeholders in making decisions about the progress of learners, whilst Wiliam (2013:15) asserted that assessment is the bridge between instruction and learning. Based on the discussions and assertions made by Mege (2014:20), Wiliam (2013:15) and Coggshall et al. (2012:6), I contend that assessment helps to determine whether actual teaching and learning have occurred in the teaching and learning process. The preceding sections indicated that teaching, learning and assessment are intertwined. This study is necessary to help EMS teachers to implement the teach and assess strategy for effective teaching in a way that it will be beneficial to learners.

1.2 PROBLEM STATEMENT AND RESEARCH QUESTION

There is a problem with assessment which is not integrated into the teaching and learning process, and a lack of strategies to integrate assessment into the teaching and learning process in EMS. If assessment can be incorporated into the teaching and learning procedure, real teaching will take place in EMS. Therefore, there is a need for a strategy that integrates assessment into the teaching and learning process in EMS for effective teaching and learning to take place.

Based on the foregoing presentation of the background to the problem, the following research question needs to be answered:

How can the teach and assess strategy be used to integrate assessment into the teaching and learning process in EMS?

The secondary research questions of the study are as follows:

- What does the “teach and assess” strategy entail?
- How does the “teach and assess” strategy contribute towards effective teaching and learning in EMS?
- Under which conditions can the “teach and assess” strategy be successfully implemented in EMS?
- Are there any possible challenges in the implementation of the strategy and how can they be addressed?
- What does the proposed strategy for effective teaching and learning in EMS entails?

1.3 AIMS AND OBJECTIVES OF THE STUDY

The aim of the study is to propose a strategy for effective teaching and learning in EMS through the use of the teach and assess strategy, or to propose the teach and assess strategy as a strategy for effective teaching and learning in EMS.

Therefore, the specific objectives of the study are as follows:

- To explore what the “teach and assess” strategy entails.
- To demonstrate how the “teach and assess” strategy will contribute towards effective teaching and learning in EMS.
- To determine the conditions under which the “teach and assess” strategy can be successfully implemented in EMS.
- To identify possible challenges that might hamper the implementation of the strategy in order to put mechanisms in place to overcome them.
- To propose the “teach and assess” strategy as the strategy for effective teaching and learning in EMS.

1.4 THEORETICAL FRAMEWORK

According to Mertens (2010:8), Critical Emancipatory Research (CER) emphasises that the agency for change rests in the persons in the community, working side by side with the researcher towards the goal of social transformation. People from the

school and within the school community worked with the researcher to develop the strategy for effective teaching and learning in EMS through the use of the teach and assess strategy. The feelings and attitudes of the co-researchers were considered throughout the study.

Lincoln, Lynham and Guba (2011:102) contended that CER is aimed at creating space for empowerment and change for the oppressed. Co-researchers who normally do not have a voice in issues affecting them, had a chance to contribute to this study. The space was created for the co-researchers who were empowered through meetings and other interactions throughout the study.

1.5 RESEARCH METHODOLOGY AND DESIGN

Participatory Action Research (PAR) was used in this study.

1.5.1 PAR as a data generation method

Green, George, Daniel, Frankish, Herbert, Bowie and O'Neill (2003:1) defined PAR as a systematic inquiry, with the collaboration of those affected by the issue being studied, for purposes of education and taking action or effecting change. According to Powers and Allaman (2012:1) in PAR, people investigate meaningful social topics, participate in research to understand the root causes of problems that have a direct impact on them, and then take action to influence policies through the dissemination of their findings to policymakers and stakeholders. This study was undertaken for educational purposes, and action will be taken to influence the stakeholders on a strategy to be used in EMS teaching and assessment. Crane and O'Regan (2010:2) identified the distinctive feature of PAR as participation of those affected by the issue and the potential for them to be involved in both asking and answering an action research question. Co-researchers had a chance to ask questions and contribute to the study.

1.5.2 Data generation

Data were generated through collaborative meetings and dialogue. The plan for the meetings and dialogue was developed by the team members, based on the aims and the objectives of the research. The proceedings of the meetings were tape-recorded and the notes were kept safely. The team met for the first time to introduce the members and to get a brief background on the study. Team members developed a plan on how to carry on during the study and allocated roles to the members. Subsequent meetings addressed all research objectives.

1.5.3 Co-researchers in the study

The team that conducted this research, was constituted as follows: the researcher (myself), the Grade 9 EMS teacher at the school, the Head of Department (HOD) for EMS and Grade 8 teacher at the school, the principal of the school, the EMS subject advisor, one member of a teachers' trade union per trade union having members at the school (i.e. two representatives), three learners, one member of the Representative Council of Learners (RCL), a Commerce Education university lecturer and a Commerce Education university student. The co-researchers worked collaboratively and as equal partners with the researcher.

The co-researchers in this study were selected for the following reasons: The EMS teacher, the EMS HOD and the EMS subject advisor are experts in the field; the principal, to share more information about management of the strategy at the school; the trade union members as stakeholders in education for valuable inputs on how the strategy should be structured and to ensure that the strategy is structured in a way that will be acceptable to their members and not impact negatively on labour relations, i.e. teachers; three learners to share information on application of the strategy, as the strategy is developed for their benefit and to make input on what can be done to achieve effective teaching and learning in EMS classrooms; an RCL member as a leader of learners, to add valuable information to make the strategy acceptable to learners at the school and ensure that the voice of the learners is represented in strategy development; the Commerce Education university lecturer

and the Commerce Education university student, to share their past experiences and the future trends in Commerce Education.

1.6 DATA ANALYSIS

Critical Discourse Analysis (CDA) was used in this study. Tsotetsi (2013:162) postulated that critical discourse analysts study the injustice with the aim of taking action so as to transform the unsatisfactory situation. CDA was appropriate to this study because the study was aimed at changing the unsatisfactory situation with the help of those involved in the situation.

According to Fairclough (1992:110), the CDA of a text should pass through the three stages of description, the interpretation of the relationship between text and interaction, and an explanation of the relationship between interaction and social context. In this study, the co-researchers used meetings to discuss and give descriptions, and the researcher interpreted the generated data and determined the relationship between the transcribed text and what the co-researchers had said during their interactions. Lastly, the relationship between the interaction of the co-researchers and how it related to the social context was explained. Fairclough (2013:3) stated that CDA is deemed appropriate when the intention is to apprehend meaning and also make implication. In this study, the co-researchers gave meaning and meaning was made from the data generated. Data analysis began after each interaction of the team members. Tape-recorded information was transcribed verbatim, as far as possible.

1.7 VALUE OF THE STUDY

The strategy will help to integrate assessment into the teaching and learning practise. The study will help teachers to implement the teach and assess strategy in EMS in a way that will lead to effective teaching and learning. Effective teaching and learning will help to achieve the purpose of teaching EMS. All the learners in Grades 7 to 9 and the teachers teaching EMS in all the grades will benefit from this study.

1.8 ETHICAL CONSIDERATIONS

Ethical clearance was sought from the University of the Free State Education Research Ethics Committee. Permission to undertake the study was sought from the Director of Strategic Planning and Research Directorate of the Free State Department of Education and the principal of the participating school before data generation began. Consent forms were signed by the co-researchers and parents signed consent forms for their participating children who were minors. Co-researchers participated freely and voluntarily. Co-researchers were assured of anonymity, confidentiality, the ability to withdraw freely from participation at any stage, and choosing not to comment on particular issues.

1.9 LAYOUT OF CHAPTERS

Chapter one deals with the introduction to and background of the study, the problem statement and research question, the aims and objectives of the study, the theoretical framework, research design and methodology, data analysis, the value of the study, ethical considerations, the layout of the study and a chapter summary.

Chapter two focuses on an introduction, the theoretical framework, the literature review of the concepts used in this research study and concluding remarks.

Chapter three focuses on an introduction, approaches to teaching, approaches to learning, assessment, EMS as a subject, what the teach and assess strategy entails, how the teach and assess strategy can contribute towards effective teaching and learning in EMS, the conditions under which effective teaching and learning can take place in EMS, the conditions under which the implementation of a strategy can take place, the conditions under which the teach and assess strategy in EMS can be implemented, the challenges in the implementation of a strategy, overcoming the challenges in the implementation of a strategy and concluding remarks.

Chapter four focuses on an introduction, the research design and methodology, PAR as an approach, ethical considerations, the profile of the research site, profiles

of co-researchers, the researcher's background, data generation, data analysis and concluding remarks.

Chapter five focuses on the presentation, analysis and interpretation of data and concluding remarks.

Chapter six focuses on CER as theoretical framework for this study, PAR as a data generation method for this study, the findings, conclusions and recommendations, the limitations for the study, the implications for further research and concluding remarks.

Chapter seven focuses on the conditions for the successful implementation of "teach and assess" as a proposed strategy for effective teaching and learning in EMS, the components of "teach and assess: a proposed strategy for effective teaching and learning EMS", presentation of the proposed strategy for effective teaching and learning in EMS through the use of the teach and assess strategy, the summary of the study and impressions from the study.

1.10 CHAPTER SUMMARY

This introductory chapter considered the introduction to and background of the study, problem statement and research question, aims and objectives of the study, theoretical framework, research design and methodology, data analysis, value of the study, ethical considerations, layout of the study and the chapter summary. The next chapter will focus on an introduction, theoretical framework, literature review of the concepts used in this research study and concluding remarks.

CHAPTER TWO

THEORETICAL FRAMEWORK AND CONCEPTS INFORMING TEACH AND ASSESS: A STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

2.1 INTRODUCTION

The aim of this study is to formulate a strategy for effective teaching and learning in EMS through the use of a teach and assess strategy. The previous chapter provided an introduction and a background to the study, the problem statement and research question, aims and objectives of the study, the theoretical framework, the research design and methodology, data analysis, the value of the study, ethical considerations, the layout of the study and a chapter summary. In this chapter, the focus is on the theoretical framework, the literature review of the concepts used in this research study and concluding remarks. The theoretical framework provides knowledge that has been used in this study. This chapter considers CER as a theoretical framework for the study. The operational concepts are explained and defined comprehensively so that they are understood within the focus of this study.

A synthesis of views and perspectives on CER, teaching and learning, effective teaching and learning, assessment, and the teaching and learning process is developed through a review of literature and other relevant sources of information. Information gathered from literature provides the study with various experiences and varying perceptions on CER, teaching and learning, effective teaching and learning, assessment, and the teaching and learning process. A literature review is important in order to reach an understanding of the theoretical framework for this study and the concepts used in the study. The next section discusses the theoretical framework.

2.2 THEORETICAL FRAMEWORK

The concept “theoretical framework” consists of two words, i.e. “theoretical” and “framework”. In order to clearly discuss the theoretical framework for the study,

“framework” will be discussed, then “theoretical” (“theory”) and, lastly, “theoretical framework”. According to Hornby (2010:594), the word “framework” is a noun which refers to a set of beliefs, ideas, or rules that is used as the basis for making judgements and decisions. A framework usually denotes a structure, an overview, an outline, a system, or a plan, consisting of various descriptive categories, e.g. concepts, constructs or variables, and the relations between them that are presumed to account for a phenomenon. However, Nilsen (2015:2) stated that frameworks do not provide explanations; they only describe empirical phenomena by fitting them into a set of categories. In Svinicki (2010:5), it was stated that the framework serves as the basis for understanding the causal or correlational patterns of interconnections across events, ideas, observations, concepts, knowledge, interpretations and other components of experience. Based on discussions by Nilsen (2015), Svinicki (2010) and Hornby (2010), I conclude that a framework is a basis or a structure for understanding, passing judgement and making decisions.

According to Hornby (2010:1547), the word “theoretical” is an adjective, usually before the noun, which is concerned with the ideas and principles on which a particular subject is based, rather than practice. Hornby (2010:1548) discussed the word “theory” as a noun as follows: it is a formal set of ideas that is intended to explain why something happens or exists; and it is a set of interconnected concepts, which structures a logical view of occurrences for the purpose of explaining or foretelling. Based on these definitions of the words “theoretical” and “theory” by Hornby (2010:1547), I recommend that in this study the words “theoretical” and “theory” should be used interchangeably.

Udo-Akang (2012:89) argued that the importance of theory in research cannot be underestimated and research requires a sound theoretical basis and strong methodology. In Imenda’s (2014:186) view, theory is a principle which a particular subject is based on, while Kitchel and Ball (2014:188) concluded that theories are used to explain and predict phenomena and help to answer the “what”, “how” or “why” particular phenomena occurred. Furthermore, Imenda (2014:186-187) asserted that a theory is like a blueprint, a guide for modelling a structure that depicts the elements of a structure and the relation of each element to the other, just as a theory depicts the concepts which compose it, and the relation of concepts to

one another. From the discussions by Imenda (2014:186-187), Kitchel and Ball (2014:188) and Udo-Akang (2012:89), I conclude that a theory is a principle which a particular subject is based on and which structures the view of the phenomena in order to explain it. According to Udo-Akang (2012:91), theory has a central role in research. A theory will be used in this study to explain and guide the research project until it reaches its completion.

Kitchel and Ball (2014:188) asserted that theory guides inquiry and interpretation, and affords academic rigor to scholarly work. Whilst Tavallaei and Abu Talib (2010:572) stated that theory is defined in a variety of ways, depending on the field of study, the ground of science and even the era it was recognised to be a vital device in the process of knowledge throughout history. I concur with Tavallaei and Abu Talib (2010:572) that the definition of theory depends on the field of study. On the other hand, Nilsen (2015:2) posited that theories can be described on an abstraction continuum. By what Nilsen (2015:2) posited, it means that theory is general ideas, not based on a particular real person or thing or situation, and consists of a series of similar items in which each item is almost the same as the ones next to it, but the last item is very different from the first item. In Braun, McCoy and Finkbeiner (2013:2), it was stated that theories inform practice, and practice can also inform theory. In congruence, Udo-Akang (2012:91) argued that although theory should ideally guide research, theory and research are interrelated and are dependent on one another to make sense of a phenomenon. These statements by Braun et al. (2013:2) and Udo-Akang (2012:91) imply that what is done in practice, is informed by theory, and theory is also informed by what is done in practice. This study was informed by theories and the study will inform theories.

Imenda (2014:187) identified the three main significant features of a theory as follows: it is a set of interrelated propositions, concepts and definitions that presents a systematic point of view; it specifies relationships between/among concepts; and it explains and/or makes predictions about the occurrence of events, based on the specified relationships. In congruence, Nilsen (2015:2) posited that a good theory provides a clear explanation of how and why specific relationships lead to specific events. Braun et al. (2013:1-2) identified the benefits of the application of theories as follows:

- It increases the likelihood that intended outcomes will be achieved. Theories increase the possibility of achievement of outcomes.
- It provides the rationale for how the programme is strategically structured and delivered. Theories give the reason why the research is structured and delivered in a particular manner.
- It offers the basis for assessment of the programme's degree of success in achieving intended outcomes. Theories offer principles of assessing whether the intended outcomes were achieved.
- It enables programme planners to combine their experience and insight with evidence-based explanations of behaviour change. Theories help to explain why certain things happen.
- It contains key concepts and variables that define how the concepts will be measured for evaluation of a theory-driven program. Theories gives guidance on how the programme should be evaluated.
- It provides a rationale for what educational programme designers do or did, and what the result was. Theories give the principle of understanding what was done and the results of what was done.

I concur with Imenda (2014:187) and Nilsen (2015:2) that a theory helps to present a systematic point of view, specifies relationships and explains or make predictions about the occurrence of events. I also concur with Braun et al. (2013:1-2) that a theory provides the rationale for how the programme (in this regard a research project) is strategically structured and delivered; offers the basis for assessment of the programme's (research project's) degree of success in achieving intended outcomes; enables programme planners (researchers) to combine their experience and insight with evidence-based explanations of behaviour change; and contains key concepts and variables that define how the concepts will be measured for evaluation of a theory-driven programme (research).

Kitchel and Ball (2014:190) argued that the terms "theory" and "theoretical framework" should be used interchangeable because they are both defined as a statement or complex argument explaining and/or predicting phenomena. Imenda (2014:189) stated that a theoretical framework refers to the theory that a researcher

chooses to guide him or her in his or her research. I agree with Imenda (2014:189) that a theoretical framework is the theory that guides the research project. Nilsen (2015:2) concurred with Kitchel and Ball (2014:190) that the purposes of the use of theories, models and frameworks are as follows: describing and/or guiding the process of translating research into practice, understanding and/or explaining what influences implementation outcomes, and evaluating implementation.

Grant and Osanloo (2014:12) argued that a theoretical framework is the foundation from which all knowledge is constructed for a research study and serves as the structure and support of the rationale for the study, the problem statement, the purpose, the significance and the research questions, while Troudi (2010:2) stated that, in educational research, the theoretical framework reflects where the researcher stands intellectually against his or her research questions and the way data are going to be considered. In congruence, Casanave and Li (2015:108) purported that to frame a study or to build a theoretical or conceptual framework for a study is a matter of addressing the question during data collection or analysis. Furthermore, Agherdien (2007:17) asserted that theoretical frameworks provide a position from which the researcher accumulates and views knowledge. Imenda (2014:189) asserted that a theoretical framework is the application of a theory, or a set of concepts drawn from one and the same theory, to offer an explanation of an event, or shed some light on a particular phenomenon or research problem.

The theoretical framework for a study is as stipulated by Ocholla and Le Roux (2011:1) as the structure that holds and supports the theory of a research work and serves as the lens that a researcher uses to examine a particular aspect of his or her subject field. In Tavallaei and Abu Talib (2010:573), it was stated that theoretical framework refers to the theory that a researcher chooses to guide him or her in his or her research and thus gives the researcher a valuable opportunity to see what could seem familiar through a new and distinct perspective. Imenda (2014:185) contended that, in essence, the theoretical framework is the soul of every research project and determines how a given researcher formulates his or her research problem, how he or she goes about investigating the problem, and what meaning he or she attaches to the data accrued from such an investigation. In Ocholla and Le Roux's (2011:1) view, the nature and function of a theoretical framework can be seen as an attempt

to answer two basic questions: What is the problem that is set out to be investigated and answered? And why is a specific approach a realistic or feasible solution to the problem?

From the preceding assertions and discussions, I conclude that theoretical frameworks help to structure the study, guide how data will be viewed and interpreted, and provide predominant viewpoints and direction to the research. It is, therefore, significant for me to choose an appropriate theoretical framework for this study. I have decided that the theoretical framework couched by literature for this study is CER. Interaction with co-researchers and the whole study will be guided by CER.

2.2.1 Critical Emancipatory Research

Brooke (2013:432) argued that research needs to be emancipatory, while Esau (2013:3) purported that an emancipatory action research strategy is similar to a critical action research approach and is grounded in critical hermeneutics. Behar-Horenstein and Feng (2015:46) claimed that CER challenges conventional ways in which knowledge is constructed within educational research; however, CER is one approach to research inquiry that minimises the potential for those who are in the minority and researched to remain voiceless or marginalised. Furthermore, Gilani-Wiliams (2014:16) asserted that traditional theories are concerned with understanding and explaining what is happening and their agenda goes no further than discussion; however, CER is different because it not only critiques, but seeks to make changes. Boog (2003:426) elaborated on this by his assertion that emancipation implies that the generated results of action research are two-sided. On the one hand are the specific improved action competencies of the co-researchers in the local situation in the specific research project and on the other hand are the general enhanced action competencies in other comparable problematic situations in the future, sometimes even in broader contexts.

CER, as argued by Behar-Horenstein and Feng (2015:46), necessitates a level of transparency that is not often required or evident in other forms of inquiry and pushes researchers to become aware of their taken-for-granted assumptions and the

central role thereof in research. According to Noel (2016:2), CER creates emancipation and social justice. In addition, Boog (2003:427) claimed that, in the last few decades, emancipation has come to be equated with empowerment. I conclude that CER challenges adhering or conforming to particular set standards of educational research when knowledge is constructed. CER is not one-sided, in that the researcher is the main participant in the data collection. Co-researchers were not marginalised and voiceless, unlike in conventional ways of research. The co-researchers improved in their competencies which related to a research project, because of their participation, and they can apply new competencies in similar situations in future.

Friesen (2012:1) supported the argument of critical theorists that knowledge is shaped by human interests of different kinds, rather than standing 'objectively' independent from these interests. Darder (2015:69) elaborated that critical research seeks to support a purposeful and emancipatory interaction between research and the people or the texts that are engaged during the study. Furthermore, Darder (2015:69) alluded that the interest of the emancipatory paradigm is to recognise the psychological cognitive, moral, political and social reality of all the co-researchers, including the researcher him- or herself. The aim of this is to focus on the comprehension of the group to incite a systematic change that allows transforming the practice and structures, through the empowerment and the transforming process, creating collaborative relationships, developing strategies of comradeship, negotiating power and creating participative environments, by means of the action reflection, compromising in dialogue, listening, questioning, setting problems and, above all, promoting critical thinking (Elizondo et al., 2013:435). I chose CER because this study needs to be shaped by different people who have an interest in EMS teaching and learning. Secondly, this study intended to achieve purposeful and emancipatory interaction between the researcher and the co-researchers. Thirdly, the study intended to empower co-researchers through collaborative relationships and create critical thinking through active participation.

In my view, CER is transparent because all the co-researchers planned the activities together and the researcher was not the main roleplayer during interactions with other co-researchers. The voice of the voiceless and the views of the marginalised

were very important in the research project. The co-researchers became empowered by interacting with one another because they gained new knowledge, skills, values and attitudes. The origin of CER is discussed in the next section.

2.2.1.1 The origin of CER

Noel (2016:3) stated that emancipatory research is an umbrella term that includes several research streams, including CER, feminist, race-specific, participatory and transformative research; the paradigm emerged as a response to a growing discomfort with dominant research paradigms and procedures. On the other hand, Elizondo et al. (2013:424), Watson and Watson (2011:64) and Boog (2003:430) stated that approaches, such as PAR, emancipatory action research and critical action research, emanated, and the most important desire came from the proposition of Habermas. In congruence with Elizondo et al. (2013:424), Watson and Watson (2011:64) and Boog (2003:430), Ramírez, Quintana, Sanhueza and Valenzuela (2013:424) stated that Habermas focused on emancipation. Furthermore, Boog (2003:430) stated that Habermas was the key scientist of the second generation of the Frankfurter Schule and, like all theorists of this school, his work reflected explicit emancipatory preoccupations. Torres and Moraes (2006:352) concurred with Ramírez et al. (2013:424), Elizondo et al. (2013424), Watson and Watson (2011:64) and Boog (2003:430) that the emancipatory element comes from Habermas's emancipatory-constitutive acquaintance. Based on the preceding discussions, I conclude that CER originates from the theory of Habermas and intends to benefit and empower the co-researchers.

Gilani-Wiliams (2014:16) purported that the CER emerged from a group of men who saw the atrocities inflicted by humans on humans. In congruence, Esau (2013:3) stated that the idea of CER and PAR found a home in the South African anti-apartheid teaching fraternity, where the clarion call for 'People's Education for People's Power' motivated teacher activists to oppose apartheid education in their classrooms. Elizondo et al. (2013:424) asserted that the CER was born with the philosophers Horkheimer and Adorno, founders of the Frankfurt School, who questioned the modernity of the occidental world, arguing that the mythology and tradition fed the process of men alienation. Elizondo et al. (2013:424), Esau (2013:3)

and Gilan-Wiliams (2014:16) highlighted that CER aimed at counteracting alienation of men and atrocities, such as apartheid, inflicted on people by other people. CER emerged in order to encourage emancipation and participation. Friesen (2012:1) stated that CER is generally defined as the diverse body of work produced by members and associates of the Frankfurt Institute for Social Research (or simply, the 'Frankfurt School') between 1930 and the present. Gilani-Wiliams (2014:16) concurred that CER was born from the Frankfurt School. I concur with Elizondo et al. (2013:424), Friesen (2012:1) and Gilani-Wiliams (2014:16) that CER emerged from the Frankfurt School.

Esau (2013:3) asserted that an emancipatory action research strategy is similar to a critical action research approach. Moreover, Kramer-Roy (2015:1210) claimed that the critical (or critical emancipatory) approach has been gaining recognition, and its underlying ontology is that researchers need to take into account historical, social and political influences on human thought and action, and that social structures have historically served to oppress certain groups in society. The claims made by Kramer-Roy (2015:1210) and Esau (2013:3) denote that critical action research and emancipatory action research are similar. In Noel's (2016:3) view, the CER emerged as a response to a growing discomfort with dominant research paradigms and procedures, while Boog (2003:430) asserted that action research at that time was also influenced by the critical approach as advocated by radical feminism. Ramírez et al. (2013:425) contended that the approach of the CER is the abolition of social injustice; justice is shown as necessary and indispensable, and the emancipatory paradigm looks for social change, focused on freedom and release, both in the process of the research and in the transformation of the society itself. In this regard, CER accomplishes this with three characteristics: it includes the experiences of the researcher in the research questions, the objectives of interest and the strategies for changing its condition. Frydaki and Katsarou (2013:1) argued that Carr and Kemmis introduced critical emancipatory action research to actually express their demand for social change because CER aims at intervening in the cultural, social and historical processes of everyday life to reconstruct not only practice and practitioner, but also the practice setting.

I chose the CER because I wanted to ensure that the co-researchers were not oppressed and their views were considered when a problem that affects them, was studied. CER helped to intervene in reconstruction of practice and practice-setting of integrating teaching, learning and assessment in EMS classrooms. In the emancipatory process, it is talked about negotiation, reciprocity and empowerment, taking the emancipation as a critical position that, through the participative approach, leads to building an awareness, using as methodology of research the qualitative, participative approach, by means of critical analysis, letting the human phenomena emerge and be investigated (Ramírez et al., 2013:425). On the other hand, Newton and Burgess (2008:21) argued that the emancipating/enhancing/critical science mode can assist practitioners in lifting their veil of clouded understandings, and help them to better understand fundamental problems by raising their collective consciousness. On the other hand, Noel (2016:3) claimed that CER is seen as a process of producing knowledge that can be of benefit to disadvantaged people, and the key aim thereof is to empower its co-researchers.

I contend that CER empowered and built awareness about the phenomena that were investigated. The co-researchers in this study contributed in developing a strategy for integrating teaching, learning and assessment in the EMS classroom. The co-researchers, because they were dealing, on a daily basis, with the phenomena that were investigated, helped to produce knowledge that could benefit them.

Given this understanding, Sandretto (2008:3) advocated that CER is a form of action research that seeks to both improve practice, understanding of practice, and the context in which practice takes place, and involve all of those affected by the practices under consideration in the action research process. In the same vein, Noel (2016:4) asserted that CER is dialogic, and its dialectical meaning, that it is related to the logical discussion of ideas and uses language in this context, will be grounded in a context of shared experiences. Sandretto (2008:3) was in congruence with the claim made by Carr and Kemmis in Frydaki and Katsarou (2013:1) that CER is a means for working towards greater social justice in education. Hence, as observed by Noel (2016:4), CER entails that there is a participatory and political aspect in collaborative action research. The discussions with the co-researchers in a dialogue helped to improve practice, understanding of practice, and understanding the context

of practice. Co-researchers collaboratively discussed the phenomena and proposed possible alternatives to address the phenomena, rather than the researcher collecting data individually from the co-researchers and the researcher coming up with own alternatives.

2.2.1.2 The aims and objectives of the study and the CER

According to Nelson (2013:183), research aims to solve a particular teaching-learning problem that has been identified. The aim of this study was to solve a teaching-learning problem of integrating assessment into a teaching and learning process in EMS classrooms. As stated in Section 1.3 of this study, the aim of the study was to propose the strategy for effective teaching and learning in EMS by using a teach and assess strategy.

Manfra (2009:41) highlighted the characteristics of CER as follows:

- Concern for social and cultural factors that impact school – CER deals with social and cultural factors which have an impact on school.
- Interest in democratic participation and emancipation – CER is interested in ensuring that there is democracy and emancipation during the research project.
- Seeking deep change and enlightenment within the classroom – CER intends to bring about more clarity and change in the classroom.
- Implicit goal towards improving society – CER is aimed at improving the society.

The characteristics of CER, highlighted by Manfra (2009:41), are in congruence with the aims and objectives of this study. This study was concerned with developing a strategy that will enhance effective teaching and learning in EMS classrooms, i.e. concerns with social factors that impact the school. The co-researchers participated as equals with the researcher and were free to make their claims during data collection, i.e. democratic participation and emancipation. The study aimed at developing a strategy that will help teachers to integrate teaching, learning and assessment in EMS classrooms, i.e. seeking deep change and enlightenment within

the classroom. The strategy will help to improve teaching of EMS and when teaching of EMS is improved, learners will have a better understanding of the subject, i.e. implicit goal towards improving society.

Kramer-Roy (2015:1210) and Gilani-Wiliams (2014:17) concurred with Manfra (2009:41) that CER have emancipatory goals and seek to bring empowerment to oppressed groups by exposing inequalities and giving voice, ultimately leading to positive social change. Furthermore, Gilani-Wiliams (2014:16) stated that CER seeks to emancipate and transform those who are oppressed and marginalised through functional steps. Behar-Horenstein and Feng (2015:46) concurred with Kramer-Roy (2015:1210) and Manfra (2009:41) that CER minimises the potential for the co-researchers to remain voiceless or marginalised, while Ramírez et al. (2013:425) highlighted that empowerment and a participative approach are important in CER. Noel (2016:4) and Aasgaard, Borg and Karlsson (2012:1) pointed out that there is participation and collaboration in a CER. The preceding discussions by Aasgaard et al. (2012:1), Behar-Horenstein and Feng (2015:46), Gilani-Wiliams (2014:16), Kramer-Roy (2015:1210), Noel (2016:4), Ramírez et al. (2013:425) and Manfra (2009:41) indicate that CER is appropriate to achieve the aims and objectives of this study. Co-researchers who are voiceless in other theoretical frameworks were empowered and worked in collaboration with the researcher to propose the strategy for effective teaching and learning in EMS through the use of the teach and assess strategy. Co-researchers contributed to positive social change and were empowered.

The co-researchers helped to clarify what teach and assess entails and how it will help them to achieve effective teaching and learning in EMS classrooms. Noel (2016:4) asserted that in CER design interventions, people from the periphery would be allowed an equal opportunity in playing an active role in creating knowledge, research and design, and not just be placed in a more passive role of receiving in the form of help or aid, in the knowledge that they have not created. In addition, Noel (2016:4) assumed that, in CER, the use of language is grounded in a context of shared experiences. In this study, the co-researchers discussed what they understood by “teach and assess” and that shifted the original view of the researcher about what teach and assess entails. The co-researchers were co-researchers in the

true sense, because they played an active role in creating knowledge that would benefit them.

As the strategy was developed to help the co-researchers, the co-researchers determined the conditions under which the strategy could be implemented for it to be effective. CER, unlike other frameworks, gave the co-researchers a chance to discuss their experiences in order to solve a problem that affected them. The historical, social and political influences on co-researchers' thought and action was valued, as Kramer-Roy (2015:1210) claimed that the CER has been gaining recognition because researchers need to take account of historical, social and political influences on human thought and action. Moreover, Aasgaard et al. (2012:1) contended that to realise the emancipatory intention, participation should be based on democracy and the co-researchers' involvement as equal members. The co-researchers produced knowledge that benefited them, as Noel (2016:3) claimed that CER is seen as a process of producing knowledge that can be of benefit to disadvantaged people, and its key aim is to empower its research co-researchers.

Co-researchers, in collaboration with the researcher, identified possible challenges that might hamper the implementation of the strategy and put in place the mechanisms to overcome the challenges. The co-researchers were a part of the problem-solving team and their views were valued. According to Ramírez et al. (2013:425), the approach of the CER aims at abolition of social injustice; justice is shown as necessary and indispensable, and the emancipatory paradigm looks for the social change, and focuses on freedom and release, both in the process of the research and in the transformation of the society itself. In support, Dadusc (2014:52) CER calls methods that call for the inclusion of the powerless, the subjugated and the vulnerable tend to reduce the complexity of power relations to a clear cut distinction between the powerful and the powerless – the powerholder and the subjected. In the same vein, Frydaki and Katsarou (2013:1) argued that CER was introduced to bring social change because critical emancipatory action research aims at intervening in the cultural, social and historical processes of everyday life to reconstruct not only practice and practitioner, but also the practice setting. Aasgaard et al. (2012:1) asserted that the cooperation between the researcher and the co-

researchers is seen as a democratic process in CER. Understanding the aims and objectives of the study and CER, the next section looks into formats of CER.

2.2.1.3 Formats of CER

According to Nkoane (2012:99), in CER the researcher is not coding and calculating the number of words spoken by co-researchers as a basis for drawing research conclusions or meaning-making. In support Mahlomaholo (2009:225) argued that the co-researchers are not treated as if they were mere impersonal objects in a natural science laboratory, while Brooke (2013:432) stated that in CER, the co-researchers are not data, but human voices, deeply connected with and concerned about the topic of investigation. In this study data, in terms of coding and calculating, were not used to draw research conclusions and make meanings. Data were human voices, discussing how the teach and assess strategy can be used for effective teaching and learning in EMS. Furthermore, Nkoane (2012:100) argued that language and communication become a medium of expressing experiences between the researcher and the co-researchers. Marton (2014:24) claimed that action research, participatory research, and CER focus on open-ended questions and require a high-level of participation, commitment, as well as self-reflection. Co-researchers used communicative language to express their experiences about integration of assessment in teaching and learning in EMS classrooms. A high level of participation, commitment and self-reflection was encouraged among the co-researchers.

Deeper (2012:9) contended that CER is implemented firstly by identifying problems in society that need to be addressed as a priority. In this study, a problem of assessment which is not integrated into the teaching and learning process and a lack of strategies to integrate assessment into the teaching and learning process in EMS have been identified. The researcher and the co-researchers aimed at changing how EMS was taught by integrating teaching, learning and assessment, as Mack (2010:9) purported that the CER researcher aims not only to understand or to give an account of behaviour in societies, but to change these behaviours. Moreover, Esau (2013:3) postulated that the teacher and students are not only concerned with changing and improving their practice in the classroom, but also with changing unequal relations in

the wider social context. In support Watson and Watson (2011:66) wrote that research becomes a transformative endeavour and emancipatory consciousness. The study identified the problem that needed to be addressed; secondly, it changed behaviours; thirdly, it changed the unequal relations of the co-researchers; and, fourthly, it transformed and emancipated the co-researchers. The researcher ensured that co-researchers had equal status in the project in order to change unequal relations, even when the co-researchers went to their societies to face the real world.

2.2.1.4 Nature of reality

According to Esau (2013:4), knowledge is looked at critically in terms of how it is socially constructed and how it, in turn, shapes and, hopefully, changes reality. Stahl (2006:92) argued that CER researchers must not become the gatekeepers of truth and information. Furthermore, Stahl (2006:92) concluded that CER is based on a desire to promote emancipation rather than work in systemic imperatives. In congruence with Esau (2013:4) and Stahl (2006:92), Nkoane (2013:396) argued that dominant discourse and power are not the property of powerful supervisors (leaders), as discursive formations and practices have purported them to be. In addition, Nkoane (2013:396) claimed CER aims at countering dominant discourses by levelling the playing fields for those assumed to be without power; voices, skills and knowledge must be able to take centre-stage. I concur with Esau (2013:4), Nkoane (2013:396) and Stahl (2006:92), that in CER knowledge is socially constructed, critical researchers are not gatekeepers of truth and information, those assumed to be without power take centre stage, and emancipation is promoted.

Aasgaard et al. (2012:3) maintained that CER is a democratic process and emphasises mutual understanding and communicative competence; critical reflection and emancipation are key elements of action research. White (2015:413) elaborated that CER takes the social justice or social reconstructionist pillar and apply it as praxis in education. Watson and Watson (2011:66) postulated that CER can be understood best in the context of the empowerment of individuals, and inquiry that aspires to the name ‘critical’, must be connected to an attempt to confront the injustice of a particular society or public sphere within the society. In CER,

democratic processes are followed, mutual understanding exists, critical reflection and emancipation take place, social injustices are confronted, and individuals are empowered.

Chalmers (2006:15) defined CER as the process of being set free from constraints or deliverance from physical, intellectual, moral, or spiritual fetters. Nelson (2013:186) asserted that CER aims not only at technical and practical improvement and the co-researchers' better understanding, along with transformation and change within the existing boundaries and conditions, but also at changing the system itself or those conditions which impede desired improvement in the system or organisation. In congruence, Darder (2015:69) contended that essential to the emancipatory process is a deep concern for the development of a democratic voice, participation and solidarity within the context of institutions and the larger society. Watson and Watson (2011:66) asserted that emancipation is key to implementing social justice methodologies, seeking to empower individuals and transform the systems of society, and their policies and processes that replicate oppression and injustice. Torres and Moares (2006:358) stated that teacher co-researchers in emancipatory action research start feeling empowered as education professionals. I agree with Darder (2015:69), Nelson (2013:186), Watson and Watson (2011:66), Chalmers (2006:15) and Torres and Moares (2006:358) that CER sets co-researchers free from any form of constraints, improves the understanding of the co-researchers, improves the functioning of the system, and empowers the co-researchers.

2.2.1.5 Nature of knowledge

Lucas (2012:2) stated that CER is one of the areas of knowledge in the CER approach, while Gilani-Wiliams (2014:17) wrote that critical knowledge is conceptualised as knowledge that enables human beings to emancipate themselves from forms of domination through self-reflection and takes psychoanalysis as the paradigm of critical knowledge. In CER, knowledge is emancipatory because it is generated and expressed in terms of authority, control and freeing (Friesen, 2012:2). The broad research objective of CER is to create emancipation and social justice (Nkoane, 2012:99 & Noel, 2016:2). I argue that knowledge in CER is built around emancipation and bringing social justice. Furthermore, Nkoane (2012:100) asserted

that when research located within CER is conducted, a researcher must take into account subjectivities that co-researchers bring into the discursive act, while recognising that the discourse affects the individual engaging in it. I concur with Nkoane (2012100) that the subjectivities of the co-researchers must be taken into account because they might influence the discussions. In support, Mahlomaholo (2009:34) claimed that CER's engaging nature allows for a deeper meaning and for multiple perspectives to be considered and Hlalele (2014:104) contended that CER will help the co-researchers to better understand the challenges they face. The co-researchers will understand their challenges and use multiple perspectives to address the problem. In this study, the co-researchers were aware of a problem of assessment which was not integrated into the teaching and learning process, and the lack of strategies to integrate assessment into the teaching and learning process in EMS. The co-researchers were engaged in deeper discussions to develop the strategy to integrate assessment into the teaching and learning process in EMS.

Aasgaard et al. (2012:5) claimed that CER interest requires an in-depth interpretation achievable only through an analysis of self-formative processes leading to a transformed consciousness. In addition, Nelson (2013:186) emphasised that the co-researchers are emancipated from the dictates of tradition, self-deception and coercion. Moreover, Marton (2014:24) argued that CER focuses on open-ended questions and requires an advanced-level of participation, commitment, as well as self-reflection. Whilst, Noel (2016:2) argued that knowledge of conducting research by using an CER focus would help designers to mitigate the impact of their own power or privilege on the work that they do. I concur with Marton (2014:24) that CER requires a high level of participation, commitment and self-reflection. I also concur with Noel (2016:2) that the researcher must have knowledge of conducting CER in order to mitigate his or her power or privilege role. I argue that in CER, knowledge will be constructed well if the researcher and the co-researchers are equal. Furthermore, the in-depth interpretations which should take place, as stated by Aasgaard et al. (2012:5), will only take place when the researcher knows how to mitigate his or her power or privilege role.

2.2.1.6 Knowledge generation or construction

According to Mahlomaholo (2009:225), CER sees the co-researchers as other human beings, as equal co-researchers like the researcher. On the other hand, Noel (2016:4) wrote that CER has multiple realities and knowledge is not only created by the elite researcher or dominant group, because people from the periphery would be allowed equal opportunity in playing an active role in creating knowledge, research and design, and not just be placed in a more passive role of receiving, in the form of help or aid, knowledge that they have not played a role in creating. Consequently, Barnes and Mercer (2004:121) agreed that CER reverses the traditional researcher-co-researchers hierarchy or social relations of research production, and challenges the material relations of research production, accepting a plurality of research methodologies or methods. Knowledge was constructed in line with assertions of Mahlomaholo (2009:225), Noel (2016:4) and Barnes and Mercer (2004:121), who stated that knowledge is not produced exclusively by the researcher, but that people from the periphery will play an active role in knowledge creation, the co-researchers are equal to the researcher, and there is no hierarchy of the researcher- co-researchers in knowledge construction.

Nkoane (2012: 99) emphasised that the empowering and transformative agenda of CER affords the co-researchers an opportunity to own the problem and process, to provide solution(s) to the challenge, and to provide the conditions that will make the solutions work. I concur with Nkoane (2012:99) that co-researchers must own the problem, provide solutions, and provide the conditions under which the solutions will work. Also, Frydaki and Katsarou (2013:1) claimed that CER aims at intervening in the cultural, social and historical processes of everyday life to reconstruct not only practice and practitioner, but also the practice setting. The co-researchers recommended how the practice setting should be in order for the solution to the problem to work. Accordingly, Friesen (2012:2) claimed that CER seeks to generate alternative knowledge forms, specifically, those shaped by social interests which are democratic and egalitarian. So, Brown and Strega (2005:7) argued that research by the marginalised attempts to foster oppositional discourses, ways of talking about research, and research processes that explicitly and implicitly challenge relations of domination and subordination. When the co-researchers and the researcher work

together, it will help the co-researchers to identify possible fears and thus implement measures to avoid them as part of altering their situation (Hlalele, 2014:104). Also, Marton (2014:25) asserted that the highest level of empowerment is associated with CER and it refers to constructing and using one's own knowledge for one's own benefit. Hlalele (2014:104), Friesen (2012:2), Marton (2014:25) and Brown and Strega (2005:7) emphasised the importance of equal status in the research process and using co-researchers' knowledge for their own benefit.

I concur with Noel (2016:4), Hlalele (2014104:), Marton (2014:125), Frydaki and Katsarou (2013:1), Friesen (2012:2), Nkoane (2012:99), Mahlomaholo (2009:225), Brown and Strega (2005:7) and Barnes and Mercer (2004:121) that in order to generate or construct knowledge in CER the researcher must assume the status of an equal with the co-researchers, and the co-researchers and the researcher must own the problem and the process. In this study, the co-researchers and the researcher worked together as equals to work out the solution.

2.2.1.7 The role of the researcher

Noel (2016:4) emphasised that for a design research intervention to be emancipatory, the researcher must consider how to ensure that the voice of the research collaborator is heard, despite the researcher's privilege. In support, Mahlomaholo (2009:226), stated that the role of the researcher within the CER context is that of engaging the co-researchers in the research project with the aim of empowering, transforming, and liberating them from not-so-useful practices and thoughts, and consequently meeting the needs of a real-life situation. Consequently, Aasgaard et al. (2012:3) advised that the researcher must encourage discussion with the co-researchers of the underlying assumptions and values, hence inviting the practitioners to critically reflect on their practice. I agree with Noel (2016:4) that the researcher must ensure that the opinions of the co-researchers is received, with Aasgaard et al. (2012:3) that the researcher must encourage the discussions, and with Mahlomaholo (2009:226) that the researcher in the context of CER must empower, transform and liberate the co-researchers in order to meet the needs of real-life situations. I agree with Aasgaard et al. (2012:3) that the researcher must

ensure that the discussions with the co-researchers help the co-researchers to reflect critically on their practice.

Aasgaard et al. (2012:3) discussed the role of the researcher as, firstly, engaging in a dialogue that opens up established assumptions, is open to the plurality of meanings and interpretations, and questions the validity of single claims to truth; and, secondly, understanding the validity claims of the co-researchers in the sense of making clear the implicit reasons that enable co-researchers to take the positions that they take. Behar-Horenstein and Feng (2015:46) maintained that making the researcher's stance transparent and describing their position can assist the reader in deciding how the researcher's perspective and bias may, if at all, impact his or her interpretations of the research inquiry. The researcher must ensure that there is a dialogue among the co-researchers and validate the claims made by co-researchers. The researcher should not be biased when interpreting the results.

The assertion made by Myende (2014:30) is that CER is concerned with how one creates an equal society in which there are open debates with all voices prioritised. The researcher must ensure that there are open debates during the discussions and all the views of the co-researchers should be considered. Moreover, Aasgaard et al. (2012:3) warned the researcher not to take for granted what the other co-researchers do, and to view his or her perceptions as a possible mirror to encourage reflection among the co-researchers because the ideal position of the researcher is that, as an interpreter, he or she enters the research situation without the intention of change, and is only interested in obtaining an understanding of the meanings of the actual situation through the judgment of validity claims. I agree with Myende (2014:30) and Aasgaard et al. (2012:3) that the researcher should not influence the views of the co-researchers and dominate discussions. The discussions must be open to differing views and the researcher's stance must be transparent and not be used to conclude discussions. The researcher and the co-researchers equally share the responsibility (Nelson, 2013:186). In congruence with Nelson (2013:186), Moloi (2014:29) stated that the researcher and co-researchers are key to research activities and processes, rather than isolated from these, so they are research partners and work collaboratively. The next section discusses the connection amongst the researcher and the co-researchers.

2.2.1.8 The relationship between the researcher and the co-researchers

Aasgaard et al. (2012:4) posited that the relationship between the researcher and the co-researchers is crucial for the success of action research as an emancipation activity. Furthermore, Aasgaard et al. (2012:2) posited that participation must be based on democracy and the co-researchers' involvement as equal members in order to realise the emancipatory intention. In addition, Boog (2003:427) emphasised that the main characteristic is the communicative interaction between the researchers and the co-researchers; action researchers should be experienced in handling this relationship as a minimum success factor, over and above their skills as adequate social researchers. I concur with Aasgaard et al. (2012:2,4) and Boog (2003:427) that the rapport among the researcher and the co-researchers is critical, that communicative interaction should prevail, and that the research will be successful if the researcher is able to handle the relationship with the co-researchers. I further concur with Boog (2003:427) and Aasgaard et al. (2012:4) that the relationships between the co-researchers are crucial, and how they are managed, is also crucial for the success of the research project. During my interaction with the co-researchers, I treated them as equals to achieve emancipatory intention and had communicative interactions with the co-researchers.

The relationship between the researcher and co-researchers is collaborative (Nelson, 2013:186). Furthermore, Nelson (2013:187) defined collaboration in CER as that everyone's view is taken as a contribution to understanding the situation. In congruence, Aasgaard et al. (2012:4) contended that participation can only be deemed democratic if the collaboration has the potential for emancipation; otherwise it is only symbolic. In addition, Masters (1995:7-8) argued that power in emancipatory action research resides wholly within the group, not with the facilitator and not with the individuals within the group. I worked collaboratively with the co-researchers and ensured that all co-researchers' views were considered within the context of the study and ensured that there was no domination by a group or individuals from the co-researchers.

Boog (2003:435) postulated that co-researchers must be engaged in their role as co-researchers and be able to co-control the research process and participate in the

decisions. In support, Aasgaard et al. (2012:4) wrote that involvement of the co-researchers from the beginning of the process is a prerequisite for achieving an equal balance of power between co-researchers and researchers. Thus, Myende (2014:30) reported that the co-researchers treated him as an equal when they trusted him and regarded him as part of the community. To be well accepted and treated as an equal by co-researchers I spent more time before and after collaborative meetings. The co-researchers had an equal say when decisions were taken. The co-researchers collectively drew a data collection programme.

Myende (2014:21) established that to create a relationship with the co-researchers, he needed to be trusted by all the research co-researchers, and decided to spend three months in the field and become part of the community by taking on some of the workload in the research school. Accordingly, Moleko (2014:21) expands on Myende's (2014:21) claim, by stating that through CER, the co-researchers and the researcher can bond and be closer to each other, tapping into each other's experiences and embracing them as they realise that they are valuable in making the research project successful. By spending some time outside the collaborative interactions with the co-researchers, the researcher is allowed to have a bond with the co-researchers, which made them feel that their contribution was valuable in the study. In order to bond with the co-researchers, I helped them with my expertise in their work and study-related issues.

Despite the good intentions of using the CER theoretical framework because it suits the aims and objectives of the study, CER's formats, nature of reality, nature of knowledge, knowledge generation or construction, the role of the researcher, and the relationship between the researcher and the co-researchers which are clearly discussed, there are arguments against the use of CER.

2.2.1.9 Arguments against the use of CER

According to Noel (2016:4), CER is not without its criticisms. Further, Noel (2016:4-5) identified the criticisms against CER as follows: the influence and honour of the researcher; the marginalised assessment may be anti-emancipatory; and CER can only be selectively applied. I argue that these criticisms can be mitigated if the

researcher sticks to research ethics. The researcher should treat all the co-researchers as his or her equals. The first meeting of co-researchers must ensure that the co-researchers understand their roles and status in the team to achieve the emancipatory objective.

Aasgaard et al. (2012:4), Sandretto (2008:4), as well as Oliver (2002:5), supported the argument of (Noel, 2016:4) about the ability of CER to achieve its emancipatory objective. They argued that the research paradigm might appear as emancipatory, while no real emancipation takes place. I concur with Noel (2016:4), Aasgaard et al. (2012:4), Sandretto (2008:4) and Oliver (2002:5) that achievement of the emancipation objective cannot be clearly determined. The liberating goal of action research is also challenged by Torres and Moraes (2006:352), who claimed that any emancipatory perspective presupposes values which cannot be agreed upon universally or permanently.

Sandretto (2008:4) claimed that some CER projects have been critiqued for their lack of attention to social justice issues and some current incarnations of action research are merely masquerading as their more emancipatory cousins, and are actually focused on providing evidence to support policy directives, or to encourage compliance with government programmes. I argue that when research ethics and main aspects of CER are followed, social justice will be achieved and the research will not merely back policy dictates to encourage submission with regime programmes. Though, Oliver (2002:5) argued that there is a problem with PAR involving co-researchers because the strategies attempt to deal with the problem of emancipation by sharing or attempting to share responsibility and, indeed, blame with the co-researchers. I agree that the responsibility of dealing with the problem must be shared by the researcher and the co-researchers because in CER, the researcher and the co-researchers work collaboratively, but the co-researchers should not blame one another at any stage of the research project.

Aasgaard et al. (2012:4) agreed with Noel (2016:4) that the researcher can normally be seen as holding the authority because of a familiarity with the study. Furthermore, Aasgaard et al. (2012:4) posited that the researcher can hold power because of the researcher’s membership in the intelligentsia and by being in control of a research

agenda; consequently, this may contribute to the co-researchers feeling threatened, thus making it difficult to establish the precondition for the process of interpretation. I agree with Aasgaard et al. (2012:4) that the co-researchers might feel threatened by the researcher's knowledge because the researcher has more knowledge about the study. Accordingly, Marton (2014:24) claimed that researchers often choose topics that are important to them and make recommendations to organisations and policymakers that favour their own well-being. I agree with Marton (2014:24) that the researchers choose topics which are important to them, but I disagree that researchers make recommendations to policymakers that favour themselves. Moreover, Dadusc (2014:52) argued that, despite their importance in paving the way for reflexive research practices, many of the research projects using CER aim at including the powerless and e voiceless in a participatory process of empowerment; however, by claiming to give power to the powerless, and by discovering the authenticity and truth of silenced voices, these approaches still use a language and a discourse that tend to position the researcher as the liberator or the emancipatory force of oppressed co-researchers. It is significant for the researcher to adhere to research ethics in order to mitigate the threat to co-researchers identified by Aasgaard et al. (2012:4), Marton (2014:24) and Dadusc (2014:52).

Oliver (2002:4) raised that there is a methodological problem of researching of collective as opposed to individual experience because most of the research techniques involve one researcher and one co-researcher interacting with each other, the nature of the interaction being shaped by the research paradigm within which the researcher is operating. I disagree with Oliver (2002:4) that all research paradigms should always be one-on-one, because focus groups have been used in other research paradigms. I also argue that in my previous study (Msimanga, 2014), some co-researchers were not comfortable with one-on-one interaction. I contend that adherence to research ethics helped to mitigate the arguments against the use of CER. Despite these arguments against the use of CER as the theoretical framework, I still contend that CER was the best suited theoretical framework for this study.

2.2.1.10 Preference of CER above other theoretical frameworks

Brooke (2013:430) presented research traditions and methods as those pertaining to a scientific model or positivist approach, preferring a quantitative research methodology and those of the naturalistic or interpretative approach, which predominantly applies qualitative techniques for study. In addition, (Aliyu, Bello, Kasim & Martin, 2014:84) stated that the noteworthy philosophies distinct to positivism are interpretivism and constructionism. Though, Barnes and Mercer (2004:119), Dieronitou (2014:2) and Mack (2010:5) presented the three major competing paradigms as positivism, critical (emancipatory) theory and interpretivism. Congruently, Schroeder (2014:1) identified the research paradigms as positivism, post-positivism, interpretivism, CER and indigenous theory. In the next paragraphs, positivist, interpretivist and CER will be discussed as the main research paradigms. Schroeder (2014:1) discussed positivism as a research paradigm which is external to the human mind, and where knowledge and relation of knower to known, investigator and investigated, are independent of each other, a scientific method is used and data is objective. Interpretivism as a research paradigm where knowledge is socially constructed, is a reflection of understanding from interaction of investigator and subject, subjective and objective research methods are used and data are qualitative. CER is a research paradigm that is factual and outside to the human thoughts, uncovers narrow cases of entire authority relations and empowers the troubled, subjective inquiry based on ideology and values methods is used and data are both quantitative and qualitative.

Dieronitou (2014:6) reported that it is commonly asserted that the positivist approach to research is deductive in nature in that it tests a priori a hypothesis or theory. On the other hand, Mlitwa (2011:48) stated that the positivist research tradition prioritises natural science research methods and assumes that natural science phenomena, social science phenomena and related investigations are sufficiently similar. So, Scotland (2012:10) argued that the positivist epistemology is one of objectivism and goes forth into the world impartially, discovering absolute knowledge about an objective reality. In congruence, Tronvoll, Brown, Gremlar and Edvardsson (2011:568) wrote that positivistic studies tend to be driven by theory and assume that reality is objectively given. According to De Lisle (2011:88), positivism reigned

supreme as its adherents tried to elevate this approach to the uppermost epistemic position, such that doing quantitative research became the gold standard of education research. In congruence, Elizondo et al. (2013:424) postulated that in relation to the applied method by each one of the paradigms, the positivist is focused on the quantitative method. In congruence, Hall (2012:2) contended that positivism is closely identified with quantitative research. Wright and Losekoot (2012:417) concurred with De Lisle (2011:88), Elizondo et al. (2013:424) and Hall (2012:2) that positivistic research emphasises quantification in the collection and analysis of data. Furthermore, Wright and Losekoot (2012:417) also concurred with Dieronitou (2014:6) that positivistic research has a deductive relationship between theory and research. Also, Wright and Losekoot (2012:417) agreed with Tronvoll et al. (2011:568) and Scotland (2012:10) that positivistic research has an objectivist conception of reality. Based on the assertions and arguments of Dieronitou (2014:6), Elizondo et al. (2013:424), Scotland (2012:10), Wright and Losekoot (2012:417), Hall (2012:2), Tronvoll et al. (2011:568) and Lisle (2011:88), I conclude that the positivist approach to research is logical in nature, it is impartial, it assumes that reality is objectively given and it is based on quantitative research.

The central of positivism has placed great prominence on direct interpretations (Dieronitou, 2014:5). Furthermore, Dieronitou (2014:6) states that from a methodological point of view, positivism is inclined to the side of experimentation. On the other hand, Tronvoll et al. (2011:568) argued that research is positivistic if it uses formal propositions, quantifiable measures of variables, hypotheses testing and inferences about a phenomenon drawn from a representative sample of the stated population and the positivistic paradigm focuses on the codification of data about the phenomena studied and a presentation of an underlying, generalisable pattern. Whilst, Mack (2010:10) pointed out that positivists criticise critical research for their considered dogmatic outline and their failure to remain impartial unbiased researchers. I concur with Mack (2010:10) that the critical researcher is not always an objective neutral researcher because the researcher's views might swing the research results towards a particular conclusion. I agree with Dieronitou (2014:6) that positivistic research emphasises direct observation and experimentation. I also agree with Tronvoll et al. (2011:568) that positivistic research is quantifiable, tests hypothesis and uses sample data from a representative section of the populace. This

study intended to emancipate and empower the co-researchers; therefore, the preceding discussions indicates that a positivistic approach was not relevant for this study.

The study by Aliyu et al. (2014:81) argued that positivism could be regarded as a research strategy and approach that is rooted on the ontological principle and doctrine that truth and reality are free and independent of the viewer and observer. The preceding argument by Aliyu et al. (2014:81) clearly indicated that in positivist research, the truth and reality are independent from the researcher, while Hlalele (2014:103) argued that a conventional and positivistic paradigm places the powerful researcher at the centre of the research and Noel (2016:2) claimed that positivist research is often dissociated from the people researched. In congruence with Noel (2016:2), Varga-Dobai (2012:2) stated that impartiality also implies that the researcher is able to detach him- or herself from the people researched he or she perceived in the process of research; the questions of the researcher have confined and established meanings and he or she can deliver them in a unbiased way without manipulating his or her contributors. In support, Scotland (2012:10) stated that the investigator and the studied are autonomous beings. According to Dieronitou (2014:6), in positivist research there is the knower and the known in a subject-object relationship to the subject matter. I concur with Hlalele (2014:103) that in positivist research, the researcher is at the centre of research, with Noel (2016:2) that the researcher is distanced from the subject and with Dieronitou (2014:6) that there is a subject-object relationship. The assertions and arguments made by some authors (Dieronitou, 2014:6; Hlalele, 2014:103; Noel, 2016:2) made the positivistic research approach not relevant for this study.

Aliyu et al. (2014:90) supported the notion that positivism, along with non-positivism, as an ontological viewpoint is incompatible and opposing. The post-positivistic model undertakes that investigation should not be value-free and impartial, but rather be value-laden, particular and inter-subjective, even value-driven within the critical model. Furthermore, Aliyu et al. (2014:90) posit that there is a place for the voice and role of the researcher and co-researchers in the study because humans are seen as central to the research process, rather than isolated from it. Humans are not controlled and studied, but are contributors in the practise, even researching and

advancing from the study. I concur with the stance of Aliyu et al. (2014:90) on post-positivism that research should not be value-free and balanced, but rather be particular and inter-subjective; the opinion of the investigator and the co-researchers must be present and the co-researchers and the researcher should be part of the research process. In addition, McGregor and Murnane (2010:5-6) assert that within this paradigm, research should happen in communities and in the daily lives of people in natural, rather than experimental settings. I concur with McGregor and Murnane (2010:5-6) that research should happen in normal situations, rather than in investigational situations – especially a research on the views of human beings. On the other hand, Kim and Merriam (2011:364) state that different researchers assume different epistemological perspectives and a positivist or post-positivist perspective views reality as stable and measurable, and thus, seeks to predict future behaviours. The post-positivist or non-positivist approaches are discussed as interpretivism and critical emancipation or CER.

According to Scotland (2012:12), interpretivism aims to bring into consciousness hidden social forces and structures, and the interpretive methodology is directed at understanding phenomena from an individual's perspective, investigating interaction among individuals, as well as the historical and cultural contexts which people inhabit. Whilst in Mlitwa (2011:48) it was stated that the interpretivism rejects the positivism claim that objective knowledge is achievable. But, Goldkuhl (2012:5) stated that the core idea of interpretivism is to already work with these subjective meanings there in the social world, i.e. to acknowledge their existence, to reconstruct them, to understand them, to avoid distorting them, and to use them as building blocks in theorising. I contend that in the interpretivism approach, there is interaction of the researcher and the co-researchers (Scotland, 2012:12), and subjective meanings in the social world exist and must be reconstructed to use as building blocks in theorising (Goldkuhl, 2012:5). Furthermore, Goldkuhl (2012:4) classified forms of interpretivism as conservative, constructivist, critical and deconstructionist. De Lisle (2011:88) stated that in the 1980s, what has been called The Golden Age of qualitative research, the constructivist-interpretive paradigm had become firmly entrenched within several fields, including that of education. On the other hand, Mack (2010:7) stated that the interpretivism paradigm is also sometimes referred to as constructivism because it emphasises the ability of the individual to construct

meaning. Therefore, De Lisle (2011:88) and Mack (2010:7) indicate that interpretivism can be referred to as “constructivism”. The next discussions focus on the constructivism approach.

Elizondo et al. (2013:424) remarked that the constructivism and the CER use mainly qualitative methodologies. In congruence, Hall (2012:2) asserted that constructivism is closely identified with qualitative research. In support, Dieronitou (2014:7) argued that the advent of constructivism as a legitimate paradigm for conducting qualitative research resulted as a reaction to quantitative methodologists’ efforts toward reconciliation of positivism and post-positivism. Based on the claims and arguments of Dieronitou (2014:7), Elizondo et al. (2013:424) and Hall (2012:2), I conclude that constructivism is identified with qualitative research.

Kim and Merriam (2011:364) states that a constructivist approach assumes there is no single, objective reality, because reality for an individual is constructed by his or her interpretations. Then, according to Dieronitou (2014:7), research based on constructivism aligns to an emphasis of inductive logic by means of arguing from the particular to the general; from a methodological point of view, it proceeds hermeneutically by depicting individual construction as accurately as possible in order to compare and contrast it dialectically with the aim of reaching and generating a substantial consensus. Whereas, Aliyu et al. (2014:84) aver that constructionism or social constructivism holds the view that reality or truth is constructed or formed by the observer or researcher; however, in resistance to earlier radical constructivism, it opines that reality or truth is a combined construction. Moreover, Kim and Merriam (2011:364) argued that from a constructivist perspective, questions are asked about meaning and understanding from the co-researchers’ point of view. In a constructivist approach, individuals construct reality based on their interpretations (Kim & Merriam, 2011:364), there is inductive logic of arguing from the particular to the general (Dieronitou, 2014:7) and reality is constructed by the researcher (Aliyu et al., 2014:84). In this study, reality was constructed by the researcher and the co-researchers, based on the experiences of the co-researchers.

According to Barnes and Mercer (2004:20) the emergence of a CER was a response to the perceived shortcomings of the positivist and interpretative paradigms in

contesting social exclusion. The CER intends to address social inclusion. Moreover, Elizondo et al. (2013:424) postulated that the approach of the CER is the abolition of social injustice; justice is shown as necessary and indispensable, the emancipatory paradigm looks for social change, focuses on freedom and release, both in the process of research and in transformation of the society itself. CER accomplishes these with three characteristics: by including the experiences of the researcher in the research questions, the objectives of interest and the strategies for changing its condition. I agree with Elizondo et al. (2013:424) that research must abolish social injustices, focus on social change, include the experiences of the researcher in the research question, determine the objectives of interest and develop strategies for changing the conditions. In addition, Kim and Merriam (2011:366) posit that CER is more than constructivism or interpretivism, and a critical stance has the goal of not only understanding a phenomenon, but analysing the power dynamics of a situation and by critiquing the status quo; it is hoped that people can become empowered in order to transform their situation. I concur with Kim and Merriam (2011:366) that CER differs from constructivism or interpretivism because it has the goal of addressing power dynamics and empowering the co-researchers. In this study, power dynamics were addressed and co-researchers were empowered.

I chose CER because CER is a form of PAR that recognises the authority disparity in research and strive to empower the co-researchers of societal investigation (Noel, 2016:2), and the research that seeks to present collective research ownership (Hlalele, 2014:103). In addition, Nkoane (2012:102) asserted that the theoretical foundations of CER require that power should be defused or diluted as a starting point to negotiate equal status with co-researchers. Furthermore, Nkoane (2012:102) asserted that power is the mode of organising society and it is in this context of the exercise of power, emerging from dominance over others, that excesses and surplus power ultimately produce oppression and exclusion. Also, the choice was informed by CER's objective as discussed by Hlalele (2014:104) of engaging the marginalised, so that their voices can be heard and respected, and further, to advance the agenda of human emancipation, regardless of status, and strive for the attainment of peace, freedom, hope, social justice and equity in all its forms. I chose the CER because I intended to transform by means of altering the status quo, so that once co-researchers became cognisant of how troubled they were, they can turn to

change the world, as Dieronitou (2014:6) stated the role of CER. The preceding sections discussed the CER as the theoretical framework for this study and why it had been chosen as the framework of the study. The next section looks into the operational concepts used in this study.

2.3 DEFINITION AND DISCUSSION OF OPERATIONAL CONCEPTS

Operational concepts used in this study, are comprehensively defined and discussed below in order to give an understanding of the concepts within the focus of the study.

2.3.1 Teaching and learning

According to Tazi and Zreik (2008:49), teaching and learning are causally tightly bound activities and in order to understand what is learning, a closer look at what precisely the components of teaching and their underlying principles are, is needed. In support of this, Mlitwa (2011:8) stated that teaching cannot be understood independently of learning because teaching is so intertwined with the phenomena of meaning-making, knowledge creation, knowledge development and knowledge exchange. In addition, Gravett (2001:17) stated that the main purpose of teaching is to assist people to learn, while Jadama (2014:22) asserted that the goal of teaching is to assist students in developing intellectual resources to enable them to participate in, not merely to know about, the major domains of human thought and enquiry. In congruence, Sebate (2011:18) defined teaching as an attempt by an elder or more knowledgeable person to help a younger or less knowledgeable person to gain knowledge. In addition, Nieuwoudt (2002:7) explained teaching as a purposeful and complex educational act, undertaken intentionally by one person into a live and guided interaction with another person in order for the latter to acquire knowledge, skills, attitudes and values within a specific context. On the other hand, Epstein (2007:5) defined teaching as the knowledge, beliefs, attitudes, behaviours and skills teachers employ in their work with learners. In Killen (2015:35), teaching is thought to be a process of helping learners to find, remember, understand, organise, apply and evaluate information, and doing creative things with information. Based on the assertions by a few authors, teaching is a process whereby the teacher, who is knowledgeable about the subject content, is guiding learners to attain skills and

knowledge that learners will use in their future lives (Epstein, 2007:5; Jadama, 2014:22; Killen, 2015:35; Nieuwoudt, 2002:7; Sebate, 2011:18). I concur with Mlitwa (2011:8), Tazi and Zreik (2008:49) and Gravett, 2001:17) that teaching and learning are intertwined and, therefore, when teaching is discussed, the information is applicable to learning, and when learning is discussed, the information is applicable to teaching.

According to Ertmer and Newby (2013:43), the way learning is defined and what is believed about the way learning occurs, have important implications for situations in which change is facilitated in what people know and/or do. Furthermore, Ertmer and Newby (2013:45) posited that learning is an enduring change in behaviour, or in the capacity to behave in a given fashion, which results from practice or other forms of experience, while Naumes (2013:166) stated that learning is the knowledge that students will have at the end of the class discussion that they did not have before. On the other hand, Van der Merwe (2011:44) described learning as an ongoing process where learners actively process information, linking it to their existing knowledge. In congruence with Van der Merwe (2011:44), Sebate (2011:19) described learning as a lifetime route of knowledge that changes a person. I concur with Ertmer and Newby (2013:45) that learning is a transformation in conduct, with Naumes (2013:166) that learning is the knowledge that students will have which they did not have before, with Van der Merwe (2011:44) that learning is an ongoing process and learners must be vigorously participate in their learning, and with Sebate (2011:19) that learning is a lifetime route that transforms a person. Based on assertions by Ertmer and Newby (2013:45), Naumes (2013:166), Van der Merwe (2011:44) and Sebate (2011:19), I conclude that learning is an ongoing process in which the learner is actively involved in gaining knowledge and bringing about change in his or her behaviour. In this study, learning should be understood as a process whereby learners are helped by their teacher to acquire skills and knowledge that will change learners' behaviour and shape their future lives; learners play an active part in the process. In agreement with the preceding discussions, Ambrose, Bridges, Di Pietro, Lovett and Norman (2010:3) identified three critical components of learning, namely learning is a process, not a product, which can be inferred that it has occurred from students' products or performances; learning

involves change in knowledge, beliefs, behaviours or attitudes; and learning is not something done to students, but rather something students themselves do.

Goodwin and Webb (2014:4) highlighted different definitions of learning based on Socrates, that students build and discover knowledge; Jean Piaget, that students' understandings change as they acquire new knowledge; John Dewey, that learning is grounded in experience; Lev Vygotsky, that learning is a social event and students should be both supported and challenged; and Jerome Bruner, that learning is active. From the different definitions of learning, as postulated by Goodwin and Webb (2014;4) I conclude that learning is when learners are supported and challenged when they actively build and discover knowledge in order to bring about change in themselves. I assert that assessment must be used to help learners build and discover knowledge, and to determine whether learners' understanding has changed after teaching has taken place. Teachers should base their teaching on learners' experiences, and assessment activities used, should be within the context of the learners' environment. Learners should be encouraged to consult different people, from their families to the community members, in order to respond to assessment activities; teachers should guide learners to acquire knowledge; learners should be given activities to work on their own and they should actively participate in their learning by completing assessment tasks.

Naumes (2013:166) purported that learning undergoes different stages, as discussed by Bloom (1956) and Fink (2003): according to Bloom (1956), as knowledge, comprehension, application, analysis, synthesis, evaluation and metacognition (Naumes, 2013:166); and according to Fink (2003), learning also takes place through foundational knowledge, application, integration, human dimension, caring and learn how to learn (Naumes, 2013:166). I concur with (Naumes, 2013:166) on the use of stages of learning to get an understanding of what is learning. I believe that learners should progress through different stages in order for them to learn in a developmental way. Learners should be helped to acquire basic skills before they progress to high skills, and assessment activities should start from assessing basic knowledge and skills, and progress to high knowledge and skills. Moreover, Phillips, McNaught and Kennedy (2010:2) asserted that learning has three components: the environment which facilitates learning

(learning environment), the activities which are part of learning (learning processes) and the knowledge, behaviours, skills or understanding which can be demonstrated (learning outcomes); the student and the teacher interact with these three components. I also concur with Phillips et al. (2010:2) that the teacher and learners interact in the learning environment, throughout the learning route in order to achieve the learning outcomes. Teaching and learning in this study should be understood within the context of the discussions in this section.

2.3.2 Effective teaching and learning

Ambrose et al. (2010:1) asserted that any conversation about effective teaching should begin with a consideration of how students learn. In support, Nieuwoudt (2002:8) purported that teaching is effective to the extent it enables the learner to learn what has to be learnt as well as how to learn it, while, Coe et al. (2014:2) defined effective teaching as that which leads to improved student achievement, using outcomes that matter to their future success. Furthermore, Coe et al. (2014:9) defined effective teaching as that which leads to high achievement by students in valued outcomes, other things being equal. I support the view of Coe et al. (2014:2) that effective teaching is teaching that leads to improvement in achievement of learners, as well as that of Ambrose et al. (2010:1) and Nieuwoudt (2002:2) that how learners learn, is very important for effective teaching. Although, Kivunja (2014:41) claimed that effective teaching in this new paradigm requires a shift from teaching basic to applied skills; from teaching facts and principles to investigative questions and problematising; from mere theory to practice, applying the relevant theory or theories; and from working with a fixed or set curriculum to working on authentic real-life projects. I disagree with Kivunja (2014:41) that effective teaching involves a move from teaching rudimentary to useful skills. I contend learners should master basic skills before they can progress to applied skills. Learners should master theories before they can apply them. Teaching can be effective, even if learners are not working on real-life projects.

Killion and Hirsh (2011:10) contended that effective teaching occurs best when all education stakeholders, including parents, policymakers, community members and educators, share responsibility for continuous improvement and student

achievement. I concur with Killion and Hirsch (2011:10) that effective teaching occurs best when all stakeholders share responsibility of learners' learning. Whereas, Msimanga (2014:6) argued that learners should be given an opportunity to reflect on what they have learnt to see whether effective learning took place. Further, Msimanga (2014:6) argued that effective learning requires more than making multiple connections of new ideas to old ones and sometimes requires that people radically restructure thinking. I concur with Msimanga (2014:6) that effective learning takes place when learners are afforded a chance to mirror on their learning, and assessment can be used for learners to reflect. I also agree that effective learning requires learners to restructure their thinking, based on acquiring new knowledge.

Ko and Sammons (2013:11) made the following findings about effective teaching in primary schools:

- Good subject knowledge – the teacher must be well-grounded in the content of the subject that he or she teaches.
- Good questioning skills – the teacher must be able to use different types of questions to achieve different objectives of the lessons.
- An emphasis on instruction – the teacher must use different teaching approaches in order to reach different learners.
- A balance of grouping strategies – the teacher must use different grouping strategies based on the activities to be completed.
- Clear objectives – all classroom activities must be well-structured and have clear objectives.
- Good time management – time must be spread on different activities and time must be spent on tasks.
- Appropriate range of teacher assessment techniques – different assessment strategies must be used in order to develop learners in different ways.
- Well-established classroom routines – learners should know what should be done at different times.
- Effective planning –teachers must have lesson plans and plan for all assessment activities.
- Good classroom organisation – the classroom must be organised according to the type of activities which will take place.

- Effective use of other adults in the classroom – if there are classroom assistants, the teacher must give them appropriate tasks to carry out.

Although the findings by Ko and Sammons (2013:11) were based on effective teaching in primary schools, they were useful for this study. Badugela (2012:13) concurred with Ko and Sammons (2013:11) that for teaching to be effective, the teacher must be more knowledgeable than the learner, must command sufficient content knowledge and must know the theoretical purpose of the learning. In congruence with Ko and Sammons (2013:11), Killion and Hirsch (2011:12) stated that effective teaching is possible in every classroom by ensuring every educator experiences substantive professional learning within a culture of collaboration and shared accountability.

I concur with the following findings by Ko and Sammons (2013:11): good subject knowledge by the teacher is important for effective teaching to take place; the teacher must possess good questioning skills in order to achieve the objectives of assessment; the instructional methods used by the teacher are key towards achievement of effective teaching; the groups used in class should be balanced in terms of learners' capabilities; clear objectives must be set for all teaching activities; time must be managed properly; the teacher must use appropriate range assessment techniques in order to cater for individual needs of learners; and the teacher must plan effectively and the classroom must be well-organised. I do not believe the well-established classroom routines and effective use of other adults in the classroom will be applicable in this study. When effective teaching is discussed, the following assertions must be remembered: effectiveness in teaching is an expedition, rather than an end (Killion & Hirsch, 2011:12), and for a judgement about whether teaching is effective, to be seen as trustworthy, it must be checked against the progress being made by students (Coe et al., 2014:20). The discussions above explain how effective teaching and learning should be understood in this study.

2.3.3 Assessment

Wiliam (2013:15) postulated that assessment is the bridge between teaching and learning, and it is only through assessment that it can be discovered whether the instructional activities which students were engaged in, resulted in the intended learning. In addition, Killen (2015:94) stated that assessment becomes an integral part of teaching, rather than something that is tackled at the end thereof. In congruence, Carr (2007:13), Cordiner (2011:1), Goode, Kingston, Grant and Munson (2010:21), Mansell and James (2009:9) and Sebate (2011:19) stated that assessment is an important element of learning and teaching. Furthermore, Cordiner (2011:1) asserted that assessment refers to all processes employed by academic staff to give judgments about the achievement of students in units of study and over a course of study. In congruence with Carr (2007:13), Cordiner (2011:1), Goode et al. (2010:21), Killen (2015:94), Mansell and James (2009:9) and Wiliam (2013:13), Sebate (2011:19-20) stated that assessment is an integral component of teaching and learning as it helps learners succeed by giving them feedback regarding their knowledge, skills and attitudes. Furthermore, Sebate (2011:20) maintained that it is through assessment that learners are motivated about what they are capable of doing, as well as presenting a demonstration of potentialities and progress. I agree with Carr (2007), Cordiner (2011:1), Goode et al. (2010:21), Killen (2015:94), Mansell and James (2009:9), Sebate (2011:19-20) and Wiliam (2013:13) that assessment is the fundamental element of learning and teaching. I also agree with Wiliam (2013:13), that assessment is the link between teaching and learning because assessment can help to determine whether effective teaching and learning have taken place. The aim of this study is to help teachers integrate assessment into teaching and learning in EMS classrooms, i.e. bridge the gap between teaching and learning through assessment.

According to the DBE (2012:4), assessment is a process of collecting, analysing and interpreting information to assist teachers, parents and other stakeholders in making decisions about the progress of learners. In congruence, Mansell and James (2009:9), Reddy, Le Grange, Beets and Lundie (2015), Stiggins (2005), The Cross Sectoral Assessment Working Party (2011:6) and Vermeulen (2002) stated that assessment is the procedure of collecting and understanding evidence to make

conclusions about learner learning, and assessment is used 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. In agreement, Epstein (2007:6) claimed that assessment is a process of determining how children are progressing toward expected outcomes of learning and development. In congruence, the DBE (2012:4) stated that classroom assessment should provide an indication of learner achievement in the most effective and efficient manner by ensuring that adequate evidence of achievement is collected, using various forms of assessment. In addition, Reddy et al. (2015:17) stated that assessment can be seen as the ability to observe learners and perceive what they can do, in the hope of understanding how they learn, in order to support their learning. This assertion by Reddy et al. (2015) explains how assessment is viewed in this study. In this study, assessment is used to make decisions about the progress of learners, as stated by the DBE (2012). I concur with Mansell and James (2009), Epstein (2007), Stiggins (2005), The Cross Sectoral Assessment Working Party (2011) and Vermeulen (2002) that assessment is used to determine where learners are and how they can be assisted to improve their learning.

Wylie and Lyon (2012:1) claimed that assessment can apply to large-scale assessments with associated high stakes, such as those taken under standardised conditions by all students in a particular grade, district or state and can also apply to assessments that contribute to an end-of-unit or end-of-course grade that are controlled at the school or teacher level. In addition, Flórez and Sammons (2013:2) argued that assessment of learning is concerned not just with confirming and verifying what students have learnt, but also with helping students and teachers to understand what the next step in learning should be and how they might be attempted; it helps to shape what lies ahead, rather than simply gauging and recording past achievements. The claim by Wylie and Lyon (2012:1) does not apply to this study because assessment will not relate to large-scale assessments undertaken under standardised conditions at the end of the course grade. This study followed the argument of Flórez and Sammons (2013:2) that assessment will help students and teachers to understand what the next step in learning should be, how the next step in learning might be attempted and shapes what lies ahead to achieve effective learning.

The Cross Sectoral Assessment Working Party (2011:6) states that the purpose of assessment is to improve learning, inform teaching, help students achieve the highest standards they can and provide meaningful reports on students' achievement; it is the crucial link among learning outcomes, content and teaching and learning activities. In support, Mege (2014:20) claimed that the process of teaching and learning can only be effective if assessment is done to determine how much teaching and learning have taken place. The discussions in this paragraph by Mege (2014:20) and The Cross Sectoral Assessment Working Party (2011:6) clearly state how assessment should be understood in this study.

2.3.4 The teaching and learning process

According to Malik, Murtaza and Khan (2011:788), the teaching and learning situation occurs when students and teachers with common interests come together for the purpose of developing an authentic product or a service that is an application of their common interest. In congruence, Phillips et al. (2010:2) stated that learning processes are the ways in which students engage with the learning environment and the learning activities embedded in it. On the other hand, Richards (2013:20) stated that in the more recent proposals, a more dynamic role for assessment is assumed, i.e. assessment for learning and in assessment for learning, teaching and assessment inform each other at every stage of the teaching and learning process. I concur with Malik et al. (2011:788) that the teaching and learning process is any situation where learners and teachers interact with a common interest, and with Phillips et al. (2010:2) that the learning process is the way in which students interact with learning activities in the learning environment. I also concur with Richards (2013:20) that the teaching and learning process is informed by assessment and the teaching and learning process will be based on teaching and assessing.

Schleicher (2016:19) concluded that pedagogical knowledge is important in the teaching and learning process. Furthermore, Schleicher (2016:19) stated that pedagogical knowledge of teaching and learning refers to the specialised body of knowledge concerned with creating effective teaching and learning environments for each and every student. It includes knowledge of how to structure learning objectives, how to plan a lesson and how to evaluate a lesson; knowledge of

effective use of allocated time and strategies for differentiated instruction; and knowledge of how to design tasks for formative assessment. The knowledge also includes specialised areas of learning, such as knowing how to facilitate learning, given certain student characteristics, such as their prior knowledge, motivation and ability levels. I concur with Schleicher (2016:19) that pedagogical knowledge is important for an effective teaching and learning process, and that for an effective teaching and learning process to take place, the teacher must have knowledge on structuring learning objectives, lesson planning, evaluation of a lesson, effective use of time, use of differentiated instruction, deigning of formative tasks and how to facilitate learning. The discussions of operational concepts will help to understand how they should be used in this study.

In summary, the framework is a basis or a structure for understanding, making judgement and making decisions; a theory is a principle on which a particular subject is based and structures the view the phenomena in order to explain it. Therefore, a theoretical framework is the theory that guides the research project and helps to structure the study, which guides on how data will be viewed and interpreted, and provides predominant viewpoints and direction to the research. CER has been used as a theoretical framework of this study. CER is transparent because all the co-researchers planned the activities together and the researcher is not the main role-player during interactions with other co-researchers. The voice of the voiceless and the views of the marginalised are very important in the research project. The co-researchers will be empowered by interacting with one another because they gain new knowledge, skills, values and attitudes. CER is a form of PAR that recognises the authority imbalance in research and pursues to empower the co-researchers, seeking to present collective research ownership. CER is used in this study to ensure that the co-researchers are not oppressed and their views are considered when a problem that affects them, is studied. CER helps to intervene in the reconstruction of practice and practice-setting of integrating teaching, learning and assessment in EMS classrooms. CER transforms by means of changing the status quo, so that once the co-researchers become aware of how troubled they had been, they can act to change the world.

Teaching and learning are intertwined and, therefore, when teaching is discussed, the information is applicable to learning, and when learning is discussed, the information is applicable to teaching. Teaching is a process whereby the teacher, who is knowledgeable about the subject content, guides learners to attain skills and knowledge that they will use in their future lives. Learning is an ongoing process in which the learner is actively involved to gain knowledge and bring about change in the learner's behaviour. Effective teaching is every encounter which leads to improved student achievement, using outcomes that matter to their future success. Effective learning takes place when learners are given an opportunity to reflect on their learning, and assessment can be used for learners to reflect and agree that effective learning requires learners to restructure their thinking based on acquiring new knowledge. Assessment is an important element of teaching and learning, as it helps learners succeed by giving them feedback regarding their knowledge, skills and attitudes. In the context of this study, assessment is used to determine where learners are and how they can be assisted to improve their learning. The teaching and learning process is any situation where learners and teachers interact with a common interest. The teaching and learning process is informed by assessment.

2.4 CONCLUDING REMARKS

This chapter focused on the theoretical framework and the operational concepts used in this research study. CER was discussed as a theoretical framework for this study. Teaching and learning, effective teaching and learning, assessment and the teaching and learning process were discussed as operational concepts.

The next chapter will focus on an introduction, approaches to teaching, approaches to learning, assessment and EMS as a subject. A literature review, which will address the research question, will be conducted. The literature review will be based on what the teach and assess strategy entails, how the teach and assess strategy can contribute towards effective teaching and learning in EMS, the conditions under which effective teaching and learning can take place in EMS, the conditions under which the implementation of a strategy can take place, the conditions under which the teach and assess strategy in EMS can be implemented, the challenges in the

implementation of a strategy, overcoming the challenges in the implementation of a strategy and concluding remarks.

CHAPTER THREE

RELATED LITERATURE INFORMING TEACH AND ASSESS: A STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

3.1 INTRODUCTION

The previous chapter focused on theoretical framework and the operational concepts used in “Teach and assess: a strategy for effective teaching and learning in Economic and Management Sciences”. Literature related to this study will be discussed. The focus will be on an introduction, approaches to teaching, approaches to learning, the purpose of assessment and EMS as a subject. This chapter will also address research questions. The discussions will be based on what the teach and assess strategy entails, how the “teach and assess” strategy will contribute towards effective teaching and learning in EMS, the conditions under which the “teach and assess” strategy can be successfully implemented in EMS, the possible challenges that might hamper the implementation of a strategy, mechanisms to overcome the challenges in the implementation of “teach and assess” as a strategy for effective teaching and learning in EMS and concluding remarks. The next section focuses on approaches to teaching.

3.2 APPROACHES TO TEACHING

Approaches to teaching are discussed to understand how teaching is viewed in developing “teach and assess” as a strategy for effective teaching and learning in EMS. This section discusses the terms “approaches” and “teaching” in order to understand what approaches to teaching entails. Then “approaches to teaching” will be discussed, based on the literature review.

According to Hornby (2010:60), an approach refers to a way of thinking about something such as a task. In congruence, Nezamedini, Rahimi and Borujeni (2013:281) stated that the term approach indicates a set of beliefs, whether explicit or implicit, about teaching and teachers’ work, including underlying assumptions.

Furthermore, Nezamedini et al. (2013:281) stated that the set of beliefs must be sufficiently consistent and comprehensive to represent a reasonable guide for coherent thinking and acting in teaching, in order to be considered as an approach. According to Hornby (2010:1532), teaching refers to ideas of a particular person that are taught to other people. In congruence, Jadama (2014:20) discussed teaching as the imparting of knowledge, skills and attitudes to an individual. In contrast, Regmi (2012:61) discussed teaching as an activity often considered to enable students to learn. Based on the preceding discussions, I conclude that approaches to teaching are a set of beliefs which guide the teachers on how to enable learners to learn.

In support, Mohammadi, Naderi, Shariyatmadari and Naraghi (2013:525) likened teaching approaches to doors through which teachers perceive teaching activities, and presented some categories for how they teach; they are perceptions of teaching which present the ideas of “What is teaching?” and “What should it be?” Carr (2007:13) noted that the Revised Curriculum makes it clear that approaches to teaching can be varied and must be varied to complement learning and take into account the differences in children, their interests and motivation, their varied personalities and the many ways in which they learn. In congruence, Killen (2015:99) stated that no teaching strategy is better than others in all circumstances, so a variety of teaching strategies must be used and decisions must be made about when each one is likely to be effective. I concur with Mohammadi et al. (2013:525) that teaching approaches are perceptions of teachers on how they should present ideas to their learners. I also concur with Killen (2015:99) and Carr (2007:13) that the teacher must not use only one approach to teaching, because learners learn differently. I contend that there is no single approach to teaching that will be relevant in all teaching and learning processes.

Various writers use dissimilar notions to refer to approaches to teaching. Some authors refer to approaches to teaching as “teaching strategies”; therefore, in this study these concepts will be used interchangeably. Authors also group the approaches to teaching differently, even though, in their discussions, connections for different groupings are evident. With reference to that, Carr (2007:17) grouped approaches to teaching as a direct approach, an inductive approach and an exploratory approach. On the other hand, Badu-Nyarko and Torto (2014:227)

grouped approaches to teaching as didactic, Socratic and facilitative. Whereas, Killen (2015:98) grouped approaches to teaching as teacher-centred approaches and learner-centred approaches, while Chen (2014:2), Mohammadi et al. (2013:525) and Fenstermacher and Soltis (2004:5) grouped the approaches to teaching as executive, facilitative and liberationist approaches.

In my view, the direct, didactic, teacher-centred and executive approaches are in the same grouping, while the inductive, learner-centred, Socratic and facilitative approaches are the same grouping. Lastly, the exploratory and liberationist approaches are in the same grouping. In this study, the approaches to teaching will be grouped as the executive, facilitative and liberationist approaches. In the next section, the three approaches to teaching will be discussed and the other groupings will prevail within the grouping adopted in this study.

3.2.1 Executive approach

According to Fenstermacher and Soltis (2004:5), in the executive approach, the teacher is viewed as the manager of complex classroom processes – a person charged with bringing about certain outcomes with students by using the best skills and techniques available. In congruence, Nezamedini et al. (2013:285) stated that, according to this approach, the instructor is the manager of complex classroom processes; his or her main responsibility is using the best materials, skills, techniques and methods of teaching which are available to him or her to produce certain outcomes with students. Moreover, Chen (2014:2) posited that the executive approach views the teacher as a skilful manager of learning and focuses on the acquisition of knowledge, skills, understandings and competencies. Based on assertions of Fenstermacher and Soltis (2004:4), Nezamedini et al. (2013:285) and Chen (2014:2), I contend that in an executive approach to teaching the teacher is a skilful manager, who manages a complex teaching and learning process and uses a variety of skills and techniques to help the learners achieve the set outcomes.

Nezamedini et al. (2013:285) stated that the executive approach typically defines knowledge as something out there, external to the teacher and the learner, with the teacher serving as a conveyor of that knowledge to the student; prior experiences of

the learners are not emphasised and students are believed to be without knowledge when they arrive in the classroom. In congruence, Lam (2011:7-8) argued that the approach favours giving direct and explicit instructions to students rather than having students explore on their own; its underlying philosophy reflects the idea of Tabula Rasa, the view that the human mind is born into this world as a blank slate, void of innate ideas, and only gains knowledge through the senses and experiences. Furthermore, Lam (2011:7-8) argued that the main responsibility of educators is to fill the students' minds with knowledge and information. In a nutshell, Nezamedini et al. (2013:285) and Lam (2011:7-8) stated that in an executive approach, the teacher is the conveyor of knowledge to learners. Secondly, they stated that learners come to school without knowledge and the teacher starts on a clean slate when teaching the learners. I disagree with the notion that the teacher is the conveyor of knowledge to learners, because learners apply their minds to any information given to them. I also disagree with the assertion that learners come to school without prior knowledge or as a clean slate, because it will be very difficult for teachers to teach a learner who does not have any knowledge. Even in the executive approach or direct instruction, the teacher still needs to link the new lesson to the prior knowledge of learners.

Killen (2015:136) stated that direct instruction is an expository teaching in which the teacher delivers academic content in a highly-structured format that directs the activities of learners and maintains focus on academic achievement. Whilst, Mlitwa (2011:8) posited that in direct instruction, the learner often directly receives knowledge from the teacher with a requirement to memorise and recall it later on, and this form of knowledge acquisition does not seem to prepare a learner to spontaneously use the knowledge later, except under exceptional circumstances. In congruence, Carr (2007:17) claimed that a direct approach to teaching aims to acquire new knowledge and skills through a structured sequence, often beginning with modelling, demonstration or illustration by the teacher. Moreover, Gunter, Estes and Schwab (2003:63) asserted that direct instruction is characterised by fairly short instructional phases, followed by practice, until mastery learning is attained. From the preceding discussions, I conclude that in direct instruction, the academic content is delivered in a structured way by the teacher and learners acquire knowledge for academic achievement. Learners should memorise, recall and practise acquired knowledge in order to achieve mastery learning. I disagree with the assertion that

knowledge acquired through direct instruction cannot be used spontaneously in future, because memorising and recalling play and important part to be able to understand, apply, analyse, evaluate and create.

According to Killen (2015:98), teacher-centred approaches are referred to as direct instruction and in this approach, the teacher has direct control over what is taught and how learners are presented with the information they are to learn. Teacher-centred teaching refers to teachers directing what is taught, when, and under what settings (Chen, 2014:2). In addition, Pamplin (2012:12) stated that transmissive teaching focuses on the didactic transfer of information from the teacher to the learners. Furthermore, Badu-Nyarko and Torto (2014:227) claimed that the didactic method is a teacher-centred approach to learning and the detailed information on knowledge to be learned is presented to learners. Congruently, Nezamedini et al. (2013:285) argued that the overall aim of the executive teacher is transmitting a body of knowledge or skills that learners are to acquire, and selecting certain methods of instruction that are most effective in conveying this body of knowledge; the approach primarily focuses on methods of teaching and knowledge of subject matter. In summary, Killen (2015:98), Chen (2014:2), Pamplin (2012:12), Badu-Nyarko and Torto (2014:227) and Nezamedini et al. (2013:285) described a teacher-centred approach as the act of transmitting the information by the teacher to learners – the teacher controls all the activities during the process, decides on what is to be done and decides how the teaching and learning process takes place.

The executive approach to teaching needs a teacher who is skilful in managing a complex teaching and learning process. Achievement of outcomes should always be at the centre of every teaching and learning encounter. The teacher should not regard learners as a blank slate, but must link teaching activities to learners' prior knowledge. The academic content should be delivered in a structured way which includes how learners would take part in the lesson. Learners should be able to memorise, recall and practise acquired knowledge in order to achieve mastery learning, and assessment can be used to determine how learning has taken place. For effective teaching to take place, using direct instruction, the teacher must properly plan and structure the activities which will take place in the teaching and learning process. This approach will be incorporated when developing the strategy

for effective teaching and learning in EMS classrooms through the use of teaching and assessing. In the next section, a counterpart approach to executive approach, which is the facilitative approach, will be discussed.

3.2.2 Facilitative approach

According to Pamplin (2012:12), facilitative teaching is seen as the counterpart to transmissive teaching, which is often defined as the lowest of a hierarchy of levels or attitudes to teaching among educators. In support, Regmi (2012:65) referred to facilitation as an interactive learning process. Whereas, Badu-Nyarko and Torto (2014:227) advance that in facilitative teaching, the teacher facilitates the learning process, but is not in control of the end results. In support, Mohammadi et al. (2013:525) asserted that in the facilitative approach, the teacher is not merely the transferor of knowledge, but plays a role as a guide or facilitator in the process of teaching, while the learners are active, being in the centre of the process. Based on the preceding discussions, a facilitative approach to teaching involves an interactive learning process whereby the teacher is not the transmitter of knowledge, but takes on the role of facilitator of the teaching and learning process. Learners play an active role in the teaching and learning process, but under the guidance of their teacher.

According to Fenstermacher and Soltis (2004:5), in the facilitative approach, the teacher is viewed as an empathetic person who believes in helping individuals grow personally and reach a high level of self-actualisation and self-understanding. Congruently, Chen (2014:2) stated that the facilitative approach refers to teachers who focus on the development and nurturing of each learner's unique capacities and personal characteristics to help them attain authenticity and self-actualisation, while Mohammadi et al. (2013:525) posited that in this approach, the teacher tries to help learners to develop their aptitudes and talents, so that they may become independent and creative people, who may reach high levels of self-florescence; the teacher pays attention to personal differences as well. In summary, Fenstermacher and Soltis (2004:5), Chen (2014:2) and Mohammadi et al. (2013:525) stated the role of the teacher in a facilitative approach as the person who helps the learner to achieve self-actualisation and self-understanding. Secondly, the teacher's role in the

facilitative approach is to unlock their unique potentialities in order for learners to be independent.

According to Nezamedini et al. (2013:285), the facilitative teacher places a high value on what learners bring to the classroom setting and puts considerable emphasis on learners' prior experiences. Furthermore, Pamplin (2012:12) asserted that the facilitative approach to teaching, which is less concerned with what the teacher does, or with the learners' shortcomings, is built around what the students do. Whereas, Carr (2007:17) elaborated that an inductive approach aims to develop a concept or process through a structured set of directed steps, where pupils collect and sift information, then examine data, construct categories and generate and test hypotheses. Nezamedini et al. (2013:285), Pamplin (2012:12) and Carr (2007:17) all highlighted the importance of prior knowledge in the teaching and learning process and the active role that learners play in their learning. I contend that learners should play an active role in their learning under the guidance of the teacher, and learning activities should take into consideration the prior knowledge of learners.

Chen (2014:2) contended that in student-centred teaching, teachers see students as more than cognitive units; instead, teachers recognise that students bring to school an array of physical, psychological, emotional and intellectual needs, plus experiences that require both nurturing and prodding; student talk also has a significance at least equal to, if not greater than, teacher talk. I concur with Chen (2014:2) that learners bring an arrangement of interrelated aspects for taking part in the learning process and experiences which need to be nurtured by the teacher. On the other hand, Killen (2015:98) stated that learner-centred approaches place a much stronger emphasis on learners' role in the learning process – the teacher still sets the agenda, but has much less direct control over what and how learners learn. I agree with Killen (2015:98) that although learners play an active role in the learning process, the teacher must still plan the learning process without determining what learners learn and how they learn, in order to achieve the benefits of facilitative learning.

Pamplin (2012:16) identified the following benefits for using the facilitative approach:

- Participants benefit by making sure that their previous understanding is brought to bear. The prior knowledge of learners is recognised in the learning process.
- It encourages participants to form relations among their individual understanding and the academic works, thereby enabling consideration on their own teaching practice. Learners are able to bring their own experiences and apply them in the learning process.
- The facilitative approach also provides a means to nurture deeper learning among the group, by ensuring that the training really addresses their needs and problems. Learners are able to learn in an innovative way and are able to apply what they have learnt.
- It allows the co-researchers to take ownership of the meetings, which boosts the kind of deep learning which can transform people's perspectives. The viewpoints of learners are considered and therefore learners take ownership of their learning process.
- It helps the co-researchers to interpret their knowledge and experiences differently. Learners are able to give different interpretations to the learnt knowledge.
- It involves surrendering some control, but the method also offers the possible for qualitatively improved learning. The learning process is not strictly controlled by the teacher and that allows for better learning.

These benefits of the facilitative approach to teaching indicate how this approach can benefit learners in the teaching and learning process. These benefits indicate that effective learning will be achieved when the facilitative approach to teaching is used in the teaching and learning process.

The facilitative approach to teaching is an interactive approach to learning. The teacher's role in the teaching and learning process is that of a facilitator and the learners play an active role. The teacher helps to unlock unique potentialities of learners and help learners to achieve self-actualisation and self-understanding. Learners are developed to be independent through active participation in their learning. Learners' prior knowledge experiences are crucial in the facilitative

approach. The teacher needs to nurture what learners bring into the teaching and learning process. The teacher must still guide learners in their learning. The facilitative approach will be incorporated in developing the strategy for effective teaching and learning in EMS classrooms through the use of teach and assess. In the next section, a liberationist approach will be discussed.

3.2.3 Liberationist approach

The liberationist approach opinions the teacher as an emancipator of the thoughts (Chen, 2014:3). In congruence, Fenstermacher and Soltis (2004:5) posited that in the liberationist approach the teacher is viewed as one who frees and opens the mind of the learner, initiating the learner into human ways of knowing and assisting the learner in becoming a well-rounded, knowledgeable and moral human being. In addition, Nezamedini et al. (2013:285) stated that the mainstream version of liberationist approach views the teacher as a person who frees and opens the learners' minds, and helps them become moral human beings. Based on the preceding discussions, the role of the teacher in a liberationist approach is that of the liberator of the mind by freeing and opening the mind of the learner. The teacher assist the learner to become a well-rounded, knowledgeable and morally good person.

In the liberationist approach, the teacher plays a role as a guide, emphasises developing problem-solving skills by suggesting challenging issues, tries to keep the learners active and provides them with critical, evaluative conditions (Mohammadi et al., 2013:525). On the other hand, Zhao, Mu and Lu (2016:32) asserted that learning is not an external controlling power, but a mental liberation where the objective of education lies in helping students in their constant self-realisation. In congruence, Nezamedini et al. (2013:285) stated that this approach views the instructor as a human being whose mission it is to help learners become self-actualised individuals. Furthermore, Chen (2014:3) and Nezamedini et al. (2013:286) asserted that the liberationist emphasises beginning into ways of knowing, and the advancement of the learner's academic and ethical qualities. I conclude that in the liberationist approach, the teacher plays a guiding role to learners in order to achieve self-realisation and self-actualisation. The liberationist approach emphasises

development of knowledge and moral virtues. The teacher helps learners to develop problem-solving skills.

According to Carr (2007:17), an exploratory approach to teaching and learning aims to practise and refine understanding and skills, through learners testing predictions or hypotheses and deciding what information to collect, and then collecting and analysing it. Whilst, Badu-Nyarko and Torto (2014:227) elaborated that teachers help learners to deduce information through questions and arrive at conclusions. Whereas, Mohammadi et al. (2013:529) stated that teachers put forward challenging issues, provide learners with discovery conditions and believe that, in this process, the content should be complex and challenging, and there should be a relation between different topics. Based on the preceding assertions, I posit that in a liberationist approach, learners are taught high-order skills, such as data collection, analysing and drawing conclusions. Learners are given discovery activities, which are related to one another.

The role of the teacher in a liberationist approach is that of the liberator and to assist the learners to become well-rounded, knowledgeable and morally good citizens. In order to assist learners to achieve the goals of the liberationist approach to teaching, the teacher plays a guiding role to learners. Knowledge and moral virtues are highly emphasised. Discovery learning is used to develop problem-solving skills which can be used in real-life problems. Learners play an active role in their learning. The liberationist approach will be incorporated in developing the strategy for effective teaching and learning in EMS classrooms through the use of teach and assess.

In summary, there is no single particular approach to teaching which will be applicable to all teaching and learning processes. Different approaches should be used in different teaching and learning processes. The objectives and anticipated outcomes of the lesson should help the teacher to identify the relevant strategy. In this study, the executive approach, facilitative approach and liberationist approach will be incorporated in the strategy to be developed in this study. This section considered the approaches to learning, while the next section will look into what is closely related to approaches to teaching, i.e. the approaches to learning.

3.3 APPROACHES TO LEARNING

According to Cirik, Çolak and Kaya (2015:31), learning approaches focus on learning strategies and motivational sources on a learning task. Whilst, Mugisha and Mugimu (2015:257) states that learning theories attempt to describe how individuals learn and retain any given information and underlying learning principles, and provide varying expositions about learning. Thus, in this study, learning theories are used to discuss approaches to learning in order to understand how learners learn. Whereas, Ertmer and Newby (2013:43) referred to learning theories as positions on learning, which provide structured foundations for planning and conducting instructional design activities. Congruently, Young-Lovell (2009:24) purported that different theories of learning inform one's way of thinking about the principles of learning. Moreover, Ertmer and Newby (2013:43) expanded further that learning theories provide instructional designers with verified instructional strategies and techniques for facilitating learning, as well as a foundation for intelligent strategy selection. Based on assertions by authors, learning theories give a position of thinking about learning and provide guidance in choosing a teaching strategy for a lesson.

Young-Lovell (2009:24) stated that learning theories differ, but they all do share some basic, definitional assumptions about learning. Further, Young-Lovell (2009:25) posited that the theories supplement, rather than contradict one another, and often overlap in practice. By using one theory or a combination of theories as the basis of instruction, individuals' peculiarities are acknowledged and the learning opportunities for individual learners are increased. In support, Dennick (2016:200) claimed that there is no single overarching theoretical framework that accounts for how learning takes place in all situations, and there are many theories of how learning takes place from experiences, as well as many theories on what these experiences are. In addition, Ertmer and Newby (2013:44) postulated that integration of the selected strategy within the instructional context is of critical importance. I concur with Young-Lovell (2009:24), Dennick (2016:200) and Ertmer and Newby (2013:44) that there is no single learning theory which accounts for learning in all situations; therefore, a combination of theories should be used. In this study, the approaches to learning will be discussed in relation to the behaviourist approach, the humanist approach and the constructivism approach. Multiple Intelligence will also

be discussed as the approach to learning, because the way learners learn is important in approaching learning.

3.3.1 Behaviourist approach

Westbrook, Durrani, Brown, Orr, Pryor, Boddy and Salvi (2013:9) stated that behaviourism emerged as a theory of learning from the work of Thorndike (1911), Pavlov (1927) and Skinner (1957), who used scientifically proven laws of stimulus-response, and classical and operant conditioning to explain the learning process through the use of rewards and sanctions, or trial and error. On the other hand, Power (2013:3) argued that behaviourism arose partly as a reaction against the traditional approaches of inquiry, and partly as a result of the quest in search for a more scientific method of acquiring empiric knowledge during analysis. In support, Jordan, Carlile and Stack (2008:21) stated that behaviourism is the most influential and generalisable theory of learning that claims a scientific basis. Based on the assertions made by these authors, I conclude that the behaviourist theory arose as a reaction against the traditional approaches in order to use scientifically proven laws to explain the learning process.

The behaviourist theory contends that learning is a transformation in noticeable conduct that happens as the effect of understanding (Jordan et al., 2008:21; Young-Lovell 2009:25). In support, Ertmer and Newby (2013:48) expanded that behaviourism equates learning with changes in either the form or frequency of observable performance. On the other hand, Westbrook et al. (2013:9) explained that the learner is rewarded for small steps of learning and achievement, with consistent positive reinforcement. In support, Young-Lovell (2009:25) explained that in a teaching situation, students' specific, observable, desired responses to questions represent behaviour and the experience is the teacher's use of reinforcement or punishment that changes the behaviour. In a nutshell, the authors posited that in the behaviourist approach, learning takes place when there is observable changes in behaviour which are caused by reinforcements or punishment.

Jordan et al. (2008:21) claimed that the transformation in behaviour must continually be recognisable, with some behaviourists suggesting that if no noticeable transformation take place, no learning has transpired. In addition, Ertmer and Newby (2013:48) discussed that learning is accomplished when a proper response is demonstrated, following the presentation of a specific environmental stimulus. Whereas, Killen (2015:230) stated that the behaviourist explanation of learning will emphasise the immediate feedback students receive from their peers and the benefits they gain from increased practice. On the other hand, Jordan et al. (2008:21) argued that behaviourists do not deny that learners think; they mainly choose to ignore inaccessible mental processes and focus on observable behaviour. I concur with Jordan et al. (2008:21) that the behaviourists do not deny that learners think, but their theory only focuses on observable behaviour. Congruently, Young-Lovell (2009:25) argued that the theory of behaviourism defines learning as a change in an individual's mental structures and processes, which may or may not result in an immediate change in behaviour. The argument by Young-Lovell (2009:25) also emphasises that the mental structures and processes play a role in the behaviourist approach to learning. Moreover, Westbrook et al. (2013:9) explained that in the behaviourist approach, knowledge is parcelled out from different parts of a separated curriculum that learners experience as distinct subjects, and directed from the teacher to the learner in set sequences, with little learner choice or interaction. I note from Westbrook et al. (2013:9) that the behaviourist approach is teacher-centred.

Mlitwa (2011:27) wrote that under the behaviourist paradigm, a learner tends to be viewed as essentially passive, with learning taking place only in response to environmental stimuli, and further claimed that the learner starts off from a completely ignorant state, while learning is transmitted directly from the teacher to the learner. I disagree with Mlitwa (2011:27) that learners start from a completely ignorant slate because learners have some experiences, but concur with the view that learning is transmitted directly from the teacher to the learner. Congruently, Ertmer and Newby (2013:48) stated that the learner is characterised as being reactive to conditions in the environment, as opposed to taking an active role in discovering the environment. In support, Westbrook et al. (2013:9) posited that behaviourism supports teacher-controlled or teacher-centred approaches, where the

teacher is the sole authority figure. I conclude that the behaviourist approach is teacher-centred, but learners are not passive in the teaching and learning process.

Young-Lovell (2009:25) asserted that according to behaviourism, the goal of instruction is to increase the number, or strength of correct student responses. The strength of the theory is that it is of a progressive nature and focuses on immediate student improvement, and not a grade as an indication of student learning. In contrast, Westbrook et al. (2013:9) stated that assessment is every so often examination-oriented and at great stake, without teacher's direct contribution. I concur with Young-Lovell (2009:25) that the behaviourist approach is more concerned with formative assessment, but I disagree with Westbrook et al. (2013:9) that the behaviourist approach is examination-oriented, because in this approach immediate feedback is emphasised in order to correct students' responses.

Despite all the good intentions of the behaviourist approach Westbrook et al. (2013:9) identified the following criticisms against behaviourism:

- The knowledge acquired is in the surface nature. Deeper learning does not take place because learners only respond to the stimulus.
- It approaches learning as a one-size-fits-all approach. The teacher does not vary methods, even if they are not appropriate in other situations.
- Individual learners' differences are not considered. The teacher approaches all learners in the same way, without considering the differences in their strengths.
- The teacher remains unaware of learners' current knowledge or misconceptions. Learners' individual problems are not identified and solved.
- Sanctions, such as corporal punishment, as a deterrent. Sanctions at times, instead of motivating learners to change, may cause learners to be negative.

The behaviourists should try to ensure that what learners learn can be used in future and teachers should use different methods to learning in order to reach all the learners. Individual learners' needs should be addressed and sanctions should be used to bring a positive change.

In summary, the behaviourist theory arose as a reaction against the traditional approaches in order to use scientifically proven laws to explain the learning process. In the behaviourist approach, learning takes place when there is an observable change in behaviour, which is caused by reinforcements or punishment. The mental structures and processes play a role in the behaviourist approach to learning. The approach is teacher-centred, but learners are not passive in the teaching and learning process. Formative assessment is key, because immediate feedback is emphasised to correct students' responses. The behaviourists should ensure that deeper learning takes place, different methods to learning are used, individual learners' needs are considered and sanctions must be used to bring a positive change. Some of the principles of this approach will be incorporated in developing a strategy for effective teaching and learning in EMS through the use of teach and assess. A humanist approach will be discussed in the next section.

3.3.2 Humanistic approach

Khatib, Sarem and Hamidi (2013:45) averred that the humanistic approach was introduced by the ideas of scholars such as Erickson, Rogers and Maslow. Congruently, Qi (2012:37) identified Rogers and Maslow as researchers who influenced the humanistic approach, and Mueller (2012:28) and Turkich, Greive and Cozens (2014:5) also identified Rogers. Based on the preceding discussions, I contend that Rogers is one of the researchers who influenced the humanistic approach. Again, Karthikeyan (2013:57) argued that a humanistic approach to education involves a move away from traditional behaviour theories and practices towards a perspective that recognises the uniqueness of each individual's perception, experiences and approaches to learning. Similarly, according to Mugisha and Mugimu (2015:262), the humanistic theories of learning are based on the belief that man is a unique creature with varying capacities, self-drive and a natural desire to learn. I conclude that a humanistic approach to learning moves away from the behaviouristic approach, which concentrated on behavioural change, and the humanistic approach emphasises the uniqueness of individuals in the teaching and learning process.

Winston (2015:47) stated that according to the humanistic theory, if people are to be authentic, they must be everything that they can be, and not be what they cannot be. In addition, Taylor and Hamdy (2013:1652) averred that the goal of the humanistic approach is to produce individuals who have the potential for self-actualisation, who are self-directed and who are internally motivated. Congruently, Karthikeyan (2013:57) stated that a humanistic approach to teaching and learning focuses on developing a learner's self-concept and intrinsic motivation towards learning and self-awareness, with emphasis on internal development and self-regulation, while Khatib et al. (2013:47) postulated that humanistic education is a way of relating that emphasises self-discovery, introspection, self-esteem and getting in touch with the strengths and positive qualities of others and ourselves. On the other hand, Qi (2012:37) emphasised that humanistic psychology attaches much importance to non-academic aspects such as self-esteem and motivation, but lacks a clear combination of emotional satisfaction and academic achievement. Even Guney and Al (2012:2336) stressed that humanists have a priority for human needs and interests which are basic needs, such as biological and physiological, safety needs, a need for belonging or love, a need for self-esteem, and self-actualisation needs. I conclude that a humanistic theory is concerned with ensuring that people are authentic, have a potential of achieving self-actualisation and are intrinsically motivated towards learning. Secondly, the theory considers non-academic aspects, such as basic needs.

According to Karthikeyan (2013:57) and Taylor and Hamdy (2013:1652), this approach is child-centred because students play a central role in the whole teaching-learning process and are free to develop and make progress according to their own pace, needs and interests. Moreover, Rostami and Khadjooi (2010:66) expanded by stating that the goal of this approach is for the learner to become autonomous and self-directed, using activities which facilitate collaborative learning. Again, Killen (2015:230) stated that the humanist explanation of learning would suggest that learning is enhanced by students' natural curiosity and by the way group members respond to one another's contributions. I contend that a humanistic approach is learner-centred and aims at helping learners to be self-directed, but the learner collaborates with other learners in the teaching and learning process.

Qi (2012:37) asserted that the teacher should adopt a non-judgmental facilitating role in helping the learner to achieve self-actualisation, and intervenes as little as possible in the natural development of the learner. In congruence, Karthikeyan (2013:57) stated that in the humanistic approach, the teacher acts as a guide, friend or helper of the students, not forcing students to be disciplined, but encouraging self-discipline and self-control among students. In support, Mugisha and Mugimu (2015:262) stated that educators need to help learners to recognise and achieve this natural desire of acquiring knowledge and to be helped to gain control of their own education and take responsibility for their own learning. In the same way, Rostami and Khadjooi (2010:66) argued that learners and instructors should negotiate objectives, methods, and evaluative criteria. I conclude that in a humanistic approach, the role of the teacher is to facilitate learning and to guide learners to achieve self-actualisation, while learners take responsibility for their own learning through self-discipline and self-control.

In summary, Maslow and Rogers are the researchers who influenced the humanistic approach to learning. The humanistic approach moved away from concentrating on behavioural change, but is concerned with ensuring that people achieve self-actualisation and are intrinsically motivated towards learning. Uniqueness of learners in the teaching and learning process is emphasised. The approach is learner-centred and collaborative. The teacher plays a facilitative and guiding role to help learners to achieve self-actualisation. Learners must apply self-discipline and self-control. Non-academic aspects are key in the teaching and learning process. This approach will be incorporated in developing a strategy for effective teaching and learning in EMS through the use of teach and assess. The next section discusses the constructivist approach.

3.3.3 Constructivist approach

According to Bhattacharjee (2015:66), Chmiel (2014:1) and Westbrook et al. (2013:10) the theory of constructivism is commonly credited to Jean Piaget, who expressed ways by which understanding is internalised by learners. On the other hand, Li (2012:5) averred that constructivism as a learning theory, simply speaking, is to make learning meaningful. In addition, Lam (2011:8) postulated that

constructivists believe that learners come into formal education with a range of prior knowledge, skills, beliefs, and concepts that significantly influence what they notice about the environment and how they organise and interpret it, while they construct new knowledge from the existing knowledge. I concur with Lam (2011:8) that learners come into formal teaching and learning with a variety of previous understanding, abilities, views and perceptions. Therefore, according to Ertmer and Newby (2013:55) learners do not transfer knowledge from the external world into their memories; they rather build personal interpretations of the world based on individual experiences and interactions. In the same way, the constructivism transforms the students' role from a passive recipient of knowledge to an active participant in the learning process (Claxton, Lucas & Spencer, 2012:10; Goodwin & Webb, 2014:4; Jia, 2010:198; Khalid and Azeem, 2012:171). Based on the assertions made, I conclude that the constructivist approach is attributed to the work of Jean Piaget, and that learners construct new knowledge from existing knowledge and are active participants in the teaching and learning process.

Killen (2015:45) stated that the basic premise of constructivism is that knowledge is obtained and understanding is expanded through active construction and reconstruction of mental frameworks; learning is not a passive process of simply receiving information, but rather involves deliberate progressive construction and deepening meaning. In congruence, Bhattacharjee (2015:66) highlighted the suggestion of Jean Piaget that through processes of accommodation and assimilation, individuals construct new knowledge from their experiences. In support, Ertmer and Newby (2013:55), Jia (2010:198), Gravett (2001:18), Khalid and Azeem (2012:171) and Mlitwa (2011:30) stated that humans or learners create meaning, as opposed to acquiring it. Similarly, Westbrook et al. (2013:10) asserted that individual learners actively explore their environment by building on their existing cognitive structures or schemas. In addition, Claxton et al. (2012:10) averred that the goal of any learning intervention is the generation of new knowledge in collaboration with others and such an approach requires resourcefulness and relating skills to a large extent. I contend that in the constructivist approach, deliberate and collaborative construction of knowledge by learners takes place through accommodation and assimilation, and a meaningful meaning is created, based on experiences and existing cognitive structure.

The claim by Claxton et al. (2012:10) and Lam (2011:8) is that in a constructivist approach to learning, the teacher is the facilitator and learning is created by an interaction between people's ideas and their experiences with other people. I concur with Claxton et al. (2012:10) and Lam (2011:8) that in the constructivist approach, the teacher is the facilitator and learning takes place when learners interact with other people. In addition, Creemers (2005:7) postulated that constructivism forces teachers to expand not only their goals, but the scope of their subject content and their materials as well, and teachers who want to practise constructivism should also be aware of changing requirements for the classroom organisation. Moreover, Westbrook et al. (2013:11) expanded on this by stating that the space is needed for flexible social groupings, and within this, students need to feel that they have the right to talk and contribute to their peers' learning. In support, Bhattacharjee (2015:65) asserted that in constructive learning, the standard classroom procedure is turned upside down, there are no lectures, no demonstrations and no presentations, because from the beginning, students engage in activities through which they develop skills and acquire concepts. On the other hand, Khalid and Azeem (2012:171) stated that, 'always guided by the teacher, students construct their knowledge actively, rather than just mechanically ingesting knowledge from the teacher or the textbook; the task of the instructor is to translate information to be learnt into a format appropriate to the learners' current state of understanding. I concur with Creemers (2005:7), Westbrook et al. (2013:11), Bhattacharjee (2015:65) and Khalid and Azeem (2012:171), when the constructivist approach is used, the classroom organisation changes from the one where learners sit in rows and face forward, to a classroom organised in such a way that learners will be able to interact and work collaboratively with one another. I disagree with Bhattacharjee (2015:65) that in the constructivist approach, there are no lectures, no demonstrations and no presentations, because even when learners construct their own knowledge, the teacher will still guide the learners before they are engaged in a task and throughout the task.

In summary, a constructivist approach to learning is attributed to the work of Jean Piaget. In this approach, learners construct new knowledge from existing knowledge. Learners bring prior knowledge, skills, beliefs and concepts into the teaching and learning process. They participate actively, deliberately and collaboratively in the

teaching and learning process. Meaningful meaning is created, based on experiences and existing cognitive structure. The teacher is the facilitator and guides learners in knowledge construction. In this approach, the classroom organisation changes – learners sit in groups or pairs, which allows them to have meaningful interaction. In a constructivist approach, there are still lectures, demonstrations and presentations; not knowledge transmission, but the teacher lectures or demonstrates or presents when guiding learners before they are engaged in a task and throughout the task. The constructivist approach will be incorporated in developing a strategy for effective teaching and learning in EMS through the use of teach and assess. In order to achieve effective learning the teacher must have an understanding of how learners learn. In the next section, the theory of Multiple Intelligences and learning styles are discussed.

3.3.4 Multiple Intelligences and learning styles approach

Young-Lovell (2009:26) averred that a learning styles approach to teaching and learning is based on the idea that all students have strengths and abilities, but each may have a preferred way of using these abilities. In support of this, Killen (2015:99) stated that not all learners learn or are able to learn everything in the same way because they have different learning styles or thinking styles. According to Li (2012:4) and Carr (2007:18), Multiple Intelligences is a psychological and learning philosophy, advanced by psychologist Howard Gardner, which suggests that a range of diverse styles of intelligence exists in people. On the other hand, Turkich et al. (2014:5) postulated that each intelligence has its own strengths and weaknesses, the levels of each vary within individuals. Furthermore, Walsh (2010:8) posited that a myriad of theories has been developed to describe the process by which someone learns, but a practical approach involves the senses of hearing, vision and touch.

Msimanga (2014:41) and Walsh (2010:8) identified the three learning styles based on how learners learn, i.e. auditory learners, visual learners and kinaesthetic learners. Aural learners learn best by listening – talks and audiotapes are effective teaching tools for these learners. They perform well in activities where they must relate something. They are good in storytelling and debates activities. Visual learners learn best by seeing, watching or reading. Demonstrations, written materials and

videos are all appropriate tools. They learn best when they take notes during a lecture or when they read something new or difficult. They prefer teachers to engage in demonstrations, as they learn easily through descriptions and by remembering what they have seen. Kinaesthetic learners learn by doing. Manipulative materials, models and hands-on opportunities to build or assemble are favoured by this group. They learn best by feeling and touching. They also learn by action, like doing, simulations, hands-on approach, manipulation and live events. They gain more knowledge by physical involvement and field trips.

According to Young-Lovell (2009:27) a multi-sensory approach to learning means that the learner can use any one or all of their senses to help them to truly understand a concept or idea. In congruence, Walsh (2010:8) stated that the favoured learning style is unique to the individual, and it can provide valuable clues to preferred teaching strategies. The preceding discussions clearly indicated that for learners to learn effectively, the teacher must incorporate different learning styles in the teaching and learning process to cater for different abilities of learners in the classroom. The Multiple Intelligences Theory also helps the teacher to cater for learners with different abilities.

Carr (2007:18-19) discussed Multiple Intelligences according to Gardner as:

- Linguistic Intelligence enables individuals to communicate and make sense of the world through language, to use words to understand and interpret the world around them, and to use words easily to communicate.
- Logical-Mathematical Intelligence enables individuals to understand abstract relations and solve practical problems by imagining different solutions and test them in their brain or on paper, without having to find concrete examples in real life.
- Spatial Intelligence makes it possible for people to perceive visual or spatial information, to transform this information, and to recreate visual images from memory – they find it easier to express themselves in images, rather than in words.
- Bodily or Kinaesthetic Intelligence allows people to use all or part of the body to create products, solve problems or express themselves.

- Musical Intelligence allows people to create, communicate and understand meanings made out of sound. Inter-personal Intelligence enables individuals to recognise and make distinctions about feelings and intentions of others.
- Intra-personal Intelligence helps individuals to distinguish among their own feelings, to build accurate mental models of themselves and to draw on these models to make decisions about their lives.
- Naturalist Intelligence allows people to distinguish among, classify, be sensitive to and use features of the environment.
- Existential Intelligence is the capacity to raise and reflect on philosophical questions about life, death and ultimate realities.

Moreover, according to Turkich et al. (2014:5), each intelligence has its own strengths and weaknesses; the levels of each vary within individuals and, ideally, the educational environment offers a multitude of learning opportunities to attain the best possible outcomes for each learner. Therefore, the teaching and learning process should not be biased towards a particular intelligence, because some learners will not learn effectively if their intelligence is not catered for.

The learning styles of learners and the Multiple Intelligences should be catered for in all teaching and learning encounters for effective teaching to take place. Learning styles and Multiple Intelligences will be considered when developing a strategy for effective teaching and learning in EMS through the use of teach and assess. In the next section, assessment is discussed as the problem statement of this study in Section 1.2 states the problem as assessment which is not integrated into the teaching and learning process and a lack of strategies to integrate assessment into the teaching and learning process in EMS. Based on the problem statement, having discussed approaches to teaching and approaches to learning, it is important to discuss assessment.

3.4 PURPOSES OF ASSESSMENT

According to Dixon-Román (2011:2), often a single assessment is used for multiple purposes. On the other hand, Cordiner (2011:1), Ndalichako (2015:326) and Reddy

et al. (2015:43) stated that assessment should be perceived as a fundamental component of the learning and teaching process. Congruently, Wiliam (2013:15) argued 'that students do not learn what they are taught; therefore, this simple and profound reality means that assessment is perhaps the central process in effective instruction. Moreover, Rogier (2014:3) argued that assessment plays an important role in teaching and learning, and affects decisions related to instruction, determines the extent to which instructional objectives are met and provides information for administrative decisions. Based on the preceding discussions, I contend that assessment is an integral part of the teaching and learning process, a single assessment can be used for multiple purposes and assessment determines what learners have learnt and provides administrative information on learners' progress.

According to Dixon-Román (2011:2), the purpose of an assessment determines priorities, and the context of use imposes constraints on the design; it is essential to recognise the fact that one type of assessment does not fit all. In congruence, Dunn and Mulvenon (2009:2) posited that one assessment could be used by students and teachers to inform the learning process, as well as by administrators to create policy changes. In addition, Ndalichako (2015:326) purported that classroom assessment is seen as a vital ingredient for effective teaching and learning because it gives students guidance on their performance, contributes to improving the learning process and provides feedback on students' progress over a period of time, so that any errors or learning difficulties can be identified and corrected. In support of this, Harlen (2014:5) identified purposes of assessment as to help learners while they are learning and to find out what they have learned at a particular point in time. Based on assertions made by these authors, I conclude that different types of assessment should be used for different purposes because the purpose of assessment might be to identify errors and learning difficulties experienced by learners, inform teachers and learners about the teaching and learning process and inform administrators when they create a policy. Therefore, different uses of assessment should be considered in order to achieve each purpose of assessment.

According to Cordiner (2011:8), the purpose of assessment tasks that are described as formative, is to provide students with feedback to enable them to improve achievement on current or subsequent tasks; this type of assessment serves a

diagnostic purpose for both students and teachers, and an assessment task that is formative, may be given a grade that may contribute to the final grade in a unit of study. I concur with Cordiner (2011:8) that a formative assessment can serve the purpose of diagnostic and summative assessment. In this study, diagnostic assessment, formative assessment and summative assessment are discussed to address different purposes of assessment. In the next section, diagnostic assessment is discussed.

3.4.1 Diagnostic assessment

Booyse and Du Plessis (2014:80) wrote that diagnostic assessment not only measures a learner's current knowledge and skills, but also gives the teacher an understanding of the existing knowledge and skills a learner brings to the teaching-learning process environment. In support of this, Reddy et al. (2015:19), Sebate (2011:61) and Van der Merwe (2011:63) stated that baseline assessment of previous knowledge is assessment that takes place at the commencement of a grade or a phase to determine what learners previously know. Similarly, Van der Merwe (2011:66) stated that outcomes-based assessment should aim to diagnose a learner's weaknesses in time to rectify problems, so that learners can achieve the required standard, which is outcomes. Congruently, Sebate (2011:61) averred that diagnostic assessment is applied to determine whether learners experience challenges to learning and to identify the nature and origins of such challenges, as well as to determine specific areas of learning difficulty. Based on the preceding discussions, I contend that baseline assessment is a form of diagnostic assessment because it determines learners' prior knowledge at the beginning of the grade or the phase, which means baseline assessment diagnoses what learners already know and do not know. I also content that diagnostic assessment diagnoses learners' weaknesses and strengths in order to build on strengths and rectify learners' problems.

According to Reddy et al. (2015:19), diagnostic assessment serves as a guideline for the teacher to develop suitable teaching, learning and assessment strategies that will ensure maximum progress; it can be formal or informal. In the same way, Van der Merwe (2011:66) claimed that diagnostic assessment is done as part of formative

assessment, where the intention is to diagnose learners' strengths and weaknesses, but it can also form part of summative assessment for the same reasons. I concur with Reddy et al. (2015:19) and Van der Merwe (2011:66) that diagnostic assessment can be done formally and informally, and can be formative and summative, with the purpose of diagnosing learners' strengths and weaknesses, and guiding teachers to develop suitable teaching, learning and assessment strategies.

In summary, baseline assessment is a form of diagnostic assessment. The purpose of diagnostic assessment is to determine learners' prior knowledge at the beginning of the grade or the phase, to diagnose learners' weaknesses and strengths, and to guide teachers to develop suitable teaching, learning and assessment strategies. Diagnostic assessment can be done formally and informally, and can be formative and summative. Diagnostic assessment will be incorporated in teach and assess as a strategy for effective teaching and learning in EMS. The next section discusses formative assessment.

3.4.2 Formative assessment

According to Killian (2015:387) and Wylie and Lyon (2012:1), formative assessment, takes place before or during the instruction, with the clear purpose of producing proof that can be used to improve the existing learning. In congruence, Booyse and Du Plessis (2014:79) wrote that assessment becomes formative assessment when the evidence is used to adapt the teaching in order to meet the needs. On the other hand, Looney (2010:5) argued that formative assessment is most effective when practised systematically – that is, when it is integral to the teaching and learning process. Congruently, Reddy et al. (2015:47) stated that formative assessment occurs through formal and informal assessment activities throughout the teaching and learning process, and the term assessment for learning is used to depict this form of assessment, because it involves assessment that occurs during the learning process and aims at supporting learning. Based on the preceding discussions, I conclude that formative assessment takes place before the instruction (diagnostic) and during the instruction, with the purpose of getting evidence that can be used to improve the teaching and learning process. As long as the purpose of assessment is

to support learning, formative assessment can be formal assessment or informal assessment.

Harlen (2014:5) asserted that the purpose of formative assessment is assisting learning, and for that reason is also called assessment for learning. Congruently, DBE (2011**b**:24) stated that assessment for learning is developmental and it helps learners improve and progress by informing them of their strengths and weaknesses. In addition, Flórez and Sammons (2013:3) states that assessment for learning is any assessment for which the first priority in its design and practice is to serve the purpose of promoting pupils' learning. The DBE (2012:3) discussed that informal (assessment for learning) or daily assessment is the monitoring and enhancing of learners' progress and is done through teacher observation and teacher-learner interactions, which may be initiated by either teachers or learners. On the other hand, Li (2012:16) contended that assessment for learning is associated with the constructivist view of learning. The preceding discussions emphasised that formative assessment is assessment for learning and its main purpose is to enhance learners' learning. Formative assessment is based on the constructivist view of learners actively participating in their learning.

Dixon-Román (2011:2) stated that formative assessments – often instructionally embedded measurement methods – provide feedback to both the teacher and student on the student's learning and developmental progress and inform instructional strategies. In support of this, Flórez and Sammons (2013:3) postulated that assessment activities can help learning if it provides information to be used as feedback by teachers, and by their pupils, in assessing themselves and one another, to modify the teaching and learning activities in which they are engaged. Whilst, Hofman, Goodwin and Kahl (2015:6) argued that formative assessment is not simply frequent testing, nor is it interim or benchmark assessments, such as those provided by publishers or the multi-state assessment consortia, but rather is a sequence of instructional steps, one of which involves ongoing monitoring and evidence-gathering of students' learning, related to a particular learning target. In elaborating, Heritage (2007:141) identified the four core elements of formative assessment as identifying the gap, feedback, student involvement, and learning progressions. I contend that formative assessment must identify teaching and learning gaps, give feedback to

both the teacher and learners about learning that has taken place in order to modify teaching and learning strategies and allow learners to participate actively in their learning. I agree with Hofman et al. (2015:6) that formative assessment should not take place by mere frequent testing without purpose, by following assessment activities in the textbooks as they are, or by using assessment activities provided externally, without aligning them to what has be taught to learners.

In summary, formative assessment takes place before the instruction and during the instruction. The purpose of formative assessment is to get evidence that can be used to improve the teaching and learning process. It can take place through formal assessment or informal assessment. Formative assessment is assessment for learning and its main purpose is to promote learners' learning. Therefore, formative assessment must help learners to learn, identify teaching and learning gaps, give feedback to both the teacher and learners about the teaching and learning process and allow active participation of learners in the teaching and learning process because it is based on constructivists' views. Frequent testing which is not aligned to the teaching and learning process, the use of assessment activities in the textbooks and other resources as they are and the use of assessment activities provided externally, without aligning them to what has be taught to learners, should not be regarded as formative assessment. Formative assessment will be one of the pillars of teach and assess as a strategy for effective teaching and learning in EMS classrooms. The next section discusses summative assessment.

3.4.3 Summative assessment

Dixon-Román (2011:2) discussed summative assessments as large-scale assessments that focus on the most critical and central aspects of learning in a domain, as defined by curriculum standards and informed by cognitive research; these are primarily used for post hoc decision-making, such as promotion, accountability, evaluation and policy. But, according to Booyse and Du Plessis (2014:79) and Reddy et al. (2015:45), the purpose of summative assessment is to decide a learner's general success in a specific field of learning in a particular space of time, usually at the end of learning process, school term or year. In congruence, Cordiner (2011:9) described the purpose of summative assessment tasks as

providing students with a grade for a task and this grade contributes to the final overall grade or level for the unit. In support of this, Dixon-Román (2011:2) posited that summative assessments provide information for parents on their child's progress, and for teachers on students' instructional needs. Based on the preceding discussions, I conclude that summative assessment determines overall learner's achievement in order to make a decision about learner's progress in a subject or a grade and is used for reporting. Summative assessment is used to make decisions about promotions, accountability, policy and certification.

Reddy et al. (2015:45) postulated that the term "summative assessment" is more recently referred to as "assessment of learning" to indicate that it is an assessment form that occurs after a learning activity has transpired. In addition, Harlen (2014:5) purported that summative assessment has the purpose of summarising and reporting what has been learnt at a particular time and, for that reason, is also called assessment of learning. Moreover, DBE (2011**b**:24) states that assessment of learning usually takes place at the end of a period of work, such as a topic, term or year and is typically used for promotion and certification purposes. Further, according to the DBE (2012:4), formal assessment (assessment of learning) provides teachers with a systematic way of evaluating how well learners are progressing in a particular subject and in a grade. Based on the preceding discussions, I contend that summative assessment is assessment of learning, because it takes place at the end of the period of work, indicates what transpired after learning, summarises what has been learnt, and provides a systematic way of evaluating learners' progress, and reports on what has been learnt.

In summary, summative assessment is assessment that takes place at the end of a teaching and learning process period, which can be a term or a year. It indicates what has transpired after learning, summarises what has been learnt, and provides a systematic way of evaluating learners' progress and report on what has been learnt. It is used to make decisions about promotions, accountability, policy and certification. In this study, summative assessment was not considered, because the study intended to integrate assessment into the teaching and learning process. Having discussed the purpose of assessment, the next section discusses EMS as a subject, because this study intended to improve teaching and learning in EMS classrooms.

3.5 ECONOMIC AND MANAGEMENT SCIENCES AS A SUBJECT

Economic and Management Sciences will be discussed as a subject currently offered in Grade 7 to Grade 9. The sections below are mainly confined to the EMS CAPS document.

3.5.1 Background to the subject

According to Adu and Ngibe (2014:983), Esau (2013:1) and Taole (2013:39), the education policy is revisited time and again because Curriculum 2005 (C2005) was introduced in 1997, the Revised National Curriculum Statement (RNCS) in 2002, the National Curriculum Statement (NCS) in 2007 and currently the Curriculum and Assessment Policy Statement (CAPS) was introduced in 2012. During the introduction of Curriculum 2005, I observed the introduction of EMS as a learning area, which encompassed the content for Accounting, Business Economics (now Business Studies), Computer Studies and Economics. Currently, with the implementation of CAPS, EMS is a subject which deals with the content of Accounting, Business Studies and Economics. According to DBE (2011**b**:8), the subject, EMS, deals with the efficient and effective use of different types of private, public or collective resources to satisfy people's needs and wants.

Schreuder (2009:28) postulated that when EMS was implemented, there were no teachers who had any formal educational qualification to teach the learning area and it naturally became the task of the Accounting, Business Economics or Economics teachers to teach EMS. Furthermore, Schreuder (2009:28) stated that the teachers are seldom equipped to teach all aspects of the learning area, they have a bias towards their field of expertise and they focus on only one discipline, whereas EMS requires teachers to be knowledgeable in the different disciplines within the learning area. I concur with Schreuder (2009:28) that EMS was taught by teachers who had not been trained in all aspects of the learning area and therefore teachers were biased towards their specialist subject. I observed that EMS was also taught by teachers who had not been trained in commerce subjects, but subject advisors

trained teachers on EMS subject content. This study should be understood within this background of the subject.

3.5.2 Teaching and learning in Economic and Management Sciences

Below are discussions on how teaching and learning should take place in EMS.

3.5.2.1 Time allocation

According to DBE (2011**b**:10), the teaching time for EMS is two hours per week and as this subject involves the development of accounting skills of learners in Grades 8 and 9, one hour per week must be used for financial literacy in terms of the Annual Teaching Plan. Furthermore, according to the DBE (2011**b**:8-9), the weighting of different topics in EMS is 30% for the economy and entrepreneurship and 40% for financial literacy. I argue that the time allocated for EMS is not compatible with the content which is prescribed and can affect effective teaching and learning. According to the way the teaching plan is structured, it is not possible to allocate one hour every week for financial literacy in Grade 8 and 9 for the whole year. The allocation of one hour per week to financial literacy will contradict the weighting of 30% for the economy, 30% for entrepreneurship and 40% for financial literacy, because the ratio is 60%:40% and not 50%:50%. This will lead to bias towards financial literacy.

3.5.2.2 Teaching plans

The DBE (2011**b**:8-9) summarised the teaching plan for EMS according to three main topics, i.e. the economy, financial literacy and entrepreneurship. The topics which are covered in the teaching plans for Grade 7 to Grade 9, are as follows:
The economy

- History of money
- Needs and wants
- Goods and services
- Inequality and poverty
- The production process

- Government
- The National Budget
- Standard of living
- Markets
- Economic systems
- The circular flow
- Price theory
- Trade unions

Financial literacy

- Savings
- Budgets
- Income and expenditure
- Accounting concepts
- Accounting cycle
- Source documents
- Financial management and keeping of records
- Savings; budgets, income and expenses; and accounting concepts
- Accounting concepts; accounting cycle; source documents; Cash Receipts Journal and Cash Payments Journal of a service business; effects of cash transactions on the accounting equation; and General Ledger and Trial Balance
- Cash Receipts Journal and Cash Payment Journal of a sole trader; posting to the General Ledger; preparing a Trial Balance; recording transactions in the Debtors Journal, Creditors Journal; and posting to the Debtors Ledger and Creditors Ledger

Entrepreneurship

- Entrepreneurial skills and knowledge
- Businesses
- Factors of production
- Forms of ownership
- Sectors of the economy

- Levels and functions of management
- Functions of a business
- Business plan

The content, as stated in the EMS CAPS document, is discussed because the study will look into how this content will be taught effectively using teach and assess as a strategy.

3.5.2.3 Teaching and learning materials required in EMS

According to the DBE (2011**b**:10), each learner should have a textbook and calculator; learners in Grades 8 and 9 should each have one Cash Journal exercise book, one General Ledger exercise book and a normal exercise book; Grade 7 learners should have only a normal exercise book; teachers should have a textbook with a teacher's guide. Teaching and learning materials required in EMS indicate that learners should actively participate in the teaching and learning process, they should go through textbooks, use calculators and write in different exercise books. The strategy developed in this study ensured that the teaching and learning materials required in EMS are used effectively to achieve effective teaching and learning in EMS.

3.5.3 Assessment in EMS

According to the DBE (2011**b**:24), assessment in EMS focuses on the knowledge, skills and values inherent in the activities of production, consumption, exchange and making meaningful and informed financial decisions in economic and social environments. EMS covers valuable skills, such as economic, entrepreneurial, financial and managerial skills, that prepare learners for success in different economic and business environments. Teachers should reflect all these abilities when preparing teaching, learning and assessment actions. Informal assessment, formal assessment, Programme of Assessment reporting, and recording and moderation of assessment are discussed below to understand how assessment activities should be planned and managed.

3.5.3.1 Informal assessment

DBE (2011**b**:24) states that assessment for learning has the purpose of continuously collecting information on learners' achievement, which can be used to improve their learning and informal assessment is a daily monitoring of learners' progress. Further, DBE (2011**b**:24) states that this is done by observations, discussions, practical demonstrations, learner-teacher conferences and informal classroom interactions. Informal assessment may be as simple as stopping during the lesson to observe learners or discussing with learners how their learning is progressing. Furthermore, DBE (2011**b**:24) states that informal assessment should be used to provide feedback to the learners and to inform planning for teaching; it does not need to be recorded; it should not be seen as separate from learning activities taking place in the classroom and learners or teachers can mark these assessment tasks and give feedback to learners, thereby improving teaching and learning; the results of the informal daily assessment tasks are not formally recorded, unless the teacher wishes to do so, and the results of daily assessment tasks are not considered for promotion and certification purposes. On the other hand, DBE (2012:4) states that informal assessment builds towards formal assessment and teachers should not only focus on formal assessment.

I disagree with the policy (EMS CAPS) when it states that informal assessment is a daily monitoring of learners' progress because in the previous section it was discussed that EMS is allocated two hours per week, which makes it impossible to have daily monitoring in EMS. I concur with the policy on how informal assessment should take place in order to build towards formal assessment. I contend that it is not important to record the informal assessment marks because it might increase administrative work for teachers. I conclude that informal assessment is assessment for learning. Teach and assess as a strategy for effective teaching and learning in EMS classrooms is mainly based on the preceding discussions of informal assessment.

3.5.3.2 Formal assessment

DBE (2011**b**:25) states that all assessment tasks that form a formal programme of assessment for the year are regarded as formal assessment and the teacher marks and records all formal assessment tasks formally for progression and certification purposes. Further, DBE (2011**b**:25) states that all formal assessment tasks are subject to moderation for the purpose of quality assurance, thus ensuring that appropriate standards are maintained in order to provide teachers with a systematic way of evaluating how well learners are progressing in a grade and in a particular subject and the examples of formal assessments include tests, examinations, practical tasks, projects, oral presentations, demonstrations and performances. Furthermore, DBE (2011**b**:25) states that formal assessment for the Senior Phase comprises three formal assessment tasks, two tests and two examinations. The total number of formal assessment tasks per year for the Senior Phase is seven; learners are required to do two formal assessment tasks per term in the first, second and third term and one formal task in the fourth term; and of the two formal assessment tasks per term, one assessment task must be a test or an examination. I argue that some of the examples of formal tasks can be used to assess learners informally. Formal assessment was not incorporated in this study, but all informal activities will be geared up towards preparing learners for formal activities.

3.5.3.3 Programmes of assessment

According to DBE (2011**b**:28), the Programme of Assessment is designed to spread formal assessment tasks in all subjects in a school throughout a term and for promotion purposes, the year mark (School Based Assessment – SBA) is added to the end-of-year examination mark. The Programme of Assessment was considered in development of teach and assess as a strategy for effective teaching and learning in EMS classrooms because informal activities will be built-up activities towards implementing the Programme of Assessment.

3.5.3.4 Recording and reporting

Based on DBE (2011**b**:30), recording is a process by which the teacher documents the level of a learner's performance in a specific assessment task and indicates learner progress towards the achievement of the knowledge, as prescribed in the National Curriculum and Assessment Policy Statement. Further, DBE (2011**b**:30) states that records of learner performance should provide evidence of the learner's conceptual progression within a grade and her or his readiness to progress or be promoted to the next grade and they should also be used to verify the progress made by teachers and learners in the teaching and learning process. Lastly, DBE (2011**b**:30) states that reporting is a process of communicating learner performance to learners, parents, schools, and other stakeholders. Reporting and recording will not be incorporated in teach and assess as a strategy for effective teaching and learning in EMS classrooms, because if the teacher records and reports on both formal and informal activities, administration work for the teacher will increase and effective teaching will be hampered.

3.5.3.5 Moderation of assessment

As stated in DBE (2011b:31), moderation refers to the process that ensures that the assessment tasks are fair, valid and reliable and moderation should be implemented at school, district, provincial and national levels. In addition, DBE (2011b:31) stipulated that a comprehensive and appropriate moderation practices should be in place for the quality assurance of all subject assessments and with regard to formal assessment, in Grades 7 and 8, tasks are moderated internally. Further, DBE (2011b:31) stipulated that the subject advisor should moderate a sample of these tasks during school visits to verify the standard of internal moderation, the Provincial subject advisors should moderate Grade 9 tasks and the Provincial Department of Education will monitor the process. I posit that subject advisors should monitor and moderate informal assessment tasks in Grade 7 to Grade 9 during the school visits. In teach and assess as a strategy for effective teaching and learning in EMS classrooms, moderation of informal assessment will be incorporated.

In summary, EMS is a subject which deals with the content of Accounting, Business Studies and Economics. EMS is mainly taught by teachers who have not been trained in all aspects of the subject and, therefore, are biased towards their specialist subject. EMS is also taught mainly by teachers who have not been trained in commerce subjects, but are trained by subject advisors in the EMS subject content. The time allocated for EMS is not sufficient to cover the content which is prescribed in the teaching plan and it is not possible to allocate one hour every week for financial literacy in Grade 8 and 9 for the whole year. EMS learners must have textbooks, calculators and different exercise books. Informal assessment in EMS is assessment for learning. Informal activities serve as built-up activities towards implementing the Programme of Assessment. Marks for informal activities should not be recorded because the purpose is not getting marks, but learning. The quality of informal activities should be monitored and moderated.

The preceding sections tried to unpack the topic of the study. The next sections will try to answer the research questions based on literature. Therefore, the next sections are aligned to the objectives of this study, stated as follows in Section 1.3:

- To explore what the “teach and assess” strategy entails.
- To demonstrate how the “teach and assess” strategy will contribute towards effective teaching and learning in EMS.
- To determine the conditions under which the “teach and assess” strategy can be successfully implemented in EMS.
- To identify possible challenges that might hamper the implementation of the strategy in order to put mechanisms in place to overcome them.
- To propose the “teach and assess” strategy as the strategy for effective teaching and learning in EMS.

The next section discusses what the “teach and assess” strategy entails.

3.6 WHAT THE TEACH AND ASSESS STRATEGY ENTAILS

The teach and assess strategy is a concept used in the Thabo Mofutsanyana Education District as the way to make teachers understand the value and importance

of daily activities in their teaching. As stated in Section 1.1, the presentation by Sempe (2014) discussed the five pillars of what is termed the “teach and assess strategy” as follows: quality of daily activities, frequency of daily activities, marking of daily activities, corrections of daily activities and monitoring and control by the SMT. Learners should be assessed with activities of a good quality which address the content as stipulated in the annual teaching plan of the subject. Learners must be assessed on a daily basis with written work. Daily written activities must be marked by the teacher. Corrections of daily activities must be written and marked and the corrections be rewritten. The SMT must control daily written activities. This strategy in its current form increases teachers’ workload tremendously; therefore, it is not practical to apply in different subjects in different grades. Although the strategy is called the “teach and assess strategy”, the strategy used in the Thabo Mofutsanyana Education District mainly deals with management of assessment because teaching is nowhere mentioned in the pillars of a strategy. In this study, a different approach to the teach and assess strategy is developed. The next paragraphs discuss what teach and assess entails in this study.

I posit that “teach and assess” is a concept derived from the words “teaching and assessing”. In essence, it implies that teaching must be coupled with assessment, which means that every teaching and learning process must be assessed and assessment must not be separated from the teaching and learning process. Therefore, in this study the teach and assess strategy should be understood in the context that every teaching and learning process must be assessed, and assessment is integrated into the teaching and learning process. When the concept “assessment” is used, it refers to formative assessment because it takes place during the teaching and learning process and not at the end of the process.

Cordiner (2011:13) stated that in order to create the learning, teaching and assessment strategies, the strategy must undergo four distinct phases: identify the learning outcomes; design the assessment tasks; plan the learning experiences and teaching methods; and choose the content. In addition, Samosir (2015:61) warned that teachers should carefully note that an instruction strategy is more than a simple description of the content which will be presented to the learner, but the learning strategy has five components, namely pre-instructional activities, content

presentation, learner participation, assessment and follow-through activities. Whilst, Friesen (2009:4) identified the following five core principles in the effective teaching practices: beginning with the thoughtful and intentional design of learning that engages students intellectually and academically; the work that students are asked to undertake is worthy of their time and attention, is personally relevant, and deeply connected to the world in which they live; assessment practices are clearly focused on improving student-learning and guiding-teaching decisions and actions; teachers foster a variety of interdependent relationships in classrooms that promote learning and create a strong culture around learning; and teachers improve their practice in the company of peers. It is evident from the preceding assertions by Cordiner (2011:13), Friesen (2009:4) and Samosir (2015:61) that assessment should be part of any teaching and learning process strategy.

Epstein (2007:5) listed one of the characteristic of good intentional teaching as thoughtful questioning, whereby teachers pose questions to get insight into what children are thinking and to stimulate their thought processes. Whilst, Rosenshine and Stevens, in Pintrich and Schunk (2002:316-317), and Gunter et al. (2003:73) identified two of the instructional procedures as checking for understanding and providing feedback. In the steps of direct instruction, Gunter et al. (2003:64) mentioned one of the steps as checking for understanding to determine if students have grasped the new material. Epstein (2007:5), Gunter et al. (2003:73) and Rosenshine and Stevens, in Pintrich and Schunk (2002:316-317), emphasised the importance of assessment in teaching and learning process. Assessment which is emphasised, is formative assessment or assessment for learning because it is assessment that takes place during the teaching and learning process, and not at the end of the process.

Carless (2007:59) stated that assessment tasks should promote the kind of learning dispositions required of students and should mirror real-world applications of the subject matter, students should be involved in assessment so that they develop a better understanding of learning goals and engage more actively with criteria and standards and for assessment to promote learning. In congruence, Goodwin and Webb (2014:4) asserted that in a constructivist classroom, the teacher designs the activities, such as problem-solving and in-depth inquiry, to guide the students to

discover knowledge rather than memorising facts. Additionally, Faraday, Overton and Cooper (2011:42) stated that practice and repetition help to ensure that the learning undertaken, is remembered. In elaborating assertion (Faraday et al., 2011:42), Friesen (2009:2) claimed that at the turn of the 20th century, Thorndike created theories which emphasised frequency which are exercise, recency and intensity, which are effective, as key conditions for learning had a significant and lasting impact on instructional practices and materials. From the assertions of Carless (2007:59) and Goodwin and Webb (2014:4), it is evident that assessment activities should be used to promote learners' learning, problem-solving, in-depth inquiry and knowledge discovery. I concur with Faraday et al. (2011:42) that practice and repetition help to ensure that learning undertaken, is remembered, and with Friesen (2009:2) that exercise should be frequent, recent and have an effect on learners' learning.

In summary, teach and assess entails integrating assessment into the teaching and learning process. Here assessment takes place during the teaching and learning process and, therefore, assessment in the teach and assess strategy is formative assessment or assessment for learning. Assessment is part of the teaching and learning process and any strategy for the teaching and learning process should include assess and, thus, a teach and assess strategy. The assessment activities should be used to promote learners' learning, problem-solving, in-depth inquiry and knowledge discovery and they should be frequent, recent and have effect on learners' learning. In the next section the discussions consider how the teach and assess strategy can contribute towards effective teaching and learning in EMS.

3.7 HOW THE TEACH AND ASSESS STRATEGY CAN CONTRIBUTE TOWARDS EFFECTIVE TEACHING AND LEARNING IN EMS

In the previous section, it was stated that the teach and assess strategy is based on formative assessment or assessment for learning. Therefore, in this section, formative assessment or assessment for learning is used to determine how the teach and assess strategy can contribute towards effective teaching and learning in EMS. According to Harlen (2014:6), formative assessment is an on-going cyclic process in which information is gathered in relation to the pupils' progress towards the short-

term goals of a lesson or series of lessons. Formative assessment is a cyclic process because assessment is used to identify the gaps in teaching and learning and the results of assessment determine what should be taught again. On the other hand, Ndalichako (2015:326) postulated that classroom assessment is a vital ingredient for effective teaching and learning, and when it is integrated in classroom practices, substantial learning gains can be achieved. Ndalichako (2015:326) further stated that it is essential because it gives students guidance on their performance and contributes to improving the learning process and provides feedback on students' progress over a period of time, so that any errors or learning difficulties can be identified and corrected. In congruence, Cordiner (2011:8), Dixon-Roman (2011:2), Harlen (2014:6), Heritage (2007:141) and Flórez and Sammons (2013:18) stated that formative assessments provide feedback to both the teacher and student on the student's learning and developmental progress. Based on the preceding discussions, the teach and assess strategy will help EMS teachers to determine the gaps in their lessons and be able to re-teach what is supposed to be re-taught before learners work on the new lesson. EMS teachers and learners will receive feedback, which can be used to determine whether the content has been mastered or what still needs to be emphasised in the lesson. This is key in EMS because the topics in EMS are interrelated, i.e. the proficiency in one topic is needed before another topic is taught. For example, learners should understand subsidiary journals before they can post the transactions to the ledgers.

Hofman et al. (2015:6) elaborated that the feedback provided is a real-time feedback, while Looney (2010:4) posited that feedback provided is timely and specific. In addition, Hofman et al. (2015:6) stated that feedback to students and teachers guide adjustments they both can make to learning and teaching and have, in effect, a multiplier effect on various components of the learning process. Also, feedback informs what the next steps in learning should be (Harlen, 2014:6; Heritage, 2007:141). I contend that feedback received will be real-time feedback because learners will not have to wait for a test or examination before they know about their performance in EMS. The feedback will be specific to a particular lesson of EMS and adjustment can be effected on time before learners are confronted with a new lesson. Feedback will also guide the teacher on when to move to the next lesson.

Looney (2010:4) averred that formative assessment is integral to classroom culture and oriented towards clear learning goals. In congruence, Heritage (2007:141-142) posited that learning progressions towards standards is a core element of formative assessment. On the other hand, Dunn and Mulvenon (2009:2) stated that formative assessment is assessment used by teachers and students to adjust teaching and learning, while Sebate (2011:62) claimed that formative assessment monitors and supports the process of learning and teaching, and is used to inform learners and teachers about the learners' progress in order to improve learning. On the other hand, Dixon-Roman (2011:2) purported that formative assessment informs instructional strategies, and can be used to assist in the development of a student's metacognitive and meta-componential competence. In support of this, Flórez and Sammons (2013:18) claimed that formative assessment helps to achieve clarity about what and how they want students to learn, by careful and flexible planning with objectives based on assessment evidence, regular revisiting and reinforcement of objectives during lessons and a clear notion of what students could and could not do in order to help them to progress. I agree that assessment activities will help the teacher to set clear learning goals which must be attained in every EMS lesson. Formative assessment will help the teacher to monitor whether learning has taken place and determine the level of progression towards achievement of EMS outcomes in a particular class. The teacher will know whether his or her teaching strategies are effective in EMS lessons.

Mansell and James (2009:9) purported that formative assessment is the use of day-to-day, often informal, assessments to explore pupils' understanding, so that the teacher can best decide how to help them to develop that understanding. Though, Hofman et al. (2015:6) argued that formative assessment brings changes which offer the promise of transforming classrooms and schools, producing equally profound, improved student outcomes (including shrinking achievement gaps), and greatly increasing educational efficiency. But, Flórez and Sammons (2013:18) postulated that assessment for learning encourages students to become more active and participative in classroom interaction; the teachers' participation is said to shift from the prime concern to be a content deliverer who largely controls the classroom dynamics, to a moderator and facilitator of learning who collaborates with students during the class, supporting and monitoring their progress. Congruently, Harlen

(2014:6) and Heritage (2007:141) stated that pupils are the ones who do the learning. Based on assertions by Harlen (2014:6), Heritage (2007:141-142), Hofman et al. (2015:6), Flórez and Sammons (2013:18) and Mansell and James (2009:9) the teacher will be able to understand how to help EMS learners to develop understanding; learners' outcomes achievement will improve, learners will be actively involved in their learning and the teacher will work in collaboration with learners towards the achievement of the outcomes.

In summary, the teach and assess strategy will provide EMS teachers and learners with feedback, which is real-time, specific feedback. Feedback will help EMS teachers to determine the gaps in their lessons and be able to re-teach what is supposed to be re-taught. Feedback will be specific to a particular lesson of EMS and adjustment can be effected on time, before learners are confronted with a new lesson. Learners will not wait for a test or examination before they know about their performance in EMS. Assessment activities will help EMS teachers to set clear learning goals which must be attained in every EMS lesson. The teacher will be able to monitor whether learning has taken place and determine the level of progression towards achievement of EMS outcomes in a particular class. The teacher will know whether his or her teaching strategies were effective in EMS lessons or whether they need to be adjusted to improve learners' learning. Learners will be actively involved in their learning and the teacher will work in collaboration with learners towards the achievement of EMS outcomes. Having discussed the contribution of the teach and assess strategy towards effective teaching and learning in EMS, the next section looks into the conditions under which teach and assess strategy can be successfully implemented in EMS.

3.8 THE CONDITIONS UNDER WHICH THE TEACH AND ASSESS STRATEGY CAN BE SUCCESSFULLY IMPLEMENTED IN ECONOMIC AND MANAGEMENT SCIENCES

Ololube (2013:40) postulated that the best-formulated strategy is useless, or rather worthless, if it cannot be implemented effectively; for effective implementation, it needs to be translated into more detailed policies that can be understood at the functional level of an educational system. Olsen and Olsen (2009:31), on the other

hand, argued that implementation is the most difficult part of the planning process – it is actually achieving the goals set out in the plan, while remaining alert and flexible to new opportunities as they unfold with the overall aim of integrating the strategic planning with daily, weekly, and monthly routines. Notwithstanding the aforementioned, according to Earle (2009:22), for a strategy to be effective, organisations must have the participation and support of leaders, process champions and employees who will implement the plan. I concur with Olsen and Olsen (2009) that the implementation of a strategy is the most difficult part of the planning process and with Ololube (2013:40) that the strategy is worthless if it cannot be implemented effectively. From the assertions of (Ololube, 2013:40; Earle, 2009:22; Olsen and Olsen, 2009:31), for a strategy to be effectively implemented, it needs to be translated into detailed policies which can be understood by people who will implement the strategy, which should be integrated into daily, weekly and monthly routines, and the leaders and employees (implementers) must participate and support the strategy. In this study, the school principal, HOD and union leaders are the co-researchers in the development of the strategy. Teachers and learners who will implement the strategy will take part in the development of the strategy. This strategy will not be implemented as an add-on to implementers' responsibilities, but will be incorporated in their daily routines. The strategy will be in a simple and clear language for easy understanding by those who will use it.

Hummelbrunner and Jones (2013:9) contended that in strategy development, the starting point is the present (not the future), beginning with an assessment of the effectiveness of current activities and strategies, increasing the sensitivity for change, improving synergies and incorporating past experience to retain elements of past success, such as strengths and skills. In contrast, Nickols (2016:7) asserted that the necessary precondition for formulating strategy is a clear understanding of the ends to be obtained and without these ends in view, action is purely tactical and can quickly degenerate into nothing more than a flailing about. I concur with Hummelbrunner and Jones (2013:9) that the strategy development should start from the present and with Nickols (2016:7) that strategy formulation should be based on a clear understanding of the future. The present will help to assess current activities which are effective and the future will help to determine the actions that need to be taken to bring effective change. According to Olsen and Olsen (2009:31), the plan or

strategy needs to be supported with people, money, time, systems and, above all, communication. In addition, Wulf, Meibner and Stubner (2010:8) posited that an integrative strategy framework needs to consider viewpoints and information from diverse stakeholders in order to challenge existing assumptions and overcome inertia, to be based on a clear process for which specific strategy tools are defined so that an easy and quick application to practice is possible and to be adaptable to different environmental conditions in order to ease application. In congruence with Olsen and Olsen (2009:31) and Wulf et al. (2010:8), the strategy should be supported with people, money, time, systems, communication and stakeholders. There should be people who will implement the strategy. Money for resources and training should be available. The systems must be created which will help the implementation of the strategy. Time for training people on the strategy must be available. Different stakeholders must participate in strategy formulation, and effective communication must take place among the stakeholders. In order to implement the strategy of this study effectively there are conditions which must be met with regard to assessment, which are discussed below.

Ndalichako (2015:326) claimed that classroom assessment is seen as a vital ingredient for effective teaching and learning. On the other hand, Looney (2010:5) purported that formative assessment is most effective when practised systematically – that is, when it is integral to the teaching and learning process. Further, Ndalichako (2015:326) stated that due to the powerful influence of assessment on learning outcomes, researchers have advocated for the integration of assessment with teaching and learning. Therefore, for teach and asses to be a strategy for effective teaching and learning in EMS, assessment should be seen as a fundamental element of the learning and teaching process and not separate from the process. In order to achieve this the following conditions for assessment, stated by Flórez and Sammons (2013:4), should be met:

- It is part of effective planning. During the planning stage, assessment activities should be developed with their assessment tools.
- It is central to classroom practice. Assessment should play a crucial role when teaching and learning take place. Learners should be asked questions throughout the lesson to check their understanding.

- It promotes understanding of goals and criteria. Assessment activities should be based on the lesson to promote understanding and achievement of the lesson's goals.
- It fosters motivation. Assessment activities must motivate learners to learn because they can assess their progress in every lesson.
- It focuses on how pupils learn. Assessment should determine whether the teaching strategy applied, is effective for learners' learning.
- It helps learners know how to improve. Assessment should help learners to identify their weaknesses.
- It develops the capacity for peer and self-assessment. Learners should be able to assess themselves and their peers.

In addition to the conditions by Flórez and Sammons (2013:4), Cordiner (2011:1) stated the following conditions:

- There is a clear alignment between stated learning outcomes (or objectives), the learning experiences provided for students, and the assessment tasks. Assessment tasks should be aligned to the learning objectives of the lesson.
- Student understanding of the assessment process is facilitated by clear explanations of the assessment tasks, how the assessment tasks relate to the learning outcomes, and the criteria and standards against which students will be assessed. The assessment tasks should be clear and relate to the lesson outcomes.
- Assessment tasks assess the capacity to analyse and synthesise information and concepts, not just recall the information previously presented. Assessment tasks should not be based on recalling information, but should involve analysis and synthesis of information and concepts.

In congruence with Flórez and Sammons (2013:4) and Cordiner (2011:1), Looney (2010:5) purported that effective formative assessment focuses attention on students' learning goals, and what students need to do to reach goals. Teaching and learning, oriented towards specific, clear learning goals and which supports a mastery approach to learning, as opposed to a performance approach, is more effective. In support, Ndalichako (2015:326) asserted that classroom assessment is

essential because it gives students guidance on their performance and contributes to improving the learning process and provides feedback on students' progress over a period of time, so that any errors or learning difficulties can be identified and corrected. Moreover, Spiller (2009:5) stated that the evidence suggests that when a conversation around assessment and feedback is extended and the students are more active participants in the whole process, feedback is likely to be most useful to students' learning. Furthermore, Spiller (2009:5) stated that feedback should be given as soon as possible after the completion of the learning task. Based on the preceding assertions, assessment should be aligned to lesson goals or objectives, and assessment tasks should be clear and require learners to analyse and synthesise. Assessment should provide feedback to learners on their learning, and feedback should be given as soon as possible to correct the errors as early as possible.

Summarily, for a strategy to be effectively implemented, it needs to be translated into detailed policies which can be understood by people who will implement it (EMS teachers and learners). The strategy should be integrated into daily teaching and learning activities and should not be an add-on on the work of the teachers and learners, i.e. assessment activities should not increase the workload of EMS teachers and learners. The school principal, the EMS HOD, the EMS subject advisor, EMS teachers, EMS learners, leaders of teachers' unions and learners' leaders will be involved in strategy development and support its implementation. The strategy will be in a simple and clear language in order to be understood by those who will use it. Strategy development will start from the present by assessing the current situation and the future to determine the actions that need to be taken to bring about effective change. The strategy will be supported by people to develop and implement the strategy, time to plan for implementation, systems to monitor implementation, communication of information, and feedback on progress on implementation and involvement of the relevant stakeholders. For assessment, the conditions are that assessment should be part of the lesson-planning process and be aligned to lesson goals or objectives as stated in EMS teaching plans. The assessment tasks should be clear, understandable and be based on the EMS content. Learners should also be required to use their high order thinking skills which include analysing and synthesising. Learners should be provided with feedback

which is prompt in order to correct errors as soon as possible. Having discussed the conditions under which the teach and assess strategy can be successfully implemented in EMS, there are possible challenges that might hamper the implementation of a strategy, which are discussed in the next section.

3.9 THE POSSIBLE CHALLENGES THAT MIGHT HAMPER THE IMPLEMENTATION OF TEACH AND ASSESS AS A STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN EMS

Li, Guohui and Eppler (2008:3) argued that it is not surprising that, after a comprehensive strategy or single strategic decision has been formulated, significant difficulties usually arise during the subsequent implementation process. I concur with Li et al. (2008:3) that after a strategy has been developed, no matter how good it is, it encounters challenges during the implementation process. In elaboration, Brinkschröder (2014:7) identified the most common challenges as the rivalry of subsidiaries (i.e. departments), communication and lack of understanding for overall aims and direction support. I concur with Brinkschröder (2014:7) that one of the challenges in the implementation of the strategy is rivalry among the departments. At school, different departments want to implement their strategies, which might impact on the implementation of this strategy. If effective communication does not take place, there will be a challenge in the implementation of the strategy. The strategy will not be well-implemented if it is not well-understood by those who are supposed to implement it, or if the strategy is not supported by the stakeholders who are affected by the strategy. In addition, Rankins (2006:9) identified the challenges as following: too little time is spent in ensuring that the overall strategy is realistic and implementable before the strategy is published, limited management time commitment, implicit disagreement on priorities and an ineffective implementation management regime. I concur with Rankins (2006:9) that if the development of the strategy is rushed, it might hamper the implementation of the strategy. Lack of commitment to a strategy by the SMT might hamper the strategy implementation. Other competing priorities of the school might hamper the implementation of the strategy. The ineffective management of strategy implementation might hamper the implementation of a strategy. Congruently, Flórez and Sammons (2013:16) stated that any problems identified are attributed to unfavourable contextual conditions,

such as lack of time, insufficient application of assessment for learning principles in teaching and external constraints.

According to Harlen (2014:9), negative impacts arise when what has been assessed reflects only on easily tested aspects of learning, compounded by attaching rewards and punishments to the results, acquiring high stakes and therefore, the pressure on teachers to increase test results is transferred to pupils, even if the tests are not high stakes for pupils, and teachers focus on teaching the test content, train pupils in how to pass tests and feel impelled to adopt teaching styles which do not match what is needed to develop real understanding. In congruence, Hofman et al. (2015:3-4) argued that, in addition to failing to deliver the desired results, the current system of high-stakes testing and accountability appears to have had many unintended and counter-productive consequences, such as increasing stress levels for professionals, little positive impact on classroom teaching and disengaged students. In addition, Wiliam (2013:19) posited that when students believe they cannot learn, when challenging tasks are just one more opportunity to find out that you are not very smart, many students disengage. Based on the preceding discussions, the implementation of the teach and assess strategy as a strategy for effective teaching and learning, will be hampered when assessment is used to determine who should be punished or get a reward, because everyone will not use assessment for learning, but to get a reward or avoid punishment. The strategy implementation might increase pressure on teachers, which might make the teacher apply assessment practices incorrectly, leading to learners' disengagement.

Wiliam (2013:19) contended that when students disengage, they deny the teacher the opportunity to make any judgment about what the student can do and think it is better to be thought lazy, than dumb. Therefore, Rogier (2014:3) stated that many teachers feel assessment and testing are not relevant to their classroom practice and report that they feel unprepared to undertake assessment-related activities. But, according to Hodges, Eames and Coll (2014:191), when the teacher determines the required learning, the related assessment tasks and criteria, the performance of the student, the grade awarded, then the student takes a passive, rather than active, role in assessment – counter to the need for sustainable assessment practices that help prepare students for lifelong learning beyond the academy. In agreement with Wiliam

(2013:19), Rogier (2014:3) and Hodges et al. (2014:191), I contend that learners might not take part in assessment activities to avoid being seen as dumb. Teachers might have a different teaching approach and have a feeling that assessment activities are not relevant to their classroom practices. The strategy implementation will be hampered when learners are not actively involved in their assessment activities.

The possible challenges that might hamper the implementation of teach and assess as a strategy for effective teaching and learning in EMS can be summarised as follows: Rivalry among the departments because every department prioritise its activities over other departments; if there is no effective communication among the stakeholders who are supposed to implement the strategy; the strategy is not well understood by those who are supposed to implement it and the strategy is not supported by the stakeholders who are affected by the strategy; and when the development of the strategy is rushed and there is lack of commitment to a strategy by the SMT. The implementation of the strategy can also be hampered by competing priorities of the school and ineffective management of strategy implementation. The implementation of the teach and assess strategy as a strategy for effective teaching and learning will also be hampered when assessment is used to determine who should be punished or get a reward because not everyone will use assessment for learning, but to get a reward or avoid punishment. If the strategy implementation increases pressure on teachers, it might lead the teachers to apply assessment practices incorrectly, which might lead to learners' disengagement. Learners might not be actively involved in their assessment activities in order to be seen as those who did not do the activity, rather than to be seen as dumb. Teachers might have a different teaching approach and have a feeling that assessment activities are not relevant to their classroom practices and not integrate assessment into their teaching.

The next section discusses the mechanisms to overcome the challenges in the implementation of teach and assess as a strategy for effective teaching and learning in EMS.

3.10 MECHANISMS TO OVERCOME THE CHALLENGES IN THE IMPLEMENTATION OF TEACH AND ASSESS AS A STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN EMS

According to Li et al. (2008:3) there are many (soft, hard and mixed) factors that influence the success of strategy implementation, ranging from the people who communicate or implement the strategy to the systems or mechanisms in place for co-ordination and control. Therefore, Chemwei, Leboo and Koech (2014:119) recommended that, firstly, before trying to implement any strategy, the schools' management and educational stakeholders should carry out a strengths, weaknesses, opportunities, and threats (SWOT) analysis and identify strategic issues affecting the school. This will help them understand where they are, what challenges are facing them and what opportunities are available to them; they can hence minimise on their weaknesses and capitalise on their strengths, thus contributing to strategy implementation success. Secondly, according to Chemwei et al. (2014:119), schools should put a lot of emphasis on the training and development of its human resources, which will enhance the adoption of any planned change in the institution. In support, Dan (2013:246) also recommended that continuous training and capacity development should be done to the strategy implementation teams to enable them to efficiently take the steps necessary in strategy implementation, such as fundraising, planning and implementation of strategic activities and enhancing financing. Based on the assertions of the authors, in order to overcome the challenges in the implementation of teach and assess as a strategy for effective teaching and learning in EMS, there should be communication among the people who implement the strategy. The systems to co-ordinate and control the implementation of a strategy should be in place. When a strategy is developed, a SWOT analysis should be carried out to understand the current situation in order to plan for the change. People who are involved in the strategy implementation must be trained on the strategy.

Kohtamäki (2010:14) asserted that the major success in the strategy implementation is shared internal support and the capacities and knowledge of personnel to carry out the strategic plan. In addition, Chukwumah and Ezeugbor (2015:1388) recommended that school principals are encouraged to collaborate with relevant

stakeholders to promote capacity development of teachers through intensive and regular in-house seminars or workshops to improve knowledge, pedagogical skills and competence of teachers in various subjects, and improvisation of instructional materials to enhance the teaching-learning process. In order to overcome the challenges in the implementation of a strategy, Zeps and Ribickis (2015:936) suggested that a detailed activity plan, with clear tasks and deadlines for all units, should be created, as well as motivation of management to cascade the tasks to the lower units and avoidance of too frequent change of strategic targets. Based on the discussions by Chukwumah and Ezeugbor (2015:1388), Zeps and Ribickis (2015:936) and Kohtamäki (2010:14), I contend that the success of the strategy is dependent on internal support and capacities of the teachers who will implement the strategy. In order to improve capacity of EMS teachers who will implement the strategy, intensive training must take place. A clear plan of strategy implementation must be developed and be communicated to teachers who implement the strategy. However, Brinkschröder (2014:7) shares the most important solutions gained from practice to overcome the challenges in the implementation of a strategy as follows: ensuring information exchange and meeting points between personnel of the different subsidiaries or departments; making communication interesting short and flexible to clearly convey overall objectives; increasing atmosphere and motivation; giving support to raise understanding and enthusiasm; building teams; and holding meetings to organise; allocating leadership; and giving responsibility to raise commitment and identification.

Hofman et al. (2015:6) argued that formative assessment go to the heart of where learning and teaching happen, and effective implementation of formative assessment will improve teaching practice and will engage and motivate students to take ownership of their own learning. On the other hand, Wiliam (2013:20) posited that different teachers will find different aspects of classroom formative assessment more effective for their personal styles, their students, and the contexts in which they work, so each teacher must decide how to adapt the use of formative assessment for use in their practice. Again, Looney (2010:5) asserted that formative assessment is most effective when practiced systematically, i.e. when it is integral to the teaching and learning process. On the other hand, Lumadi (2013:220) purported that teachers should be constantly focused, hence the need for them to have teaching plans, so

that their classroom assessment activities are well-coordinated. Based on the preceding discussions, I contend that if assessment is at the heart of the teaching and learning process, it will not increase the workload of teachers, and student will be motivated to be actively involved in their learning, rather than being disengaged. Teachers should be allowed to adapt the implementation of the strategy in order to suit their teaching styles and practices. The implementation of strategy should be integrated in the teaching and learning process, done systematically, well-coordinated and addressing the content from the teaching plans.

Quyen and Khairani (2017:169) recommended that careful teacher-training and providing support to them should be a priority in order to implement formative assessment efficiently. Congruently, Lumadi (2013:220) stated that teachers should be afforded more opportunities to receive professional development and training of teachers should be a process that has to take place over an extended time. On the other hand, Hofman et al. (2015:5) postulated that formative assessment should aim to drive intrinsic motivation for learning by asking and answering why students ought to learn something, making it relevant for them, and giving students the feedback. Regarding feedback, Looney (2010:5) elaborated that feedback is most effective when provided in a timely manner and good feedback is based upon explicit criteria regarding expectations for performance. I concur with Quyen and Khairani (2017:169) and Lumadi (2013:220) that teachers should be trained and supported over an extended period of time in order for them to implement the strategy effectively. I also concur with Hofman et al. (2015:5) and Looney (2010:5) that the strategy must be based on things which are relevant to learners. Learners must get feedback which is timely and based on learning goals in order to motivate them to actively participate in their own learning.

The strategy will be proposed in Chapter seven of the study. In summary, in order to overcome the challenges in the implementation of teach and assess as a strategy for effective teaching and learning in EMS, there should be communication among all the stakeholders and people who implement the strategy. There should be systems in place to co-ordinate and control the implementation of a strategy. The SWOT analysis should be carried out to understand the current status of integrating assessment into the teaching and learning process in order to plan how to improve

on integrating assessment into the teaching and learning process. People who are involved or affected by the strategy should be trained intensively and supported on strategy implementation. There should be a clear plan of strategy implementation and it must be communicated to those who implement the strategy. Assessment should be at the heart of the teaching and learning process that is to be integrated into the teaching and learning process in order to avoid the increase of the workload of teachers. The strategy should be developed systematically, be well-coordinated and address the implementation of teaching plans. Teachers should be allowed to adapt the implementation of the strategy to suit their teaching styles and practices. The strategy should be based on materials which are relevant to learners to motivate them to participate in their own learning. Learners should get prompt feedback which is based on learning goals of EMS.

3.11 CONCLUDING REMARKS

This chapter discussed literature related to this study. Approaches to teaching, approaches to learning, the purpose of assessment and EMS as a subject were discussed. Research questions were answered in this chapter. The following were also discussed: what a “teach and assess” strategy entails, how a “teach and assess” strategy will contribute towards effective teaching and learning in EMS, the conditions under which a “teach and assess” strategy can be successfully implemented in EMS, the possible challenges that might hamper the implementation of a strategy and mechanisms to overcome the challenges in the implementation of teach and assess as a strategy for effective teaching and learning in EMS.

The next chapter will focus on an introduction, research design and methodology, PAR as an approach, ethical considerations, the profile of the research site, the profiles of co-researchers, the researcher’s background, data generation, data analysis and concluding remarks.

CHAPTER FOUR

DATA GENERATION FOR TEACH AND ASSESS: A STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

4.1 INTRODUCTION

Literature related to this study was discussed in the previous chapter. Approaches to teaching, approaches to learning, the purpose of assessment and EMS as a subject were discussed. Research questions were answered in the previous chapter, except the question of a proposed strategy, which will be answered in Chapter seven. This chapter will focus on research design and methodology, PAR as an approach, ethical considerations, the profile of the research site, the profiles of co-researchers, the researcher's background, data generation, data analysis and concluding remarks. The next section discusses research design and methodology.

4.2 RESEARCH DESIGN AND METHODOLOGY

Mouton (2001:56) explained that research methodology focuses on the research process and the kind of tools and procedures to be used, while Leedy and Omrod (2005:94) claimed that many researchers categorise research studies into two broad categories, i.e. quantitative research and qualitative research. In addition, De Vos, Strydom, Fouché and Strydom (2011:308) wrote that there is a difference in the way in which quantitatively and qualitatively oriented researchers view the nature of a research design, because a qualitative paradigm requires the design of the research to be more than a set of worked-out formulas and the qualitative researcher is concerned with understanding and an explanation with naturalistic observation, rather than controlled measurement, with the subjective exploration of reality from the perspective of an insider, as opposed to that of an outsider predominant in the quantitative paradigm. Notwithstanding the preceding discussions, Chimirri (2015:39) postulated that design practices, as well as design research, underwent a methodological paradigm shift towards collaborating with those human beings that are to benefit from a design. In this study, a qualitative paradigm which shifts

towards collaborating with human beings that are to benefit from the design and the study is concerned with understanding explanations from the perspective of the insider. Those who are to benefit from the study will work with the researcher as co-researchers.

De Vos et al. (2011:309) identified qualitative research perspectives or major approaches as objectivism, interpretivism and constructionism. The objectivism approach is based on the belief that there is an external reality that can be studied objectively. The interpretivism approach believes that the subject matter of the social sciences is fundamentally different from that of the natural sciences. Furthermore, De Vos et al. (2011:310) stated that the constructionism approach believes that there is no truth out there; only a narrative reality that changes continuously – reality can therefore only be socially and personally constructed and the subject should be actively involved. As discussed in Section 2.2.1.10, a constructivism approach will be used in this study because the theoretical framework of this study, CER, supports that knowledge should be socially constructed and the co-researchers must be actively involved as co-researchers.

Kumar (2014:122) defined a research design as a road map that one decides to follow during one's research journey to find answers to one's research questions as validly, objectively, accurately and economically as possible. On the other hand in congruence, Mouton (2001:54) described a research design as a plan or blueprint of how you intend to conduct the research. In support of this, Tustin, Lightelm, Martins and Van Wyk (2005:82) stated that a research design represents the master plan that specifies the methods and procedures for collecting and analysing the required information and gives a clear account on how data will be collected and analysed. According to Kumar (2014:122), a research design is a procedure cum operational plan that details what and how different methods and procedures are to be applied during the research process. Further, Kumar (2014:123) asserted that a research design is a plan through which the researcher decides how to communicate to others decisions regarding what study design is proposed to be used, how information will be collected from the respondents (co-researchers), how respondents (co-researchers) will be selected, how the information collected will be analysed and how the findings will be communicated. A research design for this study will give a clear

explanation of how the study will be conducted, i.e. the research method, ethical considerations, the research site, the co-researchers (i.e. researchers), data generation and data analysis. The next section discusses PAR as a research method for this study.

4.3 PAR AS AN APPROACH

PAR is a powerful methodology that has grown in popularity in the Global North, primarily over the past fifteen years. PAR is a qualitative research methodology and is considered a subset of action research, because action research discourse includes a myriad of terms, such as PAR, participatory research, community-based participatory research, and other forms of participative inquiry (Breda, 2015:9; MacDonald, 2012:34-35). On the other hand, Gaffney (2008:10) stated that PAR has been described in much the same way as action research, with little to distinguish the two, depending on whom one is reading. Notwithstanding the preceding assertions, Hien (2009:103) wrote that there are two main types of action research, i.e. Practical Action Research and PAR. In addition, Rose, Spinks and Canhoto (2015:2) and Aasgaard et al. (2012:1) asserted that another approach to action research has been to emphasise the collaborative and democratic possibilities of action research alongside its focus on changing the co-researchers' situations. Based on the preceding discussions, I conclude that PAR is a qualitative research methodology and a collaborative action research approach which focuses on changing the partici co-researchers pants' situation. Therefore, in this study a collaborative approach of research was applied and the co-researchers were regarded as co-researchers instead of participants. Collaboration, which is one of the objectives of PAR and as discussed in Section 2.2.1.2 is also the aspect for CER which is the theoretical framework for this study.

Chimirri (2015:39) contended that PAR has a long tradition of engaging in co-research, as well as co-design, reflected in its widespread use of the concept of emancipation. On the other hand in congruence with this, Boog (2003:426), Breda (2015:9), Crane and O'Regan (2010:3), Esau (2013:4), Hien (2009:103), Rose et al. (2015:2) and Tshelane (2013:416) stated that PAR has emancipatory roots. Notwithstanding these facts, Powers and Allaman (2012:1) postulated that PAR is a

process through which people investigate meaningful social topics, participate in research to understand the root causes of problems that directly impact them, and then take action to influence policies through the dissemination of their findings to policymakers and stakeholders. I concur with the preceding assertions that PAR engages in co-research, co-design and emancipation. People who are affected by the topic under investigation, act as co-researchers and are involved in research design. PAR aims at emancipating those who are affected by the topic under investigation. In this study, the co-researchers will be EMS teachers at the school, the HOD for EMS at the school, the principal of the school, the EMS subject advisor, two representatives of teachers' trade unions from the school, three learners, one RCL member, a Commerce Education university lecturer and a Commerce Education university student. The co-researchers will help to develop a research design. The study will emancipate co-researchers by affording them an opportunity to voice their views on an issue that is affecting them currently and that will also affect them in future. The emancipatory aim of CER (the theoretical framework for this study) will be achieved when people who never had a voice, are able to speak out about issues which affect them.

Cammarota and Fine (2008:5) concluded that PAR is a collective process, enriched by the multiple perspectives of several researchers working together – researchers are more or less insiders in a given situation. But, De Vos et al. (2011:491) maintained that in PAR, the focus is on the involvement and participation of all the roleplayers in the particular research project, while Crane and O'Regan (2010:2) and Kramer-Roy (2015:1207) purported that the unique feature of PAR is the participation of those affected by the issue and the potential for them to be involved in both asking and answering an action research question. In congruence, Tshelane (2013:416) stated that PAR is more than a method of conducting research, but an orientation to research and rooted in emancipatory movements, and it engages the co-researchers so that their voices can be heard and respected. I concur with Cammarota and Fine (2008:5), De Vos et al. (2011:491), Crane and O'Regan (2010:2), Kramer-Roy (2015:1207) and Tshelane (2013:416) that the unique feature of PAR is involvement and active participation of those affected by the issue. As indicated in the preceding paragraph, those affected by the issue, will participate actively in the research project.

Hien (2009:103) reported that PAR studies social issues that constrain individual lives, emphasises equal collaboration and focuses on life-enhancing change, resulting in the emancipated researchers. On the other hand, Lykes, Hershberg and Brabeck (2011:24) postulated that PAR is one of several critical approaches to research and seeks to develop collaborative processes that prioritise the voices and actions of those marginalised from power and resources in educational, advocacy and organising activities that contribute to knowledge construction and material social change and/or transformation. Notwithstanding the preceding discussions, MacDonald (2012:38-39) purported that PAR involves three types of change, including the development of critical consciousness of the researcher and the co-researchers, and improvement in the lives of those participating in the research process. Based on the preceding discussions, I contend that PAR studies social issues that constrain individuals' lives, emphasises equal collaboration, results in emancipated researchers, prioritises the voices and actions of those marginalised from power and resources in educational activities, and contributes to knowledge construction and social transformation. All these aspects are also related to the aims of CER, which is the theoretical framework for this study.

PAR is cyclical, participatory, systematic, dynamic, developmental and critical (Crane & O'Regan, 2010:13). According to Crane and O'Regan (2010:14) the main aspects of the PAR cycle are as follows: observing what is happening in a practice context; reflecting by developing an understanding of the context and one or more questions to begin with; planning a strategy that might provide the answer, or part of it; acting on the strategy; observing to describe what happened; analysing and developing a theory or insights about what this means; and checking out by sharing and seeking feedback. On the other hand in congruence, Gaffney (2008:10) postulated that PAR has also been used as an acronym to remember the process: Planning a change; Acting and observing the process and consequence of change; Reflecting on these processes and consequences; and then re-planning, acting, and observing and reflecting. In addition, Tshelane (2013:417) contended that PAR is a collaborative effort to address issues in specific systems and is a collaborative, cyclical, reflective research design that focuses on problem-solving, improving work practices and understanding the effect of the research or intervention as part of the research process. The system which is collaborative, cyclic and reflective, as Tshelane

(2013:417) contended, was used. The study followed the main aspects of PAR, as identified by Crane and O'Regan (2010:14), which are observing, reflecting, planning, acting, analysing and development of a theory. The PAR process of planning, acting and reflecting, as postulated by Gaffney (2008:10), was integrated in the process, as identified by Crane and O'Regan (2010:14). The researcher observed what happened in teaching and learning in EMS at schools when he worked as a subject advisor for EMS, i.e. assessment that is not integrated in the teaching and learning process. He reflected on this by developing an understanding of how effective teaching and learning in EMS can be achieved; if assessment can be integrated in the teaching and learning process. The researcher and co-researchers developed teach and assess as a strategy for effective teaching and learning of EMS. The co-researchers who field-tested the strategy gave feedback. The feedback was used to modify and develop the proposed strategy that is proposed in Chapter seven.

In summary, PAR is a qualitative research methodology and a collaborative action research approach. PAR engages in co-research, co-design and emancipation. People who are affected by the topic under investigation, act as co-researchers and are involved in research design. The study will emancipate co-researchers by affording them an opportunity to voice their views on an issue that affects them currently and that will also affect them in future. The co-researchers were two EMS teachers at the school, the HOD for EMS at the school, the principal of the school, the EMS subject advisor, two representatives of teachers' trade unions from the school, three learners, one RCL member, a Commerce Education university lecturer and a Commerce Education university student. Those affected by the issue participated actively in the research project. PAR studies social issues that constrain individuals' lives, emphasise equal collaboration, results in emancipated researchers, prioritises the voices and actions of those marginalised from power and resources in educational activities, and contributes to knowledge construction and social transformation. The main aspects of PAR relate very well with the main aspects of CER, which is the theoretical framework for this study, as discussed in Chapter two. The system of PAR is collaborative, cyclic and reflective and the PAR process involves planning, acting and reflecting. The process of PAR used in this study involves observing, reflecting, planning, acting, analysing and development of

a theory. The next section looks into ethical considerations which have been observed in this study.

4.4 ETHICAL CONSIDERATIONS

According to Schulze (2002:17), whether a quantitative or a qualitative research approach is used, it is important for the researcher to conduct research in an ethically responsible way. In addition, Tustin (2006:14) stated that ethics, or what is deemed acceptable or unacceptable in human conduct, has become a key issue in research and is central to the execution of research projects. On the other hand, Merriam (2001:219) averred that to ensure that the study's findings were not used to the detriment of those involved, the researcher has to be conscious of the ethical issues that pervade the research process and examine his or her personal philosophical orientation against those issues. In congruence, De Vos et al. (2011:113) posited that for researchers in the social sciences, the ethical issues are pervasive and complex, as data should never be obtained at the expense of human beings. On the other hand, Schulze (2002:17) stated ethical consideration is of particular importance in qualitative research where the researcher is the main instrument and becomes immersed in the context of the research. I concur with Tustin (2006:14) and Schulze (2002:17) that any research approach must be conducted in an ethically responsible way and with De Vos et al. (2011:113) and Merriam (2001:219) that data should not be generated to the detriment or expense of human beings. Ethical clearance for this study was sought from the University of the Free State Education Research Ethics Committee. The ethical clearance certificate for this study is number UFS-HSD2016/0311 and attached as **Appendix A**. This was done to ensure that the research project is carried out in an ethically responsible way and not to the detriment of the co-researchers. The researcher complied with all ethical issues, as spelt out in the ethical clearance certificate.

Kumar (2014:284, 289) purported that there are many ethical issues to consider concerning co-researchers, researchers and sponsoring organisations, while De Vos et al. (2011:113) averred that research should be based on mutual trust, acceptance, cooperation, promises and well-accepted conventions and expectations between all parties involved in a research project. Notwithstanding the assertions made by

Kumar (2015:284, 289) and De Vos et al. (2011:113), Neuman (2014:145) stated that ethical issues are concerns, dilemmas and conflicts that arise over a proper way to conduct a research and define what is not legitimate to do or what moral research procedure involves. In addition, De Vos et al. (2011:115) stated that ethical issues require the researcher to balance values, i.e. the pursuit of scientific knowledge and the rights of those being studied or of others in the society. In this study, there are no sponsoring organisations and therefore only ethical issues concerning the researcher and co-researchers were considered.

Permission to undertake the study was sought from the Director of Strategic Planning and Research Directorate of the Free State Department of Education and the principal of the participating school before data generation began. Permission was granted by both the Director and the principal. This research was based on mutual trust, acceptance, cooperation, promises and well-accepted conventions and expectations between all parties involved in a research project. Participation was voluntary and the basic human rights of co-researchers were protected at all the times during the research project.

Kumar (2014:289-290) posited that ethical issues in research can be examined in relation to co-researchers, researchers and sponsoring organisations. With regard to research, co-researchers' areas which can pose ethical issues if not dealt with properly are as follows: collecting information, seeking consent, providing incentives, seeking sensitive information, the possibility of causing harm to co-researchers and maintaining confidentiality. With regard to the researcher, areas which can pose ethical issues include: introducing bias, providing and depriving individuals of treatment, using unacceptable research methodology, inaccurate reporting, and inappropriate use of information. On the other hand, De Vos et al. (2011:115) identified the following ethical issues: harm to experimental subjects and/or respondents, voluntary participation, informed consent, deception of subjects and/or respondents, violation of privacy/anonymity/confidentiality, denial of treatment, compensation, debriefing of co-researchers, actions and competence of researchers, cooperation with contributors and sponsors, and release or publication of the findings.

In this study, consent forms were signed by the co-researchers, and parents signed consent forms for their participating children. Co-researchers participated freely and voluntarily. Co-researchers were assured anonymity, confidentiality, the ability to withdraw freely from participation at any stage and given the option of choosing not to comment on particular issues. Co-researchers were not paid for participating in the research project, but were reimbursed for reasonable transport costs to attend research project activities. The researcher was not biased during interaction with the co-researchers, reported the findings truthfully and only used the information for research purposes. The researcher debriefed the co-researchers when the research project had been completed. In future, the researcher will not use data generated in this research for any other purpose, except for research publications.

In summary, research was conducted in an ethically responsible way and data were not generated to the detriment or expense of co-researchers. Ethical clearance for this study was sought and granted from the University of the Free State Education Research Ethics Committee, attached as **Appendix A**. Permission to undertake the study was sought and granted from the Director of Strategic Planning and Research Directorate of the Free State Department of Education, attached as **Appendix C** and the principal of the participating school, attached as **Appendix D** before data generation began. The research was based on mutual trust, acceptance, cooperation, promises and well-accepted conventions and expectations between the researcher and the co-researchers. The rights of the co-researchers were protected at all the times during the research project. Consent forms were signed by co-researchers, attached as **Appendix R, S, T, U, V and W**, learners signed assent forms, attached as **Appendix X**, the RCL member signed an assent form, attached as **Appendix Y**, and parents signed consent forms for their participating children, attached as **Appendix Q**. Co-researchers participated freely and voluntarily. Co-researchers were assured anonymity, confidentiality, the ability to withdraw freely from participation at any stage and given the option of choosing not to comment on particular issues. Co-researchers were not paid for participating in the research project, but were reimbursed for reasonable transport costs to attend research project activities. The researcher was not biased during interaction with the co-researchers, reported the findings truthfully and only used the information for research purposes. The researcher debriefed the co-researchers when the research

project was complete. Data generated in this research will not be used for any other purposes except for research publications. The next section discusses the profile of the research site.

4.5 PROFILE OF THE RESEARCH SITE

The research site was a school in the Thabo Mofutsanaya Education District in the Free State Province. The school was located in one of the Qwaqwa villages. The school was a quintile one school, which indicates that the school was located in an area that was poor. It was a non-Section 21 school, which means that the Free State DBE procured all the resources on behalf of the school. The grades offered at school were Grade R (which was introduced in 2016), Grade 1 (which was introduced in 2017) and Grade 4 to Grade 9. The number of learners enrolled in these grades was 711. The school intended to introduce Grade 2 and Grade 3 incrementally in 2018 and 2019 respectively. The Home Language (HL) of the majority of learners at the school was Southern Sotho, whereas the Language of Learning and Teaching (LoLT) in the Foundation Phase (FP) was Southern Sotho and in the Intermediate Phase (IP) and Senior Phase (SP), the LoLT was English. EMS was one of the subjects offered at school for all learners in Grade 7 to Grade 9. The school's staff members comprised of the principal, one deputy principal, three HODs, 20 teachers, two administrative clerks, two cleaners, one gardener and four nutrition programme food handlers. The HOD for EMS was also the HOD for Life Orientation (LO) and Creative Arts (CA), and taught EMS in Grade 8. There were three teachers who taught EMS; one teacher was responsible for Grade 7, the other teacher responsible for Grade 8 and the other teacher responsible for Grade 9. The RCL consisted of six members. There were two teacher unions which organised teachers at the school.

The research site was selected because it offered EMS as a subject. The researcher purposively chose the school because when he was the subject advisor for EMS, he worked with this school; the school was one of the schools performing well in EMS, the Grade 8 and 9 EMS teachers from the school were committed to EMS teaching, and learners from the school performed well in EMS competitions. The researcher regarded the school as information-rich for this study. The next section discusses the profiles of the co-researchers.

4.6 PROFILES OF CO-RESEARCHERS

Below are the profiles of all the co-researchers.

4.6.1 EMS subject advisor

Mr Josephs (pseudonym), the EMS subject advisor in the Thabo Mofutsanyana Education District, holds a Senior Primary Teachers' Diploma, a Further Diploma in Education (Economic and Management Sciences) and a Bachelor of Public Administration Honours degree. He had worked as a teacher for 11 years and taught English, Mathematics, Social Sciences and EMS. He has worked as a subject advisor for EMS for the past 13 years. He attended 80% of the research project meetings.

4.6.2 EMS HOD

Mr X (pseudonym), the EMS HOD and Grade 8 teacher, holds a Senior Primary Teachers' Diploma (English, Mathematics, Biology and Afrikaans) and a Bachelor of Commerce degree in Accounting (Accounting, Commercial Law and Auditing). He has worked as a teacher for five years and taught Accounting, Mathematics, Natural Sciences, Life Orientation, Technology and EMS. He has worked as the HOD for EMS for the past 16 years, is responsible for EMS, Creative Arts and Life Orientation and teaches EMS and Life Orientation. He attended 80% of the research project meetings.

4.6.3 EMS Teacher

Mr Max (pseudonym), the Grade 9 EMS teacher, holds a Secondary Teachers' Diploma (Accounting and Typing) and an Advanced Certificate in Education (Technology). He was studying towards a Bachelor of Education Honours degree (Educational Management, Education Systems and Laws). He has worked as a teacher for the past 16 years, teaches EMS, Technology and Life Orientation, and has taught the subjects during his teaching career. He attended 100% of the research project meetings.

4.6.4 University lecturer

Vic (pseudonym), a university lecturer, holds a Master of Education degree in Curriculum Studies. He was in the final year of the study towards Philosophiae Doctor in Education. He has worked as a teacher for seven years at the school, where he taught Accounting and Economics. He was a Junior Lecturer at the university and specialised in Commerce Education. He had co-authored one published paper and had collaboratively written academic reports on the pedagogical and content knowledge of teachers and the impact youth facilitators, supplied by children organisation, had on the academic performance of the learners. He was co-supervising five Master of Education students in the discipline of Commerce Education. He had presented papers in conferences and colloquiums, both locally and internationally. He attended 80% of the research project meetings.

4.6.5 University student teacher

Jeff (pseudonym) a university student teacher. He was in the final year of study towards a Bachelor of Education degree and specialising in Business Studies, English and Sesotho. He worked part-time at the university as a facilitator for African Languages. In matric, he passed Sesotho, English, Mathematics, Accounting, Business Studies, Economics and Life Orientation. His research interests are in Curriculum Development and Curriculum Studies. He attended 100% of the research project meetings.

4.6.6 Teachers' unions' representatives

Miss P (pseudonym), a representative of a teachers' union, had taught for 32 years. She was the teacher for Mathematics at her school. She was a leader of the teachers' union at school level for six years. She was no longer holding any leadership position in the teachers' union. She attended 40% of the research project meetings.

Mrs M (pseudonym), a representative of a teachers' union, had taught for 18 years. She was the teacher for Sesotho at her school. She was a leader of the teachers' union at school level. Attended 20% of the research project meetings.

4.6.7 Principal

Mr P (pseudonym), the principal of the school, holds a Senior Primary Teachers' Diploma (Mathematics, English, History, Southern Sotho and Afrikaans) and Advanced Certificate in Education (Educational Management). He had worked as a teacher for nine years. He had worked for ten years as the HOD for all primary school subjects and had taught all primary school subjects. He has worked as the principal for the past seven years. He attended 40% of the research project meetings.

4.6.8 RCL member

The RCL member was a Grade 9 male learner. He was the president of the RCL at school. It was his third year in SP. He was registered for all nine Grade 9 subjects and his HL was Southern Sotho. He attended 40% of the research project meetings.

4.6.9 Learners

Learner one was a Grade 9 male learner. It was his fourth year in SP because he was retained once in Grade 8. He was registered for all nine Grade 9 subjects and his HL was Southern Sotho. He attended 40% of the research project meetings.

Learner two was a Grade 9 female learner. It was her third year in SP. She was registered for all nine Grade 9 subjects and her HL was Southern Sotho. She attended 40% of the research project meetings.

Learner three was a Grade 9 female learner. It was her third year in SP. She was registered for all nine Grade 9 subjects and her HL was Southern Sotho. She attended 40% of the research project meetings.

Having discussed the profiles of the co-researchers, the next section discusses the researcher's background.

4.7 RESEARCHER'S BACKGROUND

The researcher was a lecturer in the Education and Curriculum Studies Department at the University of Johannesburg. He previously worked as a lecturer in the Department of Curriculum and Instructional Studies at the University of Zululand from June 2016 to March 2017. He held different positions within the Free State Department of Education in the Thabo Mofutsanyana Education District. He started to work as a teacher in 1996 and taught Accounting, Business Economics (Studies) and Economics, worked as the HOD for the Commerce Department at school and taught Accounting, Business Economics (Studies) and EMS in the year 2000 when Curriculum 2005 (C2005) was introduced in Grade 7. In the same year, he attended the C2005 orientation programme for curriculum implementation and focused on EMS, which was a new Learning Area (LA). In 2003, he worked as a deputy principal and taught EMS. Attended training on the Revised National Curriculum Statement (RNCS) and focused on EMS implementation. In 2005 to 2016, he worked as a subject advisor for EMS in the Thabo Mofutsanyana Education District and trained teachers on the National Curriculum Statement (NCS), focusing on EMS curriculum implementation. When the Curriculum and Assessment Policy Statement (CAPS) was introduced, he trained teachers in EMS curriculum implementation. From 2014 to June 2016, he held a position of internal moderator for EMS in Grade 9 within the Free State Department of Basic Education (DBE).

As a subject advisor, he supported teachers in EMS curriculum implementation and conducted workshops on EMS content and methodologies. Working as a subject advisor for EMS, the researcher observed that farm schools' teachers struggled with managing teaching and learning in multi-grade classrooms. The researcher did not have any skill to help the teachers and during his Master's degree studies, the researcher focused on how to manage teaching and learning in multi-grade classrooms. The study helped the researcher to able to support EMS teachers teaching in multi-grade classrooms. The researcher also observed that teachers struggled to integrate assessment into the teaching and learning process in EMS

classrooms. Therefore, he decided to embark on this study to be able to help teachers on how to integrate assessment into the teaching and learning process in EMS classrooms in order to achieve effective teaching and learning. He self-published an EMS textbook for Grade 7 to Grade 9, which focused on financial literacy. The book was written, based on the observation that teachers were struggling to teach financial literacy in EMS.

4.8 DATA GENERATION

The process of PAR, according to De Vos et al. (2011:499-502), should be as follows: introduction to the community, problem identification and statement, goals and objectives, implementation of data collection technique, analysis of data, negotiation, planning, evaluation, report writing, action plan and evaluation of the action outcomes. This study followed the process of PAR, as identified by De Vos et al. (2011:499-502). On the other hand, Kumar (2014:191) argued that before the researcher starts collecting information from potential co-researchers, it is imperative to make sure that the respondent is willing to share information with the researcher; respondents must understand what is expected from them and the respondents must have the information sought. The researcher ensured that the co-researchers who participated in the study were willing to participate and share information, were informed about what was expected from them and were told about their roles and the information that was sought from them, as Kumar (2014:191) argued.

4.8.1 Recruitment of co-researchers

The researcher visited the school to talk to the school principal about the intention to conduct a research at the school. The research project was explained to the principal, deputy principal and the HOD for EMS at school. The principal agreed that the school could be used as a research site. The principal and the HOD were asked to inform EMS teachers about the request for their voluntary participation in the research project, and to identify three learners, one RCL member and one representative from each teacher trade union having members at school and inform them that they were requested to voluntarily participate as co-researchers in this study. The principal and the HOD were requested to identify these groups of people

because they were closer to them. The subject advisor and the university lecturer were called telephonically by the researcher to request them to voluntarily participate in the study. The research project was explained to them and they agreed to participate voluntarily. The lecturer was requested to identify one Commerce Education university student who would serve voluntarily as a co-researcher and the lecturer agreed. The lecturer was requested to assist in this matter, because he knew the Commerce Education students very well. When all the co-researchers were identified, the researcher sent them formal invitations to participate in the study, attached as **Appendix F, G, H, I, J, K, L, M** and **N**.

4.8.2 Planning for the first meeting

The researcher applied for ethical clearance from the University of the Free State Education Research Committee. An ethical clearance certificate was issued by the University of the Free State Education Research Committee, attached as **Appendix A** and having received the ethical clearance certificate, the researcher applied for permission to conduct a study at a school from the Free State Department of Basic Education, attached as **Appendix B**. The approval to conduct a research was granted by Free State Department of Basic Education attached as **Appendix C**. Having received an approval to conduct a study, based on previous verbal discussions with the principal of the school, the researcher sent the principal a formal letter requesting permission to conduct a study at the school, attached as **Appendix D**. The researcher sent invitations to participate to all co-researchers, consent forms to adult co-researchers and parents of participating minors and assent forms to minors. The HOD was called telephonically to determine the date that would be suitable for co-researchers based at the school to attend the first research meeting. The proposed dates were then communicated to other co-researchers who were not from the school. One date which was suitable for everyone was set as a date for the first research project meeting. The invitation for the first research meeting, with the date, venue, time and agenda, was sent to all the co-researchers and the parents of the minors, attached as **Appendix Z**. The research project meetings are discussed below.

4.8.3 Research project meetings

According to De Vos et al. (2011:404), in participatory and action research approaches, the intrusiveness of the researcher in the setting is not an issue because the approaches are interactive and fully include co-researchers. On the other hand, Kumar (2014:156) stated that the records of the discussions then become the basis of analysis for the findings and conclusions. I concur with De Vos et al. (2011:404) that PAR approaches are interactive and fully involves the co-researchers; therefore, the researcher is not seen as dominant. In this study, the records for the discussions in the form of audio-recording and notes were used as the basis for analysing the findings and conclusions. In addition, De Vos et al. (2011:502) purported that it is important to identify a data-collection technique for a study.

According to De Vos et al. (2011:502-503), data-collection techniques that can be used in PAR are community forums, nominal groups, workshops, focus groups, storytelling and drama. Community forums, also known as community meetings, make provision for larger groups of up to 50 participants. Making use of nominal groups is a small-group technique, used for up to 10 members and is used when the needs or problems of a community have been prioritised by the community's self-survey techniques. Workshops usually provide for a bigger crowd than the community forum, but it is a specifically target interest group and normally takes place after some preliminary research has been completed. Focus groups are used when a small selected group of 8 to 12 members is drawn together to apply their knowledge, experience and expertise to a specific problem. Storytelling is when all the members of a group tell their own story by giving an account of their experiences and demonstrating their views on the topic. Drama is when members of a group act out their story, instead of telling it to the community and spectators in the group interpret the meanings and comment on themes and patterns.

Neuman (2014:471) stated that focus groups are a special technique in which people are informally interviewed in a group setting, whereas Kumar (2014:156) postulated that focus groups are a form of a strategy in qualitative research in which attitudes, opinions or perceptions towards an issue, product, service or programme are

explored through a free and open discussion between members of a group and the researcher. Focus groups are facilitated group discussions in which a researcher raises issues or asks questions that stimulate discussion among members of the group. From data-collection techniques identified by De Vos et al. (2011:502-503), this study used focus groups as a data-collection technique. The focus groups, as discussed by Neuman (2014:471), were not used as a technique for this study. In this study, focus groups were used as discussed by Kumar (2014:156) and De Vos et al. (2011:502-503) when they discussed focus groups as group of co-researchers which applied their knowledge, experience and expertise to a specific problem and in which attitudes, opinions or perceptions towards an issue, product, service, or programme were explored through a free and open discussion between members of a group and the researcher. The next section discusses the first research project meeting.

4.8.3.1 First research project meeting

The first research project meeting took place at the research site on the date planned as per invitation, attached as **Appendix Z**. The researcher and six co-researchers were present at the first meeting. Co-researchers present, were the EMS HOD and Grade 8 EMS teacher, the EMS subject advisor, a university Commerce Education lecturer, a university Commerce Education student, a teacher's union representative and a Grade 9 EMS teacher. The principal could not attend the meeting because he was on sick leave. The Grade 7 EMS teacher and the other representative of the teacher's union did not attend and did not tender an apology. The learners and the RCL member did not attend because of the Free State DBE condition of research approval, which stated that learners should not participate in discussions with adults. The co-researchers were asked if they objected to all the interactive meetings being recorded and no one objected. The co-researchers were asked to submit their consent forms to the researcher. Then the proceedings started and were recorded.

The researcher welcomed all the co-researchers and acknowledged their presence. Research procedures, such as reasons for the inclusion of each co-researcher, ethical clearance, approval by the Free State DBE, approval by the principal,

invitation to participate, consent forms and invitations to the meeting were discussed. Each co-researcher introduced him- or herself. The co-researchers were briefed about the research project. The research topic, aims and objectives of the study were discussed. Having discussed the research topic, aims and objectives of the study, the co-researchers discussed how they would contribute to the project in relation to aims and objectives of the study. Below are the discussions when the members introduced themselves.

> Mr X*: Ja [Yes]… I am… I will be using my pseudonym. I am X, and then I am an HOD [err…] and I am going to be participate in this research that is going to take place on effective teaching and learning… that is teach and assess strategy, the effectiveness of that strategy teach and assess and then I am an HOD.*
>
> *I am also teaching EMS and I am teaching Grade 8.*
>
> Mr Josephs: *Ja [Yes], I am coming in here as a subject advisor for EMS Grade 7 [err…] I am Mr Josephs and [err…] as a subject advisor for EMS [err…] in the district, I am responsible for… for the implementation of the teach and assess strategy. I monitor, I am responsible for monitoring the success and the effectiveness of this strategy to see to it that it is implemented as it is expected of [err…] our teachers towards teaching. Specifically Grade 7, as I am responsible for Grade 7… yes.*
>
> Miss T: *I am Miss T, representing SADTU union; a Maths teacher. I am a core researcher also in this teach and assess strategy for effective teaching and learning in EMS.*
>
> Mr Max: *[Err…] I am Mr Max, representing teachers in this [err…] research and then [uhm…] teaching EMS Grade 9 and then I also want to see how this strategy can be [err…] can be improved.*

When the co-researchers had introduced themselves, they were briefed on the theoretical framework of the study (CER), as discussed in Section 2.2.1, the data generation method (PAR), as discussed in Section 4.3 and the data analysis method (CDA), as discussed in Section 4.9 below. The research team discussed the activities which should take place until a final strategy was proposed. The research

team identified activities, such as development of a strategy, addressing the objectives of the study, field-testing the strategy, finalising the strategy and debriefing. Having discussed the activities, the team developed a research plan and sharing of responsibilities. Below are the discussions when the research team developed the research plan.

Researcher: *Now we can be able to develop a plan now… we can be able to develop a plan. The dates now, we need to look into dates which will be convenient for us.*

Mr X: *[Err…] Meneer [Sir] for our first meeting, for us to kickstart, I was thinking of the 10th of March.*

Researcher: *Tenth of March, what is the day?*

Mr X: *It's a Friday.*

Researcher: *It's a Friday… okay I am not sure, Friday; is it convenient for all of us? Let's try to check whether is it suitable to all of us? Anyone having a problem or… because if it's Friday, it will be two o'clock like today. Because it must be after teaching… contact time. Is there anyone who is having a problem with that one?*

Jeff: *[Uhm…] the problem is I have a class that is ending at two o'clock.*

Researcher: *At two o'clock?*

Jeff: *Yes...!*
So I don't know if you can make it half past two to three there's no…

Mr Josephs: *I don't have a problem.*

Researcher: *Half past two… is it fine? [Miss T and other co-researchers agrees… it is fine]. Half past two, the tenth of March, 14:30 [jotting down the date]. Is it fine with everyone? Okay, that is the first meeting. The second… the second meeting?*

Mr X: *If I can come again…! Ja, we are saying that we need to complete this before we close [all concur] that is why I… because on the twentieth, obviously learners will be writing a test… what about next Friday, you say…?*

Mr Josephs: *So that will be Monday? [All responds by saying yes…] we are not thinking of the second one. [One of the members singing in the background], how about the second… the next Friday; the 17th?*

Researcher: *Okay, is the 17th fine?*

Mr X: *I am comfortable [everyone laughs…]*

Researcher: *Fine… [Jotting down…] 17th March…*

Mr X: *Time…?*

Researcher: *The same time. [All mumbles… the same time]*

Mr Max: *Then we'll celebrate… [Giggles…] ao Meneer [Sir]!*

Researcher: *When we inconvenience you. You needed to take that into consideration*

Mr Max: *Haai, no!*

Researcher: *20th are we comfortable? At what time because it's a school holiday?*

Mr X: *Nine o'clock*

Researcher: *Nine o'clock, we need to agree. [Someone mumbling something…. I don't think it's a problem]. We can take nine o'clock on the 20th… okay!) On the 10th what we'll be doing? […an unclear answer from everyone…] two objectives; first two [neh…]. Yes, then on the 17th [answer from the group… another two] the next two? Then on the 20th what do we do?*

Mr X: *The last one, we propose the strategy*

Researcher: *We propose… we propose the strategy [neh…] we propose the strategy it's the 20th. On the 21st it's a holiday, when can we request them because they… it will be time for exams [neh…] When can we request them to field-test it during that week?*

Mr X: *Let's check [uhm…] with Mr Max there… I am having periods on Thursdays.*

Mr Max: *I will have the periods on Monday.*

Researcher: *You will take them on 23rd … you'll take on 22nd … 22nd is Grade 9, 23rd is Grade 8. Grade 8… Grade 8 [jotting down]*

Mr Max: *And the one for Grade 7? [Laughs…]*

Researcher: *Then you'll talk to the one for Grade 7 and then we'll know the date. Is it fine? The HOD will talk to the one in Grade 7 and know the date. Then Grade 8… 23 March… Grade 8.*

Mr Max: *27th?*

Miss T: *Ke [Its] Monday, its 25th.*

Researcher: *But the person will decide [neh…] then from there it would have been field-tested [neh…]. Then the last one, it's when are we going to meet again now because we have… they will have field-tested from Monday to Friday… when? The following Monday is the twenty-what? [Someone screams 27th] 27th. Now which date can we take? Monday-Tuesday… I think Monday, Tuesday, Wednesday because if we say Thursday people now will be… now thinking about schools will be closing so that we don't inconvenience anyone in our activities. Which date? But you can decide any date, like I said with me that week is not a problem. We are left with the last day where now we'll be finalising everything.*

Mr Max: *Tuesday, oh [laughing…]*

Researcher: *Okay, Tuesday has been supported… Tuesday? 28th… 28th March analysing [neh…] colleagues are we happy with the plan that we have developed, time? Or we haven't dealt with time thank you. Time? On the 28th it must be after*

school, [all adds… half past two] but they'll be writing exams during that time. [Furniture moving in the background]. Still half past two… two?

Mr Max: *No, they can… maybe earlier.*

Researcher: *TWO…! Not earlier while they are still here. While… so that we don't affect our ethics.*

Mr Josephs: *Will they still be here at two… two o'clock? I don't think so.*

Researcher: *Is two fine? [Everyone agrees to two] because we'll be finalising the strategy; that is 14:00. Are we done? Okay… now after that we have developed this plan, then it's for me now to come and debrief you.*

Mr Josephs: *Will you [err…] compile this programme that we'll just suggested and email it to us? Okay.*

Researcher: *YES… yes… yes… yes…yes! Yes... I am going to email it to you… okay.*

The researcher had to intervene (cf: 2.2.1.7) when the plan was drawn because the co-researches were not used to one another as this was their first meeting and they were somewhat reserved. When drawing a plan, each member's needs and availability were considered, such as Jeff who stated that he had a class that ended at two o'clock and the times for meetings accommodated him. The dates were proposed by the co-researchers and it was checked whether the dates were suitable to every co-researcher before being finalised. The condition of approval by the Free State DBE that data generation should take place outside tuition time was considered at all times.

Below is the research plan and it was agreed that the researcher should distribute it to the co-researchers before the next meeting.

Table 4.1: Research plan

Date	Time	Activity	Responsible person
Before 10 March 2017	Not specified	Distribution of research plan.	Researcher
10 March 2017	14h30	Discussing: What the teach and assess strategy entails and how the teach and assess strategy will contribute towards effective teaching and learning in EMS.	Research team
17 March 2017	14h30	Discussing: The conditions under which the teach and assess strategy can be successfully implemented in EMS and possible challenges that might hamper the implementation of a strategy in order to put mechanisms in place to overcome them.	Research team
20 March 2017	09h00	Develop a proposed strategy.	Research team
22-24 March 2017	During EMS periods	Field-testing of a strategy.	Grade 8 and 9 teachers
28 March 2017	14h00	Reflection and finalisation of the strategy.	Research team
End of research project	Not specified	Debriefing on the research project.	Researcher

Co-researchers had an opportunity to give their views on their experiences in the first meeting. Below are the comments of the co-researchers.

Mr X: *No I think this will help us a lot in a long run [err…] that we are… we are already implementing the strategy that has been proposed but to improve it or to make it [err…] more teacher friendly and learners as well. I think [err…] it will help us a lot if we implement something… us as people who are at grass roots. Ja!*

Mr Josephs: *No, I think the meeting was very brief… but also very clear, thank you.*

Vic: *No, thank you so much, we really… pleasant to be here and your projects would invent… I am sure now we have… with the research site. As the programme goes by, I think we'll try and pull our socks and be the early birds, we feel very welcome in the study of yours, Ntate [Sir]. Thank you.*

Jeff: *Okay, I also… [Voice not clear…] in this research, as I am gonna be a teacher again so like… I will also take pride like "I was there in the meeting" [all laughs...] just something that "I was there we were developing the strategy" and we gonna teach them.*

Miss P: *Oh, thank you, Ntate [Sir], I am going to learn a lot, the meeting was very interesting, thank you.*

Mr Max: *[Clears throat…] I think [err…] we are going to be grateful to be part of this research because I am the one who is doing the work… [All laughs…]*

The co-researchers (Mr Josephs, Vic and Miss P) were happy with the proceedings of the first meeting. The co-researchers (Jeff, Vic and Mr Max) promised that they would contribute towards the development of a strategy. The co-researchers (Mr X and Miss P) indicated that they would learn a lot through the process. The research team was reminded about the date of the next meeting as it was agreed upon in the research plan and the meeting was closed. The next section is based on the second meeting of the research project.

4.8.3.2 Second research project meeting

The second research project meeting took place at the research site on the date planned, based on the research plan as per invitation, attached as **Appendix AA**. The researcher and five co-researchers were present at the meeting. Co-researchers present were the EMS HOD and Grade 8 EMS teacher, the EMS subject advisor, the university Commerce Education lecturer, the university Commerce Education student and the Grade 9 EMS teacher. The Grade 7 EMS teacher and one teacher's union representative did not attend the meeting, but they tendered an apology that they attended a Mathematics Professional Learning Communities (PLC) meeting. The principal did not attend the meeting and did not tender an apology. Another teacher's union representative did not attend the meeting and did not tender an apology. The learners and RCL member did not attend because of the Free State DBE condition of research approval.

The researcher welcomed all the co-researchers and acknowledged their presence. The researcher informed the co-researchers that he would not be the chairperson in the meetings because the discussions were collaborative discussions. The team discussed the first objective of a research project, i.e. what the teach and assess strategy entails. Lengthy discussions took place where the research team discussed what the teach and assess strategy entails. The second objective of the research project, i.e. demonstrate how the "teach and assess" strategy will contribute towards effective teaching and learning in EMS, was introduced. Discussions on the second objective took place, but were not lengthy because the research team stated that a number of aspects which related to the second objective had been dealt with when the first objective was discussed. Data generated during this meeting are discussed in detail in Chapter 5. Having discussed the two objectives of the study, the research team considered the date of the next meeting (as per research plan) and what the focus of the next meeting would be. In closing, the co-researchers commented as follows:

> Mr X: *I think today's meeting was very fruitful and then I think we were able to interrogate the topics and then there is a light that [eh…] there is something we can contribute towards [eh…] development of the learners, rather than just presenting the*

results that want [eh…] have a positive impact on the learners as such. But I think the learners' maybe to avoid this of progressed learners but once they have understood what they have been taught I think they will do fine. And then, once our strategy is implemented, I think that will be good also.

Vic: *[Ja… Yes] I think today's session was more than informative even though at first there was that tension especially having to unpack really what constitute base for teaching… for teach and assess strategy but then immediately after there was multiple questions and proposing statements, I think we felt at ease to contribute to the discussion and I felt… I felt very okay with how we deliberated and I think we are moving places. [Laughs…]*

Jeff: *I can just say that I have gained a lot today, even that I can see that today where we are from now and to where we are going towards our destination because we are starting to get along with the points that are gathering or we are discussing.*

Mr Max: *[Clears throat…] I think the discussion for today was fruitfully and then [eh…] even on my mind I already have the strategy… the name of the strategy or what the strategy is going to be. But all in all, okay, now the light is there on the tunnel. We are going somewhere, I thank you.*

Mr Josephs: *No I think today's meeting was very informative, fruitful you know? [uhm…] we… one gets to hear different views and we learn… we learn [ja… yes] no we had a fruitful discussion.*

The comments made above by the co-researchers indicate the mood which prevailed during the research project meeting. The co-researchers were also learning by participating in this study. The discussions among the co-researchers were very effective because the co-researchers were open to one another. This might be attributed to the fact that they had an opportunity to meet one another informally after the first research project meeting and even before the second research project meeting commenced (cf:2.2.1.8). During informal conversations, the co-researchers developed some friendship among one another and discussed issues relating to education in general. The next section discusses the third research project meeting.

4.8.3.3 Third research project meeting

The third research project meeting took place at the research site on the date planned, based on the research plan as per invitation, attached as **Appendix BB**. The researcher and four co-researchers were present in the meeting. Co-researchers present were the principal, the EMS teacher, the university Commerce Education student and one teachers' union representative. The EMS subject advisor and the EMS HOD did not attend, but tendered their apologies. The university lecturer, Grade 7 EMS teacher and one teachers' union representative did not attend the meeting and did not tender an apology. The learners and RCL member did not attend because of Free State DBE condition of research approval.

The researcher welcomed all the co-researchers and acknowledged their presence. Jeff and Mr Max gave a brief reflection on the previous research project meeting by discussing the first two objectives of the study. Having put all the co-researchers on board about the first two objectives of the study, the team then discussed the third objective of the research project, i.e. the conditions under which the "teach and assess" strategy could be successfully implemented in EMS. Discussions took place where the research team discussed the conditions under which the "teach and assess" strategy could be successfully implemented in EMS. Discussions on the fourth objective of the study, i.e. the possible challenges that might hamper the implementation of a strategy and how to overcome the challenges, also took place. Detailed discussions of the third and fourth objectives of the study are presented in Chapter 4.

Having discussed the third and fourth objectives of the study, the research team then considered the date of the next meeting and the focus of the meeting. During the discussions, Jeff raised the isuue that he and Vic had a class on Monday and would not make it to the planned meeting. Mr P and Mrs M also raised the issue of their unavailability on Monday. Therefore, the team agreed that the meeting would be rescheduled for the 22nd of March 2017, at 14h00 because there would be no tuition that would be disturbed during that time at the school. It was agreed that other activities planned would still take place as planned, but the co-researchers who were supposed to field-test the strategy would reschedule their activities according to the

school timetable. The next meeting would focus on proposing the “teach and assess” strategy as the strategy for effective teaching and learning in EMS. The next section discusses the fourth research project meeting.

4.8.3.4 Fourth research project meeting

The fourth research project meeting took place at the research site on the rescheduled date as per invitation, attached as **Appendix CC**. Before the meeting started, the researcher had some informal talk with three learners and the RCL member. The researcher tried to ensure that the learners were at ease before they joined the whole team. The researcher explained to the learners their roles in the study, that the meetings were collaborative discussions and that all co-researchers in the project were equals, but respect should be maintained at all times. The conditions as stipulated in the consent form and assent form were explained to the learners. The researcher asked the learners not to be afraid to raise their points and that they should be calm during the meetings.

The researcher and ten co-researchers were present in the meeting. Co-researchers present were the EMS subject advisor, the principal, the EMS HOD and Grade 8 teacher, the EMS teacher, the university Commerce Education lecturer, the university Commerce Education student, the RLC member and three Grade 9 learners. One teachers’ union representative did not attend because she attended a teachers’ union meeting. The Grade 7 EMS teacher and one teachers’ union representative did not attend the meeting and did not tender an apology. Three Grade 9 learners and the RCL member attended the meeting for the first time. It was crucial for them to attend this meeting, even though the Free State DBE had not attended to the request of the researcher. The researcher did everything a reasonable person could do to engage the Free State DBE on condition of research approval which relates to learners, but had been unsuccessful. After unsuccessful attempts, the researcher used learners’ parents’ consent to participate as a ground for involving learners in this meeting and going forward with the study.

When the meeting began, the researcher welcomed all the co-researchers and special words of welcome were extended to the three learners and the RCL member

who joined the team for the first time. The presence of every co-researcher was acknowledged. Jeff and Mr Max gave a brief reflection of the previous research project meeting by discussing the third and the fourth objectives of the study as discussed during the third research project meeting. Having put all the co-researchers on board about the third and fourth objectives of the study, the team then discussed the fifth objective of a research project, i.e. to propose the “teach and assess” strategy as the strategy for effective teaching and learning in EMS. Before the discussions on objective five of the study began, the researcher, with the help of Mr X, asked the learners and RCL member the questions about EMS as a subject, how they learned in their EMS classrooms, the challenges they were faced with in EMS classrooms and the good things that their EMS teacher should continue to do in their classrooms. The purpose of the exercise was to ensure that the three learners and the RCL member were at ease to participate in the meeting. This part of the meeting was very crucial because it helped the three learners and the RCL member to relate very well with other co-researchers and to speak freely in the meeting. They began to relax and spoke their minds; their ideas contributed positively in proposing the strategy. The three learners and the RCL member were able to raise important issues which are discussed in detail in Chapter four.

Discussions took place here and the research team discussed aspects which should be included in the proposed strategy. Detailed discussions on the fifth objective of the study are presented in Chapter five. Having discussed the fifth objective of the study, the research team discussed the logistics for field-testing the proposed strategy. The main points of the strategy were summarised to check whether everyone was content with what would be field-tested. The team agreed that Grade 8 and Grade 9 teachers would field-test the strategy in the presence of other co-researchers who were from the school. The teachers would use their teaching periods to field-test the strategy and prepare feedback. It was agreed that each teacher would field-test the proposed strategy in two different classes with the same lesson in order to allow the teacher to reflect before presenting the second lesson. The dates for field-testing were rescheduled from the 22nd to 24th of March 2017, to the 23rd to 29th of March 2017. The team also agreed to change the date for the fifth meeting from the 28th of March 2017 to the 30th of March 2017. The fifth meeting

would focus on proposing the final strategy after field-testing. The next section discusses the fifth research project meeting.

4.8.3.5 Fifth research project meeting

The fifth research project meeting took place at the research site on the rescheduled date as per invitation, attached as **Appendix DD**. The researcher and ten co-researchers were present in the meeting. Co-researchers present were the EMS subject advisor, the EMS HOD and Grade 8 teacher, the EMS teacher, the university Commerce Education lecturer, the university Commerce Education student, a teachers' union representative, the RLC member and three Grade 9 learners. The principal did not attend because he was busy with school's submissions. One teachers' union representative did not attend the meeting and did not tender an apology.

The researcher welcomed all the co-researchers in the meeting and acknowledged their presence. The co-researchers reflected on salient points of the previous meeting. Having reflected on the previous meeting, the team agreed that the strategy proposed in the previous meeting was intact because no major hiccups had been encountered during field-testing by the Grade 8 teacher. The Grade 8 teacher field-tested the strategy with the topic of the lesson as Accounting Cycle. He briefed the team on his approach and on how the lesson had taken place. He reported that there had been a tremendous change on how learners had learnt when he applied the strategy. The teacher provided the team with learners' reflection of the lesson. The reflections indicated that learners had learnt something during the lesson. The Grade 9 teacher was unable to field-test the strategy, but committed to field-testing the strategy and providing feedback to the researcher about the field-testing. The researcher was asked to incorporate the reflections in the final strategy. The Grade 9 teacher managed to field-test the strategy as arranged. The summary of the reflections indicated that the lesson topic was Credit Transactions for Debtors. A role-play was used in order to link classroom activity with real life. Aspects which would be included in the proposed strategy were incorporated in the lesson. Learners' reflections indicated that effective learning had taken place. The team

agreed that the researcher should organise three debriefing sessions, each meeting targeting a group of co-researchers in different institutions.

Having discussed issues related to field-testing, the researcher requested all the co-researchers to give their concluding remarks about the research process from when they had started to participate until the last day of their participation in meetings. The concluding remarks of co-researchers were as follows:

> Mr Josephs: *I am grateful that I was invited to be a part of this very important journey that is intended to make the teaching and learning of our learners or the education of our learners better or to improve the standard in our education. For me it has been the very exciting journey, there are a lot of things that I have learnt from different stakeholders that were part of this research group [ja… yes] I learnt a lot really from the colleagues that are here…, from the members that are here. Really it was an eye opener and as I said I am grateful.*
>
> Jeff: *Okay, what I can say is that I am also grateful to be involved in this research because as now I know whenever I am teaching I must also think about the students or learners who are very important because… [not clear] is all about them. Because here in this research I have learnt if we give them a chance to tell us about their opinions, it is better to work with people who know how do they want to work. Because that will make their learning and teaching easier. That's what it is.*
>
> Miss P: *Thank you, Ntate [Sir] even if I have missed two meetings, but I learnt a lot about EMS then I wish strategy can be a good help to learners, thank you, Ntate [Sir].*
>
> Learner 2: *For me I am very grateful that all the…, I am very grateful that the Department of Education is realising that they need our voice in order to see how we like to learn stuff and I am very grateful that we as learners had the power to help the next generations to learn better because when the majority of learners learn better it means that our society will be a better place. And I am very grateful that I was here to join the whole process, and I am very thankful that I am here again from the last meeting. Thank you to everyone.*

Learner 1: *I am very thankful for being here and I really appreciate the… the researcher who invited us together here that means he is caring for our education, thank you.*

Mr X: *I am also glad to say that [er…] these meetings that the researcher came to our school about what was worrying me a lot that the poor were given not the best education if I may say that, and then whereby it's like it was politicised where we need the results but there was no quality in it. But what we are trying to implement to say it will provide to quality that they are preaching whereas they are not providing, but with this then there will be quality education for all the learners regardless their background and then where they are staying but if we can implement the strategies as we have said then surely these learners will be better, and then I must also thank the researcher to be that brave enough to challenge the system. [Laughs…] I wonder if it is the right way to challenge the system when you are out or when…, or while you are in?*

Researcher: *No I started the research while I was still at the department, [ja… yes] I have started I January [giggles…]*

Mr X: *Because like I have said, I really appreciate the researcher's braveness to challenge the system really. It will, maybe you will be one of these that when we talk of they…, people who fought for the poor then your name will be mentioned, I thank you.*

Vic: *Yes, thank you for the opportunity I think we need to turn it differently, instead of you know piling stone on the researcher but we should acknowledge the fact that we have all contributed to the envisaged strategy that we had intended to put in place and we are very much happy for that. Personally, I feel this has been quite a learning experience and, Ntate [Sir] we are looking forward to a consolidated document detailing that particular strategy I am sure with that would be… [unclear] to implement and implement, thank you so much.*

RCL Member: *I would like to thank the researcher for involving all of us the learners in this programme because it showed me that even us as learners we have a say in what is going on in our education. And we also got a chance to express how we feel every day in our class, so we think what we have made or the strategy we agreed on will help us as learners. Thank you.*

Learner 3: *Thank you researcher, I would like…, I am happy to be part of this research because I learnt more about teaching and learning access to all learners of South Africa. And I would like to…, I will like you to explain me about the media, how could we use it? How could we use it as a learning style?*

Researcher: *I think the question is for all of us, it's not only for me. But I can take a bite to say, on TV like this is a strategy for EMS, now nowadays they talk about the Minister of Finance has been recalled. Now that thing is affecting the rate of exchange then we must follow that story that's how we use media – radio and TV, you follow how it affects the economy. Today they said the committee, monetary committee will be meeting to tell us whether what is going to happen to the interest rates; now you follow that story. That what is it going to remain constant or its going to increase, when it increases what will happen when it decreases you see we are still dealing with the media. There's a thing on rates of exchange to say now the rand against the dollar, every day now they give you that thing. Then you follow it and see, or if it is low what is an impact or if it is high, what is an impact. You see, you can use it that way. Anything that relates to EMS when it's on media you follow it and interpret it based on what you learn in your classroom. Are you answered? [Learner three: yes] other co-researchers who want to take a bite? Okay its fine, its fine they agree I can see they are nodding their heads [all co-researchers laugh…]*

Mr Max: *Okay, thank you researcher. First of all, I like to thank the researcher for choosing our school amongst hundreds of schools in Thabo-Mofutsanyane to make this research at…, so it means [er…] the researcher have trust on us. So, I thank you for that Mr researcher, and then all I can say is that the research study for my side it was fruitful it means I learnt a lot from this research and then I think I am going to develop as an EMS teacher. And then I believe that if the strategy can be successful then our teaching and learning in Thabo-Mofutsanyane can improve or will improve, I thank you.*

Researcher: *Thank you very much ladies and gentlemen, my concluding remarks are: I am grateful that you took part in this, you have seen the forms that you have signed it says it is voluntary. If you didn't want, no one can force you…, no one can force you but you dedicated your time to come here. And then the other thing your contributions; your contributions, you contributed in a fruitful way so that the strategy can be shaped. In the first meeting, we were afraid of each other, people*

were like not wanting to say something then it was a little bit tense. But after we had some finger lunch then…, having informal discussions then our interaction improved. Now we know each other now, we know each other and we managed to achieve what PAR says and CER that we are treated as equals. No one was respected as a researcher, as a university lecture, Vic is Jeff's lecture but we couldn't see that, the HOD is here but we couldn't see that; you see there's a subject advisor – we couldn't see that. People were free to do to discuss, we managed to achieve that, we managed to achieve that and I am grateful. I am grateful for you to take part. With learners that was good you represented other learners well, I wish I can have another research and involve you in that research because at times learners when they are around adults they feel not comfortable to raise important issues. And then you showed that you will be future leaders, if you are brave to raise issues in such meetings then it shows that you will be future leaders who'll represent the people you are representing, I am very grateful. Thank you very much, thank you.

In summary, the research project meetings went well and in all the meetings there were different groups of co-researchers represented. The representatives of teachers' unions and the principal did not attend the meetings regularly. The first meeting focused on logistical aspects and developing a research plan. The second meeting focused on the first and the second objectives of the study. The third meeting focused on the third and the fourth objectives of the study. The fourth meeting focused on the fifth objective of the study. The fifth meeting focused on reflecting whether the proposed strategy is implementable after field-testing. The meetings went well and all the co-researchers worked collaboratively with equal status during the discussions. Even learners were free and open to raise their points among the adults. The objectives of CER and PAR were achieved during the meetings and the concluding remarks of the co-researchers attested to this. The next section discusses how data generated will be analysed.

4.9 DATA ANALYSIS

De Vos et al. (2011:399) stated that qualitative data analysis is a process of inductive reasoning, thinking and theorising, which is certainly far removed from structured, mechanical and technical procedures to make inferences from empirical data of social life; when data analysis is treated as a science, the analysis should be

rigorous, disciplined, systematic and methodologically documented as is in case of grounded theory, typological analysis and analytic induction. However, Neuman (2014:487) postulated that data analysis is a search of patterns in data, i.e. recurrent behaviours, objects, phases and ideas, and involves examining, sorting, categorising, evaluating, comparing, synthesising and contemplating the coded data, as well as reviewing the raw and recorded data. Whereas Mouton (2001:108) claimed that analysis involves breaking up the data into manageable themes, patterns, trends and relationships, Schulze (2002:14) postulated that the aim of analysis and interpreting research findings is to increase validity of the research by ensuring that errors and inaccuracies are eliminated. Notwithstanding the preceding discussions, Kumar (2014:318) identified the steps of data analysis in qualitative research as follows: identifying the main themes, assigning codes to the main themes, classifying responses under the main themes and integrating themes and responses into the text of the report. Based on the preceding discussions, data analysis is an inductive process of reasoning, thinking and theorising. Data analysis is a search of patterns in data, examining, sorting, categorising, evaluating, comparing, synthesising and contemplating the coded data, as well as reviewing the raw and recorded data. It is also breaking up the data into manageable themes, patterns, trends and relationships. These aspects of data analysis were incorporated in CDA, which was used to analyse data for this study.

Wodak (2002:6) stated that the terms Critical Linguistics (CL) and (CDA) are often used interchangeably, and recently the term CDA seems to have been preferred and is being used to denote the theory formerly identified as CL. Then, Gonsalvez (2013:49) asserted that CDA is based on the social theory of language, which states that discourse is an important element in socialisation which is based on communicative and interactive practices in a network of individuals, and the goals and purpose of socialising are achieved through discourse. However, Rahimi and Riasati (2011:108) purported that CDA may be defined as fundamentally concerned with analysing opaque, as well as transparent structural relationships of dominance, discrimination, power and control, as manifested in language, and CDA aims to investigate critically social inequality as it is expressed, signalled, constituted, and legitimised by language use (or in discourse). In congruence, Huckin, Andrus and Clary-Lemon (2012:107) and Filologia (2006:29) stated that CDA is an

interdisciplinary approach to textual study that aims to explicate abuses of power promoted by those texts, by analysing linguistic or semiotic details in light of the larger social and political contexts in which those texts circulate. In addition, Dieronitou (2014:10-11) stated that CDA attempts to bring together text analysis with contemporary social, political and cultural theory and involves an examination of force, power and relations in formation within the ever-changing, non-discursive global processes, such as economic, political and cultural processes. Based on the preceding discussions, CDA was used to analyse data because it relates well to CER (the theoretical framework for this study) and PAR (as data generation method for this study). CER, PAR and CDA are based on using a discourse as a social element through communicative and interactive practices and they are concerned with structural relationships of dominance, discrimination, power and control. CER, PAR and CDA deal with contemporary social, political and cultural theory and involve an examination of force, power and relations within the ever-changing global processes, such as economic, political and cultural processes.

According to Huckin et al. (2012:108), CDA aims to critically investigate social inequality as it is expressed, constituted, and legitimised by language use. On the other hand, Rahimi and Riasati (2011:107) asserted that CDA has been used as a basic discipline in education to provide answers to questions about the relationships between language, society, power, identity, ideology, politics and culture. Then Wodak (2002:11) averred that for CDA, language is not powerful on its own; it gains power by the use powerful people make of it and this explains why CDA often chooses the perspective of those who suffer, and critically analyses the language use of those in power, who are responsible for the existence of inequalities and who also have the means and the opportunity to improve conditions. Furthermore, Wodak (2002:11) stated that an important perspective in CDA, related to the notion of power, is that it is very rare that a text is the work of any one person and in texts, discursive differences are negotiated; they are governed by differences in power which are, in part, encoded in and determined by discourse and by genre. Congruently, Gonsalvez (2013:50) discussed that in CDA, discourse negotiates power between or among individuals involved in the discursive process. I concur with Gonsalvez (2013:50) and Huckin et al. (2012:108) that discourse negotiates power among individuals involved in the discursive process. I also concur with Wodak

(2002:11) that language is not powerful on its own, but gains power by the use powerful people make of it and that a text is not the work of any one person, because in texts, discursive differences are negotiated. In this study discussions negotiated power among the co-researchers because the input of every co-researcher was discussed and texts formed were based on the views of different co-researchers.

According to Wall, Stahl and Salam (2015:260-261), discourse analysis approaches methods seeking to identify hegemony and emancipate marginalised individuals and ideas. In congruence, Dieronitou (2014:12) and Lazar (2007:145) averred that CDA is part of an emancipatory critical social science which is openly committed to the achievement of a just social order through a critique of discourse. Moreover, Gonsalvez (2013:46) purported that CDA is a way of understanding the meanings of the texts in order to determine areas of inequality, domination and marginalisation, and discourse cannot only shape society, but it can also reproduce or recreate societies; it is often used to expose inequities, domination and outright oppressions. Based on the preceding discussions, I contend that CDA is aimed at emancipating the marginalised by allowing them to take part in a discourse in order to reshape the society. The emancipation nature of CDA suits the emancipation aim of CER and PAR.

Dieronitou (2014:13) posited that CDA provides research with systematic and critical techniques for analysing written texts. However, Filologia (2006:10) claimed that in CDA, discourse is not produced without context and cannot be understood without taking the current and historical context into consideration, which means discourse is connected to the past and the current social context, since texts can be interpreted in different ways by different people, because of their different backgrounds, knowledge and power positions. In addition, Huckin et al. (2012:108) claimed that CDA is based on the following distinctive principles: CDA addresses social problems, power relations are discursive, discourse constitutes society and culture, discourse does ideological work, discourse is historical, the link between text and society is mediated, discourse analysis is interpretative and explanatory and discourse is a form of social action. Then, Rahimi and Riasati (2011:108) posited that the raw material for the analysis within CDA is the naturally occurring text and talk in their

original contexts, while Wodak (2002:11) contended that texts are often sites of struggle in that they show traces of differing discourses and ideologies all contending and struggling for dominance. I concur with Dieronitou (2014:13) and Filologia (2006:10) that CDA offers study with logical and critical procedures for analysing written writings and the texts are not produced without context and cannot be understood without taking the current and historical context into consideration. Therefore texts can be interpreted in different ways by different people, because of their different backgrounds, knowledge and power positions. In this study, the researcher's notes and tape recordings were used as raw material for the analysis in naturally occurring text and talk in their original contexts.

In summary, data analysis is an inductive process of reasoning, thinking and theorising. It is a search for patterns in data, examining, sorting, categorising, evaluating, comparing, synthesising and contemplating the coded data, as well as reviewing the raw and recorded data. It is also breaking up the data into manageable themes, patterns, trends and relationships. CDA relates well to CER and PAR because they use discourse as a social element through communicative and interactive practices, concerned with structural relationships of dominance, discrimination, power and control, deal with contemporary social, political and cultural theory, examine force, power and relations and they are aimed at emancipation. Discourse negotiates power among individuals involved in the discursive process; language gains power by the use powerful people make of it and a text is not the work of any one person. In text, discursive differences are negotiated. CDA provided a research with systematic and critical techniques for analysing written texts. The texts were produced within the context of the study and we understood that by taking the current and historical context into consideration.

4.10 CONCLUDING REMARKS

This chapter focused on data generation for this study. PAR as an approach, ethical considerations, the profile of the research site, the profiles of co-researchers, the researcher's background, data generation, extensively discussed during the meetings of the research team, as well as data analysis were discussed. The next

chapter will be based on an introduction, data presentation, analysis and interpretation, and concluding remarks.

CHAPTER FIVE

DATA PRESENTATION, ANALYSIS AND INTERPRETATION FOR TEACH AND ASSESS: A STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

5.1 INTRODUCTION

The previous chapter focused on data generation for this study. PAR as a data generation approach was discussed. Issues such as ethical considerations, profile of the research site, profiles of the co-researchers and the researcher's background were discussed. Data generation, which clearly spelt out what had transpired before data was generated and which were discussed during the research team's meetings, as well as data analysis were discussed in the previous chapter. This chapter will look into an introduction, research objectives, data presentation, analysis and interpretation based on research objectives, as well as concluding remarks. The next section reiterates the research objectives as discussed in Section 3.1 because in this chapter they will be discussed with regard to data generated.

5.2 RESEARCH OBJECTIVES

As discussed in Section 3.1 the aim of this study is to propose the strategy for effective teaching and learning in EMS through the use of the teach and assess strategy; and the specific objectives of the study are:

- To explore what the "teach and assess" strategy entails.
- To demonstrate how the "teach and assess" strategy will contribute towards effective teaching and learning in EMS.
- To determine the conditions under which the "teach and assess" strategy can be successfully implemented in EMS.
- To identify possible challenges that might hamper the implementation of the strategy in order to put mechanisms in place to overcome them.

- To propose the “teach and assess” strategy as the strategy for effective teaching and learning in EMS.

These research objectives will be used to present, analyse and interpret the data generated, as discussed in Section 4.8.3.2 to Section 4.8.3.4 of this study. The next section explores the first research objective, i.e. what the teach and assess strategy entails.

5.3 WHAT THE “TEACH AND ASSESS” STRATEGY ENTAILS

The discussions, which took place during the second research meeting, were based on what the teach and assess entails, and are presented below. As discussed in Section 3.6, the teach and assess strategy is a concept used in the Thabo Mofutsanyana Education District as the way to make teachers understand the value and importance of daily activities in their teaching. The co-researchers started by discussing what the teach and assess strategy entails, based on what is done at schools in the Thabo Mofutsanyana Education District. They explained what is termed “the teach and assess strategy” to have some pillars, as discussed in Chapter 3, Section 3.6. The first pillar is that the teacher should use good quality assessment activities to assess learners. The second pillar is that after having assessed learners, the work of the learners must be marked. The third pillar is that when learners have not succeeded providing the correct answers, learners must do remedial work, i.e. they must do corrections. The corrections should be marked as well to ensure that the learners know and end up with the correct information. The fourth pillar is internal control by the HOD to monitor whether teaching and learning have been done according to the way the strategy has been given in the Thabo Mofutsanyana Education District; this is in contrast with what EMS moderation entails, as explained by the DBE (2011**b**:31) (cf. 3.5.3.5), which stated that moderation ensures that the assessment tasks are fair, valid and reliable and that moderation practices are in place for the quality assurance of all subject assessments.

> Mr Josephs: *There is one pillar that I skipped, first one is the frequency to say that there’s a number of activities to be completed.*

The extract indicates that Mr Joseph knows the pillars and explains that frequency refers to the number of activities to be written.

The fifth pillar is that learners should be assessed frequently. From the preceding discussions, I contend that teachers are expected to concentrate on these pillars on a daily basis for them to be regarded to have done their work; however, these pillars are only based on assessment as its purpose stated (cf. 1.1) is to help the teachers to understand the importance of daily activities. The co-researchers discussed the pillars without following a particular order and that indicates they know them because they use them on a daily basis.

As stated in Section 3.6, what is termed a “teach and assess strategy” emphasises assessment, and there are no elements of teaching and learning in the strategy. The co-researchers stated that teach and assess is used just to ensure that learners are assessed after every lesson that has been taught and this concurs with the purpose of the strategy, as spelt out in Section 1.1. This assertion implies that when teaching and learning are taking place, learners will not be assessed and they will only be assessed when the lesson has been completed. This is in contrast with the assertion of Harlen (2014:5) (cf. 3.4), who posited that the purpose of assessment is to help pupils while they are learning and that formative assessment takes place before or during the instruction with the explicit purpose of eliciting evidence that can be used to improve the current learning (cf. 3.4.2). Therefore, learners should be assessed while the teaching and learning process is taking place; learners’ assessment should not wait until the lesson is completed. It takes many weeks to teach the General Ledger; if the teacher assesses learners at the end a General Ledger lesson, learners will have forgotten what has been taught. Therefore, it is important for the teacher to assess learners while teaching different aspects of the General Ledger.

From the preceding discussions on the pillars of what is called the “teach and assess strategy”, the indication is that assessment should always be written because activities must be marked and be counted to check frequency. This is in contrast with what is stated (cf. 3.5.3.1), that informal assessment is done through observations, discussions, practical demonstrations, learner-teacher conferences and informal

classroom interactions. Also, informal assessment may be as simple as stopping during the lesson to observe learners or to discuss with learners how their learning is progressing.

Time for teaching EMS is limited to two hours per week, as prescribed (cf. 3.5.2.1). However, teaching time for teaching EMS is limited, learners use the same time to write activities on a daily basis, mark the activities on a daily basis, write the corrections, mark the corrections and rewrite the corrections on a daily basis. All this must happen in the classroom within two hours in a week. Teachers should spend more time on preparation of daily assessment activities because they must be of good quality. Therefore, there is no sufficient time for actual teaching and learning.

During the discussions, the research team brought forward the problems which emanate from the implementation of what is termed the “teach and assess strategy” in the Thabo Mofutsanyana Education District. These problems are discussed below.

5.3.1 Problems in current practices

The problems which have been identified in current practices are discussed in order to eliminate them in the strategy to be proposed. The problems which emanate from the implementation of what is termed the “teach and assess strategy” in the Thabo Mofutsanyana Education District are the main reasons for undertaking this study, as stated in Chapter 1, Section 1.1. In support of the researcher undertaking this study, the extracts below indicate that the co-researchers also had a need for a strategy that would be without the limitations and the challenges of other practices.

> Mr Max: *Based on what Mr Josephs have just said, it’s exactly what we are supposed to do, however, Researcher, [uhm…] I have my own fears about the strategy. The limitation I foresee with that strategy [hore… that] we are experiencing then what could be the solution thereof?*
>
> Vic: *Yes, because I think ideal is that we aware of the current challenges as they relate to the strategy itself. But then we really don’t want to duplicate whatever that has been going on given the fact that we are aware of the challenges but we really*

want to improve on it and perhaps propose some of the elements that will get to improve. I think we need to ensure that there is quality teaching learning and assessment.

The co-researchers stated that what is termed the "teach and assess strategy" did not integrate teaching, learning and assessment, but focused only on assessment. To show his frustration with what is done, Mr X stated that teach and assess is teaching a lesson plan, and not human beings, because after each and every lesson one has to assess, even without knowing whether learners have understood or not. Other co-researchers agreed with him that learners are not allowed time to digest information and save it for a longer period. When teaching the price theory, the teacher must allow learners to digest information, because the price theory involves drawing and interpretation of graphs based on demand and supply; therefore, if learners are rushed, they will not comprehend the content properly. The problem is that the strategy does not take learners' needs into consideration.

Assessment is used to monitor the teachers without consideration of learners' needs and how learners learn. The teach and assess strategy is about assessment and not measuring whether teaching was effective or not. The co-researchers asserted that teaching was compromised and learning was also compromised because the focus was on assessment and achieving the best results when schools were compared. This is in contradiction with what Cordiner (2011:1), Ndalichako (2015:326) and Reddy et al. (2015:43) (cf. 3.4) asserted when they stated that assessment was an integral part of the learning and teaching process. Assessment should focus on developing learners. The extracts below elaborate on the assertions of the co-researchers.

Vic: *And I think what I also want to flag in would be that it's not only teaching that is compromised, even learning itself because we cannot de-link learning or teaching from learning, they are interrelated and such space for learners is needed and I think is highly compromised.*

Mr Josephs: *I think Vic has said it, [eh…] its more results [eh…] orientated based. We are looking at the results, we want to see results; we want to see our learners*

performing in these activities that we give them and you know [eh…] and the intention of the whole process is [eh…] preparing learners for the tests, preparing learners for exams you see. Not actually [eh…] teaching them, allowing teaching and learning you know naturally take place, naturally happen.

Mr X: *The strategy is all about [eh…] monitoring teachers not the learners' understanding and then he does not allow learners time to digest the information so that, that information can stick in their heads and then so that they can remember maybe if they are assessed formally in the long run that they still understand. It is just like [uhm…] we want to check for what they understood for that short period of time and then thereafter we say than no we are fine whereas we are not. And then it has no consequences for underperforming learners.*

The co-researchers concluded that in order to achieve the objectives of the subject, teachers should go the extra mile. Teachers should organise extra classes. Extra classes take away the time that teachers could use for other activities, like planning. Section 3.5.2.1 indicated that the time allocation for EMS is only two hours in a week and there is a lot of prescribed content to be covered. Due to limited time allocated to EMS, the co-researchers stated that in order to achieve the objectives of the subject, the teachers should go the extra mile by organising extra classes. The extracts below indicate that the extra mile that teachers take, is not taken to benefit the learners, but to achieve results. The results in the context of the discussions do not refer to the teaching and learning process results, but refers to the school's performance in comparison with other schools.

Mr Max: *The teach and assess strategy as it is [uhm…] it requires extra classes for you at the end of the day to achieve the good results that is what I think [eh…] most problematic like you have already alluded to say that [eh…] a period for the topic that you treat [eh…] maybe it's supposed to be one hour, then it's going to take two hours; like I said teachers will have to have extra classes.*

Vic: *For you get to achieve results in other words you will always have to go extra mile.*

As discussed in Section 1.1, this study emanated from the practises which are not researched but are applied in the Thabo Mofutsanyana Education District. Therefore, the discussions above indicate that the teach and assess strategy to be proposed should avoid the limitations and challenges identified in this section. The next section discusses teaching, learning and assessment within the context of the teach and assess strategy.

5.3.2 Teaching, learning and assessment within the context of the teach and assess strategy

The co-researchers discussed that assessment comes at the end of the learning process to ensure that learning has actually taken place or not, while Cordiner (2011:1), Ndalichako, (2015:326) and Reddy et al. (2015:43) (cf. 3.4) postulated that classroom assessment is a vital ingredient for effective teaching and learning and when it is integrated into classroom practices, substantial learning gains can be achieved. Also, the DBE (2011**b**:24) (cf. 3.5.3.1) stated that assessment should not be seen as separate from learning activities taking place in the classroom. Therefore classroom assessment should not wait until the lesson has been completed, but must be integrated into the teaching and learning process. As discussed in Section 1.1, the teach and assess strategy follows a formative assessment approach and assessment is done informally. When the teacher is teaching subsidiary journals, formative assessment should take place while the transactions are recorded in order for the teacher to identify the mistakes that learners make.

> Jeff: *Yes, where the assessment is taking place during teaching and learning process and then comes a formative assessment.*
>
> Mr Josephs: *Ja [Yes] I was saying formative at the end of the process.*
>
> Researcher: *Okay, formative is the one that takes place while or during teaching and learning at the end it will be summative.*
>
> Mr Josephs: *[laughs…] Oh summative, I am sorry it is summative. Ja [Yes] I wanted to say summative.*

The extract indicates that Jeff was clear on what formative assessment is, but Mr Josephs was confusing formative and summative assessment. Many people confuse formative assessment with formal assessment, and formal assessment is summative. The co-researchers confirmed that the strategy to be developed will follow formative assessment in line with the definition of Killian (2015:387) and Wylie and Lyon (2012:1) (cf. 3.4.2) that formative assessment is assessment that takes place before or during the instruction with the explicit purpose of eliciting evidence that can be used to improve the current learning. In congruence with Killian (2015) and Wylie and Lyon (2012), the co-researchers discussed that assessment is used to find out whether teaching and learning goals were achieved or not. It is used to check if there are challenges that learners experience in order to create a space for the teacher to be able to deal with those particular challenges. The co-researchers discussed that assessment can take any form, it can be done orally or be written, and can take different forms. What the co-researchers discussed, relates to informal assessment, as discussed in the DBE document (2011**b**:24) (cf. 3.5.3.1). The teacher can ask learners oral questions when teaching the accounting equation in order to identify their misconceptions and correct them.

Discussions revealed that assessment could be applied as a way of determining the kind of experience that learners are already in possession of. The teacher will try to introduce the lesson based on the kind of understanding and experiences of learners. Assessing prior knowledge will help the teacher to apply a didactic principle of moving from the known to the unknown during the lessons. The teacher must determine whether learners know the factors of production with practical examples, before teaching them about the remuneration of factors of production. As Lam (2011:8) (cf. 3.3.3) stated, constructivists believe that learners come into formal education with a range of prior knowledge, skills, beliefs and concepts that significantly influence what they notice about the environment and how they organise and interpret it, while constructing new knowledge from the existing knowledge. Learners come to class with some prior knowledge and it is the responsibility of the teacher to ascertain what learners already know. The preceding discussions are based on the extracts below.

Vic: *Sometimes these learners when they come to class you know already they are in possession of a particular knowledge about the kind of concepts that you are teaching them, especially in the classroom. And then I think your role and responsibility as the teacher even before you could start imparting knowledge; let's suppose like you are to teach them about [eh…] financial related things and then let's suppose its budget and whatever, immediately as those learners are coming to the class they are in possession of a particular knowledge around what budget could be entailing. Now my argument would be, I could apply it the other way around as a way of mining out the kind of experience that learners are already in possession of. Let's suppose I can ask them "what is that you understand about budget?' already I am assessing them on a particular skill and knowledge and perhaps experience that they are already in possession of, and then based on the kind of understanding based on their experiences I would try and introduce the lesson and formally assess them.*

Mr Josephs: *[Ja… Yes] I think that's another approach that is [uhm…] that we use in education that is now; you move from the known to the unknown so you see… the different approach there are so many approaches that you can [eh…] use in your… in your delivery of the knowledge that you want to impart onto your learners then I agree with Vic thank you.*

During the discussions, it was found that learners are actively involved in the lesson because assessment activities engage learners to ensure that the lesson is not only teacher-centred, but also learner-centred. This will imply that assessment is informal and formative and it ensures that learners are actively involved in the lesson, as Heritage (2007:141) (cf. 3.4.2) identified learner involvement as one of the four core elements of formative assessment. Learners become active participants in their learning and the lesson becomes learner-centred. Co-researchers stated that learners are assessed with a view that teachers want to screen-check their understanding and then track down their progress. At the same time, while the teacher is intending to administer assessment, the teacher should be mindful of the administration of assessment; as well as the assessment tool that will enable the teacher to identify some of the challenges that learners have or that they experience through their learning. Hofman et al. (2015:6) (cf. 3.4.2) advised that formative assessment is not simply frequent testing, nor is it interim or benchmark

assessments, such as those provided by publishers or the multi-state assessment consortia, but rather, it is a sequence of instructional steps, one of which involves ongoing monitoring and evidence-gathering of student-learning, related to a particular learning target.

According to the research team once learners are not eager to respond to the teacher's questions, the teacher will be able to detect that learners do not follow what is taught. This will help the teacher to see that perhaps there is something that is wrongly done or perhaps the kind of teaching strategy that is implemented, is not correct; then the teacher can try a different teaching style. The discussions are supported by Flórez and Sammons's (2013:3) (cf. 3.4.2) statement that assessment activities can help learning by providing information to be used as feedback by teachers, and by their pupils, in assessing themselves and one another, to modify the teaching and learning activities which they are engaged in.

The discussions revealed that learners learn differently and learn at their own pace, and then teachers need to bear with the learners and perhaps create space for those learners who are challenged, by trying to bring in place some strategies to improve on their performance as well. Therefore, different forms of assessment, such as observations, discussions, practical demonstrations, learner-teacher conferences and informal classroom interactions, as stated in DBE (2011**b**:24) (cf. 3.5.3.1) must be used. Learners can be asked to observe entrepreneurs and write a report on how they conduct their businesses, learners can have discussions in a form of debate to debate which form of ownership is better than the other and do practical demonstrations by completing source documents. Also, learners' different learning styles – auditory, visual and kinaesthetic learning styles, as identified by Msimanga (2014:41) and Walsh (2010:8) (cf. 3.3.4) – must be considered. Assessment activities used, must accommodate learners' learning styles. Therefore, when teachers are teaching learners or developing assessment activities, they should consider different learning styles of learners in order to accommodate all of them. Accommodating different styles and needs of learners can help to achieve effective learning.

The research team emphasised that the teach and assess strategy should not be based on monitoring teachers, but should be based on quality teaching, learning and assessment. However, a balance must be maintained and assessment activities should be used to monitor curriculum coverage. Teachers should avoid assessing learners on work they have not been taught because, as Rogier (2014:3) (cf. 3.4) stated, assessment should determine the extent to which instructional objectives are met. Therefore, learners should not be assessed on something they have not been taught, unless the purpose of assessment is to determine their prior knowledge. Extracts from common papers should be used only if they relate to what learners have been taught, as Hofman et al. (2015:6) (cf. 3.4.2) argued that formative assessment should not take place by mere frequent testing without purpose, by following assessment activities in the textbooks as they are or using assessment activities provided externally without aligning them to what has been taught to learners. The assessment activities must be selected properly and the teacher must develop them. Activities used to assess learners must be within their reach and understanding, i.e. be at the level of learners. Scaffolding must be applied when the activities are developed. The learners must be assessed on participants in the economy before they are assessed on the roles of participants in a circular flow; then they can be assessed on flows in a circular flow. The research team concluded that a higher percentage of time in the classroom must be spent on teaching and learning, rather than administering assessment. Assessment must ensure that learners understand and are able to internalise the information learnt. Effective teaching and learning will have taken place when learners demonstrate skills, knowledge, attitude and values. The extracts below relate to these discussions.

> Vic: *So, I wanted to also input to say, even the selection of assessment activities plays a critical role because drawing from the current strategy, activities are extracted from common papers and the likes which are set at a different level. And then learning is a process, you can't expect immediately after you have taught one lesson that your learners will be in possession of a higher skill border and knowledge so it's a process, you need to at least select activities that are within their reach and understanding. Select those that are easy you start from simple, and then you narrow and then to a broader perspective, your teaching such that once you get to assess those that are at the higher order level at least you know that you have infused some*

of the skills that are necessary for them to be able to perform and answer effectively the questions that are at the order level.

Mr Josephs: *Oh! To demonstrate that… to demonstrate the skills [uhm…], the knowledge, the attitude, the values that they have acquired I think we must be specific because if we say… if we just say "effective teaching' we are not specific to…. Ja [Yes] so they must be able to demonstrate those things.*

The research team concluded that learning must be learner-centred and teacher-centred. This is supported by Chen's (2014:2) (cf. 3.2.2) statement that in learner-centred teaching, teachers see learners as more than cognitive units; instead, teachers recognise that students bring to school an array of physical, psychological, emotional and intellectual needs, plus experiences that require both nurturing and prodding, and student talk has a significance at least equal to, if not greater than, teacher talk. The research team stated that remedial support should be given to learners and it should not only be in the form of corrections. Learners should be given expanded opportunities by working in groups and peer tutoring, as Westbrook et al. (2013:11) (cf. 3.3.3) stated that space is needed for flexible social groupings, and learners need to feel that they have the right to talk and contribute to their peers' learning. Teachers should give learners support and afford other learners the opportunity to help their peers. The teacher can also use different types of questions to assess learners if they struggle with particular types of questions. The extract below supports the preceding discussions.

Mr Max: *So… please take us back as you said sometimes we can, there must be debate and these. This means actually learning must be learner-centred and teacher-centred once we involve learners they will be able to remember everything that they have done in class, rather than just give and feed them information that of which they will forget that lesson.*

Mr Josephs: *I am trying to think teacher-centred and learner-centred [laughs…]*

Vic: *Because I think we really need to… to re-think our curriculum and to check based within the policy or within which the provisions of… or to check within the provision of the policy itself. Because my argument will be to say CAPS has the*

curriculum its revised within the fact but we should move away from teacher-centred methodologies towards the application of learner-centred methodologies; but then with an understanding that the two are inseparable. It is important that we marry the process of teaching some elements of teacher-centred methods, but then much of the work should be done by the learners. We create a space for learners, because the manner in which teach and assess strategy is… is believed like learners are not even granted an opportunity to question their status in them. You understand it's like the teacher is redeemed as the only person who knows all and then he's the only person who has got the correct information and then learners cannot learn anything from the feature and learners are bound to learn from the teacher. But then remember that of all the concepts that a teacher is teaching these learners about, learners already are in possession of knowledge and skills around those particular concepts. Now what is important is that the teacher should create a space through a mediated and facilitated process for learners to be able to showcase these talent, skills and perhaps a particular knowledge that they have. Because learning is only effective if learners are able to relate these concepts that they learn in the classroom to their real-life settings. And then to get to achieve that objective, it is important that we also incarcerate their experience in the process of teaching as well.

Mr Josephs: *I think the other approach could be that instead of no giving them… instructing them to do corrections, we can give them expanded opportunities. Give them another exercise, another activity… a different activity but in a different that assesses the same information, the same content but in the different form. Because now it may be done that… it could be that [eh…] these learners were not able to answer these questions because they… you know the form of assessment was a bit difficult or ambiguous or you know… for them. But if you use other forms of assessment, they may get it right; instead of doing corrections on the same test you see, you can use expanded opportunities.*

Mr X: *It is important within a class of the group of the learners and then also to have tutorials where we go to maybe individual to identify the problems so that we can help each… we can help all the learners or the learners can help each other in the process. Maybe to understand the concept of or the content and then learning forward. Sorry… can I quickly, it's possible once they have discussions while we allow that they discuss and then give them the tutorials that I have just mentioned. I think that learners can help each other when they… we created space where they… they discuss the concept or the whatever the topic given.*

Vic: *Ja [Yes] I think that's the only way. Maybe we'd… I think it's one of the ways of judging on a lesson, let's suppose that you shall have presented a particular lesson and then on the first analysis of the kind of assessment you had in place you find that learners are seen not to be doing well, and then you resort to peer tutoring and the likes where they would be discussing and they are learning from one another.*

The members of the research team were divided on whether the teachers should mark learners' books or learners should mark other learners' books, but after long discussions, the assertion of Mr Josephs that marking should not be a nightmare for teachers, was taken. The research team concluded that even if the learners mark other learners' books, the teacher must sample the books of some learners as a form of control and identifying learners' mistakes. The sampling of learners' books should be done on a rotation basis. The conclusion of the research team that learners can mark other learners' books is supported by the DBE (2011**b**:24) (cf. 3.5.3.1). The preceding discussions are based on the extracts below.

Vic: *I would argue and perhaps site reasons why; I think history has taught us like sometimes learners, once you afford them an opportunity to exchange books and perhaps mark one another, there are certain commotions that arise to that factor, that others get not to be fair over the other given a number of differences that learners has. But then critical for placing the teacher the role where he is the one supposed to be marking the learners, once you mark the learners you are able to know and track the performance of an individual learner knowing exactly to say, this within my class if I am having thirty-two learners… these are the people who are challenged with understanding a particular concept. So, you don't get to conclude your learners as numbers and the likes, so you are sure. When they are saying… if let's suppose a person is to come and ask you "who is giving you the challenge with regard to academic performance in your classroom?" you are able to identify to say "Vic is not doing well on one, two, three, four, five" and then you can only be able to track down that provided that you mark the learners script, you can see that these once at least are performing at thirty percent level and then you group them and then you device separate strategies of intervention. And then those that are performing at either forty, fifty… because I believe that once you apply remedial strategies, let it not be the same because these learners do differently and then they understand*

concepts differently and then even your approach and styles of teaching them. It needs to be differently to also try and accommodate their different needs as well. Because once you apply one strategy for all, one size fits all… I think it's not working for us.

Researcher: *Okay, we remember… okay let me come in first. We said the workload of teachers must be minimised. Now if we say teacher marks averagely one activity per learner, there are teachers… we are talking about EMS here. Meneer… [Sir] how many learners do you have in Grade 9?*

Mr X: *[eh…] One hundred and seventy-three.*

Researcher: *One seventy-three, now he gives them an activity today. How long will it take him to mark one hundred and seventy-three for that activity?*

Vic: *But I think it depends on the teacher because what we are in agreement with here is that the current arrangement in terms of administration of assessment is that learners are seen to be more assessed through written work and then we are saying we need to move away from that. There are different modes of assessment that a teacher can make use of, you understand? It doesn't automatically mean that once you assess them orally you did not assess them. You teach them about a particular concept and then you administer different modes pf assessing them, and then through the interaction while you are administering that, you are able to screen check if your learners are indeed understanding or not. And then needless the administration of collective work particularly as a mode of assessment.*

Researcher: *Then it will be formative assessment because the teacher will also be able to see what are the challenges. I am not sure, am I able to persuade you that we approach it that way because we need… when we come up with the strategy it must be implementable. It must be implementable, there are teachers I know in EMS teaching three hundred… three hundred and twenty-six learners … two hundred and twenty-six. Now if we say he marks two twenty-six, most of his time will not be used for teaching and planning, will be spent on what? on marking and that's it. This strategy we are developing; we want to move away from a situation where teachers spend more time on assessment, but teachers must spend more time on teaching and learning [all agrees]. I am not sure… you can comment.*

Mr Josephs: *[Ja… Yes] I think teach… I mean [eh…] marking mustn't be a nightmare for teachers [everybody laughs out loud] it mustn't be a nightmare.*

Mr X: *My understanding with teach and assess is just to ensure that learners are assessed after every lesson that has been taught.*

In summary, teach and assess entails teaching, learning and assessment which are integrated. Learners are assessed while teaching and learning are taking place. Assessment is formative and informal and cannot be used for learners' placement, but is used to identify the problems encountered by learners in order for the teacher to address them before moving on to the next topic. Learners' assessment takes any form and it must not be written at all times. Assessment provides feedback to the teacher and learners in order to improve their performance. Prior knowledge of learners is determined to determine what learners already know and for the teacher to move from the known to the unknown during the teaching and learning process. Teachers develop assessment activities which address the content that is taught during a lesson. Activities taken from textbooks and previous common question papers are adapted to suit the content and context of the lesson. Assessment tools are developed before assessment can be administered. Different types of questions and different forms of assessment are used to assess learners. Learners are actively involved in their learning. Classrooms environment is both teacher-centred and learner-centred.

More time is spent on the teaching and learning process than on assessment. Learners' needs are considered with regard to teaching, learning and assessment. Assessment is used to develop learners and not to monitor the teachers. Time allocated to the subject is used for teaching, and not for long processes of assessment. Extra classes that teachers offer are used for teaching and learning. Teaching, learning and assessment are learner-paced and take different learning styles of learners into consideration. Learners are afforded an opportunity to reflect on what they have learnt. Learners write the corrections in order to get the correct answers. Teaching and learning take place when learners work in groups and through peer tutoring. Peer assessment is used to mark the work, but the teacher takes a sample of learners' books on a rotational basis to identify the mistakes that

are committed by learners. The next section discusses how the “teach and assess” strategy will contribute towards effective teaching and learning in EMS.

5.4 HOW THE “TEACH AND ASSESS” STRATEGY WILL CONTRIBUTE TOWARDS EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

The discussions which took place during the second research meeting were based on how the teach and assess strategy will contribute towards effective teaching and learning in EMS. The co-researchers argued that they have already said several things in the preceding section which indicate how the teach and assess strategy will contribute towards effective teaching and learning in EMS. They quickly discussed the contributions of the strategy towards effective teaching and learning in EMS as presented below.

Effective teaching and learning will take place because teaching, learning and assessment will be integrated. In support of this, Ndalichako (2015:326) (cf. 3.4) purported that classroom assessment is a vital ingredient for effective teaching and learning, and when assessment is integrated in classroom practices, substantial learning gains can be achieved. Learners are going to internalise learning and master content. This is supported by statements by Bhattacharjee (2015:66), Chmiel (2014:1) and Westbrook et al. (2013:10) (cf. 3.3.3) that in a constructivist classroom, knowledge is internalised by learners. Learners’ prior knowledge will be considered. Lam (2011:8) (cf. 3.3.3) supported this by stating that learners come to school with prior knowledge and Booyse and Du Plessis (2014:80) (cf. 3.4.1) wrote that diagnostic assessment not only measures learners’ current knowledge and skills, but also gives the teacher an understanding of the existing knowledge and skills a learner brings to the teaching-learning process environment, which will ensure that teachers relate the teaching content to what learners already know. For example, when the teacher teaches about needs and wants, the teacher can ask learners to mention their needs and wants before discussing needs and wants within the subject content.

Mr X: *Because now we’ll be applying teaching and learning.*

The extract indicates that learners are going to internalise learning and master content, because effective teaching and learning are going to take place. Teaching and learning are taking precedence over monitoring of teachers. All activities in the classroom are geared towards teaching and learning. Classroom activities are not going to be used to monitor the teachers, but to support the process of learning and teaching. This is supported by Sebate (2011:62) (cf. 3.7), who stated that formative assessment should monitor and support the process of learning and teaching and inform learners and teachers about the learners' progress in order to improve learning. Assessment activities are going to relate to the lessons taught and learners are not going to be assessed on the content that has not been taught to them. Activities from different sources are not to be used as they are, but are to be adapted to suit the content and the context of the lesson. The teacher is not supposed to use activities from EMS textbooks as they are; the activities used must relate to the subject content that was taught during a lesson.

> Mr Josephs: *You know what I was thinking, I am sorry [eh…] the way it is… it is done [neh…] teach and assess, it is more… it focuses more on [uhm…] on tests… tests yes [eh…] you know. Ignoring… you know, we've got different kinds of learners [neh…] and if we only use [eh…] tests and without ignoring other forms of… of assessment like debates, discussions and so on [eh…] we are not accommodating the different learning styles that our learners have.*
>
> Mr Josephs: *The learning styles?... [Ja… Yes] you know it will include different learners with different learning styles [coughing in the background…] all learners that will… [interrupted by the researcher…].*
>
> Researcher: *You can, now how can it benefit? The needs of different learners will be accommodated in the teach and learning situation.*
>
> Mr Josephs: *Will be accommodated because now we'll be moving away from tests, [Ja… Yes] interesting…. Hahahaha! [laughs…]*

Learners with different learning styles are to be accommodated. The teaching and learning process is supposed to cater for learners' multiple intelligences and learners' learning styles, as Young-Lovell (2009:27) (cf. 3.3.4) stated that a multi-sensory approach to learning means that the learner can use any one or all of their senses to help them to truly understand a concept or idea. Walsh (2010:8) (cf. 3.3.4) also stated that the favoured learning style is unique to the individual, and it can provide valuable clues to preferred teaching strategies. This will help to meet learners' needs in the teaching and learning process. The extract below clearly indicates that the education system will produce learners who are responsible and contributing citizens. Learners are to be problem-solvers in the real-life world. Learners can solve economic problems, become entrepreneurs and become accountants, based on the content they will be exposed to in EMS. This is supported by Carless (2007:59) (cf. 3.6), who stated that assessment tasks promote the kind of learning dispositions required from students and should mirror real-world applications of the subject matter; students should be involved in assessment so that they develop a better understanding of learning goals and engage more actively with criteria and standards, and for assessment to promote learning.

> Mr Josephs: *The system, the education system will now be you know producing learners who are responsible citizens, contributing citizens, ja [yes] you know… citizens that will be you know be able to… to bring about change in the economy in… because now… they will be able to go out there and demonstrate and apply what they have learnt.*

Effective teaching and learning are to take place because learners are to be afforded opportunities to participate in their learning and learn from other learners. Learners are to be actively involved in their learning and Killen (2015:98) (cf. 3.2.2) supported this by stating that learner-centred approaches place a much stronger emphasis on the learner's role in the learning process; the teacher still sets the agenda, but has much less direct control over what and how learners learn. Group activities will afford an opportunity for learners who are shy to speak in large classrooms to raise their issues. Teachers can also identify the strengths of different learners. Learners who are good at the subject can be used as peer tutors, and when they become peer tutors, their subject-content knowledge will improve. This is highlighted by Westbrook

et al. (2013:11) (cf. 3.3.3), who stated that space is needed for flexible social groupings in classrooms and students need to feel that they have the right to talk and contribute to their peers' learning. Peer tutoring is going to allow teachers time to do other things, while the learners are helped by other learners.

Problems encountered by learners can be detected before the teacher moves to the next lesson, as Harlen (2014:6) (cf. 3.7) purported that formative assessment is a cyclic process, because assessment is used to identify the gaps in teaching and learning and the results of assessment determine what must be taught again. In support of this, Ndalichako (2015:326) (cf. 3.7) stated that formative assessment gives students guidance on their performance, and contributes to improving the learning process and provides feedback on students' progress over a period of time, so that any errors or learning difficulties can be identified and corrected. Teachers can get feedback and detect when their methods need refinement, based on the problems encountered by learners. Several researchers (Cordiner, 2011:8; Dixon-Roman, 2011:2; Flórez and Sammons, 2013:18; Harlen, 2014:6; Heritage, 2007:141) (cf. 3.7) supported the view that formative assessments provide feedback to both the teacher and student on the student's learning and developmental progress. Hofman et al. (2015:6) (cf. 3.7) elaborated that the feedback provided is real-time feedback, while Looney (2010:4) (cf. 3.7) posited that feedback provided is timely and specific.

> Jeff: *Also promoting quality learning again, as we said that we can introduce pure… peer tutoring. Learners will be able to talk or discuss in their own while the teacher is assessing what they are doing [banging the table to emphasise his point]. This means learners sometimes are free to talk on their own rather than when they see an elder so that one… this means there will be that thing of quality learning.*

The workload of the teacher will not be increased as the learners will mark other learners' work, i.e. peer assessment, and the teacher will only sample a certain number of learners' work to mark. Learners can have extra classes in the absence of the teacher because peer tutors can teach other learners. The extra mile that the teacher will take, will benefit the learners. Time spent on administration of assessment will be reduced as there will be no more long processes of administering

formative assessment. These discussions are new information in this study, but emanate from data generation.

The subject advisors are to use their visits to schools to empower the teachers and not to check the number of activities learners have written. This is going to enable teachers to relate well with the subject advisors, because they know that they are there to help them and not to "police" them as Mr Josephs said, laughing. In the extract below, when Vic refers to the "LF", he refers to the subject advisor. The District Multi-Discipline Teams, when conducting District Support Team Visits (DSTV), are no longer going to schools on fault-finding missions, but the subject advisors are to have a one-on-one interaction with the teachers to see where they need support and support them. These discussions are new information in this study, but emanate from data generation.

> Mr X: *So, as subject advisors, they should come and empower the teachers. Not only to come and check how many activities we have done, but to empower where the teachers have challenges. Like Mr Josephs said, the relationships seem not to be good, it's just because [eh…] people are now scared of him instead of thinking that you are the person who is here to assist him to know.*
>
> Vic: *Ja [Yes] it's totally different, especially… I think it's not all the "LF" so to say,but based on the kind of experience that I have. More often especially that would take place where the multi-disciplinary team is present, I think the will of thrive that they have is that they are always in a fault-finding mission… fault-finding mission in a sense that they will identify the kind of challenges and mistakes that you have done, non-performance on the side of the learners. And then they would be swearing at you instead of like proposing strategies of how. But I think the approach is totally different to an instance where there is one to one visit… [one-on-one… someone adds] interaction between either the teacher and the subject advisor. I know that there would be… there would be improvement.*

In summary, the teach and assess strategy will contribute towards effective teaching and learning in EMS because teaching, learning and assessment will be integrated. Learners will internalise learning and that leads to mastery of content. Learners' prior knowledge will be considered and that will give the teacher an understanding of the

existing knowledge and skills a learner brings to the teaching-learning process; therefore, teachers will relate the teaching content to what learners already know. Due to mastering of content, meaningful learning will be achieved. Teachers and learners will get feedback about the learners' progress in order to improve learning. Teachers use feedback to detect when their methods need refinement based on the problems encountered by learners. Assessment activities will relate to the lessons taught and learners will not be assessed on the content that has not been taught to them. Activities from different sources will be adapted to suit the content and the context of the lesson. Teaching and learning will take precedence over monitoring of teachers, because activities in the classroom will be geared towards teaching and learning. The teaching and learning process will cater for learners' multiple intelligences and their learning styles and that will help to meet learners' needs in the teaching and learning process. The education system will produce learners who are responsible and contributing citizens and learners will be problem-solvers in the real-life world. Effective teaching and learning will take place, because learners will be afforded opportunities to participate in their learning and learn from other learners. Learners will be actively involved in their learning. Group activities will afford an opportunity for learners who are shy to speak in large classrooms to raise their issues. Learners who are good at subject content can be used as peer tutors, and when they become peer tutors their subject content knowledge will improve. Peer tutoring will allow teachers time to do other things, while the learners are helped by other learners. Problems encountered by learners can be detected before the teacher moves to the next lesson and the results of assessment will be used to determine what must be taught again.

The workload of the teacher will be reduced as learners will mark other learners' work, i.e. peer assessment, and the teacher will only sample a certain number of learners' work to mark. Learners can have extra classes in the absence of the teacher, because peer tutors can teach other learners. The extra mile that the teacher will take, will benefit the learners, because the time spent on administration of assessment will be reduced as there will be no more long processes of administering formative assessment. The subject advisors will use their visits to empower the teachers and not to check the number of activities learners have written. Teachers will be able to relate well with the subject advisors, because they

will know that they are there to help them and not to “police” them. The District Multi-Discipline Teams will no longer go to schools on fault-finding missions, but the subject advisors will have a one-on-one interaction with the teachers, see where they need support and support them. These discussions also relate to the value of this study, as discussed in Section 1.7 of Chapter 1. The next section discusses the conditions under which the “teach and assess” strategy can be successfully implemented in EMS.

5.5 THE CONDITIONS UNDER WHICH THE “TEACH AND ASSESS” STRATEGY CAN BE SUCCESSFULLY IMPLEMENTED IN ECONOMIC AND MANAGEMENT SCIENCES

The discussions which took place during the third research meeting discussed the conditions under which the “teach and assess” strategy can be successfully implemented in EMS. The conditions under which the “teach and assess” strategy can be successfully implemented in EMS, as discussed by the research team, are presented below, as Ololube (2013:40) postulated in Chapter 3, Section 3.8 that the best-formulated strategy is useless, or rather, worthless, if it cannot be implemented effectively. Therefore, these conditions will be considered for successful implementation of teach and assess as a strategy for effective teaching and learning in EMS.

The research team identified allocation of resources as one of the conditions under which the teach and assess strategy can be successfully implemented in EMS. This is in line with the views of Olsen and Olsen (2009:31) (cf. 3.8) that the plan or strategy needs to be supported by people, money, time, systems and, above all, communication. The extract below indicates the need for allocation of different and relevant resources.

> Mr P: *I think relevant resources, relevant resources… human resource… relevant human resource and relevant physical resources [err…] like allocating the relevant teacher to the subjects because in allocation, we sometimes allocate the teacher because the subject need to be taught whereas the… that particular teacher is having a very little knowledge about the subject. So, we really [err…] not allocate*

relevant person, we'll be killing forty kids in one class; in five classes it's about two-hundred kids and they will hate the subject forever. We also need to [stuttering…] allocate to have resources that are relevant, physically resources that are relevant to the subject textbooks, supporting resources like teaching needs, other teaching needs like textbooks and the stuff. The size of the class is also important, so avoiding overcrowded class because once the class is overcrowded a teacher get it very hard to can reach each and every child in the usual participation [err…] attention and the stuff, and some of the learners we know that once they are so overcrowded they even turn shy to can show that they don't know who to ask for clarity thank you.

From the preceding extract, it is noted that some learners are shy to talk in overcrowded classrooms. Therefore, the extract below indicates that small groups must be used. This is supported by Westbrook et al. (2013:11) (cf. 3.3.3), stating that the space is needed for flexible social groupings, and within this, students need to feel that they have the right to talk and contribute to their peers' learning. The classrooms should have a manageable number of learners, but classrooms with small groups will enable the teacher to assess learners effectively, if the regular classrooms are overcrowded.

Mr Max**:** *[Eh…] To add on that, on what Mr P have just said, in the case of five of the classes I think the… this strategy of teach and assess can be successful again [err…] when its conducted in small groups of classes, maybe class have twenty to twenty-five learners. I think in that case the strategy can be successful because after presenting the lesson you have to assess. You have to follow all the five pillars and then make sure that the assessment took place.*

Teachers should plan properly to be able to implement the strategy successfully. This is in line with Olsen and Olsen's (2009:31) (cf. 3.8) assertion that implementation is the most difficult part of the planning process, as it is actually achieving the goals set out in the plan. Teachers should prepare their daily and weekly lesson plans for effective implementation of the strategy. This is supported by Flórez and Sammons (2013:4) (cf. 3.8), stating that effective planning is needed in order to integrate assessment into the teaching and learning process.

Mrs M: *Okay to add again on that, I think a teacher must be ready to teach by planning in advance and also prepare for that lesson to apply that teach and assess strategy. So, it comes up with the planning, weekly plan and then be se eba [follows] daily paper… preparation so that we can be effected… effectively, can be effectively implemented it in the class.*

Learners should be taught effectively in preceding grades. As EMS builds towards Accounting, Business Studies and Economics, learners should be taught properly all the content of the economy, financial literacy and entrepreneurship. If learners are taught effectively in junior grades, it will be easier for the teachers to focus on the strategy implementation, rather than re-teaching what has not been taught in previous grades. This is an emerging topic in this study.

Mrs M: *[Giggles…] It's just that most of the work has been done from, ke eng [what is it?] intermediate, Grade ten, Grade eleven; so only twenty percent work of Grade twelve there. So that's why we assess and then re-teach.*

Jeff: *So, as you said, you assess and re-teach, this means you assess them on their previous…? Okay!*

Mr Max: *Okay, Mrs M this re-teach were the same as the… when like when you do revision? When you re-teach.*

Mrs M: *But firstly, before you re-teach, you assess whether the learners are understanding.*

Mr Max: *I am asking why because [eh…] at GET, we normally do re-teach after we realise that learners have not coped or understood the content, hence we are re-teaching.*

Mrs M: *Us, most of the work ke tsa [is for] intermediate tsa [for] GET, that's why we assess and re-teach.*

The research team discussed that one of the conditions under which the teach and assess strategy can be successfully implemented in EMS, is conducting baseline assessment at the beginning of the year. At the beginning of Grade 8, the EMS

teacher must determine what learners have been taught in Grade 7 and at the beginning of Grade 9 the teacher must determine what the learners have been taught in Grade 8. Baseline assessment will help teachers to identify where their learners have subject content gaps. This is the emerging topic in this study. Baseline assessment should also be used when the new lesson is introduced to determine learners' prior knowledge in order to move from the known to the unknown, as Lam (2011:8) (3.3.3) postulated that learners come into formal education with a range of prior knowledge.

> Mr P: *Basically [err…] first term should start with [err…] assessment because assessing during the first term, it forms a baseline of the previous year. Then you start to know your learners better because whether they been progressed then or maybe they understood work of the previous year better or what then that forms then baseline. Once you can assess first, and you re-teach so then you are bringing them back to school after the holidays then being able to progress with those learners. That is how I think it can work better because you… once you start with teach and reassess you will teach new concepts that… and the previous ones are not well understood or maybe learner have just been progressed due to different conditions of the department (age, repeating more than twice and the stuff and stuff). Then you are becoming… as a new teacher, then you start to teach them thinking that they know or they have passed, clear passed whereas is not like that. So, but if you can assess them first then you get the picture of what the learners that you are going to teach for the entire year. So it's so important to start with assessment and then you re-teach or revision, the term that may be used and then you start with the new concept just like the old strategy of teaching from known to unknown.*

> Jeff: *Because I think that also applies when you want to introduce a lesson to learners because you can… like when you are teaching them about budget you can start by asking them how do they budget at home then they will tell you, then after that you can ask them "what is budget?" that is when you are teaching from unknown to the known, after that you can check [from the known to the unknown… Jeff is corrected by other co-researchers] yes their level then you can teach from here there.*

In order to implement the strategy successfully teachers need support, as the extracts below indicate that support is needed from the SMT and subject advisors.

This is supported by Earle (2009:22) (cf. 3.8), who stated that for a strategy to be effective, the organisations must have the participation and support of leaders. New teachers also need support through induction into the subject. The SMT must support the teachers with the necessary resources that they need in their classrooms and coach them on how to teach. Subject advisors must support the teachers in the subject they teach in order for teachers to be effective in their classrooms.

> Mr P: *[uhm…] Thank you, researcher support we need support all the way from start to end. Then support must start with the SMT because they are the ones that allocate then as a coach, SMT act as a coach. So, then the coach must by his team very much you see. So, then it must start with the SMT and the SMT also, like we highlighted the question of overcrowding; he is the one to make sure that learners are not overcrowded in the class physical resources. You see and human resources. They must also provide SMT necessary resources, then the SMT I view it as the centre of support, the subject… the HOD, we sometimes have a new teacher from the… from tertiary, the need to support that teacher from first day because our induction is also very poor. We just receive the teacher from department of education, we allocate the teacher the class, the subject but not even sure that we induct that teacher, we show the teacher how to present the lessons, how to prepare the lesson so the lesson team is the centre of support and influence.*
>
> Mr Max: *And then another support, it can be maybe the subject advisors to support the teachers in the…, in different subjects and then to develop them.*

Learners must be assessed with the types of questions that will promote their understanding and not drilled to answer the questions without understanding. Learners must be taught the subject content which will enable them to respond to different types of questions. In EMS, multiple-choice questions, matching columns, true or false questions, mentioning questions, discussion questions, case studies, cartoons, paragraphs and diagrams should be used to assess learners. This is supported by Cordiner (2011:1) (cf. 3.8), who stated that assessment tasks assess the capacity to analyse and synthesise information and concepts, not just recall the information previously presented, as well as by Flórez and Sammons (2013:4) (cf. 3.8), who stated that assessment promotes understanding of goals and criteria.

Questions used must help teachers to identify errors committed by learners in order for the teacher to re-teach.

Mr Max: *Can I add? I think again this teach and assess strategy can be successful again like ma'am have indicated that there's a time whereby they do re-teaching. I think there's a time can be successful again when the use of question papers maybe in order to make learners be able to see what type questions are asked during exams or tests. I think it can also be successful again on that part.*

Mr P: *I don't know whether I am following Mr Max while…, sometimes we experience a huge number of learners dropping at the universities more especially the first year. According to my observation it's all because of the training, we train learners to answer the questions we don't teach learners the content. Some they are very good in cramming, some subject you know that they need a memory; cramming work. Hence when maybe we need discussion questions or when we have to respond to these discussions questions, our learners cannot elaborate or maybe a lot but the short questions and the stuff and maybe short questions they can just respond like this [snaps fingers…]. I don't know whether I have made my point clear.*

Mr P: *The type of questions we use [err…] I think…, not much about the type of question we use because there was standard question paper will always be having different type of questions. But our learners, they are also trained to respond to essay questions, to respond to short questions. They cannot be [err…] they are not creative, they cannot respond…, apply knowledge you see that way it takes them back to say they cannot apply knowledge.*

Mrs M: *Yes, we must teach and assess; when doing the revision, you must assess then where there is an error analysis or question analysis you find that when they were not performing well in that concept or sub-topic then you re-teach.*

Jeff: *[Err…] In the issue of question papers there is a problem that I know some people can do. You can bring the question papers to the learners, what learners will do even if you don't drill on question papers but they will cram the questions even if you can ask then the same question but if you change the way that you are asking them, they will fail because what is in their mind is the way that it was asked in the previous…, so that is the problem if you ask them…, I think we can have the*

alternative. If it is not asked in this way you must also know how to answer it in the other way like in mathematics, there are many ways to kill a cat but we must also implement that because many people just cram. If you ask them the four factors of production, they must give you the factors of production but if you can…, you change it and ask them in a different way they will fail while they know the answers.

Mr P: *Hence I believe in [uhm…] known…, assess them first, after assessing them then you teach. You know that they don't know or understand this, then you teach [err…] after that you are going to assess them on what you have taught. If they don't understand then you re-teach, then that is where [err…] teach and assess strategy can be effective. It's like [err…] unfold maybe [laughs…] that norm system or structure; then we used to say question and answer method you see. Then Jeff…, Mr Jeff you said something about [err…] from known to unknown, budget was example. Then we cannot say [err…] "just give me or maybe tell me about your budget" we must say "what is a budget?" then we must start there, it's a question. We say "what is budget?" then we can come up with different answers like you saying no wrong answer there, then budget is this and this…, okay right now you'll teach them what is budget. And after teaching them what is budget you are going to ask them "what is budget?" having provided explanation or description of a budget. Then that is when you are going to see whether they understood or not, but you'll teach then from the known to unknown then teaching will be simple in that way.*

In summary, the strategy is useless or worthless if it cannot be implemented effectively. The allocation of different and relevant resources is important for successful implementation of a strategy. Small groups must be used because some learners are shy to talk in overcrowded classrooms and the classrooms should have manageable number of learners. Teachers should plan properly and should prepare their daily and weekly lesson plans for effective implementation of the strategy. Learners should be taught effectively in junior preceding grades, which will make it easier for the teachers to focus on the strategy implementation, rather than re-teaching what has not been taught in previous grades. Baseline assessment at the beginning of the year must be conducted to help the teachers identify where their learners have subject content gaps and when the new lesson is introduced to determine learners' prior knowledge in order to move from the known to the unknown. For the strategy to be implemented successfully, teachers need to be

supported by the SMT and subject advisors. New teachers also need support through induction into the subject. The SMT must support the teachers with the necessary resources that they need in their classrooms and coach them on how to teach, and subject advisors must support the teachers in the subject they teach in order for teachers to be effective in their classrooms. Learners must be assessed with the types of questions that will promote their understanding and not be drilled to answer the questions without understanding. Learners must be taught the subject content which will enable them to respond to different types of questions. Questions used must help teachers to identify errors committed by learners in order for the teacher to re-teach. Having discussed the conditions for successful implementation of the strategy, the next section discusses the possible challenges that might hamper the implementation of a strategy in order to put mechanisms in place to overcome them.

5.6 POSSIBLE CHALLENGES THAT MIGHT HAMPER THE IMPLEMENTATION OF A STRATEGY IN ORDER TO PUT MECHANISMS IN PLACE TO OVERCOME THEM

The possible challenges that might hamper the implementation of a strategy, as discussed by the research team during the third research team meeting, are presented below. In Chapter 3, Section 3.9, Li et al. (2008:3) stated that after a comprehensive strategy or single strategic decision has been formulated, significant difficulties usually arise during the subsequent implementation process. Therefore, the possible challenges which might hamper the implementation of a strategy are discussed in order to put mechanisms in place to overcome them.

The research team discussed that the allocation of resources might hamper the implementation of a strategy. In support of this, Rankins (2006:9) (cf. 3.9) identified implicit disagreement on priorities as the challenge to implement the strategy, whereas Kohtamäki (2010:14) (cf. 3.10) asserted that the major success in the strategy implementation is shared internal support and the capacities and knowledge of personnel to carry out the strategic plan. The allocation of teachers who are not qualified to teach EMS might hamper the implementation of the strategy. Therefore, EMS must be taught by teachers who have subject content knowledge of EMS.

Teachers who are not proficient in EMS should not be allocated to Grade 7, because it is a grade in which learners should get the necessary background for the subject. The allocation of physical resources, such as classroom buildings, might hamper the implementation of the strategy. This relates to overcrowding in classrooms, which is caused by Peter Morkel's post-provisioning model. The post-provisioning model must be revisited.

> Mr P: *And that is where the SMT, like I said it's a centre of influence should really allocate the teacher that's very perfect [err…] in Grade 7 because they are creating foundations is going to crack the whole building. And that is where the graphs start if you remember mathematics, EMS, and you start to understand a graph; to teach the graphs in Grade 7.*
>
> Mr Max: *[Clicks tongue…] I think one more thing that can hamper the implementation in the case of physical resources, in our classes [err…] we have huge numbers of learners so to overcome that, if you can try to balance our numbers…, then numbers in learners…, in classes…, number of learners in classes then it can also help to overcome the overcrowded classes.*
>
> Mr P: *Yes, and the Peter Morkel model should be seriously considered because less number, more teachers will benefit the country; but more learners less teachers it's just a group of a flock to the sea. Of which is what the department is doing [laughs…]*

The implementers might not be ready to implement the new strategy because it is not easy for them to change from how they are used to doing things. Brinkschröder (2014:7) (cf. 3.9) identified lack of understanding for overall aims and direction support as a challenge. Training and induction will help to overcome the challenge of implementers being unable to adapt to the new strategy. The trainers should master the strategy in order for the implementers to be properly trained. Chukwumah and Ezeugbor (2015:1388) (cf. 3.10) recommended that school principals are encouraged to collaborate with relevant stakeholders to promote capacity development of teachers through intensive and regular in-house seminars or workshops to improve knowledge, pedagogical skills and competence of teachers in various subjects, and improvisation of instructional materials to enhance the teaching-learning process. Co-researchers identified another challenge as

continuous change, instead of adaptation of the existing strategies. Based on this, Chemwei et al. (2014:119) (cf. 3.10) recommended that before trying to implement any strategy, the schools' management and educational stakeholders should carry out a strengths, weaknesses, opportunities, and threats (SWOT) analysis and identify strategic issues affecting the schools. This will help them understand where they are, what challenges are facing them and what opportunities are available to them; and hence minimise on their weaknesses and capitalise on their strengths, thus contributing to strategy implementation success.

> Jeff: *I think the other challenge that you can face, is adapting because if you implement another strategy, we cannot just shift from this strategy to the other one but we must adapt from the present one to the coming one because if you change you will lose focus. Let's say you are used in the strategy of teaching and assessing after, so now you want to teach and assess while you are teaching. You cannot just change but you have to adapt from the previous to the present one so that you cannot lose focus. That is why in even in universities most people are dropping out because they fail to adapt, they just want to change and by doing that they lose control or focus on what they were doing even here if you can adapt from the previous strategy to the other one that will be better.*
>
> Mrs M: *I think of anyone can understand the strategy the "teach and assess strategy" and she or he is ready to present in front of us, he will present in such a way that we love it so that we can apply it to our kids. Yes, I think so, and again in order for the challenge to be…, not to be there the teacher must be ready to apply the strategy and then if [se feila… it fails], [a kgone a be a tseba hore… the learner will know that] I have applied but it has failed. But [e se ke ya feila e soka e aplauwa… let it not fail before it is applied].*
>
> Mr P: *[Err…] to add on what Mrs M has said and induction, you motivate them, you induct them, present so that they can adapt. You see one of the factors that made OBE to fail it's because of adaptation that Jeff has said, just came and you said "no no outside all" then you need to get creative you see. Now then we need to have portfolios, the word portfolio then kids were coming with big boxes for all the books they can't even carry. And at the end the very same professor then, we don't know the cause of his stroke and the stuff but the strategy failed dismally and then we were told that it failed Columbia and all those that they need resources and a lot of money*

then came for another NCS and those different systems [neh…] and then now I will end up saying back to basics. If we can be asked which system, back to which basics…, basics of which system; we are going back to basics of… [not clear…] whereby we have mental maths that we used to do, whereby we decide to exercise the memory and the stuff. But if then we adapted and just add, not do everything on the table like Mr Jeff has said the curriculum should have been far. We shouldn't have been facing this issue of bridging our learners when they go varsity they have to do one year, doing this and that bridging and the stuff. So, then adaptation then it's very important Mr Jeff I agree with you and Mr M and Mrs M. Let us learn to adapt and stop changing the…, every time and then; these changes they bring problems or they already brought problems in the past.

Rushing to complete the pace-setter might hamper the successful implementation of the strategy. This is supported by Harlen (2014:9) (cf. 3.9), who stated that negative impact arises when what is assessed, reflects only easily tested aspects of learning, compounded by attaching rewards and punishments to the results, acquiring high stakes. Teachers should not rush to be on par with the pace-setter, while learners do not understand. Learners are not given individual attention because the classrooms are overcrowded. The extracts below are supported by Hofman et al. (2015:3-4) (cf. 3.9), that in addition to failing to deliver the desired results, the current system of high-stakes testing and accountability appears to have had many unintended and counter-productive consequences, such as increasing stress levels for professionals, little positive impact on classroom teaching and disengaged learners.

Mr Max: *[Clears throat…] and then I think the other challenge can be…, it seems as if its race against pace-setter and understanding this thing of teach and assess. Because you have to work according to pace-setter even though learners they understand or not…, they are not understanding but [wena… you] you want to cover the pace-setter. There is this thing of curriculum coverage, so hence I am saying to you there's a race between the pace-setter and the understanding irrespective of the learners understood or not [wena… you] you are rushing the pace-setter. I think that one which was indicated "effective teaching" I think we can apply it so that teaching and learning can take place. We'll use assessment as a support.*

Mr P: *[Err…] having a take on what Mr Max has said, the department its really stressing teachers a lot on this issue of inclusivity then [err…] we are working with human resource not raw material for production, we produce human resource. So then the IQ's do differ and as a result you are expected to rush the pace-setter like Max has said and having not done that, you are going to be charged on work coverage but before having told or the system that was used saying that each and every learner achieves according to his or her pace, you see that's a contradiction. So teachers have not been…, that thing has not been erased so the confusion is still there and which cost lot of teachers to take early retirement and to resign and the stuff and the stuff. And on top of that [err…] the size of the class…, the size of the class contributes a lot because these kids are so many in the class this Peter Morkel model is still not working for us and its true, hence the best performing schools, they have a small size of classes like not more than thirty learners in the class.*

Written work is not used efficiently because assessment activities do not improve learners' performance. As Sammons (2013:16) (cf. 3.9) stated, problems identified are attributed to unfavourable contextual conditions such as lack of time, insufficient application of assessment for learning principles in teaching and external constraints. Teachers are unable to control learners' work and, therefore, cannot use assessment for improving teaching and learning. In order to overcome these challenges, Hofman et al. (2015:6) (cf. 3.10) posited that formative assessment go to the heart of where learning and teaching happen and effective implementation of formative assessment will improve teaching practice and will engage and motivate students to take ownership of their own learning.

Mr Max: *I just want to make an example of one of the schools in this case of race against pace-setter and understanding, the school and the subject advisor visited the school and then maybe it was week eight, and then the Grade 9 learners have almost eighteen activities of EMS then there comes a time whereby they have to write the common paper for first term mind you. And then when they do the analysis, those learners they got seven percent.*

Mr P: *Efficiency of written work [Researcher… okay what is it?] then learners should be given written work more often than and a big class it's not going to be possible for the teacher to control, they will mark themselves, give themselves rights where their wrong but then average of small classes, then it will be possible for the teacher to*

give efficient work, mark, control the work, and re-teach and assess. But in the case whereby learners are just grouped or maybe overcrowded that teacher is going to rush the pace-setter no efficient teaching done and the stuff is going to hamper the results and performance of the learner.

Mr Max: *I just want to make an example of one of the schools in this case of race against pacesetter and understanding, the school and the subject advisor visited the school and then maybe it was week eight, and then the Grade 9 learners have almost eighteen activities of EMS then there comes a time whereby they have to write the common paper for first term mind you. And then when they do the analysis, those learners they got seven percent.*

In summary, when a strategy has been formulated, significant difficulties usually arise during the subsequent implementation process. The allocation of resources might hamper the implementation of strategy and the lack of shared internal support, and the capacities and knowledge of personnel to carry out the strategic plan. The allocation of physical resources, such as classroom buildings might hamper the implementation of the strategy. Overcrowding in classrooms, which might be attributed to the post-provisioning model, can hamper the implementation of a strategy and therefore the post-provisioning model must be revisited. The implementers might not be ready to implement the new strategy, because it is not easy for them to change from how they are used to doing things. Therefore, training and induction will help to overcome the challenge of implementers being unable to adapt to a new strategy. Continuous change, instead of adaptation of the existing strategies, is also a challenge. Rushing to complete the pace-setter might hamper the successful implementation of the strategy and teachers should not rush to be on par with the pace-setter while learners do not understand. Learners should be given individual attention in the classrooms. Written work must be used efficiently in order to improve learners' performance. Teachers are unable to control learners' work; therefore, they cannot use assessment for improving teaching and learning. In order to overcome these challenges formative assessment should go to the heart of where learning and teaching happen and effective implementation of formative assessment will improve the teaching practice and will engage and motivate students to take

ownership of their own learning. The next section discusses the aspect to be infused in teach and assess as the strategy for effective teaching and learning in EMS.

5.7 THE "TEACH AND ASSESS" STRATEGY AS THE STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

Discussions which took place in the fourth research team meeting, which relate to teach and assess as the strategy for effective teaching and learning in EMS are presented below. The learners and the RCL member pointed out that the teach and assess strategy as a strategy for effective teaching and learning in EMS must address the need for textbooks, as indicated by the DBE (2011**b**:10) (cf. 3.5.2.3). Learners stated that they needed textbooks which they could use even at home to study. The classrooms should have wall-charts with EMS content. Visual learners will benefit, as discussed by Msimanga (2014:41) and Walsh (2010:8) (cf. 3.3.4) that visual learners learn best by seeing. Teachers should create opportunities for remedial work in order to help learners who did not capture the learning content properly. Teachers should do practical work with learners, such as recording the transactions in the subsidiary books and posting to the ledgers. Teachers should do recording in subsidiary journals and posting to the General Ledger practically with the learners. Teachers should not give learners notes without explaining them. If the teacher writes notes on the history of money, the notes must be explained for learners to get an understanding of the history of money. Learners should not be overloaded with homework in different subjects. Different teachers teaching different subjects in a particular class should plan when each teacher will assess learners to avoid overburdening them with work. Learners would like the teachers to code-switch to their HL, because they understand EMS better if it is explained in their HL, but the problem is that the question paper will not be translated to their HL. English Across the Curriculum (EAC) must be promoted, which states that English as Language of Learning and Teaching (LoLT) and subject terminology must be used in classrooms. Learners need to be motivated by the teacher to actively take part in their learning. The extracts below relate to the preceding discussions.

Learner 1: *We need enough text books yes, in order to study at home and revise what has been taught in the class.*

Learner 2: *I think they should put more notes on the wall, if there are notes that…, [disruptive noise in the background…] to a subject that we are taught they should be taken out and involve more notes on the wall that talk more about Economic and Management Sciences. [Furniture moving…]*

RCL Member: *I will like our EMS teachers to increase those opportunities of giving the learners extra classes because there are other learners who do not understand EMS clearly yes.*

Learner 3: *I would like my teacher to continue… I would like my teacher to continue doing practical to learners who don't understand.*

Researcher: *In which way, practical?*

Learner 3: *She…, he always writes notes, he always write notes and then he explain to us what we should write.*

Learner 1: *And give us enough class works, not much… much… much… more! [All laugh…]*

Researcher: *Now what are you saying [ja… yes] I want to get that one many, is it too many?*

Learner 1: *No not many, many… many… many…, teacher…, teacher let's say teacher will teach EMS and give us a class work and Maths one, and English one, we can't do them well and do not get enough sleep sleeping at home. [All laughs…]*

Learner 2: *I think, something that I think he shouldn't change is the way he teaches. Most of us, I am talking about our class, most of us understand very well and he teaches very well.*

Researcher: *How? We want to get that so that that thing can be used in all the classes.*

Learner 2: *He explains things in two languages, Sotho and English. And his voice is very clear and we understand him.*

Mr X: *Based on what Learner two said, that she likes when the teacher using both English and Sesotho however, I want to make them aware that their question papers will always be in English then they are going to struggle when it comes to formal testing like an examination where; there won't be any time for them to call a teacher to translate.*

RCL Member: *Yes, I think the EMS teachers must continue to encourage and inspire some learners because other learners they do not get enough motivation to do the work.*

Researcher: *Okay, how can they be motivated and inspired?*

RCL Member: *They can…, like even in a classroom when other learners are afraid to answer a specific question maybe he or she knows the answer but she is scared to tell the answer. The teacher might not tell him…, must tell him that "no it's okay to answer because even if it's wrong at least you tried'.*

Learner 1: *Other learners just laugh when they answer wrong yes.*

Researcher: *Now what must be done?*

Learner 1: *You must help him or her when he just answered, you say "no this is…" and help him.*

Learner 3: *Yes, I would like us as four of us learners here encourage others to make a group work so others who don't understand can understand well.*

The research team agreed that the proposed strategy must accommodate different learning styles, as Killen (2015:99) (cf. 3.3.4) stated that not all learners learn or are able to learn everything in the same way because they have different learning styles or thinking styles. Wall-charts with EMS content should be available in EMS classes and that will be beneficial to visual learners (cf. 3.3.4). The wall-charts can have EMS concepts, grouping of assets, owner's equity and liabilities, formulas for

calculating cost price and selling price, circular flow and levels of management. Learners should be allowed to work in collaboration with other learners in groups and through peer tutoring (cf. 3.3.3). The teaching and learning process should be learner-paced and not aimed at rushing to cover the pace-setter. Therefore, the teaching and learning process must not be about curriculum coverage and high numbers of written activities. Classroom activities must be linked to the real world. Proper reflection from both the teacher and learners must take place in every lesson. As Msimanga (2014:6) (cf. 2.3.2) posited, learners must be given an opportunity to reflect on what they have learnt to see whether effective learning has taken place. Reflection will provide feedback. Teachers should randomly select learners to check their understanding and not ask the whole class at the same time whether they understood. At the end of the lesson learners should be asked to reflect on the lesson and this is done by asking learners to respond to two questions, i.e. “What have I learnt?” and “What is not clear?”

> Learner 1: *Some teachers do not ask us you know if we are covered, if you…, he must say that you understand… you understand? All of us we say “yes we understand” but when coming to asking questions we forgot what he have taught in the previous activity.*
>
> Researcher: *What must be done?*
>
> Learner 1: *He must ask if from when we are sitting like he must ask from here to…, the rows yes.*
>
> Mr Josephs: *I think, taking from what Learner one has said [er…] the strategy must not only be you know teach and assess strategy, it must you know also be its teach and assess I mean teaching must also be assessed not only learners [giggles…] no we must create a platform where learners are given an opportunity to assess the teaching process where they…, like we do in workshops. We give reflection forms at the end plus participants can give feedback so in that way we’ll be giving our learners an opportunity to say [er…] to indicate whether they gained anything, which aspects were too difficult that they could not understand you know, and your shy learners will be able to complete that form, it can be done anonymously [ja… yes] so in that way you know it will be…, teachers will be getting feedback from the learners and that will*

help the teachers to improve and to…, to improve their strategies, the approach and to you know address the shortcomings that were not addressed initially when the lesson was presented. I think the teaching also must be assessed, not only learning; teaching must be assessed as well, that's my point, teaching must be assessed. Learners must also be afforded the opportunity…, an opportunity to give feedback, to give feedback and it can be done anonymously. Teachers can create those reflection forms, feedback forms give to…, maybe with two or three questions for learners to complete after a lesson has been taught, where they indicate that "I did not understand this thing".

The strategy must apply both teacher-centred approaches, as discussed in Section 3.2.1, and learner-centred approaches, as discussed in Section 3.2.2 and Section 3.2.3. Learner-centred approaches will encourage active learning because learners will be given an opportunity to participate in the lesson. Teaching should move from the known to the unknown because learners come with certain knowledge and skills when they come to class and therefore lessons should build on learners' prior knowledge. As Lam (2011:8) (cf. 3.3.3) postulated, constructivists believe that learners come into formal education with a range of prior knowledge, skills, beliefs, and concepts that significantly influence what they notice about the environment and how they organise and interpret it, constructing new knowledge from the existing knowledge. Teachers should thoroughly plan their teaching, learning and assessment activities (cf. 2.3.2 and 3.8). Different forms of assessment, such as puzzles, case studies, stories, debates and cartoons, must be used to assess learners to make the subject interesting. This is in congruence with the DBE's (2012:4) (cf. 2.3.3) statement that evidence of achievement is collected, using various forms of assessment. Different forms of assessment, such as projects, assignment, presentation, data response, posters and case studies, must be used to assess learners. Different learning media, such as television and videos, must be used in EMS classrooms. Learners should be asked to pay attention to news on television which relate to EMS, such as the national budget speech, government, markets, trade unions, savings and sectors of the economy. Experiential learning through excursions must take place. Learners should visit entrepreneurs in their communities to understand entrepreneurship, factories to understand the production process, banks to understand savings and large business organisations to

understand levels and functions of management, and functions of the business. Kivunja (2014:41) (cf. 2.3.2) claimed that for effective teaching to take place learners should work on authentic real-life projects.

> Researcher: *What do you say about tests and cartoons?*
>
> Learner 1: *Not cartoons, some of the learners, they watch TV and they perfectly remember what was happening on the action that has been happen and when it was yesterday, he will repeat that to…, yes today…, lets its happen yesterday and he repeat it again today and he taught it clearly and he remember what happened all of that was happening there yes.*
>
> *I think they must…, teachers must use some of videos that include EMS or some of the learning areas, yes. The learners will remember what was happening on that action.*

Higher Education Institutions (HEIs) must train teachers who will teach EMS and be competent in all the components of EMS. The EMS subject advisors should train the teachers who are already teaching EMS in pedagogical content knowledge and methodologies in EMS. Schreuder (2009:28) (cf. 3.5.1) stated that teachers are seldom equipped to teach all aspects of their learning area and have a bias towards their field of expertise and they focused on only one discipline, whereas EMS requires teachers to be knowledgeable in all the different disciplines within the learning area. Training of teachers should be compulsory for teachers who have been identified through needs analysis that they lack either pedagogical content knowledge or methodologies of teaching EMS. Newly appointed EMS teachers must undergo induction. Teachers should not be moved from teaching one subject to another and teachers should teach the subject they are competent in and confident to teach. Learners must be given an opportunity to work in groups and be helped by their peers, because they might understand better if they are taught by their peers.

> Learner 1: *Well, if I come with my opinion and this one and this one, the other one will help those and will take one and choose if this will be right and I think will give me the best marks, yes.*

Learner 3: *It will help us because many learners many learners in our school do not understand EMS as other learners understand, they will explain them things that they do not understand, so we can improve the achievement of the school.*

Learner 2: *It will help because other learners are shy to speak up in class so in groups they are with their peers, they won't be scared to speak up. And the more they share ideas, the more they will come with right answers.*

RCL Member: *I think it will help because the idea of learners being together, it will help them to brainstorm ideas together and they won't be shy to express how they feel of a certain situation.*

Mr Josephs: *Can I ask a question? [ja… yes] I don't know, I think there's always those learners when you give them group work that will not you know…, participate in there. How do you deal with such learners? Learners who are reluctant to work with you in a group? Who do not want to talk, they don't do their part [ja… yes].*

RCL Member: *We anonymously report them to our teacher and he or she will find the perfect solution.*

Researcher: *Then there are…, I have seen when I was a teacher there are those learners when you say they work in groups those who are good, who don't want to share how are we going to deal with them? Those who are good in EMS but they don't want to share, how you normally deal with that, what happens in that case?*

Learner 3: *I think they should be taught to share their knowledge with others.*
RCL Member: *No, we told the teacher to ask him politely so that he could work with us.*

Learner 1: *When are [ntho… something] eish, the goodest learner will not want to share, he would say or she would say "ha this one is dumb and this one is dumb, I don't want to participate with them, I want to participate with people with the same level with mine".*

Researcher: *Then how it is solved?*

Learner 2: *Yes, they should be taught that their knowledge is not only for them and also advice other learners on how to be as good as them, not keep it to themselves.*

Learner 3: *I think we should encourage them to share their knowledge with us so we can understand better.*

Learner 1: *I think that the…, if the learner who is performing bad, bad he will say [mang mang… so and so] will laugh at me and make me a laughing stock at the class, he will say, "I am dumb and I can't participate in the group."*

If you can just say to him, he must stop he will understand if…, let's take an example if you say to him, [wena o no o tlo etsang ha e ne ele wena? e re kere motho ona o performa bad ane; nna ke performa good kea mo tsheha. Titjhere tlamehile a tle mahareng a rona ntho haebane yo, nna ke bohlale ankere o tlotla are wena hoja one o le motho one o tlo ikutlwa jwang ha motho a o etsa jwalo?… How would you feel if it were you? Let me say this person if performing bad and I am performing well in my studies and I laugh at him. The teacher must intervene for I am the smarter one, to come and say how were you going to feel if you were in the same position/ situation as him?] That will be a good solution.

In summary, the teach and assess strategy should include the availability of textbooks which learners can use even at home to study. The classrooms should have wall-charts which have EMS content. Teachers should create opportunities for remedial work in order to help learners who did not capture the learning content properly. Teachers should do practical work with learners and should not give learners notes without explaining them. Learners should not be overloaded with homework of different subjects. Code-switching must be used properly. Learners need to be motivated by the teacher to take an active part in their learning.

Different learning styles must be accommodated. Learners should be allowed to work in collaboration with other learners in groups and through peer tutoring. The teaching and learning process should be learner-paced and not aimed at rushing to cover the pace-setter. Classroom activities must be linked to the real world. Proper reflection from both the teacher and learners must take place in every lesson. The strategy must apply both teacher-centred and learner-centred approaches. Teaching

should move from the known to the unknown, because learners come with certain knowledge and skills when they come to class and, therefore, lessons should build on learners' prior knowledge. Teachers should thoroughly plan their teaching, learning and assessment activities. Different forms of assessment must be used to assess learners. Different learning media, such as television and videos, must be used in EMS classrooms and excursions must be undertaken. Higher Education Institutions (HEI) must train teachers who will teach EMS and be competent in all the components of EMS. The EMS subject advisors should train the teachers who are already teaching EMS in pedagogical content knowledge and methodologies in EMS. Training of teachers should be compulsory for teachers who have been identified through needs analysis. Newly appointed EMS teachers must undergo induction. Teachers should teach the subject they are competent in and confident to teach.

5.8 CONCLUDING REMARKS

This chapter presented, analysed and interpreted data based on five research objectives. Extracts to support data presented were used in this chapter. Teach and assess as a strategy for effective teaching and learning in EMS will be proposed in Chapter seven. The next chapter will consider findings, conclusions and recommendations for teach and assess as a strategy for effective teaching and learning in EMS.

CHAPTER SIX

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS FOR TEACH AND ASSESS: A STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

6.1 INTRODUCTION

The previous chapter presented, analysed and interpreted data generated, based on five research objectives. Extracts from research meetings proceedings were used to support data presented, as the study sought to propose the teach and assess strategy as a strategy for effective teaching and learning in EMS. This chapter will discuss CER as a theoretical framework for this study and PAR as a data generation method for this study. This chapter will also look into findings, conclusions and recommendations with regard to the objectives of this study, limitations of the study, implications for further research and concluding remarks.

6.2 CER AS A THEORETICAL FRAMEWORK FOR THIS STUDY AND PARTICIPATORY ACTION RESEARCH AS DATA GENERATION METHOD FOR THIS STUDY

It was stated in Section 2.2 that CER is the theoretical framework of this study and in Section 4.3 that PAR is the data generation method for this study. The next discussions confirm that CER and PAR were the relevant theoretical framework and data generation method for this study. The co-researchers were treated as co-researchers, based on Chimirri's (2015:39) (cf. 4.3) assertion and Mahlomaholo's (2009:225) (cf. 2.2.1.3) argument that the co-researchers should not be treated as if they were mere impersonal objects in a natural science laboratory. Emancipatory objectives were achieved in this study because co-researchers were able to construct knowledge for their own benefit, as multiple authors (Boog, 2003:426; Breda, 2015:9; Crane and O'Regan, 2010:3; Esau, 2013:4; Hien, 2009:103; Rose et al., 2015:2; Tshelane, 2013:416) (cf. 4.3) stated that PAR has emancipatory roots and Gilani-Wiliams (2014:16) (cf. 2.2.1.2) stated that CER seeks to emancipate and

transform. Data were generated through the voices of the co-researchers who used spoken words in order to draw research conclusions. Brooke (2013:432) (cf. 2.2.1.3) supported the view that the co-researchers are not data, but human voices, deeply connected with and concerned about the topic of investigation. Nkoane (2012:99) (cf. 2.2.1.3) also supported the view that in CER the researcher is not coding and calculating the number of words spoken by co-researchers as a basis for drawing research conclusions or meaning-making.

Co-researchers worked collaboratively, which led to their empowerment and transformation because they learnt from one another, as Tshelane (2013:417) (cf. 4.3) contended that PAR is a collaborative effort to address issues. This is supported by the statement by Elizondo et al. (2013:435) (cf. 2.2.1) that the interest of the emancipatory paradigm is to empower and the transform by creating collaborative relationships, while Hlalele (2014:104) (2.2.1.6) stated that when the co-researchers and the researcher work together it will help the co-researchers to identify possible threats and thus implement measures to evade them as part of changing their situation. Noel (2016:4) (cf. 2.2.1.2), Ramírez et al. (2013:425) (cf. 2.2.1.2) and Aasgaard et al. (2012:1) (cf. 2.2.1.2) highlighted that collaboration, empowerment and a participative approach are important in CER. The co-researchers were engaged in their role as co-researchers and were able to co-control the research process and participate in the decisions (cf. 4.8.3.1); this is supported by Boog (2003:435) (cf. 4.3). There was a bond among the co-researchers, even though at the beginning there was a little bit of tension. This is supported by Moleko (2014:21) (cf. 4.3) and (Myende, 2014) (cf. 4.3) that, through CER, the co-researchers and the researcher can bond and be closer to each other, tapping into each other's experiences and embracing them as they realise that they are valuable in making the research project successful. After bonding, the co-researchers were willing to share information, knew what was expected from them and had information sought from them, as Kumar (2014:191) (cf. 4.3) argued that before the researcher starts collecting information from potential respondents, it is imperative to make sure that the respondent is willing to share information with the researcher; respondents must understand what is expected from them and the respondents must have the information sought.

The knowledge produced in this study will benefit the co-researchers in the EMS teaching and learning process; this is in congruence with the assertions of Noel (2016:3) (cf. 2.2.1) and Marton (2014:25) (cf. 2.2.1.6) that CER is a process of producing knowledge that can be beneficial to disadvantaged people and its key aim is to empower its co-researchers. Co-researchers participated democratically in order to bring change into the classroom because their participation was voluntary and they were not pressurised to comment where they did not have anything to say, as Manfra (2009:41) (cf. 2.2.1.2) highlighted that CER has an interest in democratic participation and emancipation seeking for deep change and enlightenment within the classroom.

People who were voiceless, like learners, were given an opportunity to voice their views in order to bring a social change, as Kramer-Roy (2015:1210) (cf. 2.2.1.2) and Gilani-Wiliams (2014:17) (cf. 2.2.1.2) purported that CER exposes inequalities and giving voice, ultimately leading to positive social change. In support of this, Behar-Horenstein and Feng (2015:46) (cf. 2.2.1.2) postulated that CER minimises the potential for the co-researchers to remain voiceless or marginalised. People who are normally not considered to participate in a research, were afforded an opportunity to participate and they used language to share their experiences. This is in congruence with Noel's (2016:4) (cf. 2.2.1.2) assertions that in an CER design, people from the periphery would be allowed equal opportunity in playing an active role in creating knowledge, research and design and not just be placed in a more passive role in CER where the use of language is grounded in a context of shared experiences. The next section discusses the findings with regard to what the teach and assess strategy entails.

6.3 FINDINGS WITH REGARD TO WHAT THE TEACH AND ASSESS STRATEGY ENTAILS

The findings with regard to what the teach and assess strategy entails, are discussed below.

6.3.1 The teach and assess strategy entails integrating teaching, learning and assessment activities

This finding is supported by empirical data (cf. 3.6 and cf. 5.2.3). In order to integrate teaching, learning and assessment, the teacher plans teaching, learning and assessment activities thoroughly (cf. 2.3.2, cf. 3.8 and cf. 5.7). In order to integrate teaching, learning and assessment, the teaching and learning process is learner-paced and is not aimed at rushing to cover the teaching plan. Therefore, the teaching and learning process is not about curriculum coverage and high numbers of written activities (cf. 5.7), and this is a literature surprise. The teacher asks the learners questions, while recording the transaction in the subsidiary journals and the questions asked lead to the achievement of lesson objectives of recording the transactions in the subsidiary journals. Assessment, therefore, becomes part of the teaching and learning process.

6.3.2 Learning is learner-centred and teacher-centred

Learning is learner-centred when learners are actively involved in their learning, as discussed in (cf. 3.2.3, 3.2.2 and cf. 5.7). Learning is learner-centred when a liberationist approach and humanist approach are followed in a classroom. Learning is learner-centred when learners are engaged in assessment activities through formative assessment because they are actively involved in the lesson (cf. 3.4.2 and cf. 5.3.2). Learning is teacher-centred when the teacher takes a lead in the teaching and learning environment, as discussed (cf. 3.2.1, cf. 3.3.1 and cf. 5.7). When teachers explain the notes given to learners (cf. 5.7), learning is teacher-centred. Learning is teacher-centred when an executive approach and behaviourists approach are followed. Learning is both learner-centred and teacher-centred when the teacher and learners actively participate in the teaching and learning environment, as discussed (cf. 3.2.2 and cf. 3.3.3). Therefore, when learning is both learner-centred and teacher-centred, a facilitative approach and a constructivist approach are used. To achieve both learner-centred and teacher-centred learning, learners can investigate the socio-economic issues which have an impact on businesses and the teacher can explain the topic and the role of learners. Learners will present their findings and the teacher can fill in the content gaps.

6.3.3 Learners learn differently and at their own pace

As discussed (cf. 3.3.4), learners have multiple intelligences and different learning styles, therefore teachers use different strategies which cater for different learners in a classroom (cf. 3.3.4 and cf. 5.3.2). Different EMS lessons cater for visual, auditory and kinaesthetic learners. Also, EMS lessons cater for linguistic and logical-mathematical intelligences. The teacher caters for learners' learning needs by affording learners an opportunity to work in groups and through peer tutoring (cf. 3.3.3 and cf. 5.2.3). Peer tutoring affords learners an opportunity to help their peers (cf. 5.2.3). Teachers do practical work with learners, such as recording the transactions in the subsidiary books and posting to the ledgers (cf. 5.7) to cater for the needs of visual and kinaesthetic learners. Wall-charts with EMS content in EMS classrooms benefit visual learners (cf. 3.3.4 and cf. 5.7). The teacher can benefit auditory learners when telling learners about the history of money, benefit visual learners when drawing the circular flow in the classroom, benefit kinaesthetic learners by allowing learners to simulate trading and interaction in markets, benefit linguistic learners by allowing learners to debate different economic systems and benefit logical-mathematical learners by asking them to cross-cast the subsidiary journals or calculate the cost price, selling price and profit.

6.3.4 Classroom activities are linked to the real world

Different learning media, such as television and videos, are used in EMS classrooms. Learners are asked to pay attention to the news on television which relate to EMS, such as the national budget speech, government, markets, trade unions savings and sectors of the economy (cf. 5.7). Videos or Digital Video Discs (DVDs) which have EMS content are used in the classroom to bring those things that learners cannot reach into the classroom. Learners are taken on excursions for experiential learning. Learners visit entrepreneurs in their communities to understand entrepreneurship, factories to understand the production process, banks to understand savings and large business organisations to understand levels and functions of management and functions of the business. (cf. 2.3.2 and cf. 5.7). These discussions are consistent with literature (cf. 3.6) that assessment tasks should mirror real-world applications of the subject matter.

6.3.5 Teachers and learners get feedback for every lesson encounter

The teacher and the learners reflect on each and every lesson (cf. 2.3.2 and cf. 5.7). Reflection provides feedback about the teaching and learning process. In order to reflect on a lesson, the teacher randomly select learners to check their understanding and not ask the whole class at the same time whether they understand. At the end of the lesson, learners are asked two questions, i.e. what they have learnt and what is not clear; this is done to reflect on the lesson (cf. 5.7) and to check understanding and provide feedback (cf. 3.6). Learners' responses help teachers create opportunities for remedial work in order to reach learners who have not captured the learning content of the lesson properly (cf. 5.7). Remedial work is not only in the form of corrections (cf. 5.2.3). When learners have internalised the information from the lesson, they demonstrate skills, knowledge, attitudes and values (cf. 5.2.3). If the lesson were about the accounting cycle, the teacher can see from the learners' reflections whether the problem was on the steps, not following each other, or what each step entails, or how the steps relate to the bigger picture of the accounting process; then the teacher can do remedial work which relates only to the identified problem.

6.3.6 Time allocated to EMS teaching is used on teaching and learning activities

Time allocated to EMS teaching is two hours per week in Grades 7 to 9 (cf. 3.5.2.1). The higher percentage of time in the classroom is spent on teaching and learning rather than on administering assessment (cf. 5.3.2) because assessment forms a bridge between teaching and learning, and is used to discover whether the instructional activities resulted in intended learning (cf. 2.3.3). Therefore, the purpose of teaching is to assist people to learn (cf. 2.3.1). Quality teaching, learning and assessment take precedence over monitoring of teachers. However, assessment is not used to monitor teachers, the balance is maintained by using assessment activities to monitor curriculum coverage (cf. 5.2.3). Therefore, assessment activities are used to monitor the content learners have covered. The last two sentences are literature surprises. When the learners' books mirror the content which is the teaching plan, then learners are exposed to the content, as stipulated in the teaching

plan, because the lesson is complete when the teacher manages to determine that learning has taken place through assessment.

6.3.7 Formative and diagnostic assessment approaches followed to assess learners

The teach and assess strategy is based on a formative assessment approach and a diagnostic assessment approach (cf. 3.4.1, cf. 3.4.2, 3.6 and cf. 5.3.2). Therefore learners are assessed while the teaching and learning process is taking place and learners' assessment does not wait until the lesson is completed (cf. 3.4, cf. 3.4.2, 3.6 and cf. 5.2.3). Formative assessment and diagnostic assessment help the teacher to identify the challenges faced by learners and address them at early stages (cf. 3.4 and cf. 5.3.2). Assessment is applied as a way of determining the kind of experience that learners are already in possession of (cf. 3.4.1 and cf. 5.3.2). This helps the teacher to introduce the lesson based on the kind of understanding and learners' experiences. Knowing learners' prior knowledge helps the teacher to apply a didactic principle of moving from the known to the unknown during the lessons (cf. 3.3.3, cf. 3.4.1 and cf. 5.3.2). When learners start in a new grade, the teacher can apply diagnostic assessment to determine the content covered in the previous grade. At the beginning of the year in Grade 9, the teacher can give learners and activity on the Cash Receipts Journal (CRJ) and the Cash Payments Journal (CPJ) of a service business which they did in Grade 8. This helps the teacher to determine learners' understanding of CRJ and CPJ of a service business; therefore, the teacher knows where to start when teaching CRJ and CPJ of trading the business.

6.3.8 Teachers consider administration processes before embarking on assessment activities

Teachers consider administration processes involved and the assessment tools which will be relevant to the assessment activity when administering assessment (cf. 3.4.2 and cf. 5.3.2). The assessment activities are selected properly and developed by the teacher in order to ensure that the assessment activities used, are within the reach and understanding of learners, i.e. they are on the level of learners (cf. 3.6 and 5.2.3). Different types of questions are used to assess learners and if learners

struggle with a particular type of questions, the teacher tries a different type of question. Scaffolding is applied when assessment activities are developed (cf. 5.2.3). When the teacher gives learners a project on business plans, the teacher must develop the assessment tool before learners start with the project, check whether the information needed, is accessible to learners, ensure that the instruction is clear for learners and that learners can deliver the project as expected. Teachers should start assessing learners by using low order questions; when learners perform well, they can move to the next level until they are ready to embark on projects.

6.3.9 Assessment activities are based on the lessons taught and of good quality

Teachers assess learners on the work they have taught learners (cf. 3.4 and cf. 5.2.3). Assessment is frequent and recent (cf. 3.6). Assessment activities should be of a good quality by ensuring that they are fair, valid and reliable (cf. 3.5.3.5). Therefore, learners are not assessed on something they were not taught, unless if the purpose of assessment is to determine learners' prior knowledge. In order to achieve this, extracts from common papers are only used when they relate to what learners were taught (cf. 3.4.2 and cf. 5.2.3). Activities from the textbooks are adapted to relate to what was taught in the lesson. Different forms of assessment (cf. 2.3.3 and cf. 5.7) are used to assess learners. Different forms of assessment, such as puzzles, case studies, stories, debates and cartoons, are used to assess learners in order to make the subject interesting (cf. 5.7). Assessment activities promotes learners' learning, problem-solving, in-depth inquiry and knowledge discovery (cf. 3.6). When the lesson was about the sectors of the economy, all the questions asked to assess learners, relate to the sectors of the economy. Questions from the textbook and previous question papers are only used if they are based on the sectors of the economy. Learners are assessed while the information is still new in their minds. Puzzles are used to assess EMS concepts, case studies are used to prepare accounting books, stories are used to discuss traditional societies, debates are used to debate forms of ownership and cartoons are used to interpret the standard of living.

6.3.10 Informal activities are marked by learners and learners are not overloaded with assessment activities

Peer assessment is used for marking informal assessment activities (cf. 3.5.3.1 and cf. 5.2.3). Teachers are not overloaded with the marking of informal activities because peer assessment is used; however, the teacher takes a sample of books and mark them. The books are sampled on a rotational basis (cf. 5.7). Learners are not overloaded with homework of different subjects. Different teachers, teaching different subjects in a particular class, plan when each teacher will assess learners to avoid overburdening learners with homework (cf. 3.9 and cf. 5.7). Peer assessment is used when financial literacy activities are marked and the teacher or a learner is leading the whole class in marking. The next section discusses the findings on how the teach and assess strategy will contribute towards effective teaching and learning in EMS.

6.4 FINDINGS REGARDING HOW THE TEACH AND ASSESS STRATEGY WILL CONTRIBUTE TOWARDS EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

The findings with regard to how the teach and assess strategy will contribute towards effective teaching and learning in EMS are discussed below:

6.4.1 Effective teaching and learning will take place

Effective teaching and learning will take place because teaching, learning and assessment will be integrated (cf. 5.4). This is supported in that classroom assessment is a vital ingredient for effective teaching and learning and when assessment is integrated in classroom practices, substantial learning gains can be achieved (cf. 3.4 and cf. 3.7). Effective teaching and learning will take place because learners are going to internalise learning and master content (cf. 3.3.3, cf. 3.7 and cf. 5.4). Effective teaching and learning will take place because learners will be afforded opportunities to participate in their learning and learn from other learners (cf. 5.4). Learners will be actively involved in their learning. Group activities will afford an opportunity for learners who are shy to speak in large classrooms to raise their

issues. Teachers will also identify the strengths of different learners and learners who are good in the subject will be used as peer tutors. This is consistent with the view that space is needed for flexible social groupings in classrooms and that students need to feel that they have the right to talk and contribute to their peers' learning (cf. 3.3.3). The subject content knowledge of peer tutors will improve (cf. 5.4).

6.4.2 Learners' prior knowledge will be considered

Teachers will be able to build their lessons on what learners already know (cf. 3.7 and cf. 5.4) as it is stated that learners come to school with prior knowledge (cf. 3.3.3). It is stated (cf. 3.4.1) that diagnostic assessment not only measures learners' current knowledge and skills, but also gives the teacher an understanding of the existing knowledge and skills a learner brings to the teaching-learning process environment; that will ensure that teachers relate the teaching content to what learners already know.

6.4.3 Teaching and learning will take precedence over monitoring of teachers

Teaching and learning are taking precedence over monitoring of teachers because all activities in the classroom will be geared towards teaching and learning (cf. 5.4). Classroom activities will not be used to monitor teachers, but to support the process of learning and teaching. This is consistent with the view that formative assessment should monitor and support the process of learning and teaching (cf. 3.7) and inform learners and teachers about the learners' progress in order to improve learning.

6.4.4 Assessment activities will assess what they are supposed to assess

Assessment activities will relate to the lessons taught and learners are not going to be assessed on the content that has not been taught to them. Activities from different sources will be adapted in order to suit the content and the context of the lesson (cf. 5.4). This finding is a literature surprise.

6.4.5 Learners needs will be considered in a lesson

Learners with different learning styles will be accommodated. The teaching and learning process will cater for learners' multiple intelligences and learners' learning styles (cf. 3.3.4 and cf. 5.4).

6.4.6 The education system will produce learners who are responsible and contributing citizens

Learners will be problem-solvers in the real-life world (cf. 3.6 and cf. 5.4). Learners can solve economic problems, and become entrepreneurs or accountants, based on the content they will be exposed to in EMS.

6.4.7 Problems encountered by learners in EMS will be detected and addressed

Problems encountered by learners can be detected before the teacher moves to the next lesson (cf. 3.7 and cf. 5.4). It is further stated (cf. 3.7) that formative assessment gives students guidance on their performance and contributes to improving the learning process and provides feedback on students' progress over a period of time, so that any errors or learning difficulties can be identified and corrected. Teachers can get feedback and detect when their methods need refinement based on the problems encountered by learners (cf. 5.4 and cf. 3.7). Teachers and learners will get feedback on learners' learning, and developmental progress and the feedback provided will be real-time feedback and more specific.

6.4.8 Teachers workload will not increase

The workload of the teacher will not be increased as the learners will mark other learners' work (i.e. peer assessment) and the teacher will only sample a certain number of learners' work to mark (cf. 5.4). Learners can have extra classes in the absence of the teacher because peer tutors can teach other learners. Time spent on administration of assessment will be reduced, as there will be no more long processes of administering formative assessment. Peer tutoring is going to allow

teachers time to do other things while the learners are helped by other learners (cf. 5.4).

6.4.9 Teachers will get support from the subject advisors

Subject advisors will use their visits to schools to empower the teachers and not to check the number of activities learners have written (cf. 5.4). Subject advisors will have one-on-one interaction with the teachers to see where they need support and support them. The District Multi-Discipline Teams will conduct DSTV with the purpose of supporting schools, and not be on fault-finding missions (cf. 5.4). This finding is a literature surprise.

The preceding discussions also relate to the value of this study, as discussed in Section 1.7 of Chapter one. The next section discusses the conditions under which the teach and assess strategy can be successfully implemented in EMS.

6.5 FINDINGS REGARDING THE CONDITIONS UNDER WHICH THE "TEACH AND ASSESS" STRATEGY CAN BE SUCCESSFULLY IMPLEMENTED IN ECONOMIC AND MANAGEMENT SCIENCES

The findings with regard to the conditions under which the teach and assess strategy can be successfully implemented in EMS are discussed below.

6.5.1 Resources allocated to support the strategy implementation

Allocation of resources is one of the conditions under which the teach and assess strategy can be successfully implemented in EMS (cf. 5.5). This is consistent with the view (cf. 3.8) that the plan or strategy needs to be supported by people, money, time, systems and, above all, communication. Different and relevant resources must be available to support the strategy implementation. EMS resources as indicated in (cf. 3.5.2.3) must be available and the classrooms should have wall-charts which have an EMS content.

6.5.2 Group work used to ensure that all learners are reached

Some learners are shy to talk in overcrowded classrooms; therefore, small groups must be used to afford them an opportunity to express themselves in the classroom (cf. 5.5). In support of this, it is stated (cf. 3.3.3) that the space is needed for flexible social groupings, and within this, students need to feel that they have the right to talk and contribute to their peers' learning. The classrooms should have a manageable number of learners, but small groups' classrooms will enable the teacher to assess learners effectively if the general classrooms are overcrowded (cf. 5.5).

6.5.3 Teachers properly planning teaching, learning and assessment activities

Teachers should plan properly to be able to implement the strategy successfully (cf. 5.5). This is in line with the view that the implementation is the most difficult part of the planning process as it is actually achieving the goals set out in the plan (cf. 3.8). Therefore, teachers should prepare their daily and weekly lesson plans for effective implementation of the strategy (cf. 5.5) supported by the statement that effective planning is needed in order to integrate assessment into the teaching and learning process (cf. 3.8).

6.5.4 Effective teaching and learning taking place in all the grades

The empirical data (cf. 5.5) indicates that learners should be taught effectively in preceding grades to meet the demands of the new grade. As EMS builds towards Accounting, Business Studies and Economics, learners should be taught properly all the content of the economy, financial literacy and entrepreneurship. If learners are taught effectively in junior grades, it will be easier for the teachers to focus on strategy implementation, rather than re-teaching what was not taught in previous grades. This finding is a literature surprise.

6.5.5 Baseline assessment conducted

At the beginning of each year, baseline assessment must be conducted to determine what learners have been taught in the previous grade. At the beginning of Grade 8,

the EMS teacher must determine what learners were taught in Grade 7 and at the beginning of Grade 9, the teacher must determine what the learners were taught in Grade 8. Baseline assessment will help teachers to identify where their learners have subject content gaps (cf. 5.5). Baseline assessment should also be used when the new lesson is introduced to determine learners' prior knowledge in order to move from the known to the unknown, as it was stated (cf. 3.3.3) that learners come into formal education with a range of prior knowledge.

6.5.6 Teachers supported

In order to implement the strategy successfully, teachers need support from the SMT and subject advisors (cf. 5.5), and consistent with the statement that for a strategy to be effective, the organisation must have the participation and support of leaders (cf. 3.8). Newly appointed teachers must undergo induction in the subject. SMT must support the teachers with the necessary resources that they need in their classrooms and coach them on how to teach. Subject Advisors must support the teachers with subject methodologies and subject content in order for teachers to be effective in their classrooms.

6.5.7 Different forms of assessment and different types of questions used to assess learners

Learners must be assessed with the types of questions that will promote their understanding, and not drilled to answer the questions without understanding (cf. 5.5). Learners must be taught the subject content which will enable them to respond to different types of questions. In EMS, multiple-choice questions, matching columns, true or false questions, mentioning questions, discussion questions, case studies, cartoons, paragraphs and diagrams should be used to assess learners (cf. 5.5). This is supported by the statement that assessment tasks assess the capacity to analyse and synthesise information and concepts, not just recall the information previously presented and that assessment promotes understanding of goals and criteria (cf. 3.8).

6.5.8 EMS taught by competent teachers

HEI must train teachers who will teach EMS and be competent in all the components of EMS. The EMS Subject Advisors should train the teachers who are already teaching EMS in pedagogical content knowledge and methodologies in EMS (cf. 5.5). As stated in (cf. 3.5.1) that the teachers are seldom equipped to teach all aspects of the learning area and have a bias towards their field of expertise and they focused on only one discipline, whereas EMS requires teachers to be knowledgeable in the different disciplines within the subject. Training of teachers should be compulsory for teachers who have been identified through need analysis that they lack either pedagogical content knowledge of methodologies of teaching EMS. Newly appointed EMS teachers must undergo induction.

Having discussed the conditions for the successful implementation of the strategy, the next section discusses the findings with regard to the possible challenges that might hamper the implementation of a strategy in order to put mechanisms in place to overcome them.

6.6 FINDINGS REGARDING POSSIBLE CHALLENGES THAT MIGHT HAMPER THE IMPLEMENTATION OF A STRATEGY IN ORDER TO PUT MECHANISMS IN PLACE TO OVERCOME THEM

The findings with regard to the possible challenges that might hamper the implementation of a strategy in order to put mechanisms in place to overcome them are discussed below.

6.6.1 The allocation of resources might hamper the implementation of a strategy

The allocation of resources might hamper the implementation of a strategy (cf.5.6). This is a challenge because of an implicit disagreement on priorities (cf. 3.9). The school might have different priorities and decide to allocate the resources to different priorities and not support the strategy. It is stated that the major success in the strategy implementation is shared internal support and the capacities and knowledge

of personnel to carry out the strategic plan (cf. 3.10). Therefore, the allocation of teachers who are not qualified to teach EMS, might hamper the implementation of the strategy and EMS must be taught by teachers who have subject content knowledge and methodological knowledge of EMS. The allocation of physical resources, such as classroom buildings, might hamper the implementation of the strategy. The strategy cannot be implemented in overcrowded classrooms. The overcrowding in classrooms is caused by a post-provisioning model. The post-provisioning model must be revisited for the successful implementation of the strategy.

6.6.2 Lack of understanding on how the strategy must be implemented

The implementers might not be ready to implement the new strategy, because it is not easy for them to change from how they are used to doing things (cf. 5.6). Lack of understanding of overall aims and direction support, is a challenge (cf. 3.9). In order to overcome the challenge, training and induction should take place. The strategy must be mastered by the trainers in order for the implementers to be properly trained (cf. 5.6). School principals must collaborate with relevant stakeholders to promote capacity development of teachers through intensive and regular in-house seminars or workshops to improve knowledge, pedagogical skills and competence of teachers in EMS, and improvisation of instructional materials to enhance the teaching-learning process (cf. 3.10).

6.6.3 Continuous change and disregard of existing strategies

There is continuous change, instead of adaptation of the existing strategies (cf. 5.6). It is recommended (cf. 3.10) that before trying to implement any new strategy, the schools' management and educational stakeholders should carry out a SWOT analysis. A SWOT analysis will help to identify strategic issues affecting the schools and this will help them understand where they are, what challenges are facing them and what opportunities are available to them, and hence, minimise on their weaknesses and capitalise on their strengths, thus contributing to strategy implementation success. The change will therefore strengthen current practices.

6.6.4 Rushing to complete work in order to be seen as compliant

Rushing to complete the pace-setter might hamper the successful implementation of the strategy (cf. 5.6). This is supported by the statement that negative impact arises when what is assessed, reflects only easily tested aspects of learning, compounded by attaching rewards and punishments to the results, acquiring high stakes (cf. 3.9). Therefore, teachers should not rush to be on par with the pace-setter, while learners do not understand. The desired results, the current system of high-stakes testing and accountability appear to have had many unintended and counter-productive consequences, such as increasing stress levels for professionals, little positive impact on classroom teaching and disengaged learners (cf. 3.9). Written work is not used efficiently because assessment activities do not improve learners' performance (cf. 5.6). This is in congruence with the assertion that problems identified are attributed to unfavourable contextual conditions, such as lack of time, insufficient application of assessment for learning principles in teaching and external constraints, and teachers are unable to control learners' work and cannot use assessment for improving teaching and learning (cf. 3.9). To overcome these challenges formative assessment must be at the heart of learning and teaching encounters. Effective implementation of formative assessment will improve the teaching practice and will engage and motivate students to take ownership of their own learning (cf. 3.10). The teach and assess strategy as a strategy for effective teaching and learning in EMS, will be proposed in Chapter seven. The next section discusses the conclusions drawn from this study.

6.7 CONCLUSIONS DRAWN FROM THE STUDY

The teach and assess strategy entails integrating teaching, learning and assessment activities. To achieve this the teacher must plan thoroughly. The teaching and learning process is learner-paced and is not aimed at rushing to cover the teaching plan. For example, the teacher asks learners questions, while recording the transaction in the subsidiary journals and the questions asked are leading to the achievement of lesson objectives of recording the transactions in the subsidiary journals. Therefore, assessment becomes part of the teaching and learning process. Learning is learner-centred and teacher-centred. To achieve both learner-centred

and teacher-centred learning, learners can investigate the socio-economic issues which have an impact on businesses and the teacher can explain the topic and the role of learners. Learners will present their findings and the teacher can fill in the content gaps.

Learners learn differently and learn at their own pace; therefore, teachers use different strategies which cater for different learners in a classroom. Learners work in groups and peer tutoring takes place. Teachers do practical work with learners, such as recording the transactions in the subsidiary books and posting to the ledgers. Classrooms have wall-charts with an EMS content. Classroom activities are linked to the real world and different learning media, such as television and DVD, are used in EMS classrooms. Learners are taken on excursions for experiential learning.

Formative and diagnostic assessment approaches are followed to assess learners. Teachers consider administration processes before embarking on assessment activities. Different types of questions and different forms of assessment are used to assess learners and scaffolding is applied when assessment activities are developed. Assessment activities are based on the lessons taught and are of a good quality. Extracts from common papers are only used when they relate to what learners have been taught and activities from the textbooks are adapted to suit the lesson content and context. Informal activities are marked by learners and learners are not overloaded with assessment activities. Teachers are not overloaded with marking of informal activities, but take a sample of books on a rotational basis and mark them. Different teachers teaching different subjects in a particular class, plan when each teacher will assess learners to avoid overburdening learners with homework. Teachers and learners get feedback for every lesson encounter and reflect on each and every lesson. Time allocated to EMS teaching is used on teaching and learning activities, rather than on administering assessment. Quality teaching, learning and assessment take precedence over monitoring of teachers, but assessment activities are used to monitor the content that learners have covered.

The strategy will contribute towards effective teaching and learning, because the aforementioned processes will help learners to internalise learning and master the content. Learners will be afforded opportunities to participate in their learning and

learn from other learners; therefore, active learning will take place. Peer tutors will be good in subject content knowledge. Lessons will be built around learners' prior knowledge and they will be meaningful. All activities in the classroom will be geared towards teaching and learning. The teaching and learning process will cater for learners' multiple intelligences and learners' learning styles. The education system will produce learners who are responsible and contributing citizens.

Problems encountered by learners in EMS will be detected and addressed before the teacher moves on to the next lesson. Teachers can get feedback and detect when their methods need refinement, based on the problems encountered by learners. Teachers and learners will get real-time, specific feedback on learners' learning. The workload of the teacher will not increase, as the learners will mark other learners' work. Learners can have extra classes in the absence of the teacher, because peer tutors can teach other learners. Subject advisors will use their visits to schools to empower the teachers and not to check the number of activities learners have written, and will have one-on-one interaction with the teachers to see where they need support, and support them. DSTV will focus on supporting schools and not on fault-finding.

Conditions such as allocation of resources to support the strategy implementation must be considered. Small groups must also be used to ensure that all learners participate in their learning. Teaching, learning and assessment activities must be properly planned. Effective teaching and learning should take place in all the grades to help learners to be ready for the new grade. Baseline assessment must be conducted to determine learners' prior knowledge.

Teachers must be supported in subject methodology and subject content. Newly appointed teachers must undergo induction in the subject. Different forms of assessment and different types of questions must be used to assess learners. EMS must be taught by competent teachers. HEIs must train teachers who will teach EMS and be competent in all the components of EMS. The EMS subject advisors should train the teachers who are already teaching EMS in pedagogical content knowledge and methodologies in EMS. Training of teachers should be compulsory for teachers

who have been identified through needs analysis that they lack either pedagogical content knowledge or methodologies of teaching EMS.

The allocation of resources because of competing priorities might hamper the implementation of a strategy. Lack of shared internal support and the capacities and knowledge of personnel to carry out the strategic plan can be a challenge. Another challenge can be a lack of understanding of how the strategy must be implemented. Continuous change and disregard of existing strategies are a challenge. Rushing to complete work in order to be seen as compliant can have a negative impact on strategy implementation. The next section discusses the recommendations for this study.

6.8 RECOMMENDATIONS

Assessment must be integrated into the teaching and learning process and must not be seen as a separate activity from the teaching and learning process. Assessment activities should not be written at all times; at times oral questions can be used. Assessment must be used to identify the problems encountered by learners for the teacher to address those problems before moving on to the next topic. It must provide feedback to the teacher and learners to improve performance. Learners' prior knowledge must be determined in order for the teacher to know what learners already know and in order for the teacher to move from the known to the unknown during the teaching and learning process.

Teachers must develop assessment activities which address the content that is being taught during a particular lesson. Activities taken from textbooks and previous common question papers should be adapted to suit the content and context of the lesson. Assessment tools should be developed before assessment can be administered. Different types of questions and different forms of assessment must be used to assess learners. Peer assessment must be used to mark informal work, but the teacher must take a sample of learners' books on a rotational basis to mark. The teacher must use the sampled books to identify the mistakes that are committed by learners and correct learners' work. Assessment must be used to develop learners

and not to monitor teachers. Time allocated to EMS must be used for teaching and learning and not for long processes of assessment.

Teachers should thoroughly plan their teaching, learning and assessment activities. Teaching should move from the known to the unknown, because learners have certain knowledge and skills when they come to class and therefore lessons should build on learners' prior knowledge. Learners must be actively involved in their learning and the classroom environment must be both teacher-centred and learner-centred. More time must be spent on the teaching and learning process, rather than on assessment processes. Different learning media, such as television and videos, must be used in EMS classrooms and excursions must be undertaken. Wall-charts with EMS content must be visible in EMS classrooms.

Teaching, learning and assessment activities must be learner-paced and take different learning styles of learners into consideration. Learners' needs must be considered with regard to teaching, learning and assessment. Learners should be allowed to work in collaboration with other learners, in groups and through peer tutoring. Classroom activities must be linked to the real world. Proper reflection from both the teacher and learners must take place in every lesson. Learners must do corrections in order to get the correct answers and learn from those. When teachers offer extra classes, the extra classes should be used to support learners on the problems they have encountered during the teaching and learning process.

Different and relevant resources must be allocated properly. Small groups must be used to afford shy learners an opportunity to talk. Teachers should plan properly and should prepare their daily and weekly lesson plans for effective implementation of the strategy. Learners should be taught effectively in junior preceding grades. Baseline assessment at the beginning of the year must be conducted to help teachers identify where their learners have subject content gaps. Teachers must be supported by the SMT and subject advisors. Newly appointed teachers must undergo induction in the subject. Learners must be assessed with different types of questions and different forms of assessment.

Resources must be appropriately allocated. Teachers should not rush to complete the teaching plan while learners are left behind. Learners should be given individual attention in the classrooms. Written work must be used efficiently to improve learners' performance. Peer assessment must be used to mark informal activities. HEIs must produce teachers who are competent in teaching EMS. Compulsory training workshops must be organised for teachers who were found to be incompetent in pedagogical content knowledge or subject content knowledge. The next section discusses the limitations of the study.

6.9 LIMITATIONS OF THE STUDY

The study was conducted in one school in the rural area in the Thabo Mofutsanyana Education District in the Free State, but was not tested in other districts or provinces. The study sample was chosen because the practice investigated was taking place in the Thabo Mofutsanyana Education District. Learners as co-researchers joined the research at later stages of the data generation process, because of the condition for their participation. The other challenge was that the research team's meetings had never been held with full complement of co-researchers because of competing priorities for co-researchers. There are co-researchers who attended only forty percent of the research team's meetings. Some of the results of field-testing were not discussed in a research team's meeting, but were written as a report. The next section discusses the implications for further research.

6.10 IMPLICATIONS FOR FURTHER RESEARCH

Based on the limitation of this study, I recommend that the same study should be conducted in different districts and different provinces. The study should also be conducted in a well-resourced school. Research must be conducted to determine the applicability of this study in other subjects. The next section consists of concluding remarks.

6.11 CONCLUDING REMARKS

The aim of this study was to propose teach and assess as a strategy for effective teaching and learning EMS. This chapter discussed CER as the theoretical framework for this study and PAR as a data generation method for this study. Then it presented the findings, conclusions and recommendations of this study. It also discussed the limitations for the study and implications for further research.

The next chapter will propose teach and assess as a strategy for effective teaching and learning in EMS.

CHAPTER SEVEN

TEACH AND ASSESS: A PROPOSED STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

7.1 INTRODUCTION

The previous chapter discussed CER as the theoretical framework for this study and PAR as a data generation method for this study. The findings, conclusions and recommendations of this study were presented. Finally, the limitations for the study and implications for further research were discussed, as the study sought to propose a teach and assess strategy as a strategy for effective teaching and learning in EMS. Therefore, in the final chapter of this study, teach and assess will be proposed as the strategy for effective teaching and learning in EMS. In order to propose teach and assess as a strategy for effective teaching and learning in EMS, this chapter will discuss the conditions for the successful implementation of teach and assess as a proposed strategy for effective teaching and learning in EMS and the components of teach and assess, a proposed strategy for effective teaching and learning EMS. Then the strategy will be proposed, and a summary of the study and impressions from the study will be discussed. Lastly the concluding remarks are discussed. The next section discusses the conditions for successful implementation of teach and assess as a proposed strategy for effective teaching and learning in EMS.

7.2 THE CONDITIONS FOR SUCCESSFUL IMPLEMENTATION OF TEACH AND ASSESS AS A PROPOSED STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN EMS

The conditions for successful implementation of teach and assess as a proposed strategy for effective teaching and learning in EMS are discussed below.

7.2.1 Teachers and learners must have adequate and relevant resources

Teachers must have a variety of EMS textbooks and should not follow a particular textbook, but should use different textbooks for them to get relevant content and assessment activities to be used in class. Each learner must have an EMS textbook (cf. 3.5.2.3). When each learner has an EMS textbook, he or she will be able to use them in their own time, even when they are at home. Learners must be given calculators in order for them to practise to use them on a daily basis. Each learner must be given a Cash Journal exercise book, a General Ledger exercise book and a normal exercise book in order for them to practise to write in them on a regular basis. EMS classrooms must have wall-charts with EMS content. The schools must have the availability of classroom space and availability of EMS teachers. When there are availability of classroom space and availability of EMS teachers, overcrowding in classrooms will be avoided. This will ensure that the classrooms are of manageable sizes and that will enable teachers to give learners individual attention. The SMT should support the teachers with the necessary resources that they need in their classrooms. EMS must be allocated to teachers who are grounded in the pedagogical content and subject content of EMS. The subject must not be taught by teachers who have a shortage of periods and then their periods are increased by allocating EMS to them.

7.2.2 Learners must be afforded an opportunity to work in small groups

Some learners are shy to talk in large groups; therefore, teachers must allow learners to work in small groups. Small groups will afford learners who are shy, an opportunity to express themselves in the classroom. This will make learners feel that they have a right to talk in the classroom, learn from their peers and contribute to their peers' learning.

7.2.3 Peer tutoring must be used in EMS classrooms

Peer tutoring will afford learners an opportunity to help other learners and other learners will learn from their peers. Some of the learners are shy or afraid to ask teachers questions; therefore, it will be easier for them to ask their peers. The peer

tutors will be grounded in the subject content because they have to prepare before engaging in peer tutoring. Peer tutors can help other learners during extra classes even when the teacher is not available. That will allow the teacher time to do other subject-related things like planning.

7.2.4 Teachers must properly plan teaching, learning and assessment activities

Teachers should plan properly how classroom activities will take place. Teachers should prepare their lesson plans, which should clearly spell out the topic, the duration of the lesson, content, lesson aims and objectives, linking of the lessons, teaching methods, teacher activities, learner activities, assessment activities, resources needed and differentiation. The lesson plan must be aligned to the teaching plan. The teacher should have one lesson plan for each topic in the teaching plan because the lessons overlaps and cannot be completed in one period.

7.2.5 The teacher and learners must reflect on each lesson

The teacher must reflect after the lesson has been completed in order to see how he or she can improve in the future. Learners must be allowed to reflect on the lesson by answering two questions, which are: “What I have learnt?” and “What is not clear?” These two questions will help the teacher to know where there is a need for re-teaching, or whether to progress to the next lesson. Learners should be asked to reflect individually, not as a whole class because some learners will conceal their views within the views of other learners.

7.2.6 Effective teaching and learning must take place in all the grades

Learners should be taught effectively in all the grades in order for them to have prior knowledge needed in the following grade. When learners are taught effectively in all the grades, they will meet the demands of the following grades, as the curriculum is planned in a manner that there is progression in content from one grade to the next. When learners are taught all three the main topics of EMS, i.e. the economy, financial literacy and entrepreneurship, they will meet the demands of Economics,

Accounting and Business Studies in Further Education and Training (FET). In schools with FET, EMS should not be allocated to teachers who are regarded as not competent in Business, Commerce and Management (BCM) subjects because EMS lays the basis for FET. If learners get the right foundation in EMS, they will cope with BCM subjects in FET.

7.2.7 Baseline assessment must be conducted

At the beginning of each year, baseline assessment must be conducted to determine what learners have been taught in the previous grade. At the beginning of Grade 8 the EMS teacher must determine what learners were taught in Grade 7 and at the beginning of Grade 9 the teacher must determine what the learners were taught in Grade 8. Baseline assessment will help teachers to identify where their learners have subject content gaps. Baseline assessment should also be used when a new lesson is introduced to determine learners' prior knowledge in order for the teacher to move from the known to the unknown.

7.2.8 Teachers must be supported in pedagogical content and subject content

The HOD must train teachers on pedagogical content and subject content of EMS. Where the HOD encounters problems, the HOD must ask for assistance from the subject advisor. Newly appointed teachers must undergo induction where they will be introduced to aspects which relate to EMS, such as the EMS CAPS document, teacher's file and its contents, teaching plan, planning, assessment and evidence of learners' work.

7.2.9 EMS must be taught by teachers trained in EMS teaching

HEIs must train teachers, who will teach EMS, to be competent in all the components of EMS. EMS subject advisors should train the teachers who are already teaching EMS in content knowledge and methodologies in EMS. Training of teachers should be compulsory for teachers who have been identified through needs analysis that they lack either pedagogical content or subject content of EMS.

7.2.10 Teaching and learning must take precedence over monitoring of teachers

Teaching and learning must take precedence over monitoring of teachers. All classroom activities must be geared towards teaching and learning, and should not be used to monitor the teachers, but to support the learning and teaching process. If classroom activities are used to monitor teachers, the teachers will end up focusing on compliance instead of focusing on effective teaching and learning. The next section discusses the components of teach and assess, a proposed strategy for effective teaching and learning in EMS.

7.3 THE COMPONENTS OF TEACH AND ASSESS: A PROPOSED STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN EMS

The components of teach and assess: a proposed strategy for effective teaching and learning in EMS are discussed below.

7.3.1 Teaching, learning and assessment activities are integrated

Teaching, learning and assessment activities are bound to one another. Assessment takes place while the teaching and learning process is in progress. Assessment is part of the teaching and learning process and is not a stand-alone activity. Teaching, learning and assessment activities are well-planned by the teacher and do not happen haphazardly.

When the teacher teaches learners about the recording of transactions in subsidiary journals and posting to different ledgers, learners are asked questions throughout the processes. The questions can be written or orally put. At the end of the lesson, learners are given a written assessment activity.

7.3.2 A facilitative approach is used during teaching and learning process

A facilitative approach is followed during the teaching and learning process. A facilitative approach is followed because the teacher facilitates the learning process

and learners actively participate in the process. A facilitative approach relates to constructivist approach to teaching and learning. The facilitative approach and constructivist approach apply learner-centred strategies to teaching and learning. In the teaching and learning process, learners play an active role in their learning, while the teacher guides them towards achievement of the lesson objectives.

When the teacher teaches learners about the National Budget, the teacher explains the National Budget, income and expenditure in the National Budget. The teacher guides learners on the activities that they must follow. In all these processes, the teacher is facilitating the teaching and learning process about the National Budget. Learners start to collect information about the National Budget by consulting different media, then discuss their findings with their peers and construct meaning. In the end, learners provide feedback on the National Budget. Learners are actively involved in their learning and the teacher fills in the content gaps.

7.3.3 Multiple intelligences and different learning styles are considered in the teaching and learning process

Different multiple intelligences and different learning styles of learners are considered when teaching, learning and assessment activities are planned. Activities in EMS should cater for linguistic intelligences, and logical-mathematical intelligences also cater for auditory, visual and kinaesthetic learners. Classroom discussions and debate will cater for linguistic intelligences, and practical performance of the accounting cycle will cater for logical-mathematical intelligences. Teacher-centred approaches will cater for auditory learners, like when the teacher introduces a lesson or discusses the origin of economic systems. The use of textbooks, the chalkboard, charts, television and DVDs will cater for visual learners. Excursions and practical demonstrations will cater for kinaesthetic learners. These activities should take place in the EMS classroom, but they must be well-planned.

The lesson benefits linguistic learners when they debate on the trade unions. Logical-mathematical learners benefit when they record the transactions in the subsidiary journals, post to the ledgers and do the calculations of cost price, selling price and profit. When the teacher explains the standard of living of traditional and

modern societies, auditory learners benefit. When learners read from the textbooks about the levels of government, or when the circular flow is drawn, or the chart on accounting equation is on the classroom wall, visual learners benefit. When learners are engaged in entrepreneurial activities on a business day at school, kinaesthetic learners benefit.

7.3.4 The teaching and learning process is learner-guided

The teaching and learning process is learner-guided and is not aimed at rushing to cover the teaching plan. Learners' individual needs are considered during the lessons. When the majority of learners struggle with the content of a lesson, the teacher does not move to the next topic until the majority of learners master the content of the lesson. If a few learners in the classroom struggle with the content of the lesson, the teacher gives those learners individual support and remedial support outside the teaching time. The teacher can ask peer tutors to help other learners or organise learners in small groups to reteach the lesson. The teaching and learning process is about learners' learning and not about curriculum coverage and high numbers of written activities.

The teacher teaches demand and supply schedules and graphs when learners understand demand and supply, and the relationship between demand and price, and the relationship between supply and price. When the majority of learners do not understand the price theory, the teacher will re-teach the lesson to the whole class. If few learners do not understand, the teacher asks peer tutors to explain the price theory or organise small groups where learners discuss the price theory.

7.3.5 Learners work in small groups and peer tutoring takes place

In a constructivist classroom, learners are afforded an opportunity to construct knowledge by interacting with their peers under the guidance of the teacher. In order to achieve this, small groups are used in the classroom where the learners will be actively engaged in learning activities under the guidance of the teacher. Learners who are mastering the content of a particular lesson, are used as peer tutors. This affords learners the opportunity to share their understanding with their peers, while

other learners get an explanation of the content from a different person, who is on their own level.

7.3.6 Classroom activities are linked to big ideas

All classroom activities are linked to big ideas because they aim to relate what is done in the classroom with the real world. Different learning media, such as television and DVD are used in EMS classrooms. Learners like to watch television and DVDs at home and therefore it will be interesting for them to watch them at school. During data generation one learner clearly stated that learners easily relate what happened on movies that they watched and therefore it will be easy for them to relate the content of the subject if they watch it on DVD. When learners watch television, they pay special attention to issues which relate to the subject and the teacher helps guide them. Learners are taken on excursions for experiential learning. Learners are engaged in entrepreneurial activities by hosting an entrepreneurship day at school, where they will showcase their entrepreneurial skills.

The teacher plays a DVD in class on the history of money and learners are given an assessment activity based on the history of money. Learners are asked to watch television and write a report on the repo rate, the interest rate, the role of the government, inequality, poverty and trade unions. Learners observe every interaction they have in every business they visit on a daily basis, and are asked to respond to questions on how entrepreneurs manage their businesses. Excursions are organised to factories, banks, business development agencies, mines and government departments. Prior to undertaking the excursions, the teacher prepares questions which learners must respond to, based on their observations during the excursion. Feedback is given when learners are back in class.

7.3.7 Teachers and learners get feedback for every lesson encounter

The teacher and learners reflect on each lesson, and feedback focuses on the teaching and learning process. The teacher randomly selects learners to check their understanding of the lesson. At the end of the lesson, learners are asked two questions, i.e. “What I have learnt?” and “What is not clear?” This is done to reflect

on the lesson to check the understanding of learners. The teacher uses learners' responses to create opportunities for remedial work in order to reach learners who did not capture the learning content properly during the lesson. Based on learners' feedback, the teacher reflects on his or her classroom practices in order to improve in future.

7.3.8 Time allocated to EMS teaching is used on task

The higher percentage of time in the classroom is spent on teaching and learning, rather than on administering assessment. Long processes of assessment are avoided during the contact time. Contact time is not used to ensure compliance, but is used for effective teaching and learning. Learners' written assessment activities relate to what they have been taught and therefore learners' books mirror the content that has been taught in the EMS classroom. Time allocated to EMS is used to expose learners to the content, as stipulated in the teaching plan.

7.3.9 Formative and diagnostic assessment approaches are followed to assess learners

The teach and assess strategy is based on a formative assessment approach and a diagnostic assessment approach; learners are assessed before and/or while the teaching and learning process takes place, and learners' assessment does not wait until the lesson is completed. Formative assessment and diagnostic assessment help the teacher to identify the challenges faced by learners and address them at early stages. Assessment is applied as a way of determining the kind of experience that learners are already in possession of and this helps the teacher to introduce the lesson based on the kind of understanding and experiences of learners. Knowing learners' prior knowledge helps the teacher to apply a didactic principle of moving from the known to the unknown during the lessons. When learners start in the new grade, the teacher applies diagnostic assessment to determine the content covered in the previous grade.

7.3.10 Teachers consider administration processes before embarking on assessment activities

Teachers consider administration processes involved in assessing learners and the assessment tools which will be relevant to the assessment activities when administering assessment. Learners must know what is expected from them before they embark on any assessment activity. Teachers should provide learners with the criteria for an assessment activity. Informal activities are planned beforehand by the teacher. The assessment activities are selected properly and developed by the teacher in order to ensure that the assessment activities used, are within the reach and understanding of learners. Scaffolding is applied when assessment activities are developed. The teacher increases the level of difficulty of questions when the learners master a particular content. Teachers start assessing learners by using low-order questions; when learners perform well, they move to the next level, until they are ready to embark on high-order questions. The types of questions that teachers use, include true or false questions, matching items, filling in the missing word(s) and multiple-choice questions. When learners master these questions, the teacher uses definitions of concepts, discussion questions, identifying questions, explanation questions and exploration questions. When the learners have mastered these questions, teachers use evaluation questions, critical discussions questions and developing questions.

7.3.11 Assessment activities are based on the lessons taught and are of good quality

Teachers assess learners on the work they have taught learners and assessment is recent. The teacher does not take long before assessing the learners; at the end of the lesson learners are assessed with a written activity, based on the lesson. Throughout the lesson, learners are assessed either orally or in writing. Assessment activities used, are of a good quality and are fair, valid and reliable. Learners are not assessed on something they have not been taught, unless when the purpose of assessment is to determine learners' prior knowledge. Extracts from common papers are only used when they relate to what learners were taught and activities from the textbooks are adapted to relate to what was taught in the lesson.

7.3.12 Peer assessment is used to mark informal activities

Peer assessment is used for marking informal assessment activities and teachers are not overloaded with marking of informal activities. The teacher takes a sample of books and mark them. The sample of books is done on a rotational basis to ensure that the teacher gets feedback on different learners. Learners are not overloaded with homework of different subjects because they do not manage to complete all of them. Teachers teaching different subjects in a particular class, plan when each teacher will assess learners to avoid overburdening learners with homework.

7.3.13 Assessment is varied

Different forms of assessment and different types of questions are used to assess learners. Different forms of assessment, such as puzzles, case studies, stories, debates and cartoons, are used to assess learners in order to make the subject interesting. The use of different forms of assessment promotes learners' learning, problem-solving, in-depth inquiry and knowledge discovery. The teacher does not use the same form of assessment in all the activities because learners who are good in that form of assessment, are advantaged, while those who are not good, are disadvantaged. When forms of assessment are varied assessment, assessment is fair to all the learners. Different types of questions are used to assess learners and if learners struggle with a particular type of question, the teacher tries a different type of question. Different learners are good in responding to different types of questions; therefore, if types of questions used, are varied, assessment is fair.

7.3.14 Teaching and learning activities are contextualised

Teaching and learning activities are related to the context of learners' environment. Teaching and learning activities are related to the life-world of learners. When examples are made in the classroom, they relate to the environment of learners. Teachers make teaching and learning concrete by relating it to practical examples which are within the reach of learners.

The aforementioned components will be used to propose teach and assess as a strategy for effective teaching and learning in EMS. The next section proposes the strategy.

7.4 TEACH AND ASSESS: A PROPOSED STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN EMS

The outline of teach and assess: a proposed strategy for effective teaching and learning in EMS is presented below.

Table 7.1: Outline of the proposed strategy

Components of the strategy	Description	Purpose	Application
Dynamic integration of teaching, learning and assessment	Teaching, learning and assessment activities are bound to one another. Assessment takes place while the teaching and learning process is in progress. Assessment is part of the teaching and learning process and is not a stand-alone activity.	To ensure that assessment supports the teaching and learning process in different contexts.	When the teacher teaches learners, learners are asked written or oral questions throughout the lesson. At the end of the lesson, learners are given a written assessment activity. Similar lesson topics may not necessarily be presented in similar contexts.
Creatively apply a facilitative approach during the teaching	A facilitative approach is followed when the	To ensure that the teaching and learning process is	Learners construct meaning through interaction with

and learning process	teacher facilitates the teaching and learning process and learners actively participate in the process.	learner-centred.	their peers. Learners play an active role in knowledge generation and the teacher monitors and guides the process. When learners give feedback, the teacher fills the content gaps.
Observe multiple intelligences and consider different learning styles in the teaching and learning process	Learners in the classroom have different multiple intelligences and different learning styles. Learners have preferred ways of learning.	To ensure that teaching, learning and assessment activities cater for the needs of individual learners.	The classroom activities should cater for linguistic intelligences through activities which encourage language usage and logical-mathematical intelligences through activities which allow for logical thinking and calculations. The teaching and learning process should vary the activities in order to cater for auditory learners through lecture method,

			presentations at schools and recorded materials, visual learners through chalkboard notes, pictures, wall-charts, textbook reading, DVD and television, and kinaesthetic learners through simulations, practical demonstrations and excursions.
Learner-guided teaching and learning process	The teaching and learning process is learner-guided when the teacher's pace is guided by learners' understanding. The teaching and learning process is learner-guided when the teachers are not aimed at rushing to cover the teaching plan.	To ensure that there are no learners who are left behind with the teaching content.	The teacher does not move on to the next lesson if the majority of learners struggle with the content of a lesson. The teacher only moves to the next topic when the majority of learners have mastered the content of the lesson. If a few learners in the classroom struggle with the content of the lesson, the teacher gives those

			learners individual support and remedial support outside the teaching time to avoid wasting the time of the majority of learners who have already mastered the content. Peer tutors help other learners or learners work in small groups.
Significant and creative use of small groups	Significant and creative use of small groups refers to the use of small groups in different contexts to meet the lesson objectives. With small groups, learners work in groups of four to six learners, depending on the size of the classroom.	To afford learners an opportunity to construct knowledge by interacting with their peers under the guidance of the teacher.	Learners actively engage in learning activities under the guidance of the teacher. Classroom discussions, cooperative learning and gallery walks can be applied with small groups.
Constructive application of peer tutoring	Peer tutoring takes place when learners who have mastered the content teach their fellow learners. Constructive	To afford learners the opportunity to share their understanding with their peers and learners getting an	Learners who are mastering the content of a particular lesson teach other learners, as if they

	application of peer tutoring refers to application of peer tutoring in a structured way to advance learners' learning.	explanation of the content from a different person, who is on their own level.	are teachers. Peer tutors are intentionally chosen to achieve a particular objective. Peer tutors can be used for reinforcing the learning content, clarifying a particular concept and remedial teaching.
Connect classroom activities to big ideas	Classroom activities are connected to big ideas when the learning content is related to its applicability in the lives of learners.	To ensure that what is done in the classroom, relates to the real world.	The learning content is connected to big ideas when it relates what is done in the classroom to the real world. Different learning media, such as television and DVD, are used to bring the real world into the classroom. When learners watch television, they pay special attention to issues which relate to the subject. Learners are taken on excursions for

			experiential learning. Learners are engaged in entrepreneurial activities.
Structured reflection for constructive feedback	The teacher and learners reflect on each and every lesson. Reflection is structured because learners answer two questions to provide feedback.	To ensure that the teacher gets feedback about the teaching and learning process and use feedback to reflect on his/her classroom practises in order to improve in future.	The teacher purposefully selects learners to check their understanding on the lesson. At the end of the lesson, learners are asked two questions, i.e. "What have I learnt?" and "What is not clear?" This is done to reflect on the lesson to check the understanding of learners. The teacher uses learners' responses to create opportunities for remedial work in order to reach learners who did not capture the learning content properly during the lesson.
Time spent on task	The time allocated	To ensure that a	Long processes of

	to EMS teaching is spent on the task. Contact time is used for effective teaching and learning and not for ensuring compliance with the expectations of district officials.	higher percentage of time in the classroom is spent on teaching and learning, rather than on administering assessment.	assessment are avoided during the contact time. Time allocated to EMS is used to expose learners to the content, as stipulated in the teaching plan.
Teaching and learning mirrored in learners' books	Learners' written assessment activities relates to what they have been taught and therefore learners' books mirror the content that was taught in the EMS classroom.	To ensure that learners assessed on what they have been taught.	The books of learners should have the activities which relates to what was taught. The learners' books indicate whether the teaching plan was covered properly.
Intelligently apply formative and diagnostic assessment	Formative and summative assessment are applied in a sound way to contribute to the teaching and learning process. Learners are assessed before and/or while the teaching and learning process takes place, and	To determine the kind of experience that learners are already in possession of and to identify the challenges faced by learners in order to address them at early stages.	The teacher must introduce the lesson based on the kind of understanding experiences of the learners. Apply a didactic principle of moving from the known to the unknown during the lessons. At the beginning of the

	learners' assessment does not wait until the lesson is completed.		new grade, diagnostic assessment is applied to determine the content covered in the previous grade. During the lesson and at the end of the lesson, the teacher uses formative assessment to identify the challenges faced by learners in the lesson and develop remedial strategies based on identified challenges.
Careful consideration of administration processes before embarking on assessment activities	Teachers consider administration processes involved in assessing learners' time to be spent on assessment and the assessment tools which will be relevant to the assessment activities when administering	To ensure that assessment activities are well-planned, within reach of learners and clear to learners.	Informal activities are planned beforehand by the teacher. The assessment activities are selected properly and developed by the teacher in order to ensure that the assessment activities used, are within the reach

	assessment. Learners know what is expected from them before they embark on any assessment activity.		and understanding of learners. Scaffolding is applied when assessment activities are developed. Teachers provide learners with the criteria for an assessment activity.
Recent and relevant assessment, coupled with quality assessment tasks	The teacher does not take long before assessing the learners and assessment activities used, are of a good quality, and are fair, valid and reliable.	To ensure that assessment is recent and learners are assessed on what they were taught with activities of a good quality.	Throughout the lesson, learners are assessed, either orally or in writing, but at the end of the lesson, learners are assessed with a written activity based on the lesson. Extracts from common papers are only used when they relate to what learners were taught and activities from the textbooks are adapted to relate to what was taught in the lesson.

Purposeful application of peer assessment	Peer assessment is used when informal activities are marked by learners with the purpose of helping learners to learn while they mark their peers' books.	To ensure that learning takes place while learners mark, the teacher get feedback on learners' learning and the workload of the teacher is reduced.	Learners mark other learners' books, see the mistakes their peers have made and how their answers differ from those of their peers. The teacher takes a sample of books on a rotational basis and mark them. The sample of books is marked by the teacher to get feedback on different learners.
Conscientiously plan homework exercises	The teachers are regardful when they give learners homework exercises in different subjects on one day.	To ensure that learners are not overloaded with homework and homework are manageable for learners.	Teachers teaching different subjects in a particular class, plan when each teacher will assess learners to avoid overburdening learners with homework. An assessment plan for homework can help to avoid overloading learners with homework.

Diversify and vary assessment tasks	Different forms of assessment and different types of questions are used to diversify and vary assessment.	To promote learners' learning, fair assessment, problem-solving, in-depth inquiry and knowledge discovery.	Different forms of assessment, such as puzzles, case studies, stories, debates and cartoons, are used to assess learners. The teacher does not use the same form of assessment in all the activities because learners who are good in that form of assessment, are advantaged, while those who are not good, are disadvantaged. Different types of questions are used to assess learners and if learners struggle with a particular type of question, the teacher tries a different type of question. Different learners are good in responding to different types of questions;

			therefore, types of questions used, are varied to cater for all the learners.
Contextualise teaching and learning activities	Teaching and learning activities are related to the context of the learners' environment.	To ensure that learners concretise the learning content.	Teaching and learning activities are related to the life-world of learners. Examples given in the classroom must relate to the environment of learners. Teachers make teaching and learning concrete by relating it to practical examples which are within the context of the learners.
Recognise multiple forms of expression	Learners are allowed to respond to assessment tasks in various ways.	To ensure that the evidence of learning that has taken place, is more important than how the evidence of learning is presented.	Learners should be allowed to respond to an assessment task in a way that will allow them to provide evidence of their learning. Teachers should not restrict learners' responses to a particular format.

In order for this proposed strategy to be effective the aforementioned issues should not be used in isolation. Having proposed teach and assess as a strategy for effective teaching and learning in EMS, which was the aim of this study, the next section is the summary of the study.

7.5 SUMMARY OF THE STUDY

The aim of this study was to propose teach and assess as a strategy for effective teaching and learning EMS. The theoretical framework for this study was CER, which emphasised emancipation of the co-researchers. This study managed to achieve the objectives of CER, as evident in Chapter four. The data generation method for this study was PAR, which emphasised the participation of the people who would benefit from the study. The objectives of PAR were achieved, as discussed in Chapter four. The research objectives served as a guide for the literature review, data generation, data presentation, data analysis, data interpretation, research findings, research conclusions and research recommendations.

In this chapter, the study managed to propose teach and assess as a strategy for effective teaching and learning in EMS. Therefore, the aim of the study was achieved, as it was to propose teach and assess as a strategy for effective teaching and learning in EMS. It is believed that the proposed strategy will be tried by different stakeholders who have an interest in the teaching of EMS. Finally, it is believed that the proposed strategy will intrigue more research on its applicability. The next section considers the impressions from the study.

7.6 IMPRESSIONS FROM THE STUDY

This study managed to confirm the use of CER as the theoretical framework and PAR as the data generation method for research in education. The study managed to show that people who were affected by the problem under investigation, were able to contribute positively to change the situation. People who were normally marginalised and voiceless, when they were given an opportunity to raise their views, were able to raise issues which were normally not recognised, but very

important. During data generation, learners raised issues which were of concern to them, but other co-researchers did not care about them until learners raised them. Learners felt overburdened by the number of homework exercises different teachers give them and stated that they were unable to cope with that. EMS teachers also raised their concerns about the way they were expected to teach and assess learners in the subject and did not have a platform to raise their concerns. The study revealed that platforms should be created for different stakeholders to raise their concerns.

The study proved that a study can be carried out without the researcher playing the central role during data generation. The co-researchers proved that their direct experience of the matter investigated, made them information rich; that was very crucial for the study and allowed them to contribute effectively in the study. The study proved that different stakeholders can equally collaborate to solve the problem under investigation. People who were seen as senior and junior, i.e. different groups of co-researchers, were able to work collaboratively and equally as co-researchers, without any problems during the research meetings. The co-researchers were empowered through their participation in the study and that was evident from their comments in extracts in Chapter four.

Teach and assess, in this study, emphasise integration of teaching, learning and assessment activities. Within the context of this study, teach and assess refer to assessment which is not separated from the teaching and learning process. The study emphasises that assessment should take place at the beginning and while the teaching and learning process is in progress in order to support the process. Therefore, the study emphasised the use of diagnostic and formative assessment in EMS lessons. Varied forms of assessment and types of questions should be used to cater for different types of learners. Learners should be allowed to demonstrate their evidence of learning through multiple forms of expression.

The study found that assessment was used incorrectly at school because it was used to monitor the teachers. This put a lot of pressure on teachers and they ended up assessing learners for compliance. Teachers also rushed to cover the teaching

plan. But this study found that assessment and the teaching and learning process must be used for learners' learning.

The study explicitly discussed the executive, facilitative and liberationist approaches to teaching. The study recommended the facilitative approach as the approach which supports effective teaching and learning in EMS. The main aspect of the facilitative approach is that learners are actively engaged in their learning; they learn differently and innovatively, their prior knowledge is recognised and the teacher facilitates the learning process. The study revealed that the constructivist approach to learning is directly linked to the facilitative approach. The study recommended that logical-mathematical and linguistic multiple intelligences should be incorporated in EMS lessons. The study also recommended that when teaching, learning and assessment activities are planned, different learning styles of learners, i.e. auditory, visual and kinaesthetic learning styles, should be born in mind.

The study made a contribution on strategy development. It revealed that for the proposed strategy to be effectively implemented, it must not be an add-on to teachers' work but should be integrated in their daily work. Secondly, the strategy must be supported by different stakeholders and be adequately resourced with relevant resources for its implementation. Thirdly, the implementers must be trained on the strategy and clearly understand it. The study made a unique contribution by developing a non-existent strategy for effective teaching and learning in EMS. The next section holds the concluding remarks.

7.7 CONCLUDING REMARKS

This chapter sought to propose the teach and assess strategy as a strategy for effective teaching and learning in EMS. The conditions for successful implementation of teach and assess as a proposed strategy for effective teaching and learning in EMS and the components of teach and assess, a proposed strategy for effective teaching and learning EMS were discussed. "Teach and asses: a proposed strategy for effective teaching and learning in EMS" was presented. The summary of the study and impressions from the study were discussed.

REFERENCE LIST

Aasgaard, H.S., Borg, M. & Karlsson, B. 2012. Emancipation or symbolic participation: How can we 'do' action research as a democratic process? Critical reflection on practice development. *International Practice Development Journal,* 2(1):1-7.

Adu, E.O. & Ngibe, N.C.P. 2014. Continuous Change in Curriculum: South African teachers' Perceptions. *Mediterranean Journal of Social Sciences,* 5(23):983-989.

Agherdien, N. 2007. A review of theoretical frameworks in Educational Information and Communication Technology Research at leading South African Universities. Johannesburg: University of Johannesburg. (Dissertation – M.Ed.).

Aliyu, A.A., Bello, M.U., Kasim, R. & Martin, D. 2014. Positivist and Non-Positivist Paradigm in Social Science Research: Conflicting Paradigms or Perfect Partners? *Journal of Management and Sustainability,* 4(3):79-95.

Ambrose, S.A., Bridges, M.W., DiPietro, M., Lovett, M.C. & Norman, M.K. 2010. *How Learning Works. Seven Research-Based Principles for Smart Teaching.* San Francisco: John Wiley & Sons, Inc.

Badugela, T.M. 2012. Problems facing educators in implementing the National Curriculum Statement: The case of Tshifhena Secondary School, Vhembe District, Limpopo Province, South Africa. Pretoria: University of South Africa. (Dissertation – M.Ed.).

Badu-Nyarko, S.K. & Torto, B.A. 2014. Teaching methods preferred by part-time tertiary students in Ghana. *International Journal of Humanities and Social Science,* 4(1):226-233.

Barnes, C. & Mercer, G 2004. Implementing the Social Model of Disability: Theory and Research. *The Disability Press,* 8:118-137.

Behar-Horenstein1, L.S. & Feng, X. 2015. Emancipatory Research: A Synthesis of Quantitative Evidence. *IOSR Journal of Research & Method in Education,* 5(3):46-56.

Bhattacharjee, J. 2015. Constructivist approach to learning – An effective approach of teaching learning. *International Research Journal of Interdisciplinary and Multidisciplinary Studies,* 1(6):65-74.

Bloom, B.S. (Ed.). 1956. *Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook 1: Cognitive Domain.* New York: David McKay.

Boog, B.W.M. 2003. The Emancipatory Character of Action Research, its History and the Present State of the Art. *Journal of Community & Applied Social Psychology*, 13:426-438.

Booyse, C. & Du Plessis, E. 2014.*Curriculum studies development, interpretation, plan and practice.* 2nd edition. Pretoria: Van Schaik Publishers.

Braun, B., McCoy, T. & Finkbeiner, N. 2013. *Extension education theoretical framework with criterion-referenced assessment tools*. Maryland: University of Maryland Extension.

Breda, K.M.L. 2015. What is old is also new – Participatory Action Research. *Texto Contexto Enferm, Florianópolis*, 24(1):9-10.

Brinkschröder, 2014. Strategy implementation: Key factors, challenges and solutions. 4th IBA Bachelor Thesis Conference held in Enschede, Netherlands on the 6th November 2014.

Brooke, M. 2013. Which Research Paradigm for TESOL? *Theory and Practice in Language Studies*, 3(3):430-436.

Brown, L. & Strega, S. 2005. *Research as Resistance: Critical, Indigenous, & Anti-oppressive Approaches*. Toronto: Canadian Scholar's Press/Women Press.

Cammarota, J. & Fine, M. 2008. *Evolutionizing education youth Participatory Action Research in motion.* New York: Routledge.

Carless, D. 2007. Learning-oriented assessment: conceptual bases and practical implications. *Innovations in Education and Teaching International,* 44(1):57-66.

Carr, J. (ed). 2007. Approaches to Teaching & Learning. Irish National Organization Consultative Conference on Education. Ireland, October 2008.

Casanave, C.P. & Li, Y. 2015. Novices' Struggles with Conceptual and Theoretical Framing in Writing Dissertations and Papers for Publication. *Publications,* 3:104-119.

Chalmers, T. 2006. "Emancipation Through Modernist Pursuits: The Discipline of Running", in NA – Advances in Consumer Research. *Association for Consumer Research,* 33:15-20.

Chemwei, B., Leboo, C. and Koech, S.J. 2014. Factors that impede the implementation of strategic plans in secondary schools in Baringo District,

Kenya. *International Journal of Humanities and Social Science,* 4(5)1:114-120.

Chen, J. 2014. Teachers' conceptions of approaches to teaching: A Chinese perspective. *Asia-Pacific Educational Research,* DOI 10.1007/s40299-014-0184-3. Accessed on 19 October 2016.

Chimirri, N.A. 2015. Designing psychological co-research of emancipatory-technical relevance across age thresholds. *Outlines – Critical Practice Studies,* 16(2):26-51.

Chmiel, K. 2014. The Constructivist's approach to teaching tomorrow's general music professor. ILMEC conference presentation. Illinois, 10 January 2014.

Chukwumah, F.O. & Ezeugbor, C.O. 2015. Problems of implementation of strategic plans for secondary schools' improvement in Anambra State. *Educational Research and Reviews*, 10(10):1384-1389.

Cirik, I., Çolak, E. & Kaya, D. 2015. Constructivist learning environments: The teachers' and students' perspectives. *International Journal on New Trends in Education and their Implications,* 6(2):30-44.

Claxton, G., Lucas, B. & Spencer, E. 2012. *Making it studio teaching and its impact on teachers and learners.* Winchester: Centre for Real-World Learning.

Coe, R., Aloisi, C., Higgins, S. & Major, L.E. 2014. What makes great teaching? Centre for Evaluation and Monitoring review of the underpinning research. Durham University, October 2014.

Coggshall, J.G., Rasmussen, C., Colton, A., Milton, J. & Jacques, C. 2012. Generating Teaching Effectiveness: The Role of Job-Embedded Professional Learning in Teacher Evaluation. Research & Policy Brief: National Comprehensive Center for Teacher Quality.

Cordiner, M. 2011. Guidelines for good assessment practices. Centre for the Advancement of Learning and Teaching. University of Tasmania. Assessment Working Group.

Crane, P. & O'Regan, M. 2010. *On PAR: Using Participatory Action Research to Improve Early Intervention.* Department of Families, Housing, Community Services and Indigenous Affairs: Australian Government.

Creemers, B.P.M. 2005. Combining different ways of learning and teaching in a dynamic model of educational effectiveness. Lecture for the Lee Hysan Lecture Series Hong Kong, 30 September 2005.

Dadusc, D. 2014. Power, knowledge and resistances in the study of social movements. *The Multidisciplinary Journal of Social Protest, 1(2):*47-60.

Dan, A.H. 2013. Determinants of implementation of strategic plans in public secondary schools: A case of Nakuru Municipality, Kenya. *International Journal of Innovative Research and Development*, 2(9):242-246.

Darder, A. 2015. Decolonizing Interpretive Research: A critical bicultural methodology for social change. *The International Education Journal: Comparative Perspectives,* 14(2):63-77.

De Lisle, J. 2011. The benefits and challenges of mixing methods and methodologies: Lessons learnt from implementing qualitatively led Mixed Methods Research Designs in Trinidad and Tobago. *Caribbean Curriculum,* 18:87-120*.*

De Vos, A.S., Strydom, H., Fouché, C.B. & Strydom, C.L.S. 2011. *Research at grass roots: For the social sciences and human service professions*. 4th edition. Pretoria: Van Schaik Publishers.

Deeper, S. 2012. Emancipatory Research in Community- Based Rehabilitation (CBR) Programmes. A Guide for CBR Programme Managers. Promoting Empowerment. Association Amici di Raoul Follerea - AIFO. Italy: Bologna.

Dennick, R. 2016. Constructivism: reflections on twenty-five years teaching the constructivist approach in medical education. *International Journal of Medical Education*, 7:200-205.

Dieronitou, I. 2014. The ontological and epistemological foundations of qualitative and quantitative approaches to research with particular reference to content and discourse analysis of textbooks. *International Journal of Economics, Commerce and Management*, 2(10):1-17.

Dixon-Román, E. 2011. Assessment, Teaching, and Learning. *The Gordon Commission on the Future of Assessment in Education,* 1(2):1-8.

Dunn, K.E. & Mulvenon, S.W. 2009. A Critical Review of Research on Formative Assessment: The Limited Scientific Evidence of the Impact of Formative Assessment in Education. *Practical Assessment, Research & Evaluation,* 14(7):2-11.

Earle, J.V. 2009. Development of a strategic planning process model for division I- A intercollegiate athletic departments. Pittsburgh: University of Pittsburgh. (Dissertation - D.Ed.).

Elizondo, E., Alberto, N., Zavala, Q., Olga, M., Olivia, S.A. Suazo, V. & Verónica, S. 2013. The emancipatory paradigm and its influence on the development of nursing knowledge. *Enfermería Global,* 30.

Epstein, A.S. 2007. The Intentional Teacher. Choosing the Best Strategies for Young Children's Learning. National Association for the Education of Young Children. Washington, DC.

Ertmer, P.A. & Newby, T.J. 2013. Behaviorism, Cognitivism, Constructivism: Comparing Critical Features from an Instructional Design Perspective. *Performance Improvement Quarterly,* 26(2):43-71.

Esau, O. 2013. Preparing pre-service teachers as emancipatory and participatory action researchers in a teacher education programme. *South African Journal of Education,* 33(4):1-10.

Fairclough, N. 1992. *Discourse and Social Change*. London: Polity Press.

Fairclough, N. 2013. *Critical discourse analysis: The critical study of language.* London: Routledge.

Faraday, S. Overton, C. & Cooper, S. 2011. *Effective teaching and learning in vocational education*. London: LSN learning.

Fenstermacher, G.D. & Soltis, J.F. 2004. *Approaches to teaching*. 4th Edition. New York: Teachers College Press.

Filologia, Q. 2006. What is critical discourse analysis? *Estudis Lingüístics,* XI:9-34.

Fink, L.D. 2003. *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses.* San Francisco: Jossey-Bass.

Flórez, M. & Sammons, P. 2013. *Assessment for learning: Effects and impact*. Oxford University Department of Education. CfBT Education Trust.

Friesen, N. 2012. Critical Theory and the Mythology of Learning with Technology: The Role of Criticism in Understanding Problem Solving, Explorations in the Learning Sciences, Instructional Systems and Performance Technologies 5.

Friesen, S. 2009. *What did you do in school today? Teaching Effectiveness: A Framework and Rubric*. Toronto: Canadian Education Association.

Frydaki, E. & Katsarou, E. 2013. The dialogic practices of educational action research participants as a means of supporting or undermining its critical orientation. *Action Researcher in Education,* 4(March):1-19.

Gaffney, M. 2008. Participatory Action Research: An Overview. What makes it tick? Weaving educational threads. Weaving educational practice. *Kairaranga*, 9:9-15.

Gilani-Wiliams, F. 2014. Islamic Critical Theory: A Tool for Emancipatory Education. *International Journal of Islamic Thought,* 5(June):16-27.

Goldkuhl, G. 2012. Pragmatism vs interpretivism in qualitative information systems research. *European Journal of Information Systems,* 21(2):135-146.

Gonsalvez, L. 2013. Using Critical Discourse Analysis to address the gaps, exclusions and oversights in active citizenship education. Electronic Theses and Dissertations*,* Paper 4945.

Goode, K., Kingston, T., Grant J.M. & Munson, L. 2010. Assessment for learning: Curriculum insert. *ETFO Voice*, March:21-24.

Goodwin, D. & Webb, M.A. 2014. Comparing teachers' paradigms with the teaching and learning paradigm of their state's teacher evaluation system. *Research in Higher Education Journal,* 25(September):1-11.

Grant, C. & Osanloo, A. 2014. Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house". Connecting education, practice, and research. *Administrative Issues Journal,* 4(2):12-26.

Gravett, S. 2001. *Adult learning: Designing and implementing learning events – a dialogic approach.* Pretoria: Van Schaik Publishers.

Green, L.W., George, M.A., Daniel, M., Frankish, C.J., Herbert, C.P., Bowie, W.R. & O'Neill, M. 2003. Appendix C: Guidelines for Participatory Research in Health Promotion Community-Based Participatory Research for Health. San Francisco, CA: Jossey-Bass Inc.

Guney, A. & Al, S. 2012. Effective learning environments in relation to different learning theories. *Procedia – Social and Behavioral Sciences,* 46:2334-2338.

Gunter, M. A., Estes, T. H. & Schwab, J. 2003. *Instruction: A Model approach*. 4th Edition. Boston: Pearson Education, Inc.

Hall, R. 2012. *Mixed Methods: In Search of a Paradigm*. The University of New South Wales.

Harlen, W. 2014. *Assessment, standards and quality of learning in primary education. A report for the Cambridge Primary Review Trust*. New York: Cambridge Primary Review Trust.

Heritage, M. 2007. Formative Assessment: What Do Teachers Need to Know and Do? *Phi Delta Kappan*, 89(2):140-145.

Hien, T.T.T. 2009. Why is action research suitable for education? *VNU Journal of Science, Foreign Languages*, 25:97-106.

Hlalele, D. 2014. Creating Sustainable Rural Learning Ecologies in South Africa: Realities, Lessons and Prospects. *J Hum Ecol.,* 45(2):101-110

Hodges, D., Eames, C. & Coll, R.K. 2014. Theoretical perspectives on assessment in cooperative education placements. Special Issue: Critical assessment issues in work-integrated learning. *Asia-Pacific Journal of Cooperative Education*, 15(3):189-207.

Hofman, P., Goodwin, B. & Kahl, S. 2015. Re-balancing assessment: Placing formative and performance assessment at the heart of learning and accountability. Denver CO: McREL International.

Hornby, A.S. 2010. *Oxford Advanced Learner's Dictionary. International students' edition*. New 8th edition. New York: Oxford University Press.

Huckin, T., Andrus, J. & Clary-Lemon, J. 2012. Critical Discourse Analysis and rhetoric and composition, *CCC*, 64(1):1-29.

Hummelbrunner, R. & Jones, H. 2013. *A guide for planning and strategy development in the face of complexity*. UK: The Overseas Development Institute Background Note.

Imenda, S. 2014. Is there a conceptual difference between theoretical and conceptual frameworks? *Kamla-Raj. J Soc Sci,* 38(2):185-195.

Jadama, L.M. 2014. Impact of subject matter knowledge of a teacher in teaching and learning process. *Middle Eastern & African Journal of Educational Research,* 7:20-29.

Jia, Q. 2010. A Brief Study on the Implication of Constructivism Teaching Theory on Classroom Teaching Reform in Basic Education. *International Education Studies*, 3(2):197-199.

Jordan, A., Carlile, O. & Stack, A. 2008. *Approaches to learning a guide for teachers.* New York: McGraw-Hill Education.

Karthikeyan, P. 2013. Humanistic approaches of teaching and learning. *Indian Journal of Research,* 2(7):57-58.

Khalid, A. & Azeem, M. 2012. Constructivist Vs Traditional: Effective Instructional Approach in Teacher Education. *International Journal of Humanities and Social Science,* 2(5):170-177.

Khatib, M., Sarem, S.N. & Hamidi, H. 2013. Humanistic education: Concerns, implications and applications. *Journal of Language Teaching and Research,* 4(1):45-51.

Killen, R. 2015. *Teaching strategies for quality teaching and learning.* 2nd edition. Cape Town: Juta and Company (Pty) Ltd.

Killion, J. & Hirsh, S. 2011. The elements effective teaching. Professional learning moves vision, framework, and performance standards into action. *JSD,* 32(6):10-16.

Kim, S.J. & Merriam, S.B. 2011. Methodological Challenges in Studying Transformative Learning. Adult Education Research Conference. Kansas State University Libraries New Prairie Press, 2011:364-370.

Kitchel, T. & Ball, A.L. 2014. Quantitative Theoretical and Conceptual Framework Use in Agricultural Education Research. *Journal of Agricultural Education,* 55(1):186-199.

Kivunja, C. 2014. Innovative pedagogies in Higher Education to become effective teachers of 21st century skills: Unpacking the learning and innovations skills domain of the new learning paradigm. *International Journal of Higher Education,* 3(4):37-48.

Ko, J. & Sammons, P. 2013. Effective teaching: a review of research and evidence. CfBT Education Trust.

Kohtamäki, V. 2010. Strategy implementation in a Higher Education Institution: Successes and failures. Paper presented in track 1 EAIR 32nd Annual Forum held in Valencia, Spain on 1 to 4 September 2010.

Kramer-Roy, D. 2015. Using participatory and creative methods to facilitate emancipatory research with people facing multiple disadvantage: A role for health and care professionals. *Disability & Society,* 30(8):1207-1224.

Kumar, R. 2014. *Research methodology: A step-by-step guide for beginners.* 4th edition. London: SAGE Publications Ltd.

Lam, F. 2011. The Socratic method as an approach to learning and its benefits. Rwanda: Carnegie Mellon University. (Senior Honours Thesis).

Lazar, M.M. 2007. Feminist Critical Discourse Analysis: Articulating a Feminist Discourse Praxis. *Critical Discourse Studies*, 4(2):141-164.

Leedy, P.D. & Omrod, J.E. 2005. *Practical research. Planning and design.* 8th edition. Upper Saddle River, NJ: Practice Hall.

Li, N. 2012. Approaches to learning: Literature review. International Baccalaureate research paper. International Baccalaureate Organization.

Li, Y., Guohui, S. & Eppler, M.J. 2008. Making Strategy Work: A Literature Review on the Factors influencing Strategy Implementation. ICA Working Paper, 2/2008:1-46.

Lincoln, Y. S., Lynham, S.A. & Guba, E.G. 2011. Paradigmatic controversies, contradictions, and emerging confluences, revisited. In: N.K. Denzin & Y.S. Lincoln (Eds), *The Sage handbook of qualitative research,* (4th ed.). Los Angeles: Sage. (pp. 97-128).

Looney, J. 2010. Making it Happen: Formative Assessment and Educational Technologies. Curriculum and Assessment assets. Sponsored by Promethean Education Strategy Group. Paper 1, part 1 (December 2010):1-23.

Lucas, P. 2012. Critical reflection. What do we really mean? Proceedings ACEN National Conference Melbourne / Geelong, 2012.

Lumadi, M.W. 2013. Challenges Besetting Teachers in Classroom Assessment: An Exploratory Perspective. *Journal of Social Sciences,* 34(3):211-221.

Lykes, M.B., Hershberg, R.M. & Brabeck, K.M. 2011. Methodological Challenges in Participatory Action Research with Undocumented Central American Migrants. *Journal for Social Action in Counseling and Psychology*, 22(3):22-35.

MacDonald, C. 2012. Understanding Participatory Action Research: A qualitative research methodology option. *Canadian Journal of Action Research,* 13(2):34-50.

Mack, L. 2010. The Philosophical Underpinnings of Educational Research. *Polyglossia,* 19:5-11.

Mahlomaholo. S. 2009. Critical emancipatory research and academic identity. *Africa Education Review,* 6(2):224-237.

Malik, M.A., Murtaza, A. & Khan, A.M. 2011. Role of teachers in managing teaching learning situation. *Interdisciplinary Journal of Contemporary Research in Business,* 3(5):783-833.

Manfra, M.M. 2009. Action Research: Exploring the Theoretical Divide between Practical and Critical Approaches. *Journal of Curriculum and Instruction,* 3(1):32-46.

Mansell, W. & James, M. 2009. Assessment in schools. Fit for purpose? A Commentary by the Teaching and Learning Research Programme. London: Economic and Social Research Council, Teaching and Learning Research Programme. The Assessment Reform Group.

Marton, K. 2014.The Participation of Children and Adults with Disability in Participatory and Emancipatory Research. *Eotvos Lorand Tudomanyegyetem, Barczi Gusztav Gyogypedagogiai Kar tudomanyos főmunkatars,* 3:23-32.

Masters, J. 1995. The History of Action Research. *Action Research Electronic Reader.* University of Sydney. online.http://www.behs.cchs.usyd.edu.au/arow/Reader/rmasters.htm. Accessed on 22 June 2016.

McGregor, S.L.T. & Murnane, J. A. 2010. Paradigm, methodology and method: Intellectual integrity in consumer scholarship. *International Journal of Consumer Studies,* 34(4):419-427.

Mege, C.A. 2014. Influence of school environmental factors on teaching-learning process in public primary schools in lower Nyokal Division, Homa-Bay District, Kenya. Nairobi: University of Nairobi. (Dissertation – M.Ed.).

Merriam, S.B. 2001. *Qualitative Research and Case study applications in education.* Revised and expanded from case study research in education. San Francisco: John Wiley & Sons, Inc.

Mertens, D.M. 2010. *Research and Evaluation in Education and Psychology*. Washington: Sage.

Mlitwa, N.W.B. 2011. *Integration of e-learning systems into academic programmes in modern universities:* A South African perspective. Cape Town: TVK e-Nnovations.

Mohammadi, M., Naderi, E., Shariyatmadari, A. & Naraghi, M.S. 2013. The survey of the relationship between the epistemological beliefs of teachers with the inclination toward teaching approaches. *European Journal of Experimental Biology*, 3(3):524-530.

Moleko, M.M. 2014. Enhancing the functionality of supplemental instruction for first-year Mathematics students at a Higher Education Institution. Bloemfontein: University of the Free State. (Dissertation – M.A.).

Moloi, T.J. 2014. Enhancing problem-solving skills in a Grade 10 – Mathematics classroom by using indigenous games. Bloemfontein: University of the Free State. (Thesis – Ph.D.).

Moreeng, B.B. 2009. Structuring of a powerful learning environment for the teaching and learning of History in the Further Education and Training band in Free State schools. Bloemfontein: University of the Free State. (Thesis – Ph.D.).

Mouton, J. 2001. *How to succeed in your Master's and Doctoral studies. A South African guide and resource book*. Pretoria: Van Schaik Publishers.

Msimanga, M.R. 2014. Managing teaching and learning in multi-graded classrooms in Thabo Mofutsanyana Education District, Free State. Pretoria: University of South Africa. (Dissertation – M.Ed.).

Mueller, S. 2012. The mature learner: understanding entrepreneurial learning process of university students from a social constructivist perspective. Available online: http://openair.rgu.ac.uk. Accessed on 1 December 2016.

Mugisha, W.R. & Mugimu, C.B. 2015. Application of learning theories in curriculum development and implementation of the MLT Diploma programme in Uganda. *British Journal of Education, Society and Behavioural Science,* 5(3):256-275.

Myende, P.E. 2014. Improving academic performance in a rural school through the use of an asset-based approach as a management strategy. Bloemfontein: University of the Free State. (Thesis – Ph.D.).

Naumes, M.J. 2013. Writing Effective Learning Objectives. *Case Research Journal,* 33(1):65-171.

Ndalichako, J.L. 2015. Secondary School Teachers' Perceptions of Assessment. *International Journal of Information and Education Technology,* 5(5): 326-330.

Nelson, D. 2013. Action Research: An Appropriate Research Paradigm for Practitioners. *Language in India,* 13(10):183-196.

Neuman, W.L. 2014. *Social research methods: Qualitative and quantitative approaches*. Pearson New International Edition. 7th edition. England, Essex: Pearson Education Limited.

Newton, P. & Burgess, D. 2008. Exploring Types of Educational Action Research: Implications for Research Validity *International Journal of Qualitative Methods,* 7(4):18-30.

Nezamedini, M.S., Rahimi, A. & Borujeni, S.A.M. 2013. A study of the relationship between English Teachers' approaches to teaching and students' incivilities. *International Journal of English Language Education,* 1(1):281-299.

Nickols, F. 2016. Strategy Definitions & Meanings. Distance consulting. One of three occasional papers prepared by Fred Nickols while he was the head of Strategic Planning & Management Services at Educational Testing Service.

Nieuwoudt, H.D. 2002. Investing in our children: An integrated perspective of effective classroom teaching. Potchefstroom: Potchefstroom University for CHE. (Teaching perspectives Dictate 743 DI.)

Nilsen, P. 2015. Making sense of implementation theories, models and frameworks. Implementation Science. Division of Community Medicine, Department of Medical and Health Sciences, Linköping University, Linköping, Sweden.

Nkoane, M.M. 2012. Critical emancipatory research for social justice and democratic citizenship. *Perspectives in Education*, 30(4):98-104.

Nkoane, M.M. 2013. Creating sustainable postgraduate supervision learning environments through critical emancipatory research. *The Journal for Transdisciplinary Research in Southern Africa,* 9(3):393-400.

Noel, L. 2016. Promoting an emancipatory research paradigm in Design Education and Practice. Design Research Society 50th Anniversary Conference. Brighton, UK: 27-30 June 2016.

Ocholla, D.N. & Le Roux, J. 2011. Conceptions and misconceptions of theoretical frameworks in Library and Information Science Research. Paper presented at the 6th Biennial Prolissa Conference, Pretoria: 9-11 March 2011.

Oliver, M. 2002. Using emancipatory methodologies in disability research. Emancipatory research: A vehicle for social transformation or policy development. 1st Annual disability research seminar. Hosted by the National Disability Authority and the Centre for Disability Studies, University College Dublin: 3 December 2002.

Ololube, N.P. 2013. The problems and approaches to educational planning in Nigeria: A theoretical observation. *Mediterranean Journal of Social Sciences,* 4(12):37-48.

Olsen, N.D. & Olsen, H.W. 2009. Elements of a strategic plan. *NACBA Ledger*. Winter:22-31.

Pamplin, M. 2012. Encouraging effective group work: The pedagogical challenges involved in designing a staff workshop. *Learning at City Journal*, 2(1):11-17

Phillips, R.A., McNaught, C., & Kennedy, G. 2010. Towards a generalised conceptual framework for learning: The Learning Environment, Learning Processes and Learning Outcomes (LEPO) framework. *ED-MEDIA:*2495-2504.

Pia, K.F. 2015. Barriers in Teaching Learning Process of Mathematics at Secondary Level: A Quest for Quality Improvement. *American Journal of Educational Research,* 3(7):822-831.

Pintrich, P.R & Schunk, D.H. 2002. *Motivation in Education Theory, research and application.* 2nd edition. New Jersey Columbus, Ohio: Upper Saddle River.

Powers, C.B. & Allaman, E. 2012. *How Participatory Action Research Can Promote Social Change and Help Youth Development*. Born This Way Foundation and the Berkman Center for Internet & Society: Harvard University.

Qi, A. 2012. On the theoretical framework of autonomous learning. *International Journal Education and Management Engineering,* 11:35-40.

Quyen, N.T.D. & Khairani, A.Z. 2017. Reviewing the Challenges of Implementing Formative Assessment in Asia: The Need for a Professional Development Program. *Journal of Social Science Studies,* 4(1):160-177.

Rahimi, F. & Riasati, M.J. 2011. Critical Discourse Analysis: Scrutinizing Ideologically-Driven Discourses. *International Journal of Humanities and Social Science,* 1(16):107-112.

Ramírez, E.N.A., Quintana, Z.M.O., Sanhueza, A.O. & Valenzuela, S.S.V. 2013. The emancipatory paradigm and its influence on the development of nursing knowledge. *Enfermería Global,* 30(April):422-433.

Rankins, G.J. 2006. Improving Strategy Implementation. *Project Manager Today,* November: 25-28.

Reddy, C., Le Grange, L., Beets, P. & Lundie, S. 2015. *Quality assessment in South African schools.* Cape Town: Juta & Company.

Regmi, K. 2012. A review of teaching methods - lecturing and facilitation in Higher Education (HE): A summary of the published evidence. *The Journal of Effective Teaching,* 12(3):61-76.

Republic of South Africa, Department of Basic Education. 2011**a**. *National Policy Pertaining to the Programme and Promotion Requirements of the National Curriculum Statement Grades, R-12.* Pretoria: Government Printers.

Republic of South Africa, Department of Basic Education. 2011**b**. *Economic and Management Sciences, Curriculum and Assessment Policy Statement of the National Curriculum Statement Senior Phase Grades, 7-9.* Pretoria: Government Printers.

Republic of South Africa, Department of Basic Education. 2012. *National Protocol for Assessment of the National Curriculum Statement Grades R-12.* Pretoria: Government Printers.

Republic of South Africa, Department of Education. 2002. *Revised National Curriculum Statement Grades R-9 (Schools) Policy, Overview.* Pretoria: Government Printers.

Richards, J.C. 2013. Curriculum Approaches in Language Teaching: Forward, Central, and Backward Design. *RELC Journal,* 44(1):5-33.

Rogier, D. 2014. Assessment Literacy: Building a Base for Better Teaching and Learning. *English Teaching Forum*, 3:2-13.

Rose, S., Spinks, N. & Canhoto, A.I. 2015. Management Research: Applying the Principles. *Action research*, 1-8.

Rostami, K. & Khadjooi, K. 2010. The implications of behaviorism and humanism theories in medical education. *Gastroenterology and Hepatology from Bed to Bench,* 3(2):65-70.

Samosir, D.K. 2015. The interaction effect of learning strategy and learning style on mathematical learning outcome. *International Journal of Research and Current Development,* 1(2):59-65.

Sandretto, S. 2008. Discussion Paper: Action Research for Social Justice. Teaching and Learning Research Initiative. Wellington: New Zealand.

Schleicher, A. 2016. Teaching Excellence through Professional Learning and Policy Reform: Lessons from Around the World, International Summit on the Teaching Profession, OECD Publishing, Paris.

Schreuder, G.R. 2009. The role of Economic and Management Sciences (EMS) in preparing learners for Accounting in Grade 10. Mowbray: Cape Peninsula University of Technology. (Thesis – M.Ed.).

Schroeder, R. 2014. Exploring Critical and Indigenous Research Methods with a Research Community: Part II – The Landing. In the Library with the Lead Pipe.

Schulze, S. 2002. *Research methodology. Study guide for MEDEM2R.* Pretoria: University of South Africa.

Scotland, J. 2012. Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistemology to the Methodology and Methods of the Scientific, Interpretive, and Critical Research Paradigms. *English Language Teaching,* 5(9):9-16.

Sebate, P.M. 2011. The role of teacher understanding in aligning assessment with teaching and learning in Setswana Home Language. Pretoria: University of South Africa. (Dissertation – M.Ed.).

Sempe, S.R.N. 2014. Teach and assess strategy for effective teaching and learning. Presentation to the Senior Phase SMT meeting at the DTDC, Tshiya on 20 January. Thabo Mofutsanyana Education District. (Unpublished).

Spiller, D. 2009. Assessment: Feedback to promote student learning. Teaching Development. *Wāhanga Whakapakari Ako*: February 2009.

Stahl, B.C. 2006. On the Difference or Equality of Information, Misinformation, and Disinformation: A Critical Research Perspective. *Informing Science Journal,* 9:83-96.

Stiggins, R. 2005. Assessment for learning defined. Assessment Training Institute's International Conference: Promoting Sound Assessment in Every Classroom, Portland USA: September 2005.

Suleman, Q., Hussain, I., Butt, M.N. & Ahmad, S. 2012. Identification of the Problems Faced by Secondary School Teachers in Kohat Division, Pakistan. *International Journal of Learning & Development,* 2(5):324-340.

Svinicki, M.D. 2010. A guidebook on conceptual frameworks for research in Engineering Education. Rigorous Research in Engineering Education.

Taole, M.J. 2013. Teachers' Conceptions of the Curriculum Review Process. *International Journal of Educational Sciences,* 5(1):39-46

Tavallaei, M. & Abu Talib, M. 2010. A General Perspective on Role of Theory in Qualitative Research. *The Journal of International Social Research,* 3(11):570-577.

Taylor, D.C.M. & Hamdy, H. 2013. Adult learning theories: Implications for learning and teaching in medical education: AMEE Guide No. 83. *Medical Teacher,* 35:e1561-e1572.

Tazi, S. & Zreik, K. (Eds.). 2008. What is teaching? Cognitive-Based Tutoring Principles for the Design of a Learning Environment. Common innovation in e-learning, machine learning and humanoid. *ICHSL,* 6:49-55.

The Cross Sectoral Assessment Working Party. 2011. Teachers' Guide to Assessment. Association of independent schools of the ACT incorporated. Archdiocese of Canberra and Goulburn. Catholic Education Office.

Torres, M.N. & Moraes, S.E. 2006. Building Socially Responsive Curricula through Emancipatory Action Research: International Contexts. *International Journal of Action Research,* 2(3):343-374.

Tronvoll, B., Brown, S.W., Gremler, D.D. & Edvardsson, B. 2011. Paradigms in service research. *Journal of Service Management,* 22(5):560-585.

Troudi, S. 2010. 'Paradigmatic nature and theoretical framework in educational research'. In English in Learning: Learning in English, Dubai. *TESOL Arabia Publications,* 315-323.

Tshelane, M.D. 2013. Participatory action research and the construction of academic identity among postgraduate research students. *TD The Journal for Transdisciplinary Research in Southern Africa,* 9(3):401-429.

Tsotetsi, C.T. 2013. The implementation of professional teacher development policies: A continuing education perspective. Bloemfontein: University of the Free State. (Thesis – Ph.D.).

Turkich, K., Greive, S. & Cozens, P.M. 2014. Transferring educational theories and knowledge using a co- teaching mentor model: A discipline-appropriate approach. *Journal of University Teaching & Learning Practice,* 11(3):1-19.

Tustin, D.H. 2006. *Business Research. Study guide for CBURESX.* Pretoria: University of South Africa.

Tustin, D., Lightelm, A. Martins, J. & Van Wyk, H. 2005. *Marketing Research in Practice.* Pretoria: University of South Africa.

Udo-Akang, D. 2012. Theoretical Constructs, Concepts, and Applications. *American International Journal of Contemporary Research,* 2(9):89-97.

Van der Merwe, R. 2011. Formative assessment in Senior Phase Mathematics. Bloemfontein: University of the Free State. (Thesis – Ph.D.).

Varga-Dobai, K. 2012. The Relationship of Researcher and Participant in Qualitative Inquiry: From “Self and Other” Binaries to the Poststructural Feminist Perspective of Subjectivity. *The Qualitative Report,* 17(93):1-17.

Vermeulen, L.M. 2002. Curriculum 2005: School and classroom organisation and assessment for the Senior Phase (Grade 7 to 9). Vanderbijlpark. Chapter 7.

Wall, J.D., Stahl, B.C. & Salam, A.F. 2015. Critical Discourse Analysis as a Review Methodology: An Empirical Example. *Communications of the Association for Information Systems,* 37(11):258-285.

Walsh, A. 2010. Teaching/Learning Principles. Certificate Program for Surgical Services Educators. Competency & Credentialing Institute. Denver, Colo. Learning Module 2.

Watson, S.L. & Watson, W.R. 2011. Critical, Emancipatory, and Pluralistic Research for Education: A Review of Critical Systems Theory. *Journal of Thought,* Fall-Winter: 63-77.

Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J. & Salvi, F. 2013. Pedagogy, Curriculum, Teaching Practices and Teacher Education in Developing Countries. Final Report. Education Rigorous Literature Review. Department for International Development.

White, C. 2015. Internationalizing Education: Critical Qualitative Case Studies in Social Education. *American Journal of Educational Research,* 3(2):211-219.

Wiliam, D. 2013. Voices from the Middle. *National Council of teachers of English,* 21(2):15-20

Winston, C.N. 2015. Points of convergence and divergence between existential and humanistic psychology: A few observations. *The Humanistic Psychologist,* 43:40-53.

Wodak, R. 2002. Aspects of Critical Discourse Analysis. *ZfAL,* 36:5-31.

Wright, N. & Losekoot, E. 2012. *Interpretative Research Paradigms: Points of Difference.* Auckland New Zealand: Auckland University of Technology.

Wulf, T., Meibner, P. & Stubner, S. 2010. A Scenario-based approach to strategic planning – integrating planning and process perspective of strategy. HHL Working Paper, 98.

Wylie, C. & Lyon, C. 2012. Formative Assessment — Supporting Students' Learning. *R&D Connection,* 19:1-12.

Young-Lovell, J. 2009. Assessing instructional strategies at Barbados Community College hospitality institute in a dynamic global environment. New York: Rochester Institute of Technology. (Thesis/Dissertation Collections).

Zeps, A. & Ribickis, L. 2015. Strategy development and implementation – process and factors influencing the result: Case study of Latvian organizations. Paper presented at 20th International Scientific Conference Economics and Management. *Procedia – Social and Behavioral Sciences,* 213:931-937.

Zhao, M., Mu, B. & Lu, C. 2016. Teaching to the test: Approaches to teaching in senior secondary schools in the context of curriculum reform in China. *Creative Education,* 7:32-43.

APPENDICES

APPENDIX A

UFS-UV

Faculty of Education

15-Aug-2016

Dear Mr Mothofela Msimanga

Ethics Clearance: **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences**

Principal Investigator: **Mr Mothofela Msimanga**

Department: **School of Education Studies (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-HSD2016/0311**

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

APPENDIX B

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

The Director: Strategic Planning and Research Directorate
Free State Department of Education
Private Bag X20565
Bloemfontein
9300

Dear Sir/Madam

RE: Request for permission to conduct a research at the schools in Thabo Mofutsanyana Education District schools

Please accept my request to conduct this research study in Thabo Mofutsanyana Education District schools. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.** I am a registered student at the University of the Free State for PhD Degree.

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Participants in this study will participate voluntarily and their basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity of participants will be maintained at all times. The participants will be informed about the processes involved in the research study and they will be allowed to make inputs. Participants have the right to withdraw their participation at any stage when they feel uncomfortable. Participants are also free not commenting on issues they are uncomfortable with. All the activities will take place outside contact time to avoid disruptions at the school. Participants will choose convenient times that will suit them. I therefore request your permission to undertake this research in Thabo Mofutsanyana Education District schools.

I hope my request will receive your favourable consideration.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX C

education
Department of Education
FREE STATE PROVINCE

Enquiries: BM Kitching
Ref: Research Permission: MR Msimanga
Tel. 051 404 9283 / 9221 / 082 454 1519
Email: berthakitching@gmail.com and B.Kitching@edu.fs.gov.za

MR Msimanga
2 Mossle Avenue
Westerson, Harrismith

082 706 5464

Dear Mr Msimanga

APPROVAL TO CONDUCT RESEARCH IN THE FREE STATE DEPARTMENT OF EDUCATION

1. This letter serves as an acknowledgement of receipt of your request to conduct research in the Free State Department of Education.

   Research Topic: Teach and Assess: A strategy for effective teaching and learning in Economic and Management Sciences

   Schools:. **Information hidden to protect identity**

   Target Population: 3 Grade 7-9 EMS teachers, 1 Head of Department responsible for EMS, 1 Principal / Deputy Principal, 1 Subject Advisor for EMS. It should be noted that although you requested the involvement of individual learners in discussions and dialogues, etc, this is not approved due to ethical issues impacting on minors. The contributions of learners in this research topic should be obtained with alternative processes, which you should inform the Department of.

   Period of research: From February 2017 to 30 September 2017. Please note the department does not allow any research to be conducted during the fourth term (quarter) of the academic year nor during normal school hours.

2. Should you fall behind your schedule by three months to complete your research project in the approved period, you will need to apply for an extension.

3. The approval is subject to the following conditions:

   3.1 The collection of data should not interfere with the normal tuition time or teaching process.

   3.2 A bound copy of the research document or a CD, should be submitted to the Free State Department of Education, Room 319, 3rd Floor, Old CNA Building, Charlotte Maxeke Street, Bloemfontein.

   3.3 You will be expected, on completion of your research study to make a presentation to the relevant stakeholders in the Department.

   3.4 The attached ethics document must be adheared to in the discourse of your study in our department.

4. Please note that costs relating to all the conditions mentioned above are your own responsibility.

Yours sincerely

DR JEM SEKOLANYANE
CHIEF FINANCIAL OFFICER

02/12/2016
DATE:

APPENDIX D

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

The Principal

_____
_____
_____

Dear Sir/Madam

RE: Request for permission to conduct a research at the school

Please accept my request to conduct this research study at your school. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.** I am a registered student at the University of the Free State for PhD Degree.

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Participants in this study will participate voluntarily and their basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity of participants will be maintained at all times. The participants will be informed about the processes involved in the research study and they will be allowed to make inputs. Participants have the right to withdraw their participation at any stage when they feel uncomfortable. Participants are also free not commenting on issues they are uncomfortable with. The school will be used as the venue where participants will meet. All the activities will take place outside contact time to avoid disruptions at the school. Participants will choose convenient times that will suit them. I therefore request your permission to undertake this research at your school.

I hope my request will receive your favourable consideration.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX E

Information hidden to protect identity

Dear Sir / Madam

To whom it may concern

I _____ the principal of the above mention school certify that I have allowed Mr Msimanga M.R to conduct a research at our school.

The research is on teaching and learning strategy and the stake holders are Principal EMS HOD, EMS Teacher, two unions members, RCL member and three learner (consent of parents), subject advisor, lecture and student (UFS).

Hope you find the above in order

Kind regards.

APPENDIX F

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INVITATION TO PARTICIPATE IN A RESEARCH STUDY

Dear Prospective Participant: Principal

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX G

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INVITATION TO PARTICIPATE IN A RESEARCH STUDY

Dear Prospective Participant: EMS Subject Advisor

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX H

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INVITATION TO PARTICIPATE IN A RESEARCH STUDY

Dear Prospective Participant: EMS Teacher

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX I

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INVITATION TO PARTICIPATE IN A RESEARCH STUDY

Dear Prospective Participant: Head of Department for EMS

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX J

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INVITATION TO PARTICIPATE IN A RESEARCH STUDY

Dear Prospective Participant: Learner

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality (keeping secrets about the information you will give) and non-disclosure of personal information (not revealing or discussing your personal information) will be maintained at all times. Your identity will not be revealed at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX K

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INVITATION TO PARTICIPATE IN A RESEARCH STUDY

Dear Prospective Participant: Representative Council of Learners member

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality (keeping secrets about the information you will give) and non-disclosure of personal information (not revealing or discussing your personal information) will be maintained at all times. Your identity will not be revealed at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX L

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INVITATION TO PARTICIPATE IN A RESEARCH STUDY

Dear Prospective Participant: Teachers Unions' Representative

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX M

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INVITATION TO PARTICIPATE IN A RESEARCH STUDY

Dear Prospective Participant: University Lecturer

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX N

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INVITATION TO PARTICIPATE IN A RESEARCH STUDY

Dear Prospective Participant: University Student

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX O

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INFORMED CONSENT

Dear Participant: EMS Subject Advisor

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

CONSENT

1. I fully understand the nature and purpose of the research study.
2. I therefore give full consent to participate and do so freely without any coercion.
3. I fully understand the implications and risks of participating in this research study.
4. I hereby give permission for the use of information obtained during the study and the use of the findings thereof.

..... **.....**
Signature **Date**

APPENDIX P

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INFORMED CONSENT

Dear Parent or Guardian of RCL member

Please accept my request for your permission to allow _____ (Name of learner) to participate in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.** This document provides information about the study and what learners' participation in this study entails.

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Learner's participation in the study is voluntary and learner's basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. The learner will be informed about the processes involved in the research study and be allowed to make inputs. The learner has the right to withdraw his/her participation at any stage when he/she feels uncomfortable. The learner is also free not commenting on issues he/she is uncomfortable with.

The learner's participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

PARENT OR GUARDIAN CONSENT

1. I fully understand the nature and purpose of the research study.
2. I therefore give full consent to the child to participate and I am doing so freely without any coercion.
3. I fully understand the implications and risks of the child's participation in this research study.
4. I hereby give permission for the use of information obtained during the study and the use of the findings thereof.

..... **.....**

Signature **Date**

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

KUTLWISISO LE HO DUMELLA MOITHUTI HO NKA KAROLO

Motswadi kapa Mohlokomedi wa setho sa boemedi ba baithuti

Ke kopa hore o amohele kopo ya ka, ka ho dumella _____ (Lebitso la ngwana) ho nka karolo dipatlisisong tsena. **Ho ruta le ho hlahloba: Moralo wa ho ruta le ho ithuta ka nepo thutong ya Economic and Management Sciences (Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences).** Tokomane ena e fana ka dintlha tsohle mabapi le dipatlisiso le hore moithuti o tlilo nka karolo ka mokgwa ofe.

Dipatlisiso tsena di shebane le ho etsa moralo o ka thusang hore bana ba rutwe hape ba ithute ka nepo thutong ya Economic and Management Sciences (EMS) ho sebediswa mokgwa wa ho ruta le ho hlahloba. Mokgwa ona wa ho ruta le ho hlahloba o sebediswa seterekeng sa thuto sa Thabo Mofutsanyana ho ruta le ho ithuta ka nepo dithuthong tsohle ho dikereiti tsohle. Ho kenywa tshebetsong ha mokgwa ona wa ruta le ho hlahloba kamoo mokgwa ona o leng ka teng, o tlisa diphepetso phaposing ya ho ithuta ya EMS. Diphepetso di tliswa ke ho kenngwa tshebetsong ha mokgwa ona ka tsela e tshwanang dithutong tsohle le dikereiting tsohle. Dipatlisiso tsena di etsetswa hore ho etswe moralo o ka sebediswang diphaposing tsa EMS.

Moithuti o nka karolo ka boithaopo, ditokelo tsa hae tsa mantlha di tla hlomphuwa le ho sireletswa ka dinako tsohle. Diketsahalo tsohle dipatlisisong tsena di tla bolokwa e le sephiri, ha ho ditaba le boitsebiso ba moithuthi tse tla phatlalatswa ka dinako tsohle. Moithuti o tla tsebiswa ka dintlha tse tla latelwa dipatlisisong tsena hape moithuti o tla dumellwa ho etsa ditlhahiso nakong ya dipatlisiso. Moithuti o na le tokelo ya ho ikgula dipatlisisong boemong bofe kapa bofe ba dipatlisiso ha a se a sa ikutlwe ho tswela pele. Moithuti o na le tokelo ya ho se ntshe maikutlo a hae ka dintho tseo a sa rateng ho ntsha maikutlo ka tsona.

Ho nka karolo ha moithuti ho tla tlisa boleng bo boholo dipatlisisong tsena.

Ka diteboho

.....
Mothofela Msimanga

TUMELLO

1. Ke utlwisisa ka botlalo sepheo le morero wa dipatlisiso tsena.
2. Ke ka hona ke fanang ka tumello e tletseng ho ngwana wa ka ho nka karolo dipatlisisong tsena, ke etsa sena ka boithatelo ntle le ho qobellwa.
3. Ke utlwisisa ka botlalo ka ho nka karolo le ditlamorao tsa ho nka karolo ha ngwana wa ka dipatlisisong tsena.
4. Ke fana ka tumello ya hore lesedi le tla fumanwa dipatlisisong tsena le sebediswe.

..... **.....**
Ho saena **Letsatsi**

APPENDIX Q

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INFORMED CONSENT

Dear Parent or Guardian of a learner

Please accept my request for your permission to allow _____ (Name of learner) to participate in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.** This document provides information about the study and what learners' participation in this study entails.

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Learner's participation in the study is voluntary and learner's basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. The learner will be informed about the processes involved in the research study and be allowed to make inputs. The learner has the right to withdraw his/her participation at any stage when he/she feels uncomfortable. The learner is also free not commenting on issues he/she is uncomfortable with.

The learner's participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

PARENT OR GUARDIAN CONSENT

1. I fully understand the nature and purpose of the research study.
2. I therefore give full consent to the child to participate and I am doing so freely without any coercion.
3. I fully understand the implications and risks of the child's participation in this research study.
4. I hereby give permission for the use of information obtained during the study and the use of the findings thereof.

..... **.....**

Signature **Date**

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

KUTLWISISO LE HO DUMELLA MOITHUTI HO NKA KAROLO

Motswadi kapa Mohlokomedi wa moithuti

Ke kopa hore o amohele kopo ya ka, ka ho dumella _____ (Lebitso la ngwana) ho nka karolo dipatlisisong tsena. **Ho ruta le ho hlahloba: Moralo wa ho ruta le ho ithuta ka nepo thutong ya Economic and Management Sciences (Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences).** Tokomane ena e fana ka dintlha tsohle mabapi le dipatlisiso le hore moithuti o tlilo nka karolo ka mokgwa ofe.

Dipatlisiso tsena di shebane le ho etsa moralo o ka thusang hore bana ba rutwe hape ba ithute ka nepo thutong ya Economic and Management Sciences (EMS) ho sebediswa mokgwa wa ho ruta le ho hlahloba. Mokgwa ona wa ho ruta le ho hlahloba o sebediswa seterekeng sa thuto sa Thabo Mofutsanyana ho ruta le ho ithuta ka nepo dithuthong tsohle ho dikereiti tsohle. Ho kenywa tshebetsong ha mokgwa ona wa ruta le ho hlahloba kamoo mokgwa ona o leng ka teng, o tlisa diphepetso phaposing ya ho ithuta ya EMS. Diphepetso di tliswa ke ho kenngwa tshebetsong ha mokgwa ona ka tsela e tshwanang dithutong tsohle le dikereiting tsohle. Dipatlisiso tsena di etsetswa hore ho etswe moralo o ka sebediswang diphaposing tsa EMS.

Moithuti o nka karolo ka boithaopo, ditokelo tsa hae tsa mantlha di tla hlomphuwa le ho sireletswa ka dinako tsohle. Diketsahalo tsohle dipatlisisong tsena di tla bolokwa e le sephiri, ha ho ditaba le boitsebiso ba moithuthi tse tla phatlalatswa ka dinako tsohle. Moithuti o tla tsebiswa ka dintlha tse tla latelwa dipatlisisong tsena hape moithuti o tla dumellwa ho etsa ditlhahiso nakong ya dipatlisiso. Moithuti o na le tokelo ya ho ikgula dipatlisisong boemong bofe kapa bofe ba dipatlisiso ha a se a sa ikutlwe ho tswela pele. Moithuti o na le tokelo ya ho se ntshe maikutlo a hae ka dintho tseo a sa rateng ho ntsha maikutlo ka tsona.

Ho nka karolo ha moithuti ho tla tlisa boleng bo boholo dipatlisisong tsena.

Ka diteboho

.....
Mothofela Msimanga

TUMELLO

1. Ke utlwisisa ka botlalo sepheo le morero wa dipatlisiso tsena.
2. Ke ka hona ke fanang ka tumello e tletseng ho ngwana wa ka ho nka karolo dipatlisisong tsena, ke etsa sena ka boithatelo ntle le ho qobellwa.
3. Ke utlwisisa ka botlalo ka ho nka karolo le ditlamorao tsa ho nka karolo ha ngwana wa ka dipatlisisong tsena.
4. Ke fana ka tumello ya hore lesedi le tla fumanwa dipatlisisong tsena le sebediswe.

..... **.....**
Ho saena **Letsatsi**

APPENDIX R

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INFORMED CONSENT

Dear Participant: University Lecturer

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

CONSENT

1. I fully understand the nature and purpose of the research study.
2. I therefore give full consent to participate and do so freely without any coercion.
3 I fully understand the implications and risks of participating in this research study.
4. I hereby give permission for the use of information obtained during the study and the use of the findings thereof.

..... **.....**
Signature **Date**

APPENDIX S

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INFORMED CONSENT

Dear Participant: University Student

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

CONSENT

1. I fully understand the nature and purpose of the research study.
2. I therefore give full consent to participate and do so freely without any coercion.
3. I fully understand the implications and risks of participating in this research study.
4. I hereby give permission for the use of information obtained during the study and the use of the findings thereof.

..... **.....**
Signature **Date**

APPENDIX T

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INFORMED CONSENT

Dear Participant: The Principal

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

CONSENT

1. I fully understand the nature and purpose of the research study.
2. I therefore give full consent to participate and do so freely without any coercion.
3. I fully understand the implications and risks of participating in this research study.
4. I hereby give permission for the use of information obtained during the study and the use of the findings thereof.

..... **.....**
Signature **Date**

APPENDIX U

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INFORMED CONSENT

Dear Participant: Head of Department for EMS

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

CONSENT

1. I fully understand the nature and purpose of the research study.
2. I therefore give full consent to participate and do so freely without any coercion.
3. I fully understand the implications and risks of participating in this research study.
4. I hereby give permission for the use of information obtained during the study and the use of the findings thereof.

..... **.....**
Signature **Date**

APPENDIX V

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INFORMED CONSENT

Dear Participant: EMS Teacher

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

CONSENT

1. I fully understand the nature and purpose of the research study.
2. I therefore give full consent to participate and do so freely without any coercion.
3. I fully understand the implications and risks of participating in this research study.
4. I hereby give permission for the use of information obtained during the study and the use of the findings thereof.

..... **.....**
Signature **Date**

APPENDIX W

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

INFORMED CONSENT

Dear Participant: Teachers' Union Representative

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality, non-disclosure of personal information and identity will be maintained at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

CONSENT

1. I fully understand the nature and purpose of the research study.
2. I therefore give full consent to participate and do so freely without any coercion.
3. I fully understand the implications and risks of participating in this research study.
4. I hereby give permission for the use of information obtained during the study and the use of the findings thereof.

..... **.....**
Signature **Date**

APPENDIX X

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

LEARNER ASSENT

Dear Participant: Learner

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality (keeping secrets about the information you will give) and non-disclosure of personal information (not revealing or discussing your personal information) will be maintained at all times. Your identity will not be revealed at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

ASSENT

I fully understand the nature and purpose of the research study and I am willing to participate in this research.

..... **.....**
Signature **Date**

APPENDIX Y

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 05/04/2016

LEARNER ASSENT

Dear Participant: Representative Council of Learners member

Please accept my request for your participation in this research study. **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.**

This study is about formulation of a strategy for effective teaching and learning in Economic and Management Sciences (EMS) through the use of teach and assess approach. Teach and assess strategy is a strategy that is used in Thabo Mofutsanyana Education District for effective teaching and learning in all the subjects across the grades. The implementation of the strategy in its current form in EMS classrooms poses challenges because it is implemented uniformly in all the subjects across all the grades. The study is carried out to develop the strategy that can be used in EMS classrooms.

Your participation in the study is voluntary and your basic human rights will be respected and protected at all times. Confidentiality (keeping secrets about the information you will give) and non-disclosure of personal information (not revealing or discussing your personal information) will be maintained at all times. Your identity will not be revealed at all times. You will be informed about the processes involved in the research study and be allowed to make inputs. You have the right to withdraw your participation at any stage when you feel uncomfortable. You are also free not commenting on issues you are uncomfortable with.

Your participation will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

ASSENT

I fully understand the nature and purpose of the research study and I am willing to participate in this research.

..... **.....**
Signature **Date**

APPENDIX Z

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 20/02/2017

INVITATION TO A RESEARCH STUDY MEETING

Dear Co-researcher

As one of the identified co-researchers in the study **Teach and assess: A strategy for effective teaching and learning in Economic and Management Sciences.** You are cordially invited to a research study meeting. The meeting is scheduled as follows:

Date: 24 February 2017
Venue: Deleted for anonymity purposes
Time: 13H45
Agenda: 1. Opening and welcome
2. Research procedures
3. Introduction of the co-researchers
4. Briefing on research project
5. Development of a research plan
6. Sharing of responsibilities
7. Closure

Your participation in this meeting will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX AA

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za
Date: 06/03/2017

INVITATION TO A RESEARCH STUDY MEETING

Dear Co-researcher

You are cordially invited to a research study meeting scheduled as follows:

Date: 10 March 2017
Venue: Deleted for anonymity purposes
Time: 14H30
Agenda: 1. Roll call and apologies
2. Reflection on previous meeting
3. Explore what teach and assess strategy entails
4. Demonstrate how "teach and assess" strategy will contribute towards effective teaching and learning in Economic and Management Sciences
5. Any other matters
6. Next meeting
7. Closure

Your participation in this meeting will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX BB

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za

Date: 13/03/2017

INVITATION TO A RESEARCH STUDY MEETING

Dear Co-researcher

You are cordially invited to a research study meeting scheduled as follows:

Date: 17 March 2017
Venue: Deleted for anonymity purposes
Time: 14H30
Agenda: 1. Roll call and apologies
2. Reflection on previous meeting
3. Determining the conditions under which "teach and assess" strategy can be successfully implemented in Economic and Management Sciences
4. Identifying possible challenges that might hamper the implementation of a strategy in order to put mechanisms in place to overcome them
5. Any other matters
6. Next meeting
7. Closure

Your participation in this meeting will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX CC

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za

Date: 17/03/2017

INVITATION TO A RESEARCH STUDY MEETING

Dear Co-researcher

During the research study meeting held on the 17 March 2017 the team decided to change the date of the research study meeting because some co-researchers will not be available on the planned date. You are cordially invited to a research study meeting scheduled as follows:

Date: 22 March 2017
Venue: Deleted for anonymity purposes
Time: 14H00
Agenda: 1. Roll call and apologies
2. Reflection on previous meeting
3. Proposing teach and assess strategy as a strategy for effective teaching and learning in Economic and Management Sciences
4. Field testing arrangements
5. Any other matters
6. Next meeting
7. Closure

Your participation in this meeting will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX DD

Researcher
Mothofela Msimanga
2 Mossie Avenue, Westerson
Harrismith
9880
Contacts: 0586232223/0827065464
E-mail: mothofela@internet-sa.co.za

Study Leader
Prof. D.J Hlalele
8 New Education Building
School of Education Studies
QwaQwa UFS
Contacts: 0833799328
E-mail: hlaleleDJ@ufs.ac.za

Date: 27/03/2017

INVITATION TO A RESEARCH STUDY MEETING

Dear Co-researcher

During the research study meeting held on the 22 March 2017 the team decided to change the date of the research study meeting because of the time needed for field testing. You are cordially invited to a research study meeting scheduled as follows:

Date: 30 March 2017
Venue: Deleted for anonymity purposes
Time: 13H00
Agenda: 1. Roll call and apologies
2. Reflection on previous meeting
3. Final proposal of teach and assess strategy as a strategy for effective teaching and learning in Economic and Management Sciences
4. Any other matters
5. Debriefing details
6. Concluding remarks of each co-researcher
7. Closure

Your participation in this meeting will add great value to this study.

Yours thankfully

.....
Mothofela Msimanga

APPENDIX EE

CERTIFICATE OF LANGUAGE EDITING

Dr. L. Hoffman

Kroonstad

BA, BA(Hons), MA, DLitt et Phil

Cell no: 079 193 5256 Email: larizahoffman@gmail.com

DECLARATION

To whom it may concern

I hereby certify that the English language of the following thesis meets the requirements of academic publishing. This thesis has been linguistically and technically edited and proofread by me, Dr. L. Hoffman.

Title of thesis

TEACH AND ASSESS: A STRATEGY FOR EFFECTIVE TEACHING AND LEARNING IN ECONOMIC AND MANAGEMENT SCIENCES

Candidate

MOTHOFELA RICHARD MSIMANGA

Lariza Hoffman

Kroonstad

26 May 2017

APPENDIX FF

Teach and assess: A strategy for effective teaching and learning in EMS Thesis

ORIGINALITY REPORT

10%	9%	3%	4%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	uir.unisa.ac.za Internet Source	2%
2	etd.uovs.ac.za Internet Source	1%
3	www.education.gov.za Internet Source	<1%
4	iafor.org Internet Source	<1%
5	www.into.ie Internet Source	<1%
6	www.ijiet.org Internet Source	<1%
7	41.89.99.18 Internet Source	<1%
8	revistas.um.es Internet Source	<1%
9	dspace.nwu.ac.za	