A CONTEXT-BASED APPROACH TO ENRICH STUDENTS' APPLICATION OF ABSTRACT ECONOMIC CONCEPTS

by

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DECLARATION

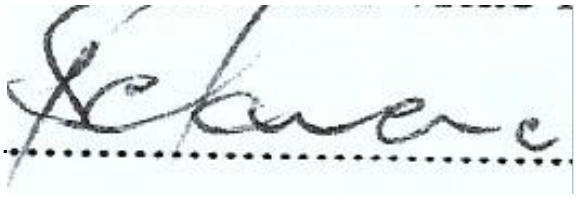
I, Gailele Lucas Sekwena, declare that the thesis,

> ***A Context-based approach to enrich students' application of abstract economic concepts*****,**

submitted for the qualification of Doctor of Philosophy at the University of the Free State, is my own independent work.

All the references that I have used have been indicated and acknowledged by means of complete references.

I further declare that this work has not previously been submitted by me at another university or faculty for the purpose of obtaining a qualification.



11 December 2019

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LIST OF ABBREVIATIONS/ACRONYMS

AEA	AMERICAN ECONOMICS ASSOCIATION
AR	ACTION RESEARCH
CAPS	CURRICULUM ASSESSMENT POLICY STATEMENT
CDA	CRIRITICAL DISCOURSE ANALYSIS
CEE	COMMITTEE ON ECONOMICS EDUCATION
CRPs	CONTEXT-RICH PROBLEMS
CTL	CONTEXTUAL TEACHING AND LEARNING
EMS	ECONOMIC AND MANAGEMENT SCIENCES
FET	FURTHER EDUCATION AND TRAINING
PAR	PARTICIPATORY ACTION RESEARCH
PBL	PROBLEM-BASED LEARNING
PERG	PHYSICS EDUCATION RESEARCH GROUP
REACT	RELATING EXPERIENCING APPLYING COLLABORATING TRANSFERRING
SFL	SYSTEMIC FUNCTIONAL LINGUISTICS
SWOT	STRENGTH WEAKNESS OPPORTUNITIES THREATS
TIP	TEACHING INNOVATIONS PROGRAMME
USA	UNITED STATES OF AMERICA
ZPD	ZONE OF PROXIMAL DEVELOPMENT

ABSTRACT

This study examined the feasibility of developing a Context-based Approach intended to enrich students' application of abstract Economics concepts, which could be realised by creating a contextual teaching and learning environment in Economics. The need to develop this approach stems from the observation that Economics is comprised of theories and abstract concepts which students often learn by mere memorisation. Consequently, students find it challenging to link them to real life and apply in the actual world situations. This seeming lack of connection between theory and actual life situations results in students' failure to apply these abstract concepts and is often demonstrated by their responses to higher-order and data response questions. The *Curriculum and Assessment Guide* (Curriculum Development Council, 2007:35) states that Economics is a discipline with a high level of abstraction which can be very challenging to students and mastery of the subject requires of students to develop understanding through connecting concepts and theories with the practical world situations. This study proposes a paradigm shift from a theoretical confined pedagogic praxis, that is highly textbook bound in teaching Economics to a more practicum Context-based pedagogic praxis which will enrich students' connection of theory and practice.

This study is embedded within a Constructivist theoretical framework as a theory of choice. Huali (2011:642) points out that Constructivism theory holds that learning is interconnected to a context or a social status quo, thus implying that when students learn in situations that are similar to the practicum world, they can make use of their existing knowledge to embrace new knowledge and give it new meaning. A cyclical Participatory Action Research (PAR) approach was followed in collating and generating data in this study. Participants were Economics teachers and pre-service student teachers who formed the core of the research team and data were mainly generated through focus group discussions. Data generated were analysed using a Critical Discourse Analysis (CDA).

Findings and conclusions from this study are Context-based approach in Economics (i.e. use of Case method, Context-rich problems, Service-learning and Problem-based learning) advances and enriches students' understanding of the subject and affords them opportunities to practical application of abstract concepts.

This further enhance their ability to transfer their theoretical content knowledge from one context to the other.

Keywords: Case method, Context-based approach, Context-rich problems, Economics education, Problem-based learning, Service-learning.

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OVERVIEW OF THE STUDY

1.1 INTRODUCTION

This research project examines the development of a context-based approach in Economics education, which aims to enrich the students' ability to apply Economics theories and abstract concepts in the real world, which seems to be difficult for students when the subject is taught theoretically or in abstraction. The argument of the study is that a shift from a more theory-based and highly teacher centred approach in an Economics class to an approach that puts the subject content in context through the use of context based teaching and learning strategies. With the adoption of these strategies a teaching and learning environment is created, which affords students opportunities to see the relevance of the subject in their daily lives. This environment seems to enable the students to link the classroom or textbook theory to the practical world and enhances their application of this theoretical knowledge in the real world. This chapter will provide the background to this study and a short review of the literature related to the problem investigated in the study. The chapter will further introduce the problem statement formulated, the research question the study aimed to address, as well as the aim and the objectives, which the study pursued. The theoretical framework in which this study is couched will be introduced in the chapter and a brief explanation of the research methodology followed in conducting the study, will also be given in this chapter. The potential value of the study is highlighted in the chapter and the ethical issues that were considered when the study was conducted are elaborated upon.

1.2 BACKGROUND AND REVIEW OF RELATED LITERATURE

The aim of this study is to propose a Context-based approach in the teaching of Economics, as this approach seems to have a potential to enhance the students' application of Economics theories and abstract concepts to the real-world problems. The rationale for proposing a Context-based approach stems from the observation that a more teacher-centred, highly textbook-driven and classroom-confined approach seems to be a commonly used approach in teaching this subject. This

teaching approach appears to focus more on knowledge transmission by the teacher to students, on acquisition and comprehension of Economics concepts by students and on the breadth of content coverage by teachers. Salemi (2005:49) notes that in the USA instructors devote most of the class time to lecturing while almost no class time is used for activities that promote active student participation. A similar observation is also made at three different UK universities where Economics teaching is characterised by heavy reliance on the lecture method and a content-driven, fast-paced approach that seeks to cover material quickly. This approach appears not to be enough to assist students to go beyond a level of merely acquiring the subject knowledge to a level where they can relate to these theories and concepts and further apply them in real-world situations. This is a level where students will also be able to demonstrate an acquisition of skills to analyse, synthesize and evaluate information. These are the skills which they need, for example, in answering higher-order questions and questions that require of them to demonstrate application of the content knowledge.

Economics teaching seems to be based on the three main objectives, which are noted by Smith (2007:308) as mastery of the principles of Economics, acquisition of skills to apply the principles of Economics to real life issues, and learning to systematically analyse policy issues. Smith (2007:308) further notes that of these three objectives the usual textbook and a course in Economics overemphasise the first objective and underemphasise the other two. This observation is also made by Tan (2007:2), who notes two concerns that have been raised about the teaching of Economics, the first being lack of active learning-based teaching and the second concern being less effort devoted towards teaching students to acquire the skills and expertise which can assist them to apply to real life economic theories and models. Velasco, Martinez and Ferrero (2012:463), for example, note that graphic illustrations are one of the main tools used for economics analysis and that unfortunately students often show difficulty in understanding graphs. Velasco *et al.* (2012:464) identify the model of supply and demand as one example of the graphical illustrations that may be difficult for students to understand, let alone to apply to real-life situations. This problem is noted by Friesner and Alexelsen (2006:1), who make reference to the results of the research on Economics education in the US, which demonstrate low levels of Economics literacy among students who undertook a

course in Economics at high school or college. Economics literacy according to Salemi (2005:2) refers to the students' ability to apply basic economic concepts in situations that relate to their lives but differ from those they came across in the classroom.

It is the assertion of Rosales and Journell (2012:51) that despite a general agreement that Economics education has its purpose to teach students towards thinking like economists data suggest that the dominant teacher-centred method has not succeeded in communicating the theoretical underpinnings of the field of Economics in such a manner that students are capacitated to think like economists. This teaching and learning environment appears to focus more on the acquisition and knowledge of economic concepts by students and on the breadth of content coverage, while not doing much to assist students to work towards practising the application of Economics theories and concepts. Demircioğlu, Dinc and Calik (2013:682) argue that students are often confronted with abstract concepts at an early age and unfortunately find it difficult to learn or visualize those concepts. Students are therefore required to possess abstract reasoning competency and if not, they end up having the wrong understandings of such concepts.

Students also appear to lack analysis, synthesis and evaluation skills. Students need these skills, especially in answering higher-order questions, i.e. the questions that require of them to go beyond rote memory and recall, but need them to use Economic reasoning, e.g. essay writing and interpretation of data response questions, which are in the form of case studies, cartoons and graphs. Students also need to acquire these skills in order to participate meaningfully in debates on economic policy issues and to make reasoned judgements. Economics as a subject has various abilities it aims to equip students with and, according to the Department of Basic Education (Economics CAPS document) (DBE, 2011:9), they include amongst others, the ability to collect, interpret and analyse data related to production, consumption and exchange activities. This data and other related information may then be used to arrive at informed decisions in all the attempts to find solutions to problems. The study of Economics also endeavours to capacitate students in explaining economic events and in predicting their possible future outcomes. Students often show limited ability in these competencies.

The limitations highlighted in the preceding paragraphs might be as a result of minimal opportunities that are created in the Economics teaching and learning environment to allow students to practise the application of Economic theory and concepts, which they are often taught in an abstract manner.

It is against this background that it becomes imperative that a different approach to the teaching of Economics must be followed, and such an approach should incorporate the methods that will create a space for students to start practising the application of the theory of Economics they are taught. Salemi (2005:49) asserts that as Economics literacy means the ability to use Economics knowledge in practice, a course targeted to impart economics literacy should be able to provide students an opportunity to put to practice the concepts which they learn.

In an effort to improve on the limitations of the dominant textbook approach in the Economics class, Rosales and Journell (2012:53) argue that one of the possible actions to achieve the desired results is to change the approach in the presentation and application of the subject and not the subject content. This change may assist to ensure that the application and relevance of the material become more evident to students. Maxwell, Mergendoller and Bellisimo (2004:494) assert that Economics is a subject that offers opportunities for developing more interactive pedagogies in high school and at tertiary level to enhance learning, since this subject contains numerous concepts that are often seen as difficult to grasp by students. Velasco, Martinez and Ferrero (2012:463) maintain that the creation of a platform to enhance students' ability to think like economists, requires not only teaching the theory of Economics or abilities to solve micro-economic and macro-economic problems, but also competencies or skills required in the labour market. According to Velasco *et al.* (2012:463), one way to develop such competencies is to provide students with opportunities to be hooked on the application of economics. The study therefore focuses on the pedagogic methods and strategies that can seamlessly be used together to develop an effective teaching and learning approach to enrich students' application of the subject knowledge in the real world.

One approach that can be used to help the students to understand a link between theory and practice and to start practicing application of economics knowledge is the Context-based approach, which incorporates real-world economic issues. Contextual

teaching and learning is described by Hudson and Whisler (2007:54) as a way of introducing content to be taught by using active learning techniques aimed at helping students to connect to their prior knowledge what they are expected to learn and to construct knowledge from the analysis and synthesis of this learning process. King (2007:2) notes that Context-based learning refers to a group of learning experiences that persuade students to transfer their knowledge of concepts to situations that replicate real-life. In Context-based learning, context therefore refers to the social and cultural setting where the student, the teacher and the place of learning are located.

A change from a more content-based approach to a more context-based approach in Economics education is proposed by this study, based on the potential benefits offered by contextual teaching and learning environments, e.g. Hudson and Whisler (2007:54) note that the contextual teaching and learning environment benefits students as it enhances their ability to connect the subject content they are being taught to the real life contexts where that content would likely be used. Avargil, Herscovitz and Dori (2012:209) further assert that the context in which learning experiences occur should help students to see the relevance of what they are learning and how it can be possibly be applied in their daily lives. The context should also help them to tie their new knowledge to their previous knowledge so as to facilitate successful learning. Taconis, den Brok and Pilot (2016:5) argue that using appropriate contexts in teaching the subject content brings coherence, connection, meaning and relevance by linking to every-day life realities and issues in economic life and society. The main characteristic of a context-based learning (CTL) environment, according to Taconis *et al* (2016:5) is that a practical context gives significance and sense to ideas and concepts that are covered in a particular lesson.

A Context-based approach developed in this study includes the use of, amongst others, Context-rich problems, Service-learning, Problem-based learning and the Case method in Economics instruction. A description of Context-rich problems (CRPs) is offered by Salemi and Walstad (2010:171), who state that a Context-rich problem includes a short story in which the student is the major character with a plausible motivation for deriving a solution. The problem requires a series of decisions to be made about the fundamental concepts and then a self-conscious reflection on how the problem was solved. Hoyt and McGoldrick (2012:48) describe

context-rich problems as an active learning strategy that gives students an opportunity to think like Economists since this strategy puts students in realistic scenarios which allow them to practice applying economic concepts.

The Case method also seems to have a potential to provide students with opportunities to acquire skills in applying the principles of Economics to reality and in learning to analyse policy issues systematically. Hoyt and McGoldrick (2012:45) assert that even though the goal of Economics teachers may be to develop the students' capability to think like economists, the pedagogic methods they use may not always include opportunities for students to demonstrate that ability. Hoyt and McGoldrick (2012:45) recommend that this gap can be filled by using case method to bring the real world into the classroom. Smith (2007:308) notes that of the three main objectives of teaching Economics, i.e. (i) mastery of economic concepts; (ii) acquisition of skills in applying economic concepts in practice; and (iii) learning to analyse policy issues systematically, the usual course in Economics emphasise the first objective. The over-emphasis of the mastering of economic concepts may be as a result of the teaching methods that are used in the subject; hence Smith (2007:308) asserts that case study teaching can be an effective method to empower students with skills in applying economics concepts to reality and in analysing policy issues systematically. Salemi and Walstad (2010:192) argue that using cases in the classroom facilitates higher-order learning, which assists students to accomplish economic literacy as cases are both real-world in nature and place the students in a decision-making role.

Service-learning has also been identified as pedagogic strategy that can create a platform for students to practise their subject knowledge. Ziegert and McGoldrick (2008:40) maintain that Service-learning in Economics provides students with an opportunity to use theories of Economics within the context of the world in which they are going to be participants. Additionally, Ziegert and McGoldrick (2008:40) argue that service-learning pedagogy combines service and learning in a manner that is beneficial to both the student and the community; hence service activities are not to be taken as mere added extras, but should be strongly tied to the academic content and the learning objectives. When service projects are arranged properly students are able to apply their content knowledge to abstract theories, which allows teachers to engage them as active participants in the learning process. Lopez (2009:138) also

states that service learning creates a platform for students to make a relation to Economics concepts and theories and to apply them to real-world experiences within the community. Students are further afforded an opportunity to reflect on how the textbook and classroom theory relates to practice and in the process, they are able to see the applicability of Economics theories to the real world and reinforce their understanding of economics.

Service-learning appears to have the potential to benefit Economics students and as Levkov and Umpleby (2009:32) put it, because service learning is learning in context, students remember what they have learnt better and longer and are also motivated to learn more as they often take part in decisions about Service-learning projects. These projects have the potential to contribute to the betterment of students by enriching their cognitive skills. Students stand to gain a deeper understanding of the material learnt as they reflect on their experiences in service projects. These service activities also allow them an opportunity to transfer their subject knowledge to different contexts. Additionally, Al Barwani, Al Mekhlafi and Nagaratnam (2013:111) assert that the benefit of service learning is three pronged in that, firstly, it benefits the student, secondly, it benefits the institution of learning, and thirdly, it benefits the community. The benefits that students accrue include amongst others: engaging them in active learning, which has the potential to reveal the relevance of the academic work and to enhance their critical thinking skills. Teacher education programmes also stand to benefit from service learning as it provides powerful learning experiences for pre-service teachers.

Problem-based learning (PBL) has also been found to have the potential in assisting students to practise application of Economics theories and abstract concepts. It is described by Savery (2006:12) as a student-centred instructional method that allows students to undertake research, put together theory and practice, and use knowledge and skills to provide a viable solution to the problem. Maxwell *et al.* (2004:489) argue that Problem-based learning is underpinned by the notion that learning is improved when it takes place in a relevant context. Maxwell *et al* (2004:489) state that according to the proponents of PBL context refers to the real-world problem. In PBL, students are presented with a genuine problem for which they are expected to construct knowledge that can help them to find a possible solution. The teacher's role during the process of finding a solution to the problem is

to guide students and he or she uses questions to direct them towards relevant tools and resources which can assist them to arrive at a solution. Finkelstein, Hanson, Huang, Hirschman and Huang (2010:17) state that PBL contrasts the textbook-driven Economics curriculum and aims to assist students to contextualise, understand, reason and solve problems for which they initially had no analytic tools. Savery (2006:12) further notes that Problem-based learning intends to equip students with skills such as critical thinking, analysis and solution of complex, real-world problems, finding, evaluating and using appropriate learning resources, working cooperatively, effective communication skills, and the use of content knowledge to become continual learners.

A case for Problem-based learning as one strategy that can be used to promote Context-based learning, is accentuated by Dolmans, De Grave, Wolfhagen and Van der Vleuten (2005:732), who in their argument state that PBL can be more effective in preparing Economics students for the future since it is based on learning that is associated with the four elements often referred to as the four modern insights into learning, i.e. it is contextual, constructive, collaborative and self-directed. Furthermore Ravitz and Mergendoller (2005:2) argue that by assigning students to solve through research a realistic problem that reflects the context and constraints of the real world, a PBL teaching and learning environment seems to encourage students to retain newly acquired knowledge, do self-directed study and to apply what they have learned to new and unfamiliar situations, all of which can lead to sustained and transferable learning. Furthermore, Laurenceson (2005:125) argues that with the use of this approach, students find the experience of problem solving more relevant and stimulating than they would if they were simply asked to memorise information and explanations. This approach gives students an opportunity to apply what they have learnt and as a result their ability to retain newly gained knowledge is enhanced.

1.3 THEORETICAL FRAMEWORK

The study is located within a Constructivist theoretical framework. According to Lowenthal and Muth (2008:2), constructivism describes a theory of both knowing and learning. When constructivism is described as a theory of knowing it is underpinned by the idea that knowledge is constructed individually or socially by people and it is

not something that exists in an objective world outside of the people. On the other hand, Jia (2010:198) also notes that constructivists are of the belief that knowledge cannot exist in a physical form on its own and outside of a specific entity. As a theory of learning constructivists argue that learning is the process in which students construct their cognitive structures. Learning is viewed by constructivists as the construction and generation of meanings and the process is completed by interaction of the students' old and new knowledge. The students' previous experiences play an important role in ensuring that they code, process and construct their unique understandings of the new experiences they come across.

Constructivist theory seems to be a fitting lens through which this study that seeks to create a contextual teaching and learning environment in Economics education can be viewed. An argument for a constructivist learning environment is made by Ciot (2009:1), who notes that criticism is often levelled against schools for producing static knowledge, i.e. knowledge that is accessed only in a constrained set of contexts, even though it is applicable to a wide variety of domains. The dominant use of a teaching model that heavily relies on transmitting knowledge directly from the teacher to students seems to be one reason for this criticism. This direct teaching model is often seen as relegating students to a position where they are mere passive recipients of knowledge in the teaching and learning process instead of affording them an opportunity to become co-constructors of knowledge. Ciot (2009:1) further notes that the limited ability of students to transfer of knowledge to different contexts often points to the detachment of the learning process in schools from the real-life contexts. It is for this reason that teaching techniques that mainly aim at recall of information may not guarantee that students will be able to use that information later. A constructivist approach seems to be an alternative under which authentic learning environments can be created. Authentic learning occurs when knowledge construction takes place within the contexts that have a potential to give it meaning and relevance; hence such learning environments are preferred as alternative to direct transmission of knowledge.

The potential for constructivist approach to create authentic learning environments is also made by Komulainen and Natsheh (2008:6) in their contention that Constructivist theory postulates that learning is contextual and should be based on concrete experiences. This contention stems from the belief that new knowledge is

highly dependent on context and should therefore not be presented in an abstract way independent of meaningful context. Mogashoa (2014:57) notes that constructivism emphasises the process of making meaning and applying meaning in real life. Constructivists therefore argue for a teaching and learning environment that promotes situated cognition and connects theoretical concepts with real-life applications. Justification for constructivism as a relevant form of pedagogy in Economics education is made by Joshi and Marri (2006:199), who state that concepts which are taught in Economics such as scarcity, markets and reserve banking are dynamic and can best be understood in action through experience. Apart from enhancing students' understanding, learning through action and experience can also be fun to students, which has the potential to promote student engagement in the learning process.

The review of literature on constructivist theory demonstrates that constructivism is not a single or unified theory, but is characterised by multiple perspectives and is often placed in three categories namely; social constructivism, psychological constructivism and radical or emancipatory constructivism. In spite of the existence of these three categories, Yilmaz (2008:163) notes that they all share the same epistemological assumption that knowledge or meaning is not discovered, but constructed by the human mind. Prince and Felder (2007:125) note that the proponents of constructivism hold that effective instruction is based on the following principles; firstly, teaching should start with the subject content and experiences that may probably be familiar to students so they can connect them to their already developed knowledge structures. The implication is that presentation of new material should be in the context of how it is intended to be applied in the real-world instead of being presented in an abstract manner and out of context. The second principle is that subject content presentation should not be in a way that leads to an abrupt and drastic change of cognitive models, i.e., students should not be forced outside what Vygotsky calls the zone of proximal development. The zone of proximal development is what Vygotsky refers to as the region between what students are able to do independently and what they can potentially do when guided by an adult or when they are working together with more capable peers. The third principle is that instruction should assist students to diverge from being heavily depended on the teachers as their primary sources of information and take steps towards being self-

regulated and independent learners. Lastly, instruction should engage students in doing tasks collaboratively in small groups, which is something that can be made assisted amongst others by using cooperative learning exercises.

Woldab (2013:199) and Doolitlle (2014:489) argue that though constructivism is a broad theory that can be interpreted differently, it is associated with certain principles of learning derived from its different theories and models. These principles are firstly, the processes of knowledge construction and meaning making are individual and social active processes, secondly, knowledge construction involves social mediation within cultural contexts. The argument is that social interaction is crucial in developing knowledge and skills that are socially relevant. It is also believed that the experience which a student acquires in social interactions may be contrary to, or may validate his or her existing knowledge and skills. In the event that contradictions result, the student should accommodate them in an attempt to form an accurate social model of reality and according to the third principle authentic and real-world environments advance construction of knowledge. The understanding is that experience plays an important part in the efforts to build precise representations of reality, mutually agreed upon meanings in societal activities, and also in building models of reality that are personally logical.

Three more principles associated with constructivism are identified by Woldab (2013:199) and Doolitlle (2014:489), and one of these principles is that knowledge is constructed within the framework of the students' prior knowledge and experience. In a constructivist learning environment for teachers to be able to create experiences that are effective and which can lead to optimal learning they must first understand the students' prior knowledge. The other principle is that knowledge construction is deeply integrated by employing various perspectives and representations of content, skills and social realms. The belief is that students' exposure in experiencing multiple perspectives of a particular event provides the necessary material to develop multiple representations which students use to develop more complex schemes to the experience. The last principle identified by Woldab (2013:199) and Doolittle (2014:489) is that construction of knowledge is enhanced when students achieve self-regulation, self-mediation and self-awareness. The implication of this is that students are not passive recipients of knowledge in the learning process, but they are active constructors of knowledge and meaning.

1.4 RESEARCH PROBLEM, RESEARCH QUESTIONS AND OBJECTIVES

Economics teaching seems to be too theory based and classroom confined, with minimal opportunities for students to put to practice the economic theory and concepts which they learn in class. This is often demonstrated by students' inadequate response to questions that require of them to demonstrate the application of the economic theories and concepts. In Economics these questions are often in the form of cartoons and case studies that capture the real-world events.

This problem necessitated this research question:

How can the teachers create a Context-based learning environment to enrich students' application of Economics theories and abstract concepts to real-world problems?

It is because of the attempt to address this question that this study developed a Context-based approach aimed at enriching students' application of the Economics theories and abstract concepts to real-world problems. In order to address this aim, the following objectives were pursued:

- Demonstrating and justifying the need for a Context-based approach in Economics teaching;
- Identifying the main components of a Context-based approach in Economics;
- Exploring the conditions that are optimal for a Context-based approach in Economics;
- Identifying the plausible threats to the successful implementation of a Context-based approach; and
- Monitoring of the effectiveness of a Context-based approach in Economics.

1.5 RESEARCH DESIGN AND METHODOLOGY

This study was carried out as a Participatory Action Research (PAR). Participatory action research methodology was chosen for this study based on the idea that people who encounter a certain problem on a daily basis are the ones who are in a good position to carry out research on such a problem and propose solutions to it. In a PAR project, a principal researcher, together with people who stand to benefit from

the envisaged results of the research, collaborates in designing and conducting the research in an attempt to find solution/s to the problem that affects them. Kindon and Elwood (2009:21) note that in PAR, the principal researcher and a group of people who experience a problem and are willing to address it work together in the spirit of partnership and collaboration to achieve change. The research is usually carried out within the setting where the problem is experienced with the principal researcher acting as the facilitator of data generating methods. In this study the principal researcher worked with a team of research participants, which included Economics teachers, Economics students, a local university's Economics lecturers, and an academic researcher in Economics education. The teacher component was a mixture of experienced teachers, who were of benefit to the study due to their experience in teaching Economics and the new entrants to the profession who provided new perspectives in the teaching of the subject. The university lecturers helped the study by providing inputs on the areas in the subject which the university Economics students seem to struggle with and which can be attended to in a high school course. An academic researcher on Economics education provided the study with recent advances in the teaching of Economics.

Collaborative problem solving, which is one of the distinguishing features of PAR, played an important role in the development of a Context-based approach that aims to enrich students' application of abstract Economics concepts in real-life situations. Klocker (2012:150) maintains that, in a participatory action research, the principal researcher does not carry out research on people, but joins forces with them working towards the desired change. Klocker (2012:150) further asserts that, with participatory action research chances are more that an investigation that is appropriate, relevant and meaningful to the communities will be undertaken. On the other hand, Savin-Baden and Wimpenny (2007:333) argue that the PAR process requires that people affected directly by the problem under investigation should be part of the research process and should see themselves as research participants driving the research process forward as a group of individuals with common objectives and decision-making powers. Walter (2009:2) seems to be in agreement, stating that the nature of PAR makes it to move away from the usual practice where a researcher comes from outside and enters into the community holding an expert tag to examine, theorize and propose solutions to the issue(s) or problem(s) which

the community may be facing. Savin-Baden and Major (2010:91) argue that PAR methodology is in agreement with the idea that it is through a collaborative effort of the voices of those who are directly affected by the research problem that knowledge related to a problem can be developed. This idea seems to question the premise that only knowledge found from the privileged experts should be regarded as being legitimate. This seems to the reason that Savin-Baden and Major (2010:91) maintain that PAR offers a practical problem-solving approach at grassroots level with the intention that an action aimed at problem solving can lead to meaningful social change for those directly involved.

The selection of PAR for this study was amongst other reasons influenced by the three distinctions that Baum, MacDougall and Smith (2006:854) made between PAR and other conventional research methods. Firstly, Baum *et al.* (2006:854) maintain that in PAR the focus is on research that is intended to enabling action. This action is achieved through a reflective cycle in which the research participants generate data and use it to determine what measures need to be taken to arrive at a solution for an identified problem. Secondly, PAR is cautious of power relations, and calls for power to be shared by the principal researcher and the research participants. In such a set-up research participants are not viewed as the objects of research but as equal partners in the research process. Thirdly, Baum *et al.* (2006:854) argue that unlike other research methods PAR does not detach data and information from their contexts, as it recommends that those who are experience a problem should be the ones who take an active role in the research about the problem they face. The lived experiences of the people are thus used in finding solutions to the research process. This seems to be in line with the argument by Frisby, Reid, Millar and Hoeber (2005:368) that the rapid development of participatory forms of doing research is based on the notion that when those people who are affected by a problem actively take part in the process of knowledge production, the resulting data which are aimed at improving their condition become more relevant and trustworthy.

Participatory action research was thus seen as the method that could provide the desired results for this study, as the principal researcher believed that a solution to the problem identified could be found through a collaborative effort of tapping from the knowledge and experiences of the teachers and students who are faced with the research problem on daily basis. This seems to be in agreement with Savin-Baden

and Wimpenny's (2007:333) contention that knowing is an outcome of people converging and sharing experiences in a process that entails collective investigation, action and reflection. Frisby *et al.* (2005:368) also note that PAR asserts the right and ability of people to have a say in the decisions that affect them and which are said to be generating knowledge about them. Furthermore, Brydon-Miller and Maquire (2009:82) contend that PAR is founded on and operates within principles and frameworks that enable teacher or school based practitioner research to become more participatory, collaborative, and democratic. In this way students, teachers, and other relevant stakeholders are meaningfully engaged in the research cycle that involves amongst others; problem identification, taking action and making public the research results and their implications.

1.5.1 Research Steps followed in the Study

(i) Planning: the early session of PAR, according to Savin-Baden and Wimpenny (2005:334), mainly focuses on research participants knowing one another, exploring the PAR method, and on creating a platform for collective decision-making, which can be achieved by developing a climate that encourages openness and trust. Walter (2009:4) states that during these early stages of participatory action research, a problem, issue or a desire for change is identified by the community of research's interest and this is often followed by collaboration between the members of the community of the research's interest and the principal researcher with the focus on how to tackle the problem identified. A plan of action is also developed during this stage. In this study a meeting with all research participants was arranged with the purpose of ensuring that there is common understanding of the research problem, which at first was discussed individually with some Economics teachers and students. The teachers and students who attended the meeting indicated a willingness to participate in this research to collectively find a solution to the problem. The nature of PAR was to be explained by the academic researcher who was invited to the meeting to ensure that all participants understood that they all had a valuable contribution to make to the study. Participants were assigned to research on strategies that can be employed to incorporate real-world economic problems in the teaching of Economics and also the topics in the syllabus where such strategies can be beneficial.

(ii) Acting and Observing: Walter (2009:4) states that at this stage the developed plan is put into action. The action and its outcomes are observed by the research participants. MacDonald (2012:45) notes that during the acting cycle the principal researcher and the research participants work together to create awareness, which can lead to the achievement of their common goal and bring about the desired change. After the research participants in this study had identified and brainstormed various strategies which they thought could be helpful to assist the students to apply the abstract Economics concepts, each teacher was assigned a particular strategy to work with, focusing on what the strategy entails and on how best to incorporate it in the class. At this stage, teachers started to use the identified strategies and assessed their effectiveness in solving the problem of the study.

(iii) Reflection: Walter (2009:4) argues that the next step after action and observation is reflection. In the event reflection on the action and its results leads to a conclusion that the action taken was effective, the cycle of planning, acting, observing and reflecting is initiated again with the aim of building on the success already achieved. In the event that the reflection phase finds the first action step to be unsuccessful in addressing the identified problem, a new or different action is planned, taking into consideration the outcomes of the first action. In this research project the research participants reconvened to reflect on the conditions optimal for the implementation of Context-based strategies. The research participants also reflected on the challenges that were encountered during the incorporation of various Context-based strategies and on how the impact of those challenges was mitigated. This meeting was also used to assess the effectiveness of the Context-based strategies on addressing the research problem and on what further action needed to be taken.

The research cycle described above enabled the principal researcher and participants to address the following questions:

- What are the challenges of implementing a Context-based approach in Economics?
- What conditions are optimal for the implementation of a Context-based approach?

1.5.2 Data Generation

In order to generate data for this study the research participants formed a focus group and the discussions during focus group meetings were recorded. The research participants agreed on a schedule for focus group meetings, which allowed them an opportunity to share their views on how the research problem could be solved. De Vos, Strydom, Fouche and Delport (2005:299) posit that focus groups are used as a means to develop a better understanding of the feelings and thoughts of people about an issue under investigation. Participants in a focus group are chosen because of certain characteristics they share and which are related to the issue to be discussed by the focus group. De Vos et *al.* (2005:299) further state that the principal researcher creates a liberal environment in which the focus group members are encouraged to share their lived experiences, views and perceptions on the issue under investigation, their wishes and concerns. Under such an environment research participants engage with one another on the research problem without any pressure being put on them to reach consensus. The proceedings of the focus group meetings were recorded for accurate data capturing and later transcribed for data analysis purposes.

Data were also generated using a participant observation strategy, which according to De Vos *et al.* (2005:276), is a procedure in qualitative research that makes it possible to study phenomena in their natural and everyday set-up. The teachers developed a schedule of observing one another in class when one teacher would be presenting a particular topic using a certain Context-based strategy. These observations provided teachers with the opportunity to see how a particular strategy could be incorporated in the teaching and learning process. Teachers were also able to take note of the necessary requirements to use particular strategies and also what are the possible challenges in using each strategy. The observations further provided the research participants to assess the effectiveness of each strategy in addressing the research question. De Vos *et al.* (2005:276) state that of paramount importance about participant observations is the opportunity afforded to the research participants to listen, to inquire, to observe and write down notes during the observation. As participant observers the research participants were thus afforded what De Vos *et al.* (2005:277) call a dual role of data generator and data interpreter.

The principal researcher also engaged in one-on-one discussions on the research problem with other relevant individuals who could not be part of the core research team, due to distance and other commitments, but were recommended by research participants and were believed to have valuable information which could benefit the study. These one-on-one discussions were also recorded for accurate data capturing with the permission of the individuals involved.

1.5.3 Data Analysis

Data were analysed using a critical discourse analysis (CDA), where CDA is defined by Van Dijk as a field which has its focus in analysing texts in their different forms e.g. those which are in writing and those that are spoken. The aim of this analysis is to unveil the discursive sources of bias, inequality, dominance and power (Sheyholislami, 2001:1). Additionally, Vibhute (2016:724) points out that critical discourse analysis is an approach that cuts across many disciplines in the study of discourse which regard language as a form of social practice and it regards context of language use to be crucial to discourse. Vaara (2015:1) states that CDA has its roots in applied linguistics and was developed amongst others by scholars such as Fairclough, Van Dijck, Van Leeuwen and Wodak. CDA, according to Vaara (2015:1), is a systematic approach through which the constitutive role played by discourses in modern society can be studied.

The data in this study were analysed by using Fairclough's three-dimensional model. Ravn, Frederiksen and Beedholm (2016:2) explain that, according to Fairclough's model there are three levels at which data can be analysed separately, namely textual level, discursive practice level and social practice level. Vibhute (2016:726) explains that at the first level of analysis, i.e. textual level, a text can be any object being analysed, e.g. verbal, visual or verbal and visual texts. At the second level of analysis i.e. discursive practice level, discursive practice refers to how texts are produced and received in a specific context. Context can be either situational, i.e. where the focus is on the time and place of text production. It can also be intertextual where the focus is on who is the producer and who is the receiver of the discourse. The third level of discourse analysis refers to the social practices that operate behind the whole process of analysis and govern the power relations in discourse. Ravn *et al.* (2016:2) state that when covering all three the dimensions in this framework,

analysis will focus on: (i) the linguistic characteristics of the text, i.e., text analysis; (ii) processes associated with the production and consumption of the text, i.e. discursive practice; and (iii) the broader social practice.

Liu and Guo (2016:1078) further note that in Fairclough's approach to discourse analysis, text is the outcome of communication process, or discursive practice, which entails the acts of producing, distributing and consuming text throughout discursive practice, which are all shaped by social practice. Liu and Guo (2016:1078) also note the three steps or stages within these three-dimensional frameworks namely: description stage, the interpretation stage, and the explanation stage. Fairclough argued that when doing Critical Discourse Analysis, the starting point of analysis is the description of the formal and structural features of the text and second step is the interpretation of the relations between text and interaction. The last step in the analysis process is the explanation of the connections between interaction and the social context.

Data analysis tends to be a more complex phase in a research project as it requires knowledge in various procedures in the analysis process. This observation is made by Frisby *et al.* (2005:378), who note that data analysis turns out to be a challenging stage in a research process and it may not always be possible to engage all the research participants in this phase, because participants may not have the necessary knowledge to use various data analysis procedures. The principal researcher in this study undertook to analyse the data and shared the preliminary findings with the research participants, who were asked to provide their inputs on those findings before the final report was written.

At a textual analysis level the principal researcher analysed the data generated by doing a text examination of grammar and vocabulary used in the conversations between research participants. Analysis was done of the words and wording used by research participants when making reference to: (i) the problem of the study; (ii) the need for a Context-based approach in Economics; (iii) conditions necessary for a Context-based approach to thrive; (iv) possible challenges in adopting a Context-based approach; and (v) best practices where Context-based strategies have been used. At a discursive practice level, the focus was on how text was produced, distributed, transformed and on how it was consumed by the research participants.

The principal researcher focused on how texts produced during the data generation process drew from other texts or influenced other texts. Lastly at the social practice level, the analysis focused on the links between texts and the broader social practice, which influence them with a view to understanding the possible reasons for the production of such texts and the way they are interpreted.

1.6 VALUE OF THE RESEARCH

The study has the potential to help in the transformation of Economics teaching from being too abstract and classroom confined towards being more practice based. The Context-based approach proposed by the study will help the students to see the relevance of the subject Economics in their daily lives. Their ability to apply the economics theory in practical situations will improve and this will empower them to become independent and effective problem solvers. The study will also add to the literature on alternative teaching methods in Economics. This research project also has the potential to empower the research participants with research skills such that they are able to identify problems in their practice, as well as use their knowledge and resources collaboratively to find solutions to such problems. The collaborative nature of PAR seems to be one contributing factor to the empowerment of all research participants since it provides a platform where knowledge is shared, and various skills and resources are pooled together with the aim of finding a solution to a common problem. Dobrin and Schwartz (2016:260) argue that collaboration aims to blur what they refer to as the troubling boundaries between us and them by empowering members of the community to become researchers in their own right and who also have the legitimacy and capability to participate in research projects in their communities.

1.7 ETHICAL CONSIDERATIONS

Researchers are usually cautioned to consider some ethical issues when conducting the research. Reza (2007:31) asserts that while it is important that the researchers strive towards high ethical standards, priority and care must be given to issues that relate to the integrity of the research participants, informed consent and also to ensuring confidentiality and integrity of the data. MacDonald (2012:45) also notes a

number of such ethical principles which participatory action researchers should be aware of. Some of those principles were used as guidelines when this particular study was conducted. The following are some of the examples of those principles; the principal researcher should make sure that consultation has been done with all the relevant stakeholders, e.g. committees and other authorities who may be responsible to go through and approve the principles guiding the researcher before starting with the research project. All research participants must also be allowed to have an influence on the work, and the wishes of those who do not want to participate in the research project must be respected. It is also important to ensure that the research process remains visible and open to suggestions from others throughout. The principal researcher should also make sure that all the necessary permissions are obtained and take responsibility for maintaining confidentiality throughout the process.

There are certain questions which researchers always need to bear in mind that can help to avoid or minimise any potential harm a research project may cause and which can also help in dealing with potential conflicts that may arise during the research. Reza (2007:32) notes the following three questions researchers need to deal with: (a) how can researchers avoid doing harm to research participants?; (b) what can be done effectively to ensure confidentiality and anonymity if the researcher works in collaboration with research participants?; and (c) if the research project involving a number of participants is a continuous process that runs over time, how do the research participants establish relevance for the concept of informed consent? While keeping these questions in mind, Reza (2007:32). However argues that in a PAR project, the possible risk of acting unethically and causing harm to participants is minimal because PAR is an approach based on consensus by all the research participants who, amongst other things, are able to guide the research agenda, co-create knowledge with the principal researcher and take action democratically.

Taking these ethical consideration into account, the principal researcher first got informed consent from the students who were going to be part of the study and consent from other adult participants. Permission was sought from the research participants to audio-tape the focus group meetings and the one-on-one discussions. Research participants were also informed that the recordings would solely be used

for data analysis. The principal researcher also sought permission from the participating university and from the department of education to conduct the study. The participants in the study were assigned pseudonyms to protect their identity. The informed consent forms clearly indicated to the participants that their participation was voluntary and they could withdraw from the study at any time without repercussions and that the study did not pose any threat or risk. Participants were also made aware that the research project was purely for academic reasons and no financial reward was to be expected from participation.

1.8 CHAPTER SUMMARY

The chapter demonstrated that Economics teaching seems to be more teacher centred, highly textbook driven and classroom confined, which leads to the subject being taught in abstraction. This approach to the teaching of the subject appears to be one of the reasons why students find it difficult to relate to what they are taught and make the connection between the subject knowledge and their daily lives. The dominant approach in teaching the subject appears to be inclined towards mastery of the economics concepts, while focus on the real-life application of those concepts is minimal. It is against this background that the chapter introduced the problem study, which is the inability of students to apply Economics theories and abstract concepts in real life. The research question, i.e. ***How can the teachers create a Context-based learning environment to enrich students' application of Economics theories and abstract concepts to real-world problems?*** was introduced in the chapter together with the five objectives which the study pursued.

The literature reviewed, demonstrated that departure from a highly content-based approach to a more Context-based approach has a potential to provide students with opportunities to start practising and applying their subject knowledge in real-life situations, which will assist them to see the relevance and value of Economics in their daily lives. The chapter explained that a Context-based learning environment could be created with the by making use of the pedagogic methods such as Case method, Context-rich problems, Service-learning, and Problem-based learning.

The theoretical framework which underpins this study, i.e. constructivist theory was explained and the chapter demonstrated why constructivism was seen as a fitting

lens through which the study was viewed and how it contributes to the attainment of the goal the study pursued. Participatory Action Research (PAR), the methodology that was followed to conduct the study, was explained with the focus on, amongst others, the relevance of PAR to this study and the research cycle the study went through. The chapter further explained the data collection methods, the instruments used in capturing data and the method that was used to analyse data, i.e. critical discourse analysis. The potential value of this research was highlighted and the ethical issues that were taken into consideration and attended to when the study was conducted, were also explained.

CHAPTER 2 :
THEORETICAL FRAMEWORK

2.1 INTRODUCTION

The chapter introduces the constructivist theory, which is the theoretical framework in which this study is located, i.e. the lens through which the study is viewed. The historical origins of this theory, dominant approaches to this theory, as well as the main tenets which hold this theory together are explained in the chapter. Furthermore, the chapter makes a justification of the choice of this theory for this particular study and an explanation is given on how this theory contributes to the attainment of the objectives of this study. The chapter further explains the philosophical underpinnings of the study, i.e. ontological considerations, epistemological considerations, and axiology.

2.2 THEORETICAL FRAMEWORK: CONSTRUCTIVIST THEORY

This study is located within a constructivist theoretical framework. Lowenthal and Muth (2008:178) argue that constructivism entails a theory of knowing and learning. Constructivism as a theory of knowing is underpinned by the belief that knowledge does not exist in an objective world outside of the people, but instead it is constructed individually or socially by people. In addition, Jia (2010:198) also notes that constructivists are of the belief that knowledge does not live on its physical form and out of a specific entity. As a theory of learning, constructivists argue that learning is the process in which students construct their cognitive structures. Learning is viewed by constructivists as a process by which meanings are constructed and generated and the process is completed by interaction of the students' old and new knowledge. The students' previous experiences assist students in coding, processing and constructing their distinctive understandings of the new experiences they come across.

Constructivists posit that learning is constructed from within the individuals and therefore knowledge is not something that is delivered to a person. As Scheyvens, Griffin, Jocoy, Liu and Bradford (2008:53) note, the advocates of constructivism believe that knowledge is something which does not exist separately from the

knower. To this effect, Wang (2014:1552) argues that knowledge should not be seen as something that exists independent of a person, but as an active construction in human activity of knowing the world outside. This construction takes place in the environment when contact is made with other human beings and is therefore a result of social interaction. Bada and Olusegun (2015:67) assert that the view held by constructivists on learning differs with one where learning is perceived as process of passively transmitting information from the teacher to the student, i.e. a situation in which reception and not construction is the key. In addition, Kalpana (2014:27) points out that the central to constructivism is the belief that students play an active role in constructing their own knowledge and meaning from their experiences. This is done through the perceptions they make about things in the surroundings and by making sense out of the objects in a particular learning situation.

Furthermore, Wang (2014:1553) points out that constructivist learning theory stresses that learning is the central point and learner autonomy should be allowed. The understanding is that the teacher plays a role of a guide, organiser and assistant in learning process instead of being an imparter of knowledge. At the same time students actively participate in the process in a quest to go beyond the cognitive level of knowing and understanding of new information to a cognitive level where they are able to apply new knowledge, analyse, evaluate and criticise it. Lunenburg (2011:4) also notes that in a constructivist environment, students are assumed to possess conceptions and skills that they use to construct knowledge individually or collectively while the teacher's role includes creating a setting, giving challenges and providing support to promote cognitive construction by students. It is further assumed that, during group discussions, the teacher is responsible to guide student activities, to model behaviour and to provide examples so that student discussions result in meaningful conversation on the topic under investigation.

The primary goal of constructivism, according to Kalpana (2014:28), is to help students learn how to learn and this has a potential to enhance their critical thinking, increase their motivation and add to their autonomy. In a constructivist classroom, student learning is the focal point and not teacher's teaching. In such a learning environment, knowledge can be constructed individually or collaboratively. Knowledge constructed individually will be based on the prior knowledge which the student brings to the learning environment and knowledge that is constructed

collaboratively is depended on the contributions of other role players e.g. classmates and teachers. Furthermore, Bada and Olusegun (2015:67) argue that students remain active in the constructivist learning environment. They are engaged in applying their current understandings, noting relevant elements in new learning experiences and judging the consistency of prior knowledge, as well as emerging knowledge. With this active engagement in the learning process, students can then be able to modify knowledge. According to Collins (2008:5), the constructivist learning environment has the potential to promote development of students who are self-directed and yet interdependent. Such students will demonstrate ability in accessing and using a wide range of available cognitive structures to transfer learning to contexts they might still encounter.

In summing up what Constructivist theory is, Brandon and All (2010:90) identified four major assumptions believed to the basis of this theory. The first assumption is that learning is founded on the previous constructs which students have already made. This implies that it is through their current mental frameworks that students get to know the world. Students use their current mental frameworks to transform and interpret new information. The second assumption is that new constructions are the outcomes of the processes of assimilation and accommodation. When students are confronted with new information, which seems not to fit with their current mental framework, they are unable to assimilate that information and new zones of cognitive development or higher-order learning transpire through the accommodation process. Thirdly, it is assumed that learning is not mechanical but is taken to be an organic process of invention. With this assumption the constructivists believe that meaningful learning takes place when students demonstrate ability in hypothesizing, predicting, manipulating and constructing knowledge rather than merely memorising information, which is often regarded as rote learning. With the fourth assumption, constructivists assume that it is only when students are able to reflect on and link newly acquired knowledge to their current knowledge frameworks that meaningful learning can be said to be taking place.

In the same vein, Bada and Olusegun (2015:67) contend that the constructivists' perspective on knowledge construction revolve around two notions. The first notion holds that new understandings are constructed by students from their existing knowledge and this notion echoes the idea that a student's mind is not a *tabula rasa*

onto which new knowledge will be poured. Instead, students are perceived to come to learning situations equipped with existing knowledge that will influence the new or modified knowledge constructed from new experiences. The second notion regards learning as a process in which students are actively engaged in applying current understandings, noting relevant elements in new learning experiences, judging consistency of prior and emerging knowledge and modifying knowledge.

2.2.1 The Historical Background of the Constructivism Theory

Constructivism is not a solitary or combined theory, but is characterised by numerous viewpoints and is often placed in three categories i.e. social, psychological and radical or emancipatory constructivism. Yilmaz (2008:163), however, notes that these three categories have in common the epistemological assumption that posits that people do not discover knowledge or meaning, but they actually construct knowledge and meaning through their minds. Additionally, Doolittle (2014:489) maintains that even though Constructivist theory is broad and can be interpreted differently, it is associated with certain principles of learning derived from its different theories and models. According to these principles of learning, knowledge construction and meaning making entail individually and socially active processes and social mediation within cultural contexts. These principles of learning also suggest that knowledge construction is promoted by authentic and real-world environments and that it takes place within the framework of the learner's prior knowledge and experience. Furthermore, these principles hold that knowledge construction is integrated more deeply by engaging in multiple perspectives and representations of content, skills and social realms and that it is fostered by students becoming self-regulated, self-mediated and self-aware.

The roots of constructivism, according to Yilmaz (2008:165), are often attributed to the ideas of, amongst others, John Dewy, Jean Piaget, Lev Vygotsky, Jerome Bruner and Ernst von Glaserfeld. The ideas of these theorists led to different conceptions of construction, which have been classified under psychological, also known as cognitive constructivism, social and radical or emancipatory constructivism. These categories are differentiated primarily by three key areas, namely the subject of study, views on the development of cognitive forms, and the emancipatory power of the pedagogical approaches. In spite of the existence of this

categorisation of constructivism, Ciot (2009:1) asserts that psychological and social constructivism are two broad interpretations of constructivism which are held by contemporary educators. This assertion has also been noted by Lowenthal and Muth (2008:178), who state that cognitive (psychological) constructivism and social constructivism emerged as dominant perspectives on constructivism. The same observation is made by Schcolnik, Kol and Abarbanel (2006:13), who also identify cognitive and social constructivism as two main approaches in the constructivist theory.

In explaining how these two approaches were labelled cognitive and social constructivism, respectively, Lowenthal and Muth (2008:178) note that constructivism describes a theory of both knowing and learning. Lowenthal and Muth (2008:178) state that when explained as a theory of learning, the constructivists conceptualises learning as an outcome of construction of meaning which is depended on the individual's experiences and prior knowledge. This view was to be known as individual, psychological or cognitive constructivism. Furthermore, when constructivism is explained as a theory of learning, learning is believed to occur through construction of meaning in social interaction, within cultures and through language. This is the view that came to be known as social constructivism. However, the two approaches are not seen as being mutually exclusive, as they are both based on the idea that students learn by personally constructing their knowledge. The difference between cognitive and social constructivism is based on their main focal points, with the former having its focus on the role played by the mind in learning and the latter focusing on what the environment and interaction between students contribute to learning.

This study focused on these two dominant perspectives that comprise social constructivism, which evolved from Vygotsky and others, who believed that society and culture have an influence on knowledge creation and also on cognitive constructivism which developed from the work of Piaget, which considers learning as an outcome of construction of meaning based on an individual's prior knowledge and experiences. The historical development of constructivism can further be tracked to the work of John Dewey who, according to Bhattacharjee (2015:68), argued that education is based on action-knowledge and that ideas surface from a situation in which students have to draw out experiences that are meaningful and important to

them. Dewey further contends that human thought is practical problem solving and that problem-solving experiences occur in a social context, e.g. in a classroom where students collaborate in manipulating material and observing outcomes.

2.2.2 Dominant Approaches to Constructivism

2.2.2.1 Psychological (Cognitive) Constructivism

According to Bhattacharjee (2015:67), the origins of psychological constructivism can be traced back to the work of Jean Piaget who developed the theory of genetic epistemology. This theory analogised the development of the mind to the evolutionary biological development and drew attention to the adaptive function of cognition. Piaget identified the four stages through which human development move through, i.e. the sensor motor stage, the preoperational stage, the concrete operational stage, and the formal operational stage.

These four stages are outlined by Kalina and Powell (2009:242), who note that according to Piaget, in the sensor motor stage (zero-two years old) children start to notice the environment around them through their own senses and physical activity and also through language. The preoperational stage (two-seven years old) is the stage where language skills in children start to develop. However, children are still not yet ready to take hold of the thoughts of others at this stage. At this stage children start to differentiate pictures or symbols for different objects found in their immediate surroundings. Piaget identified a sub-stage within the preoperational stage that he named intuitive thought which is a stage where children begin to inquire about all the things they come across in their environment. The third stage, the concrete operational stage (seven-eleven years old), is characterised by logic starting to develop in the brains of children. This is evident from their demonstration of logical reasoning, which replaces intuitive thought. Higher levels of thinking become evident when children reach the formal operation stage (eleven-adulthood). At this stage they start to use abstract ideas to solve problems. These four stages of development, as identified by Piaget, relates to the learning that children are able to achieve at various stages of their childhood, as determined by logical development.

Kalina and Powell (2009:243) assert that Piaget's cognitive constructive theory demonstrates why it is important to understand what individual students need in

order to construct knowledge and to learn at an individual pace. This calls for teachers to be observant of students in trying to understand their level their abilities. An understanding of these developmental stages by teachers is important so that they can target the students' logical and intellectual grasp of concepts when they teach.

Piaget conceptualised that human intellect development goes through a process of adaptation and organisation. Adaptation is viewed as a process encompassing assimilation and accommodation. As noted from Kalpana (2014:27), Constructivist theory posits that learning is adaptive, because it combines newly acquired knowledge with the prior knowledge and allows for creation of new ideas. The adaptive nature of the learning process is explained by Doolittle (2014:487), with the assertion that in the learning process individuals first experience an event and will then attempt to understand it through their prior knowledge and past experiences. The initial understanding activates a goal directed response, which can be cognitive or behavioural. In the event that the response is not satisfactory, disequilibrium is caused in the mind. As this happens the individual will reorganise or adapt their earlier understanding in order to explain the unsatisfactory results. The whole exercise of event interpretation, cognitive or behavioural action, expected or unexpected results, verifying or reorganising understanding amounts to an adaptive process meant to make the individual's understanding and upcoming actions more viable.

Kalpana (2014:27) further notes that learning is described by Piaget as interaction of the two mental activities known as assimilation and accommodation. Assimilation refers to a mental process where new information is incorporated to pre-existing concepts, information or ideas. It basically refers to fitting new information into the existing information. Bada and Olusegun (2015:67) states that because of assimilation an individual will integrate new experiences into previous ones. This results in the development of new outlooks, rethinking of the past misconceptions, evaluation of what is important and alteration of perceptions by an individual. Accommodation is explained as a mental process of modifying pre-existing concepts based on new information or experience. In addition, Bada and Olusegun (2015:67) explain that accommodation means that an individual reframes the world and new experiences into his or her already existing mental schema.

In line with the view that individuals go through the mental processes of assimilation and accommodation in knowledge construction, Schcolnik *et al.* (2006:13) note that, according to Piaget's cognitive constructivism, students use their already built cognitive structures to interpret the environment and as they do so, they assimilate recently acquired information into their existing cognitive structures or schemas and they will understand the new information up to the capacity of their existing schemas. Furthermore, Schcolnik *et al.* (2006:13) note that the cognitive structures of students do not remain static, but are continually modified as new information is assimilated and accommodated by these structures. In cognitive constructivism, learning is seen as an ongoing interaction between the students' mind and the environment; hence the cognitive structures are said to be continually under construction.

Piaget's theories seem to focus more on developing an individual and on the active role of an individual in the learning process, but less on the role played by the greater socio-cultural context (Jones & Brader-Araje, 2002:3). According to the afore-mentioned authors, Piaget believed that knowledge is attached to action and that knowledge is constructed when newly acquired knowledge is actively assimilated and accommodated into the current knowledge. Piaget was also of the belief that the individual's understanding of reality remains under constant revision and restructuring as a result of new experiences a person becomes exposed to. This view is echoed by Kalpana (2014:27) with the argument that at the core of psychological Constructivist theory is the belief that an individual learns through a process of mental organisation and reorganisation of new information and experiences. Kalpana (2014:27) further asserts that psychological constructivists' main focus and interest are on the inner psychology of people and in individual beliefs, knowledge, self-concept or identity; hence they are also referred to as individual constructivists.

Piaget believed that cognitive development emanates from constant changes in internal mental structures identified by a sequence of reasoning skills that are different in quality and which result from integration and extension of prior levels of cognitive development into new cognitive levels. Piaget also noted that discovery and exploration are two important activities responsible for changes in the individual's mental structure (Doolittle, 2014:487). Kalina and Powell (2009:243) also regard assimilation and accommodation as two important concepts in Piaget's

theory. They involve the mental processes through which children go as they look for balance or equilibration. This theory explains that equilibration is the result of children moving from one developmental stage to the next and this transition is often marked by a cognitive conflict, which is a state of mental imbalance or disequilibrium when one tries to figure out newly received information. This theory on equilibration, assimilation and accommodation relates to the child's cognitive or individual ability to construct new knowledge within his or her stages of development and to resolve conflict.

At its core, psychological constructivism, as noted by Richardson (2003:1625), posits that students idiosyncratically and actively construct the meaning around phenomena, depending amongst others, on students' existing knowledge. The process of making meaning might happen in a social group setting that creates a platform for members to engage in sharing of meanings and making arguments those meanings. Formal knowledge is created once an individual within a group is in agreement with the nature and reasoning behind how a phenomenon is described and the explanation offered for its relations.

2.2.2.2 Social Constructivism

One of the prominent proponents of social constructivism, Lev Vygotsky, argued that learning is collaborative by nature and impacted on by culture and social environment. According to this theory, learning takes place in a social environment that is characterised by conversations, discussions and problem-solving activities (Ramsook & Thomas, 2016:129). Richardson (2003:1624) holds that social Constructivism theory propagates that factors such values, religious beliefs, ideologies, and politics are among the factors that have an influence on the bodies of knowledge that have been developed. Social constructivism can therefore be said to have its main focus on how understandings and formal knowledge about the world are formed by people. Doolittle (2014:487) further adds that social constructivism with its emphasis on interactional nature of knowledge posits that knowledge is constructed as a result of students' interaction with the environment and also through interaction with fellow students. In this way, the process of acquiring knowledge is seen as a series of actions leading to the building of internal models or representations of external structures that are shaped by, amongst others, an

individual's beliefs, culture, previous experiences and language, which is all based on association with other people, direct instruction and modelling.

Social constructivism is usually associated with the two notions, i.e. situated cognition and zone of proximal development (ZPD). Kalpana (2014:28) maintains that situated cognition is based on the belief that thinking is entrenched in social and physical contexts and not in the individual's mind. According to this belief, knowledge is embedded in situations in which learning occurs; hence it is important that a learning environment should as far as possible resemble real-life situations. This idea of situated cognition is closely linked to the use of the teaching strategies that are the components of a Context-based approach in Economics education proposed by this study. The second notion associated with social constructivism is the zone of proximal development advanced by Lev Vygotsky and which refers to certain tasks which the child finds difficult to complete when working individually, but which can be attained when a more capable peer or an adult can offer the child assistance.

It is noted by Bhattacharjee (2015:68) that Vygotsky's Social Constructivism theory suggests that learning environments must encourage interactions that are guided by an adult and that give children an opportunity to reflect on contradictions in knowledge and to change their previous conceptions by communicating with others. Jones and Brader-Arage (2002:5) argue that, according to this theory, learning is best understood in the light of others within an individual's world. Vygotsky describes this interconnection of an individual and others as the Zone of Proximal Development (ZPD) and explains it as the level of intellect an individual is likely to reach when he or she is assisted in the learning process by an adult or a peer who possess an expertise on certain issues. During the time or period an individual is being assisted by an adult or a more capable peer the individual is referred to as being ''other regulated'' which refers to the cues and scaffolding provided by those who are assisting him or her. As a result of this scaffolding the individual is enabled to progress through a number of steps leading to growth in intellectual capacity of the individual who in the process also becomes self-regulated. The importance of this Zone of Proximal Development for Vygotsky is that it provides a measurement of the individual's intellectual potential and not the individual's achievements. It was Vygotsky's belief that the child gradually internalises external and social activities, including communication with more competent others (Bhattacharjee, 2015:68).

The role of scaffolding in knowledge construction is also noted by Kalina and Powell (2009:241), who state that Vygotsky emphasised its importance in learning with his assumption that children learn more when they have support from peers, teachers or from adults. According to Vygotsky, scaffolding supports the learner to get to the next level of understanding. It is also believed that with scaffolding a unique type of internalisation will take place for each student. For example, a student will be required to perform a task that has some meaning to him or her. With the assistance from more capable peers, teachers or adults the student might be able to finish the task, something which could be difficult to do without the support offered to him or her by a peer, teacher or adult. This internalisation will also occur for each student at a different rate according to their own experiences.

Cognitive development, according to Vygotsky, is based on the student's ability to learn about tools that can be used socially (e.g. hammers, computers, pencils) and signs that are culturally based (e.g. language, writing, number system) by interacting with their peers and adults who can also help to initiate them into their culture. The result is that these culturally based activities provide social experiences that are internalised and later become part of the individual's mental functioning. According to Social Constructivism, knowledge is therefore believed to be the outcome of personal experiences in the society which are influenced by the person's socio-cultural history and which can lead to an altered representation of experience (Doolittle, 2014:487). Kalpana (2014:28) also notes that a social constructivist approach emphasizes the social contexts of learning and stress that knowledge is mutually built and constructed. The interactions of students will therefore give them a chance to exchange their views with one another and generate a common understanding related to a particular concept being studied. Scholnik, Kol and Abarbanel (2006:13) assert that although Vygotsky acknowledged the contribution of individual cognitive structures in learning, he was, however, of the belief that the social and interpersonal aspects of learning pave the way for the individual and intrapersonal aspects. He further emphasised the social roots and the effect of interaction in learning.

A brief historical background of Constructivism presented in the preceding paragraphs demonstrates that this theory is marked by numerous viewpoints, as articulated by different theorists and scholars over many years. Yilmaz' (2008:163)

asserts that Constructivism does not represent a single or unified theory, but it embodies multiple perspectives and plurality. Psychological, Cognitive or Individual Constructivism and Social Constructivism have emerged as the two dominant approaches to knowledge construction. They also have in common the epistemological assumption that knowledge or meaning is not gained through discovery, but it is an active construction by the human mind.

It is important to note the different points of emphasis resulting from various conceptions of Constructivist theory. Le Cornu and Peters (2005:51) argue that constructivism has been conceptualised in varying ways, with some emphasising individual cognitive processes, while others emphasize the social construction of the co-construction of knowledge. It is, however, noted that, despite these varying conceptions, many educators agree that constructivist methods of leaning represent a blend of cognitive and social perspectives. Knowledge from the cognitive perspective is personally constructed, while from the social perspective, knowledge is seen as being socially mediated. Krahenbuhl (2016:97) also maintains that despite the difference on how constructivism is conceptualised, there are common attributes which seem peculiar to all learning in the constructivist set-up. These attributes have been identified as, firstly, that students build their own meaning; secondly, learning is dependent on the understanding currently in place; thirdly, genuine learning tasks are important for meaningful learning to occur; and fourthly, social interactions are pivotal in learning process.

The difference between these two approaches is found mainly on the points of focus as noted by Richardson (2003:1625). It is worth noting that while both approaches assume that meaning or knowledge is actively constructed in the human mind, a psychological or cognitive approach focuses mainly on the processes of meaning making, which occur in the individual's mind and also on how the common meaning is created in a group situation. Richardson (2003:1625) further asserts that the idea of the development of shared meaning within the Psychological Constructivism acknowledges the social nature of formal knowledge development that occurs at general society level and knowledge creation that happens in social spaces like a classroom. Richardson, however, points out that the social aspect of knowledge construction, from the point of view of Psychological Constructivism, does not equate Social Constructivism in focus, conception or analytical level. Moreover, a

psychological approach does not usually give much attention to matters such as power, status, politics, and ideology like in Social Constructivism.

On the other hand, social approach's focus seems to be on how formal knowledge is created in the light of power, economic, social and political forces. It further focuses on the structure and epistemological framework within which that knowledge is embedded. It is from the work of Sjoberg (2007:3) that we also note that even though the focus points of constructivist theorists may differ, they basically all subscribe to more or less the same core ideas. Amongst others, the Constructivist believe that knowledge is actively constructed and not passively received by the student, which means that learning is not something imposed on the student from the outside. In addition to this, Scholnik *et al.* (2006:12) also state that with constructivist theorists, a commonly used metaphor of "the mind as a vessel waiting to be filled" is replaced with another metaphor of the "mind as an agent actively trying to satisfy its curiosity and resolve troubling issues". Constructivists therefore are of the belief that knowledge is not a commodity to be transferred from an expert, e.g. a teacher to a student, but rather a construct which has to be assembled in an active process of engagement and interaction with the environment.

Another core idea constructivist theorists subscribe to is noted by Sjoberg (2007:3), who states that students bring along their existing ideas about many phenomena in a learning situation and they hold individual ideas about the world. They further believe that some of these ideas may be contradictory to the accepted scientific ideas while it might be also difficult to change some of these ideas. Furthermore, constructivists hold that even though knowledge may be said to be personal and individual, it should however be noted that construction of knowledge by students occurs when they interact with the physical world, collaborate with others in social settings and in an environment where culture and language play a role. Komulainen and Al Natsheh (2008:4) further assert that students should use their skills and conceptions to construct the knowledge they need to solve problems presented by the environment. The community, other students, i.e. peers and teachers, also contribute to and encourage knowledge construction by, for example, providing the setting, posing challenges and offering support to an individual student.

In the analysis of the contributions made by Piaget, Vygotsky and Dewey to the Constructivist theory, Bhattacharjee (2015:68) states that Piaget brought the idea of transformation and development to learning, while Vygotsky came up with the idea that learning and development are integrally tied to communicative interactions with others. Scholnik *et al.* (2006:13) also maintain that Piaget shed light on the development of cognitive structures of students, while Vygotsky focused on the effect of social interaction in learning. Dewey contributed the idea that schools had to bring real-world problems into the school curriculum.

2.2.3 Justification for the choice of Constructivist Theory

The Context-based approach in Economics education presented in this study encourages the use of learning strategies that are student-centred and allow students to be active participants in making meaning of the learning experiences they confront, as well as to be co-constructors of knowledge. Within this framework, students are provided with an opportunity to apply their knowledge of Economics concepts and theories to real-world scenarios and in this way they gain a better understanding of Economics content. This seems to be in line with the key tenets of constructivist theory. Berns and Erickson (2001:1) state that according to this theory students construct knowledge through testing ideas based on their prior knowledge and experiences. Students further apply these ideas to new situations and integrate the new knowledge with pre-existing knowledge. Berns and Erickson (2001:1) further state that constructivists believe that students must participate actively in activities that encourage critical thinking and problem solving. Dalton (2010:252) argues that constructivism is an approach that is student centred, project or inquiry based and promotes active learning. Dalton (2010:252) further asserts that the nature of constructivism resulted in different innovative classroom methods, which permitted students to build their learning from within. Constructivism also posits that knowledge construction follows a process and is not a product that is delivered by one person to another.

Constructivism seems to be a fitting lens through which this study is viewed, as the main purpose of the study is to develop an approach in Economics education that aims to position students as co-constructors of knowledge who are able to analyse, synthesize, and evaluate new information and transfer it to other contexts, rather

than being mere recorders of information. The aim of such an approach is to capacitate students to move past the stage of knowing and understanding to a stage where they are able to apply their knowledge of Economics in real-life situations. Joshi and Marri (2006:199) note that constructivism is a relevant form of teaching and learning in Economics education, for the reason that concepts taught in Economics such as scarcity, markets and reserve banking are imbedded in real life and students can understand better them in action through experience. Apart from enhancing student understanding, learning through action and experience can also be fun to students, and has the potential to promote student engagement in the learning process.

The teaching and learning strategies such as Case method, Problem-based learning, Service-learning, and Context-rich problems, which are intended to form the Context-based approach in Economics teaching as proposed in this study, all seem to have the elements of constructivist theory of learning. With these strategies students are able to construct new knowledge themselves thus enhancing their ownership of such knowledge. The intention to use the afore-mentioned teaching and learning strategies to develop a Context-based approach in Economics education seems to resonate with the description of constructivism. This is noted from Yilmaz (2008:165), who states that, according to a constructivist theory, learning should not be seen as a passive process of receiving knowledge, as it involves an active process of constructing knowledge. This knowledge construction process will be influenced amongst other factors by the person's interactions and interpretation of new ideas.

The idea with the Context-based approach in Economics that aims to enrich the students' application of abstract Economics concepts is to facilitate a shift from one long-held belief that the goal of teaching is achieved when students are filled with knowledge and are able to recall and report it back, or when they leave the classroom knowing more facts than when they came in. Salisbury (2013:2), however, cautions that knowing does not simply mean remembering information to write a test or examination, but rather the retention of information for application in future endeavours. Salisbury's word of caution appears to be in line with some of the principles of constructivism noted by Yilmaz (2008:167) that learning is an active

process and that knowledge is not inborn, absorbed in passivity, but is something that is constructed by the student.

Effective teaching should enable students to use their knowledge beyond the classroom or the learning environment; hence, Salisbury (2013:5) asserts that constructivists believe that knowledge means the ability to receive information and convert it into workable data that can be used in one's daily life. Furthermore, Salisbury (2013:11) points out that constructivism not only teaches students about different tools, but it shows them how to use them effectively in everyday life.

The Context-based approach envisaged in this study aims to create a learning environment that provides students with opportunities to make connections between the concepts and theories they learn in class with the real world. This approach has the potential to improve students' understanding and application of these abstract concepts and theories. This aim dovetails the argument by Bada and Olusegun (2015:57) that constructivist learning environments have the potential to create transferrable learning, meaning that students are empowered to develop organising principles, which they can take from one learning setting to other learning settings. As students actively play a role in constructing knowledge, they are likely to take ownership of what they learn, preserve and use the new knowledge in their daily lives. Furthermore, as a result of grounding learning activities in a real-world context, students are stimulated and remain engaged as they continually ask questions and apply their natural curiosity to the world. Wang (2014:1552) notes that learning is facilitated when there is interaction between the students' internal knowledge structure and the outside world. To make this interaction possible, Wang (2014:1552) notes that students must first take part in a particular activity and afterwards reflect on the experiences provided by their participation in that activity. Wang (2014:1552) further notes that as they are actively engaged in the learning process, students develop the ability to personalise key concepts and make connections between theory and practice.

Constructivist learning strategies seem to be relevant to the successful implementation of the Context-based approach in Economics education proposed by this study, for they emphasise the importance of teaching Economics by using relevant contexts, recognising students' prior knowledge and interactions with others

as being foundational to the construction of new knowledge. Komulainen and Natsheh (2008:6) maintain that Constructivism theory postulates that learning is contextual and should be based on concrete experiences, as new knowledge is highly dependent on context and should therefore not be presented in an abstract way independent of meaningful context. Furthermore, Komulainen and Natsheh (2008:6) argue that Constructivism theory postulates that learning is dependent upon unique prior conceptions brought to the learning situation by the student. This contention seems to be driven by the idea that old knowledge serves as the base on which new knowledge must be integrated. The student must construct meaning himself or herself and he or she must organise and reorganise knowledge until it fits with prior conceptions.

A similar view is held by Amineh and Asl (2015:11) in their argument that learning is a process of construction where students build their inner pictures or sketches of knowledge, i.e. a personal interpretation of knowledge. If what the student encounters is not in line with how they understand things, their existing knowledge can change to fit into the new experience. The student can always modify the interpretation of the experience, its structure and linkages, thus forming the base for new knowledge. Komulainen and Natasheh (2008:6) also note that the Constructivist theory holds that learning is also dependent on shared understandings that students negotiate with others. This is because, together with their peers and teachers, they all bring personal beliefs, individual feelings and own knowledge to the learning environment and through their daily interactions they negotiate a shared understanding of knowledge.

Constructivism as a theoretical framework is seen as being relevant for this study, because it is held together by similar tenets to those that form the basis of a Context-based approach in Economics education proposed by this study. This approach aims at assisting students to make meaning of the economic theories and abstract concepts, see their relevance in daily life and apply them to real-life situations. Mogashoa (2014:57) notes that in constructivism the emphasis is on the making of meaning and also in the real-life application of meaning. Constructivists believe that teaching and learning should connect theoretical concepts with real-life applications and should also strive towards situated cognition. Situated cognition is a concept that states that knowledge rests in an activity related to a social, cultural and physical

context. In addition, Collins (2008:2) argues that constructivist learning can be promoted by using case studies and projects that are based on real-life experiences. This argument is based on the belief that such activities have the potential to provide students with a learning space that enhances their prospects of meaning construction and the application of theoretical knowledge.

2.2.4 Principles of Constructivist Learning Theory

It has already been explained that the goal of a Context-based approach in Economics education is to create a leaning environment that provides opportunities for students to link the economic theory and concepts which are often taught in abstraction with the real world. This will enrich the students' ability to apply those theories and abstract concepts in practice. The learning environment envisioned by this study seems to have the potential to help students relate the classroom theory to the outside world, as it proposes the use of authentic contexts when teaching such abstract theories and concepts. Constructivist learning strategies have the potential to provide students with opportunities to learn the Economics theories and concepts and be able to put them to practice. Collins (2008:5) notes that the goal of Constructivism is to inculcate elements of self-directedness and interdependence in students and develop their ability to access and make use of a variety of cognitive structures to transfer learning to contexts they may still come across.

2.2.4.1 Recognition of Prior Knowledge

Recognition and actualisation of prior knowledge may be used in learning to reveal gaps in the knowledge of students and also to encourage their active engagement in learning. Wang (2014:1553) explains that Constructivist learning theory maintains that in addition to acquiring and understanding new knowledge, students should also demonstrate abilities in analysing, checking, and criticizing new knowledge during the learning process. In this learning environment, the teacher has to stimulate students' interest in learning and motivate them to learn. The teacher should then connect current content with students' prior knowledge and experiences as it is believed that students do not come to class as empty vessels to be filled with knowledge. Students are assumed to have gained certain knowledge and experience based on their past life and study. Students are also deemed to have

their own opinions about everything. Bhattacharjee (2015:65) concurs with Wang's assertion in stating that under a Constructivist theoretical framework, learning builds upon students' prior knowledge called schema and it is passed through the students' pre-existing schemata. Constructivists further believe that learning becomes more meaningful when students are actively engaged in the learning process, instead of just being passive recipients of knowledge.

A similar perspective on the importance of recognising previous knowledge in leaning is held by Woldab (2013:199), who argues that because learning starts within students' previous knowledge, the teacher needs to understand the students' mental schemata and experience, as this will assist in the creation of an effective experience that will result in optimal learning. Collins (2008:2) also urges that teachers should be cognisant of students' prior knowledge, which deserves to be recognised and which may be useful in constructing new meaning. The idea that meaningful learning occurs when teachers work on the prior knowledge of students, stems from the constructivist argument expressed by Woldab (2013:198) that new ideas are formed when students modify or change the old ideas they previously formed. Effective learning takes place when students rethink old ideas and draw new conclusions about new ideas, which may, however, conflict with the old ones. Woldab (2013:199) further states that the constructivists therefore believe that the individual's previous knowledge is the starting point for learning and as such the teacher needs to understand students' prior knowledge. The assumption is that when teachers understand students' prior knowledge they will be able to create effective learning experiences that lead to optimal learning. Bhattacharjee (2015:66) also points out that information will start to make sense to students when they are able to connect the new information to their prior knowledge. Students may be able to make such connection by comparing, questioning, challenging, investigating, accepting or discarding old information and beliefs.

Brandon and All (2010:90) note that students' previous constructs serve as the foundation of the learning process, as constructivists believe that students use their existing mental frameworks to know the world and that they use previous learning to transform and interpret new information. In agreement with this, Jia (2010:198) maintains that even though students do not know some issues, they may use their previous experiences and cognitive abilities to form special explanations and

assumptions. Students' previous knowledge and experiences should thus be used as starting points in teaching and should also be used to introduce students to generating new knowledge from the previous one. Jia's argument is accentuated by Mogashoa (2014:52), who also note the constructivists' argument that knowledge is created as a result of the interaction of existing knowledge, beliefs, ideas, events and the activities that individuals come across.

2.2.4.2 Active Engagement in Knowledge Construction

Students' active involvement in the learning process is seen as one of the key principles present in various descriptions of constructivism. Shively (2015:129) attests to that in stating that central to many principles of constructivism is the active participation of the students in the learning experiences. Shively (2015:129) further argues that meaningful participation in learning occurs when students are engaged with real-life experiences that also require of them to use their own understanding to deal with the problems presented by such experiences. Students should further grapple with big ideas or primary concepts in ways that enhance thinking. They also need exposure to contextual and holistic learning experiences. In the same vein, Briede and Pēks (2014:84) assert that constructivists believe that a student should use self-experience to actively construct knowledge; hence, they argue for a shift from an approach where the teacher directly transmits information to a student.

The need for active student participation in the learning process is also highlighted by Shively (2015:129), who asserts that in a constructivist learning environment, students are seen as co-constructors of knowledge who are required to use their thought processes and their self-experiences actively in constructing knowledge. This learning environment also empowers students to take control of their own learning, to improve their learning skills and also to do self-assessment of their learning outcomes. In addition, Bhattacharjee (2015:66) maintains that for constructivists, students should not be treated as passive objects who are to receive and store new information, since it will be difficult for them to process or transfer a passively received information. A constructivist learning environment, instead, requires of students to make a purposeful efforts aimed at making sense out of the information which they learn so that they can make use of it in new situations. They

are also required to create knowledge and manipulate it to fit their belief systems and by doing this, they will be able to own it.

In line with a paradigm shift from knowledge transmission to knowledge construction, Mogashoa (2014:52) notes that learning is a process by which knowledge is actively constructed and is not something transferred from one person to the other, while teaching is seen as a process that supports that construction and not the communication of knowledge. Students are regarded as knowledge constructors and active entities seeking meaning and their personal experiences serve as the basis for knowledge construction. Lunenburg (2011:4) also argues that under constructivism, students are assumed to construct their own knowledge, not only individually, but also collectively, for instance, when he or she is involved in a cooperative learning group, a student engages in a collective process of creating ideas with fellow students. The engagement of students in these collaborative learning exercises enables them not only to reflect on their own ideas, but also to reflect and comment on ideas of their peers.

The notion of student active engagement in meaning making and knowledge construction held by constructivists is highlighted by Woldab (2013:199) in pointing out that in essence, constructivism contends that it is through their experiences that students are able to construct their knowledge and meaning actively. This is a contention which philosophically relies on the belief that reality may only be known through experience. Reich (2007:11) also notes constructivists argue that the learning process should start with some activity to be done and that the required stimulation of senses of perception, memory, imagination, and judgement should result from the conditions and the needs of the activity being undertaken. Students therefore must be provided with multiple modes of experiencing and should have the ability to use, expand or change what they have already experienced with further experiences.

2.2.4.3 Role Change

The various components of a Context-based approach to Economics education, which is proposed by this study require that the teacher should shift from an accustomed role of knowledge transmitter who heavily depends on a direct chalk and talk mode of teaching, to the role a facilitator, guide and supporter of teaching

and learning activities. This role change seem to be much in line with the constructivist view expressed by Bada and Olusegun (2015:68) that one of the basic characteristics of constructivist learning environments is that the teacher plays a role of a facilitator or a guide. The role of the teacher is no longer pouring knowledge into passive students who wait like empty vessels to be filled. The teacher now assumes the role of a facilitator, coach and mediator, a role that will not only prompt students to develop and to do self-assessment of their understanding and learning. This role also requires of the teacher to support students in the learning process.

The change in the role of the teacher in a constructivist learning environment is also noted by Ramsook and Thomas (2016:128), who state that the teacher plays the role of a facilitator of learning who mentors and guides students in constructing their own meaning. Teachers need to provide students with activities that are of interest to them and that will engage them in active learning. These activities will include authentic experiences that challenge students to use their prior knowledge, as well as to explore and solve problems. Constructivism thus moves the teacher from a customary role of a dispenser of knowledge to a provider of opportunities and incentives for students to build up knowledge. In addition, Ultanir (2012:195) argues that constructivism requires that besides being a guide and facilitator, the teacher also needs to be a co-explorer in the learning process. In this role the teacher is the one who constantly encourages students in questioning, challenging and formulating their own ideas, opinions and conclusions. In agreement, Woldab (2013:200) further argues that the teacher abandons the role of factual knowledge transmitter and becomes a motivator who encourages students to construct knowledge by providing them with examples and illustrations, and by engaging them in discussions.

In the same vein, Yilmaz (2008:170) proposes that ways to develop students' cognitive and higher-order thinking skills may include, amongst others, to pose to them problems of emerging relevance, to structure learning around primary concepts, to seek and value their opinions, to adapt curricula to address students' suppositions, and to assess student learning within the context of teaching. Additionally, Woldab (2013:200) states that the teacher also has the responsibility to guide students in controlling their cognitive functions, in mediating new meanings from knowledge that currently exists, and in creating an awareness on current structures of knowledge. The implication of the change in the role of the teacher

under constructivist learning environment, according to Amineh and Asl (2015:14), is that as a facilitator of learning activities the teacher does not tell, but instead the teacher poses questions, provides support from the back and from the sides, and does not lecture from the front. Moreover, the teacher provides guidelines and creates a conducive environment that encourages students to figure out answers and conclusions on their own, rather than to give them answers according to a predetermined curriculum. Moreover, the teacher will engage in continuous and interactive dialogue with students rather that giving a monologue.

2.2.4.4 Learning as an Activity in Context

This study argues that Economics students will be in a better position to understand the subject content that is dominantly taught theoretically and in an abstract manner if authentic, real-life contexts are used to demonstrate the relevance of Economic theories and abstract concepts. This also has the potential to enhance the ability of the students to apply such theories and concepts in their daily lives. Komulainen and Al Natsheh (2008:6) assert that learning is contextual; it is an activity that should be based on concrete experiences, as the meaning of the newly constructed knowledge depends very much upon its context. Content should therefore not be presented in an abstract manner and independent of any meaningful context. In agreement with this, Woldab (2013:199) argues that learning should happen in genuine environments for the reason that experience contributes immensely towards creating precise illustrations of reality, mutually agreed-upon meanings, and logical models of reality. In addition, learning experiences that students are exposed to should be relevant to them, because their relevance can boost student motivation to learn and to build more adaptable knowledge. Experiences that encompass applicable knowledge and skills have the potential to provide students with mental processes, social information and the personal experiences they need for enriched functioning on daily basis.

Huali (2011:642) points out that Constructivist theory contends that learning is linked to a certain situation. The implication is that when students learn in situations that are similar to the real world, they can make use of their current knowledge to assimilate knowledge and give it new meaning. Huali (2011:643) further states that for students to complete the construction of knowledge, they should be exposed to

the environment of the real world so that they can feel and experience it, rather than just listening to people's narrations of the real world. Teachers should therefore not just be concerned about the effective transfer of knowledge, but should also be concerned about the experience and impressions students gain in the learning process. Schcolnik *et al.* (2006:13) reiterate the contention that learning should be an activity in context by stating that students' development of knowledge is shaped by, amongst others, the activities in which they take part as well as the context of those activities. Additional to this contention, Briede and Pēks (2014:87) maintain that learning should be treated as an activity in context, as students learn coherently with the experiences, fears, prejudices and views. For this reason, learning should thus be viewed as a process and part of the students' lives.

The notion that learning is an activity in context is also held by Reich (2007:11), who argues that learning should always take place within a context and in an environment that promotes social interactions, for instance between a student and other students, students and teachers and also between the students and the subject matter. It is important that an environment that is receptive to the students' own actions and which encourages the discovery of problems and solutions from the students' point of view must be created. The creation of such an environment improves the prospects that learning will be situational and relational.

2.2.4.5 Self-regulation and Autonomy

Meaningful learning is often said to occur in environments that promote the active participation of students in knowledge construction and meaning making, because in such environments, students' views and opinions are valued and acknowledged and the responsibility for learning rests on their shoulders. Rote learning, which is a technique in which students learn through memorisation of information through repetition and drilling of information and where students passively receive knowledge is therefore replaced by active learning. The components of a Context-based approach, which is proposed by this study, seem to have the elements of such a learning environment, which is often referred to as a constructivist learning environment. Wang (2014:1552) maintains that since Constructivist learning theory posits that students play an active role in meaning and knowledge construction, the

emphasis of the theory is that learning is at the centre in the teaching and learning process and student independence should be allowed and promoted.

Woldab (2013:200) argues that under Constructivist theory, students are not subjected to the passive reception of knowledge, but are rather given a role of active constructors of knowledge and meaning. Students are therefore viewed as knowledge co-constructors and should therefore be active in mental manipulation and self-organisation throughout the learning process. This will require of the students to be able to control their own cognitive functions, mediate new meanings from the current knowledge and create an awareness on the existing knowledge structures. The view that students are co-constructors of knowledge and should be active in the meaning making process is echoed by Doolittle (2014:486) in explaining that student autonomy is a concept which emphasise that the students are active participants in the learning process and are assumed to be responsible for their learning. Vianna and Stetsenko (2006:90) further contend that Constructivist theory posits that the students' thinking capacity is developed when the student actively constructs action schemas. Under this theory learning is believed to be a process that is self-regulatory and which requires solutions to cognitive conflicts between current individual models of the world and students' newly gained insights. On the other hand teaching is now considered to be a process which provides meaningful problems aimed at encouraging and facilitating knowledge construction.

Student self-regulation and autonomy in the learning process, according to Wang (2014:1552), mean that students are able to manage their own study, which includes setting learning objectives, self-monitoring and self-evaluation. Student autonomy means that instead of students passively receiving knowledge from the teacher, they should be able to analyse, evaluate and criticize new knowledge during the learning process. Teachers should not try to coercively impart new knowledge to students, but should gradually plough in new knowledge and experience using the students' existing knowledge and experiences as basis. Teachers are thus required to recognise and acknowledge students' prior knowledge and experiences. Learning environments that encourage students' autonomy and self-regulation are also believed to be democratic. Reich (2007:12) points out that freedom and participation are two powerful resources in learning, where freedom means that students have latitude in preserving and expanding the spaces that empower them to take their

own direction. This will require of teachers also not to restrict learning to an uncritical adaptation of knowledge, but they should instead provide opportunities for individual inquiries, interpretations and judgements. Extensive student participation in the meaning making and knowledge construction process plays a critical role in assisting students to become autonomous and self-regulated.

2.2.5 Philosophical Underpinnings of a Constructivist Theory

The theoretical framework explained in the preceding section outlined the theoretical position or lens through which this study is viewed. Additional to the theoretical position of the researcher, there are also philosophical considerations that impact on how the researcher perceives reality and on how people get to know what they know and what constitutes acceptable knowledge. Wahyuni (2012:69) notes that there are two main philosophical dimensions to distinguish between existing research paradigms, i.e. ontology, which describes the position on the nature of reality and epistemology, which relates to the view of what constitutes acceptable knowledge.

2.2.5.1 Ontological Dimension of Constructivism

Blanche, Blanche, Durrheim and Painter (2006:6) state that ontology specifies the nature of reality and what can be known about it, while Wahyuni (2012:69) describes ontology as the view of how one perceives a reality. On the other hand, Dillon and Wals (2006:550) posit that ontology focuses on what we are dealing with, i.e. what the research that is underway is all about, for instance, focusing on people's knowledge, their attitudes, the words they use or does it focus on the number of books in the school library. Bryman (2016:13) argues that the nature of social entities is the major focus of questions of social ontology. These questions seek to find out if social entities can and should be considered objective entities that have a reality external to social actors, or whether they can or should be considered social constructions, built up from the perceptions and actions of social actors. In addition, Chilisa and Kawulich (2012:1) state that ontology concerns itself with whether people are of the belief that only one verifiable reality exists, or whether there exist numerous realities that are socially constructed. Greener (2011:6) asserts that when one takes questions of ontology into consideration, the person thinks about issues such as whether the world exists independently of his or her perceptions of it.

Ponterotto (2005:130) asserts that in what is known as relativist position, constructivists believe in the existence of multiple and socially constructed realities, contrary to the belief that there exists only a single and true reality. Constructivists are of the belief that reality is personal and a factor such as the context of the situation can influence it, i.e. the individual's experience and perceptions, the social environment and the interaction between the individual and the researcher. Chilisa and Kawulich (2012:10) further state that for constructivists, reality is a personal or social construct that depends on an individual's mind. It is also seen as being confined to context, space, time and individuals or group in a given situation and cannot be generalised into one universal reality.

Central to constructivism, as Le Cornu and Peters (2005:50) assert, is the belief that students are active participants in constructing meaning and that knowledge should not be seen as something constant that exists on its own separate from the student. Constructivists rather view learning as a process of accommodation or adaptation, based on new experiences or ideas and they further believe that there is not only one verifiable reality but there exists multiple, socially constructed knowledge. Bryman (2016:19) asserts that constructivism is an ontological position that social phenomena and their meaning are constantly being accomplished by social actors. The implication of this is that social phenomena and categories not only result from social interaction, but they are in a constant state of revision. Wahyuni (2012:70) seems to be in agreement with Bryman's assertion by stating that constructivists believe in a multiple, socially constructed reality which is subjective and may change.

2.2.5.2 Epistemological Dimension of Constructivism

Greener (2011:4) explains that epistemology is the theory of knowledge. It is concerned with what knowledge is and what counts as good knowledge. Dillon and Wals (2006:550) maintain that epistemology refers to how people make knowledge, e.g. do we look for patterns and themes in what people do when they answer our questions, do we give people tests, or do we observe what people do and infer their thoughts from their actions? Wahyuni (2012:69) contends that epistemology refers to the beliefs on the way to generate, understand and use the knowledge that is regarded as being acceptable and valid. An epistemological issue, according to Bryman (2016:13), refers to the question of what should be regarded as acceptable

knowledge in a discipline. Blanche *et al.* (2006:6) maintain that epistemology specifies the nature of the relationship between the researcher (knower) and what can be known. The main issue is whether the social world can and should be studied according to the same principles, procedures and ethos. Epistemology, according to Doolittle (2014:486), has its focus on what is the essence of knowledge and what is the process by which the knower comes to know. Chilisa and Kawulich (2012:1) further point out that epistemology asks questions such as: What are the sources of knowledge? How reliable are these sources? What can one know? How does one know if something is true? Ciot (2009:1) argues that constructivism is an epistemology, a learning or meaning making theory that explains the nature of knowledge and how human beings learn. From this theory we learn that individuals create or construct their own new understanding or knowledge based on what their existing knowledge, beliefs, ideas, events, and activities are with which they come into contact.

Constructivist epistemology seems to be balanced on the pillars noted by Doolittle (2014:486), which are as follows. Firstly, the construction of knowledge is deemed to be an individually and socially active process; secondly, the individually and socially active process of knowledge construction is adaptable as its end result is to make one's thoughts and behaviours achieve the desired results relative to changing one's goals, while thirdly, a person's understanding of his or her experience is based on the individual and social interpretation of such an experience. These pillars reiterate the stance by constructivist on knowledge that it does not exist independent of the knower and as Gray (2009:18) puts it, constructivism rejects the objectivist epistemology that reality exists independently of consciousness, meaning there is an objective reality out there. Instead, constructivists maintain that truth and meaning do not exist in some external world, but meaning is constructed by individuals and is not something discovered from out there. Ponterotto (2005:131) argues that constructivists advocate a transactional and subjectivist position that posits that reality is socially constructed and the interaction between the researcher and research participants is of vital importance to capturing and understanding the lived experiences of the research participants. In agreement, Chilisa and Kawlich (2012:10) also argue that constructivists believe that knowledge is subjective, as it is constructed in a society and is mind dependent. For constructivists, truth lies within

the human experience and for this reason, statements on what is true or false are therefore culture bound, and historically and context dependent, even though some can be universal. In the same breath, Wahyuni (2012:70) also notes that the constructivists maintain that knowledge is subjective and socially constructed and that constructivists focus upon the details of a situation, the reality behind these details, subjective meanings and motivating actions.

2.2.5.3 Axiological Perspective of Constructivism

In addition to the two philosophical dimensions i.e. ontology and epistemology, which have been explained in the preceding paragraphs Wahyuni (2012:69) further identifies axiology and methodology as two basic beliefs that have an effect on the way to investigate reality. Axiology is concerned with ethics, encompassing the role of values in the research and the researcher's stance in relation to the subject studied. Dillon and Wals (2006:550) assert that axiology relates to ethical considerations and the researcher's philosophical viewpoints, e.g. do we take a positivistic stance, or use feminist epistemologies, or do we involve participants in our research? Methodology refers to a model for undertaking a research process within the context of a particular paradigm. An extensive discussion on methodology will be done in chapter four of this study.

Axiology, as further explained by Ponterotto (2005:131), concerns the role of the researcher's values in the scientific process. Chilisa and Kawulich (2012:10) assert that constructivists maintain that since reality is mind constructed and mind dependent and since knowledge is subjective, social research is also value bound and value laden. This constructivist argument stems from their belief that an individual researcher is influenced by his or her values, which have an influence on the paradigm that one chooses for the research, methods chosen for data generation and analysis, how findings are interpreted, and on how findings are reported. Wahyuni (2012:70) posits that constructivists maintain that research is value bound and since the researcher is embedded in the research process and cannot be separated from the research, the research will thus be subjective. Ponterotto (2005:131) argues that constructivists maintain that the researcher's values and lived experiences cannot be separated from the research process and as a result the researcher should acknowledge and describe his or her values, but not eliminate

them. The epistemological stance of the constructivists that requires close and interpersonal contact with the research participants, in order to facilitate their construction and expression of the lived experience being studied, seems to be the reason why it becomes difficult for the researcher's values to be separated from the research process. Participatory Action Research was deemed to be a relevant research approach for this study, as the aim was to understand the problem under investigation and propose solutions from the lived experiences of the research participants who would be seen as equal and co-constructors of knowledge in the study.

2.3 CHAPTER SUMMARY

The chapter provided descriptions of Constructivist theory and from the various descriptions offered, constructivism was explained as a theory of both knowing and learning. Constructivism as a theory of knowing explains that knowledge does not exist independently and apart from a person; instead, people construct knowledge independently or collectively. In explaining constructivism as a theory of learning constructivists argue that learning is the process in which students construct their cognitive structures. Learning is seen as a process through which meanings are constructed and generated and this process is completed by interaction of the students' prior and new knowledge. The chapter also explained that in a constructivist learning environment, student learning becomes a focal point and not teachers' teaching. In such an environment knowledge can be constructed individually and this depends on the prior knowledge which students bring along. Constructivists further assert that knowledge can also be constructed collaboratively and this depends on what other role players such as classmates or teachers contribute. The chapter further explained that learning how to learn is the primary goal of constructivism and when students know how to learn, their critical thinking skills are developed, their motivation to learn is increased and they become autonomous learners. The roots of constructivism were traced to the ideas of, amongst others, John Dewy, Jean Piaget, Lev Vygotsky, Jerome Bruner and Ernst von Glaserfeld. These ideas led to different conceptions of knowledge construction, which have been classified under psychological constructivism also known as cognitive constructivism, social constructivism and radical or emancipatory

constructivism. The chapter explained that cognitive constructivism and social constructivism emerged as dominant perspectives on constructivism among contemporary educators.

The chapter argued that a constructivist learning environment is based on the use of various strategies that develop students' ability to construct learning from within. It is also argued that knowledge is constructed through a process; it is not a parcel that can be delivered. The chapter argued that constructivism is a relevant form of pedagogy in Economics as the subject deals with real-life concepts such as markets, scarcity and money and banking which students can understand better when they experience them. A distinction of constructivism from other existing research paradigms was made by elaborating on the two philosophical considerations in research, i.e. the ontological stance and the epistemological stance of constructivism. Additionally, the axiological stance of this theory was presented. Lastly, the chapter introduced PAR, which is the research methodology followed to conduct the study.

CHAPTER 3 :
REVIEW OF RELATED LITERATURE ON A CONTEXT-BASED APPROACH

3.1 INTRODUCTION

This chapter will outline the nature of the subject Economics and highlight the dominant teaching approach to this subject. The seeming limitations of this approach in achieving some of the objectives of Economics teaching will also be highlighted. The chapter will also demonstrate the need for a shift from a more Content-based approach towards a more Context-based approach in Economics education. The relevance of Context-based approach in Economics education will be illustrated through a review of related findings on the challenges faced in Economics teaching and learning and through a review of literature on the Context-based learning strategies. The chapter further explains different components of the envisaged Context-based approach aimed at creating a teaching and learning environment that enhances students' application of Economic concepts and theories to the real-world situations. The conditions that are optimal for the successful implementation of each component and the plausible challenges related to the incorporation of each component in the teaching of Economics are identified in the chapter. Recommendations are also made on measures that may be used to address the identified challenges. The benefits and evidence of the success of various components will be highlighted.

3.2 THE NATURE OF THE SUBJECT ECONOMICS AND ITS DOMINANT TEACHING APPROACH

The subject Economics deals with many abstract models, concepts and theories which students often find difficult to understand and see their connection and how to apply them to their daily lives. Demircioğlu *et al.* (2013:628) argue that students are often introduced to abstract concepts in early ages, and usually find such concepts difficult to learn and visualize. Students are therefore required to possess abstract reasoning competency and, if not, they end up having a wrong understanding of those concepts. According to the Curriculum and Assessment Guide (Curriculum Development Council, 2007:35), to master the subject Economics, the students are

required to develop an understanding of connecting the concepts they learn in this subject with real-world events. However, this discipline seems to be very challenging for students because of its high level of abstraction. Gilbert (2006:958) maintains that students might find it difficult to form a mental schema when they simply acquire a large number of isolated facts, as they cannot develop a sense of how to give meaning to what they are learning, which can result in low engagement in class by students, rote memorisation, and afterwards forgetting the material.

Economics teachers often confine the teaching of Economic theory to the classroom, which they present through lectures, and class discussions, while at the same time they neglect the application of this theory to the world outside. As a result, students find it difficult to recognise that there is a connection between that theory and their daily lives (McGoldrick, Battle & Gallagher, 2000:45). Ziegert and McGoldrick (2008:39) state that one of the goals in Economics education is to help students to think like Economists, a phrase that has become a buzzword in Economics education. This goal can be achieved by providing students with Economic skills they can apply in their daily lives and the content they will use to make effective economic decisions. However, Ziegert and McGoldrick (2008:39) are of the view that it is not a foregone conclusion that a student completing a course in Economics, even with high marks, can think like an Economist and apply their economic understanding outside of the class situation. This view is echoed in a statement by Hugg and Wurdinger (2007:191) that “being book smart is one thing, while demonstrating application is quite another”. McGoldrick *et al.* (2000:45) maintain that while students need to develop the ability to link the Economic theory learnt from the textbook and in class with the actual life outside of the class, it may be difficult to stimulate this ability if the teaching of Economics is confined only to the classroom.

The teaching of the subject also demonstrates that the predominant method of teaching the subject is still the Lecture method, which is referred to by others as chalk and talk, where the teacher assumes the centre stage in the class as the transmitter of knowledge in the classroom. In this set-up the students are passive recipients of knowledge whose main activity in class is to listen to the teacher presenting some seemingly remote theories and concepts and to write notes. This way of teaching seems to focus on rote memorisation and recall of factual knowledge while focusing less on providing the students with contexts within which

they might be required to apply the concepts and theories they have learned in class. This teaching and learning environment seems to do little to achieve the main goals of teaching economics, i.e. Economics literacy and thinking like an Economist. While not dismissing or denigrating the Lecture approach, Zhang, Zhang and Seiler (2014:31) reckon that this approach may be sufficient when communicating definition of concepts and other information, but may be lacking when it comes to teaching students abstract theories. In the light of this, Broman Bernholt and Parchmann (2015:144) note that there is a need for a paradigm shift from the emphasis on lower-order cognitive skills, and rote algorithmic teaching to the achievement of higher-order cognitive skills.

3.3 A CONTEXT-BASED APPROACH IN ECONOMICS EDUCATION

In order to achieve the main goals of teaching Economics, there is therefore a necessity to find an alternative approach or approaches to presenting Economics' content. Hervani and Helms (2004:269) note that a teaching style that is effective creates a learning environment which assists students in the application of classroom learning to real-life situations. One such approach is the use of Context-based learning, which aims to link the theoretical knowledge with the daily lives of the students. King (2007:2) states that Context-based learning encompasses the social and cultural environment in which the student, the teacher and the institution of learning are situated and further refers to Context-based learning as group of learning experiences that encourage students to transfer their understanding of key concepts to situations that reflect the actual world.

The similar view to that of King (2007:2) is shared by Rose (2012:1), who notes that Context-based learning in its different forms is centred on the belief that knowledge acquisition and processing enhance the social context of the learning environment and the real, concrete context of knowing. Rose (2012:1), who maintains that Context-based learning is grounded in the idea that learning is a social activity that is not served well by most classroom situations, contends that the students' ability to acquire, process and produce knowledge can be enhanced in a Context-based learning environment, which provides opportunity for the use of contexts that can bring about synergy in concepts learnt in class. In an argument for the use of Context-based learning, Hubball and Kennedy (2009:2) are of the view that sole

reliance on the lecture method might not be enough to address higher-order learning outcomes and holistic student development. One possible solution can be found in the adoption of a Context-based learning, which has the potential to resituate student learning in the context of authentic learning environments. Context-based learning can thus assist the students to develop valuable life skills, such as critical thinking, self-directed learning, decision-making, effective communication, team building skills, and global citizenship.

On the other hand, Smith (2010:23) maintains that Context-based teaching addresses the concern that some students do not see the current connection or application of the content that they learn in their lives or even in future. As a result they fail to see the relevance of that content. Smith (2010:23) further notes that in a teaching and learning situation that is context based, teachers are enabled to relate content to situations where it is used in the real world, e.g. at home, in the community or at work. This context-based situation can further promote the students' transfer of knowledge and problem-solving skills from the class, to other contexts outside the class and also to prepare them for continued learning, for the careers they may take up in the future and for citizenship.

Gilbert (2006:959) argues that the collection of contexts used in class has the potential to serve as a foundation for the development of logical mental maps of the relationship between concepts learnt. This collection must be in such a manner that the teaching of concepts in a particular context should boost the chances that students will be able to transfer the understanding of those concepts to other contexts. In this manner, contexts can assist students to overcome students' inability to transfer an understanding of concepts to different contexts. This inability is noted by Simkins and Maier (2008:7) who, as an example, note that in teaching the concept of price elasticity of demand, students might be able to transfer knowledge about this concept from one good or service to the other, but may be unable to transfer their understanding to other types of elasticity.

Three principles on which the contextual teaching and learning (CTL) approach is based are identified by Jonhson (2002:26) as interdependence, differentiation and self-regulation. Johnson (2002:28) asserts that this approach is usually conducted in a group setting and as such, the discussions and sharing of ideas by group members

demonstrate their interdependence. The principle of differentiation means that students with varying characters, talents and abilities are accommodated. This approach thus allows for the exploration of individual talents, cultivation of own learning styles and progression at an individual pace by students (Johnson, 2002:31). The principle of self-regulation requires that students should be able to recognise and initiate things and maintain them on their own. In this way students will be able to show all their potential, while the teacher should motivate and encourage them by giving them responsibility for plans, choices, solutions they propose and the decisions they take. Satriani, Emilia and Gunawan (2012:11) seem to concur with idea of this principle with their assertion that the purpose of Context-based teaching and learning is to encourage students to take responsibility for their own learning and to see the relevance of knowledge gained and how it is applicable to a variety of contexts in their lives.

The importance of context in teaching is also noted by Avargil *et al.* (2012:209), who argue that relevance and the possible application of what is being taught become evident to students when contexts are used, and that successful learning can be achieved as students are able to link their new knowledge to their prior knowledge. Gilbert (2007:959) further contends that for students to start seeing the relevance of the concepts they are taught they need to become sufficiently involved in the work at hand and show an interest in it. The contexts used should also unveil the relevance of the subject to students and enable them to develop a sense of ownership of what is to be learnt. A similar view is held by Birchinall (2013:32), who maintains that a Context-based approach to learning situates students in a suitable environment that can also stimulate learning. Therefore, a collection of contexts that highly reflect the students' own lives and experiences from the community can develop a feeling of engagement and connectedness in the learning process.

The order in which contexts are used can vary. For instance, De Jong (2008:2) notes that contexts can follow concepts or may precede concepts. When contexts follow concepts they can serve two purposes. Firstly, contexts are presented as illustrations of concepts that have already been taught, especially in the case of abstract concepts. Secondly, context is presented to offer the possibility to students to apply their knowledge of a concept. When contexts precede concepts they may again be

seen as serving two purposes, i.e. they are presented as a starting point or rationale for teaching a concept, and they enhance motivation for learning new concepts.

One can thus infer that if relevant contexts can be provided in teaching the abstract Economics concepts, learning will be enhanced, as students are able to use their prior knowledge to make meaning of the new content material presented and start practising the application of these concepts to actual world problems. Context-based learning therefore has the potential to transform the customary Economics classroom in which students are passive recipients of knowledge who often rely on rote memorisation to a teaching and learning environment where the context in which learning is based is a dual axis. This dual axis, according to Rose (2012:2), means that on the one hand, context is the social situation of learning in which the acquisition, processing and production of knowledge are a collaborative effort between the student and the teacher and between the student and his or her peers, rather than through direct dissemination. Rose (2012:2) maintains that, on the other hand, context must be on engaging with the authentic life task through which knowledge connects with an actual, observed reality. The two axes lead to a departure from a more passive learning model of teaching which is dominant in most classrooms.

Teaching Economics using the Context-based approach, which might comprise the use of Case method, Context-rich problems in the classroom and engaging students in Service-learning projects, seems to have that potential to empower students with knowledge and skills such that, when confronted with real-life situations and problems, they will be able to apply the analytic thinking skills to understand and resolve such problems. Hervani and Helms (2004:268) assert that Service-learning and the Case method present real-world problems in which students are expected to apply the theory and analytic methods learned in class. The adoption of this way of teaching can thus afford the teacher to bring into the classroom actual and current economic events. It can thus be said that Context-based approach provides the prospect to close the gaps created by student's lack of experience in the real world.

A Context-based approach proposed in this study aims to combine various contextualised teaching and learning strategies into a unified and seamless teaching approach that will draw from the benefits offered by each strategy to provide

students with opportunities to enhance their understanding of abstract economic concepts and theories and to enrich their application of such concepts and theories in the authentic contexts. Baker, Hope and Karandjeff (2009:8) assert that a real-life context helps students to see the applicability of information and builds a pathway to understanding of the content material. Baker *et al.* (2009:8) further argue that in a contextualised teaching and learning environment, a systematic learning approach is developed through numerous components working together, which suggests that teaching and learning are attained from the whole, and not from a separate or individual part.

While the spotlight will always fall on the potential strengths of a Context-based approach in teaching Economics, it is also worthwhile to note the limitations this approach may have so that teachers are able to work out strategies to improve on those limitations. One limitation noted by Tang (2014:283) is that the choice of the actual world contexts to be used in class is usually prescribed by the teacher without the involvement of the students, based on their assumption that they know the kind of contexts that might be interesting to the students. Tang (2014:283) also that notes a related limitation, namely Context-based learning, rarely includes contexts that students often pay attention to in popular media such as movies, newspapers, video games and internet sites, which all have the potential to teach them informally.

3.3.1 The Need for a Context-Based Approach in Economics Education

The discussions in the preceding section demonstrates that Context-based teaching and learning seem to have the potential to address the need to teach Economics in relevant contexts with the aim of showing students the relevance of the content presented in class to the real life and the need to assist them to transfer the Economics content they have learnt, to different contexts in life. Smith (2010:23) notes that quite often, students do not see the connection or application of content of school to their lives and end up not seeing the purpose of the subject matter they are taught. Smith (2010:23) further identifies contextual teaching and learning as having the potential to address this problem because it is based on the principle of enabling teachers to relate the subject content to the settings where it is used in real-world life, such as at home, in the community and in work places. Contextual teaching and learning is also based on the principle of enriching students' ability to transfer their

knowledge and problem solving from the classroom context to other contexts they may encounter in life, while at the same time preparing them for future careers, citizenship or continued learning.

3.3.1.1 Ability to Apply Economic Theories and Concepts

Economics teaching should not be approached only as a list of theories and concepts that students need to absorb by a mere memorisation without showing their relevance to the students' lives and how students will need and use them outside the classroom. Arul (2007:1) asserts that effective teaching of Economics aims to enhance students' ability to apply the content knowledge properly by putting him/her into a real-world context. It is also worth noting that the achievement of this outcome not only depends on the attitude and aptitude of the student, but also on the pedagogic methods used to present the content material. It is for this reason that Arul (2007:1) argues that it is important to ensure that pedagogies that will enhance students' ability to use Economics knowledge effectively to solve problems and to satisfy needs be applied in Economics education.

3.3.1.2 Contextualising Economics Content

Ping (2003:43) notes that it is often difficult for students to provide answers to the 'What if?' questions in Economics and the reason seems to be a heavy use of textbook and lecture methods. Ping (2003:43) further argues students must understand at the very beginning that to master Economics they need to go beyond the level of merely memorising key concepts and manipulating equations they are taught. Students should instead know that Economics as a subject requires that they develop thinking skills, be aware of relevance of the concepts they are taught and appreciate their importance. Hung (2013:33) points out that contextualising content knowledge means that the meanings that are peculiar to a profession are attached to the abstract theoretical principles. This will help to make the new knowledge practical and students will be aware of the purposes for which that content knowledge can be used, where they can apply it, and how it manifests itself in the real word.

It is important that, for students to make connections between what they are taught in class and what happens in the real world outside the classroom world, relevant context within which the concepts and theories taught are applicable should be

created. Hudson and Whistler (2007:54) note that contextual teaching and learning benefit students as it helps them to connect the subject content to real-life contexts where that content can possibly be used. Hudson and Whistler (2007:54) argue that students will be able to use the knowledge and skills they have acquired appropriately when learning takes place in an integrated, multidisciplinary manner and where appropriate contexts are used. This learning environment provides them with an opportunity to review how their prior knowledge relates to the new concepts they are learning, to practise using the new concepts, and to link their new knowledge to a particular real-life scenario. A Context-based approach may therefore dispel students' perception that Economics teaching mainly subjects them to a cognitive load of theories and concepts that seem to be unconnected to their daily lives and require of them to use rote memorisation to succeed in tests and examinations.

3.3.1.3 Ability to Transfer Learning

One other competency which Economics students need to demonstrate is the ability to use the subject knowledge from a classroom setting in other situations, different from the classroom. This ability is referred to as learning transfer. Transfer in an educational context means that something that was learned in a particular setting is carried over to another setting, for example, having learnt the concept of opportunity cost in class, the Economics student will be expected to be able to weigh up the options and make informed decisions when confronted with situations where he or she is expected to make a choice in real life. Shamsid-Deen and Smith (2006:14) note that it is often expected of students to recall the subject content that was presented through direct instruction or a lecture and apply it in a realistic setting. However, the problem arises when students cannot identify the knowledge they need in order to deal with a problem that is outside the context within which knowledge was gained. This problem points to students' inability to transfer knowledge from one context to the other.

Different reasons have been advanced for students' inability to transfer knowledge. Some seem to stem from traditional methods of teaching. For example, Hung (2013:29) asserts that in a teaching and learning environment, characterised by traditional teaching methods, knowledge is taught in an abstract manner. This type of

teaching model is based on the belief that the most efficient way for students to gain conceptual knowledge when they are taught theories and concepts is by using a direct method of teaching. This method of teaching focuses more on explaining the concepts and theories and providing some examples of applying the concepts and theories to solve some well-structured, end-of-chapter textbook problems. Students, on the other hand, seem to focus more on memorising definitions, concepts and theories.

Furthermore, Hung (2013:29) contends that when teaching focuses mainly on learning abstract theoretical concepts, the issues of how students demonstrate knowledge in real life, i.e. how they use knowledge to solve real-life problems often do not receive more attention. Teaching and learning therefore takes place in a de-contextualized environment, which makes it difficult for students to acquire situational knowledge. Situational knowledge can help them to understand when to apply knowledge, where and how to apply it. Situational knowledge is important to bridge the gap between theoretical understanding and the practical application of the knowledge. In a conventional teaching and learning environment, students may therefore gain a sound theoretical knowledge, but are often not provided with opportunities to modify, restructure or seek further knowledge to solve ill-structured problems. Students may end up developing dependency on the teachers, resulting in a totally supported study and direct instruction, which can weaken the development of their independent and self-directed learning skills.

Contextual teaching and learning seem to have the potential to assist students to achieve this goal of transfer of learning, since learning takes place in a context that resembles the settings where they may be expected to apply their knowledge. It can therefore be said that chances of enhancing students' capability to transfer learning from a classroom setting to real-life situations can be increased with the use of Context-based teaching and learning approaches (Shamisid-Deen & Smith, 2006:14).

3.3.1.4 Development of Students' Higher-Order Thinking Skills

A course in Economics should equip the students with higher-order skills, which include analysis, synthesis and evaluation. Economics students need to attain higher-order learning for them to be able to analyse, synthesize and evaluate

economic phenomena and policies. Conway, Stimel, Davis and Hartmann (2010:193) describe analysis as deconstructing arguments, facts and theories into component parts; synthesis as building arguments, facts and theories from component parts, while evaluation is described as justifying a decision or opinion with facts, arguments and theories. The attainment of these skills will help the students to move beyond a mere knowing and comprehension of Economic concepts towards their application in real-world events.

The principal researcher's experience in teaching Economics shows that students often demonstrate the ability to define concepts and do well in questions that require of them to name or list, i.e. lower-order questions, but show deficiencies in the application of these concepts to real-world events. This may be as a result of the oversimplification of the concepts in the course and a tendency to put more emphasis on basic definitions (Conway *et al.,* 2010:195). It is for this reason that the teaching of Economics should strive towards higher-order learning, which is important to achieve Economic literacy. Broman *et al.* (2015:144) argue that the application of higher-order thinking may be required as students come across the problems that are more open and broader in their daily lives. These problems call for more than a mere single and limited response because to arrive at a solution or decision a student needs to make a thorough analysis, synthesis and evaluation of the data or information at hand.

3.4 COMPONENTS OF A PROPOSED CONTEXT-BASED APPROACH IN ECONOMICS

Different strategies have been proposed to create a Context-based learning and teaching environment. For example, Berns and Erickson (2001:3) state that various strategies are usually used to implement Contextual Teaching and Learning. These may include Service-learning, Problem-based learning, Cooperative learning, Work-based learning and Project-based learning. Berns and Erickson (2001:3) further assert that these strategies are not individually separate and therefore can be used in conjunction with one or more of the others. This assertion by Berns and Erickson seems to be consistent with the definition of Contextualized Teaching and Learning (CTL) offered by Kalchick and Oertle (2010:1), which states that CTL is comprised of a number of pedagogic methods intended to connect the learning of foundational

skills and academic or occupational content coherently by directing the focus of teaching and learning on actual applications within a specific context that catches the students' attention.

It should, however, be noted that even though the list of the strategies offered by Berns and Erickson may not be an exhaustive list, these strategies have the potential to assist in achieving various pedagogic objectives. Jameson-Meledy (2015:3) notes that teaching that takes place through Context-based learning strategies should encourage five essential components of learning, Relating, Experiencing, Applying, Cooperating and Transferring or REACT. Ozbay and Kayaoglu (2015:93) argue that the teaching activities based on the REACT strategy help the students to analyse the information and make links between the academic content and the context of their field, and further help them to experience activities in collaboration with their peers.

Ozbay and Kayaoglu (2015:93) note that Relating refers to the act of learning within the context of a person's pre-existing knowledge. Jameson-Meledy (2015:3) further notes that Relating means that in order to place learning within the context of everyday life experiences, instruction should first draw the students' attention to the everyday events, followed by relating those events to new information they are about to learn. Experiencing means that students learn by exploring, discovering and inventing. Applying means that students demonstrate the ability to present and apply concepts within the environment of their use and future careers they may take. Cooperating within this context means to share, respond to and communicate with other students. It also includes interpersonal communication (Jameson-Meledy, 2015:3). Transferring is explained by Satriani, Emilia and Gunawan (2012:12) as using knowledge within a new context or novel situation.

The teaching and learning strategies that will comprise the Context-based approach proposed in this study seem to include these essential forms of learning and may therefore assist in addressing the needs this Context-based approach seeks to address, i.e. the need to teach Economics content in context, the need to enhance the application of Economic theories and concepts, the need to achieve and promote learning transfer, and the need to develop the higher-order cognitive skills of the students. The study proposes the use of the following Context-based learning

techniques to be the components forming an envisioned Context-based approach in Economics teaching: the Case Method, Context-Rich Problems, Service-learning, and Problem-based Learning.

3.4.1 Case Method

A case is defined by Conway *et al.* (2010:19) as a group of source materials on a single subject that are taken from real experience, which the reader has to analyse and make a decision. These source materials may be in the form of a short, written summary, a collection of news articles, or any other presentation of real events. As an example, Velasco, Martinez and Ferrero (2012:464) identify the model of supply and demand as one graphical illustration, which students often find difficult to understand and apply in real life. However, Velasco *et al.* (2012:464) argue that the teacher can support this graphic illustration by using real-news stories. This can help students not only to understand the theory, but also to see its usefulness in their daily lives. The use of relevant newspaper cuttings can thus make the application of the concepts of demand and supply to real-life situations easier for students. Carlson and Velenchik (2006:59) assert that classes can be structured so that students do in fact learn a lot of Economics and they refer to such a structure as a Case method. They describe the Case method as an active learning technique that uses classroom discussion of a written narrative or a case as a strategy for developing the students' analytical tools and skills.

It is important to note that cases used for teaching are not case studies used in academic research as they aim at helping the students to learn Economics rather than about a particular example or event (Carlson & Velenchik, 2006:59). A further distinction between a case and case study is offered by Hoyt and McGoldrick (2012:38), who state that case studies summarize individual historical events that provide background information together with the author's analysis, synthesis and evaluation. The case, on the other hand, presents the background information and the substantive dilemma that the reader uses to create his or her own analysis, synthesis and evaluation. A case places the reader in a decision-making role.

3.4.1.1 Rationale for Case Method

Cases present a method rich in contextually introducing the new material. It also allows students a platform to apply the knowledge they have gained to new situations (Popescu, 2014:274). Golich *et al.* (2000:57) also assert that the Case method promotes learning by involving the students in the learning process. The involvement of students in the learning process connects them with the subject content which results in the shifting of the responsibility for learning to the students themselves. In this process, students play an active role discovering or constructing a body of knowledge while the teacher is acting as a guide. On the other hand, Schwartz (2014:1) notes that case studies present an opportunity for the application of theoretical concepts by students, which can be helpful in the quest to bridge the gap between theory and practice.

3.4.1.2 Benefits of Using Case Method

Teaching Economics in a manner that is geared towards helping the students to achieve higher-order skills in Bloom's taxonomy is likely to result in an Economics class characterised by students confronted with economic theories to argue about, to deconstruct, and also to try to justify their opinions and decisions. In such a teaching and learning environment, students are provided with a space to debate and put to practice the Economics concepts and theories they have learnt under the facilitation of the teacher who is no longer simply a knowledge transmitter in the learning process.

Economics as a subject also stands to benefit from the use of the Case method as it is believed that the Case method has the potential to help develop three key objectives in Economics, which are identified by Volpe (2015:1) as: the mastery of Economics concepts, application of concepts to real life, and the systematic analysis of policy issues. Apart from helping students to develop these three competencies, Volpe (2015:1) further argues that using cases in Economics seems to be effective in reinforcing theoretical knowledge and in placing theory in context. This method also seems to have the potential to assist students to develop certain transferable skills, e.g. critical thinking, communication and team-working skills.

The Case method facilitates discussion, debate, direct observation and independent decision-making by students, which results in improved learning outcomes. One other benefit of using the Case method in Economics teaching is that, given the fact that this subject is based on abstract, highly structured concepts and precisely formulated assumptions, cases serve to facilitate a comparison between such assumptions and actual real-world circumstances (Conway *et al*., 2010:198). Golich *et al.* (2000:57) assert that good cases are full of information and require of students to apply a Text-based theory to analyse the actual economic events. The Case method also promotes a deeper understanding and improved retention of the material learned.

Another assertion on the positive contribution of the use of the Case method in Economics is made by Hoyt and McGoldrick (2012:12), who observed the results of the tests and formative assessments administered to students who were taught by a Case method. The results showed that a higher number of students in the class were able apply the appropriate concepts effectively in new circumstances. They could also use the concepts correctly in analysis of issues. Furthermore, these students demonstrated the ability to combine concepts with others, to synthesize information, and arrive at logical conclusions. The results also showed that students from classes where cases were used achieved higher-order mastery of these concepts and retained them longer than students who were not exposed to the Case method.

Reflecting on the benefits of the Case method, Hoyt and McGoldrick (2012:12) further argue that cases can be effective when the teacher intends to enhance higher-order mastery of the content. Cases contribute to higher-order mastery because they bridge the gap between theory and practice by bringing the real world issues into the classroom. Cases therefore provide opportunities for the students to think like economists as they (cases) put a student in decision-making role when they are presented with a scenario that require of them to demonstrate higher-order mastery of concepts. A case allows students to learn by doing, i.e. they act like economists in a non-threatening environment with the teacher acting as a mentor. Popescu (2014:276) concurs with the point that the Case method allows the teacher to give students the opportunity to be actively engaged with the material. This is evident from the argument that, at the time when the case is discussed, the teacher assumes the role of a guide who steers student participation towards meeting the

goals of the lesson. In his or her role as a guide the teacher also has the responsibility to keep the discussion moving, ensuring that important ideas in the case are raised and that discussion is not marred by irrelevant issues.

The Case method, like other active learning techniques, allows the students to learn by doing and to be engaged with the subject matter. This has the potential to enhance the chances of mastering and retaining what they have learnt. Students also start to see the relevance and usefulness of the information they deal with in their daily lives. The advantages of the Case method will not be realised automatically, but as Carlson and Velenchik (2006:59) argue, the realisation of these advantages of the Case method depend amongst others on the degree of engagement of the students with cases, the economic ideas carried by the cases, the students' ability to work with data and to apply the Economics content they are learning.

It is important to note that a good quality case should entail certain elements that can make it effective in achieving the desired goals. To this effect Kim, Phillips, Pinsky, Brock, Phillips and Keary (2006:869) assert that good cases are relevant, realistic, engaging, challenging and instructional. These five key elements seem to be the core attributes that one should bear in mind when developing or selecting cases for use in class. Kim *et al.* (2006:870) provide the following descriptions for each of these core attributes:

- **Relevance**

In order to keep students interested and motivated, teaching cases should be pitched at a level that is appropriate for them, content must be matched with goals and objectives of a case, e.g. the goal may be to interpret information or to make a decision and to provide the justification for the decision made. Setting the case narrative is also important, because by providing the case setting at the start of the scenario will help the students to relate to the narrative they are going to read.

- **Realistic**

Cases that reflect the real-world settings increase the chances that students will transfer what they have learnt from one setting to a different setting. To add a reality feature to the cases, authentic material can used. Reality elements in cases can also

be added by bringing in related and unnecessary information such that the real challenge of data generation and synthesis is stimulated.

- **Engaging**

Cases are engaging when they contain ample content that may be analysed and interpreted at different levels and which allows for different voices and perspectives to be heard. The case is also engaging when it creates opportunities for students to decide on its course and outcome.

- **Challenging**

The teacher can use a number of ways to make cases challenging to students, e.g. by increasing the level of content difficulty, for example by including unusual cases (cases will cover uncommon events), changing the format of case presentation, i.e. varying the format in which case information is usually presented and lastly by including multiple cases. To increase the degree of difficulty in a case, the teacher may, for example, add more information or withhold some information, add an element of uncertainty or possibility for a number of solutions.

- **Instructional**

Case-based learning can be improved by building upon students' prior knowledge as this can assist students to progressively use the knowledge they already have, to evaluate students' knowledge and skills, to provide feedback to students and in using different teaching and learning aids to support the learning process.

On the other hand, Conway *et al.* (2010:192) note that a successful case often carries five key characteristics, namely (i) the case presents a problem that has to be solved or a situation that requires a decision to be made but the solution or a decision is not obvious from a mere reading of the case; (ii) the case contains information which the reader must use; (iii) the case provides enough information to be used for analysis, synthesis, or evaluation; (iv) the case requires of the reader to first think, then analyse information to be able to evaluate the problem and reach a solution; and (v) the case identifies the actor(s) who must provide a solution to the problem.

The use or application of cases in teaching Economics can take different forms. Volpe (2015:4), in his argument that case teaching does not have a single approach, identifies the following as some of the approaches that can be used to teach cases. The first approach is where a case study is used as supporting material and an illustration in presenting a lesson or in a seminar. The use of this approach does not require of one to develop and present long and elaborated case studies, as the teacher can use extracts from newspapers and business journals. The second approach is when the case study challenges students to engage with the dilemma faced by a decision maker, to work out a strategy, present it in the class and defend his or her recommendations. When using this approach, the teacher does not teach; he/she presents few lessons that are accompanied by an analysis of lengthy and complex cases.

Teachers with limited exposure to the use of cases in teaching Economics may find the first approach, i.e. using newspaper articles as a starting point and as encouraging to venture into the second and more complex use of cases. Volpe (2015:3) maintains that an inexperienced teacher can initially approach the Case method by incorporating newspaper articles or news clips in teaching a particular subject content matter and gradually work towards the use of more in-depth and comprehensive cases. Volpe (2015:3) further asserts that newspapers and magazine articles can be used effectively as cases, since they document events without presenting analysis. Moreover, they depict the complex nature of situations in both business and political domains and the role of Economics theory in explaining that complexity. The news clips can therefore be used by teachers and students to test hypotheses, to deal with uncertain and complex situations and arrive at a decision. These news clips are therefore used to complement the formal way of teaching Economics theories and concepts and to show their relevance and applicability in the real world.

As a way to ensure that the use of news clips as cases is effective in achieving the goals of teaching the content in context, enhancing the application of Economic concepts and theories, developing the higher-order cognitive skills and promoting learning transfer, careful selection of the news clips should be made. Volpe (2015:5) points out that the news clips should include the technical language or terms that is used in the delivery of subject content matter in class. With this terminology students

will realise that the topics they have dealt with in class are not issues that are just classroom confined, but are issues that are readily applicable in the business world. Continuous reference to the newspaper article during the teacher's exposition of the new theoretical content helps the students to put that theory in context and see how Economics theory is applied. During the discussion of the news clip, students are afforded the opportunity to use their prior knowledge of Economics theory to answer questions posed by the teacher, which are meant to help them analyse, synthesise and evaluate more complex information (Volpe; 2015:7).

3.4.2 Context-Rich Problems (CRPs)

Context-rich problems as it is noted by Dalton and Shaffer (2010:147) are problems posed in a form of short scenario in which a student is the central figure with a reasonable motivation to find a solution. Context-rich problems require of students to transfer what they understand about a certain concept to a situation different from where it was learnt before they can apply tools related to subjects such as formulas or diagrams to arrive at a solution or decision. Enghag (2004:31) asserts that Context-rich problems are designed in such a manner that they encourage students to use a structured and rational problem-solving strategy. They force them to see concepts within the context of real objects in the real world. Garnet and McGoldrick (2011:15) also note that Context-rich problems assist students to transfer learning, i.e. to apply their knowledge to different situations and problems.

Context-rich problems differ from the standard textbook problems, which may just require of the student to page through the textbook and find answers. Dalton and Shaffer (2010:147) note that the use of Context-rich problems started in the physical sciences where teachers noticed students' ability to solve problems in a template type format. In this format, the problem-solving process was relatively standard as it allowed students to replicate a process that had previously been demonstrated by using different numbers. However, teachers realised that students were often confused when the same concepts were applied within a different context. Context-rich problems are therefore not as standard or directed as the usual textbook problems and as such require of the students to first determine which concepts are applicable before arriving at a solution or decision.

In writing Context-rich problems the first step is the identification of the core concept to be addressed by the problem, and the ultimate objective should be to make it possible for the students to use the concept within the relevant context instead of just memorising it. The identified concept would then be expressed as a learning objective, i.e. an outcome students should be able to achieve, and not as the content he or she will learn (Dalton & Shaffer 2010:147). In agreement, Bangs (2012:53) explains that it is advisable that the focus should be on learning goals and not on course content when writing Context-rich problems. This will ensure that the focus is on what students should be able to do and not on facts they should know, e.g. a learning objective can be stated as, students must be able to apply Economics theory on price discrimination to the real-world setting.

Within a Context-rich problem setting, the student is put in a problem-solving or decision-making position, which will force him or her to dig deep into his or her conceptual knowledge to propose a solution or make a decision. The student is therefore the main character in the scenario. Maier *et al.* (2010:172) suggest that students will write better if an assignment offers a motivation for the task and specifies the target audience to whom students are writing. Hence, Context-rich problems usually begin with a pronoun “You ...”, which places the student in a specific situation that provides a motivation for solving a problem. It is therefore important to ensure that once the concept has been identified, a realistic context, i.e. a scenario that students can easily see themselves in and requires of them to make a decision, must be provided.

Context-rich problems can be implemented successfully in the class and yield positive results when they are incorporated into other active learning techniques used in class. Peterson (2009:15) asserts that incorporating Context-rich problems into other teaching methods such as cooperative learning and just-in-time teaching, will allow students to see these kinds of problems in many different contexts. Bangs (2012:52) agrees that Context-rich problems can serve as a foundation on which to structure a cooperative learning exercise, for example, a think-pair-share exercise, and that if they are used with just-in-time teaching there is the potential for rich classroom discussion. It will be necessary for students to be oriented in the use of Context-rich problems and be shown how this approach stands to benefit them, as they might still be accustomed to the standard textbook problems. This orientation

can help to avoid resentment and frustration as students might struggle during the initial stages of dealing with Context-rich problems. Bangs (2012:54) states that it is helpful to explain to students what they should expect in a Context-rich problem and also the purpose of using Context-rich problems to students, because the chances that they will embrace this technique tend to be high. Students are likely to embrace the use of Context-rich problems once they understand how different elements of this strategy, e.g. missing information or excess information in fact assist them to be ready for life after school.

3.4.2.1 Rationale for Using Context-Rich Problems in Economics

Various reasons have been advanced for incorporating Context-rich problems into the teaching and learning of Economics. One reason is that Context-rich problems are useful techniques to develop students' capability to transfer knowledge from the classroom situation to new situations. Maier, Bangs and Blunch (2010:170) assert that knowledge cannot be automatically transferred from inside the classroom to the outside world but it can be facilitated by creating opportunities for students to practise a new understanding in various contexts. On the other hand, Bangs (2012:48) views Context-rich problems as active learning technique that can create a teaching and learning environment that helps students to think like economists as they practise the application of the newly learnt Economics theories and concepts by engaging in the classroom activities or scenarios which closely resemble the real world events.

In agreement with the view that Context-rich problems are useful in the transfer of learning to new situations, Dalton and Shaffer (2010:147) note the results of studies by National Research Council, whose conclusion is that there is a need for students to pull out the essential themes and principles from what they are learning such that they develop understanding of how and when to put their knowledge to use and to learn in multiple contexts. Simkins and Maier (2008:6) contend that in an effort to improve student learning, one area that needs attention is helping them to develop the skills necessary to transfer knowledge beyond the context in which it was taught. This contention seems to be backed by the research undertaken by University of Minnesota Physics Education Research Group (PERG), which addresses the issue

of knowledge transfer and advocates a technique for writing questions that promote knowledge transfer which they refer to as Context-rich problems.

According to Bangs (2012:48) the situation or scenario used in a Context-rich problem is the one where students are likely to see or find themselves in and will thus easily help them understand why they are taught certain concepts and theories in Economics. Most often, a scenario includes a situation such as events that take place in the community, school or in the business world that a student can relate with. The use of Context-rich problems therefore has the potential to assist students to do more than a mere memorisation of Economics vocabulary and concepts and move to a level where they show an ability to implement these tools correctly. Furthermore, Bangs and Maier (2010:179) assert that the Context-rich teaching and learning environment in Economics enhance students' potential to reach a point where they are capable of appropriately using Economics tools instead of just learning about them.

The use of the Context-rich problems approach in class also seems to provide a platform to develop students' problem-solving skills. Kitaoka (2013:101) observes that students in Franklin College in the United States of America (USA) have difficulty linking problem solving with the theory. They struggle to apply theory to actual economic problems. To create a link between theory and practice, students have to be engaged in class activities that are developed to help them to understand a connection between problem solving and theory. Such activities also have the potential to develop their ability to think logically, like an economist does when solving economic problems. One such activity that can help students to become effective problem solvers is Context-rich problems, which are meant to direct the students' attention to using their conceptual knowledge in a qualitative analysis of a problem. By thinking logically and being able to explain their ideas, the students develop the aptitude to apply theory to an actual economic problem (Kitaoka, 2013:102).

Context-rich problems can also be useful in assessing students' understanding of the Economics theories and concepts taught. Maier *et al.* (2010:171) argue that using Context-rich problems in class provides a good opportunity to reveal the students' shortcomings in concept knowledge and understanding, compared to the standard

textbook problems. In the event, students demonstrate a deficient conceptual knowledge this approach can be used to reinforce and deepen students' understanding and retention of the concept. This can be achieved by focusing on a particular concept and placing it within a new context; thus requiring of students to transfer understanding from one situation to another. Maier *et al.* (2010:182) maintain that, when used as an assessment tool, Context-rich problems focus more on finding out what students have learnt as opposed to what they have remembered, with the aim of ensuring that students master the information and are able to respond to more open-ended questions. In addition, Maier *et al.* (2010:179) are also of the view that Context-rich problems can allow teachers to ensure that students have the correct understanding of how to use economic tools, rather than repeating information from the textbook.

3.4.3 Service-Learning

3.4.3.1 Rationale for Service-Learning in Economics

It has been noted that Context-based learning focuses on authentic learning environments such as community and workplace settings that offer critical cues for cognitive processing, integration of students within a community of practice and further incorporate students' developmental needs and circumstances through experiential pedagogy. With this in mind it is not surprising to note that attention has recently been placed amongst others on strategies like Place-based learning, Situated-learning and Service-learning to enrich the mastery and application of content knowledge (Hubball & Kennedy, 2009:2). The reason for an emphasis on authentic learning environments seems to stem from the realisation that there are more challenges experienced when attempting to bring the real world into the classroom than when taking the students to the real world to learn.

Service-learning as one example of authentic learning environments seems to fit well into a broader Context-based approach proposed by this study and can also be seen as a positive response to calls for reforms in education. The Colorado Department of Education (2004:11) describes it as an educational reform model and a form of contextual learning that provides students with opportunities to apply what they learn in the class to authentic community needs. Peters, McHugh and Sendal (2006:132)

are also of the view that experiences from a Service-learning project can provide a context within which students can situate the course content and increase their depth of understanding. The use of Service-learning projects in Economics can therefore put students in a real-world context to practise applying Economics concepts and theories and analytical tools they learn in class. Mathews (2001:1) contends that students are connected to the real world by having to provide a valuable service, which somehow links the course content to an organisation, which can be a governmental organisation or non-profit seeking organisation. For example, students doing a course in environmental Economics may do a Service-learning project with local environmental groups.

Lopez (2009:137) identifies another method which can be used to engage Economics students in service activity through a model of Service-learning known as student-based instruction. Student-based instruction involves Economics majors teaching Economics to local communities, such as to high school Economics students.

One can therefore say that Service-learning appropriately fits into an Economics curriculum, a point that is noted by Hervani and Helms (2004:269), who argue that it can help students to develop proficiencies that are usually expected from Economics students. These include the ability to gain access to existing knowledge, displaying the command of the existing knowledge, the ability to identify and discuss Economics concepts in published materials, and the application of the existing knowledge to explore an issue and create new knowledge. Ziegert and McGoldrick (2008:39) also state that one of the most cited goals of Economics education is to help the students to think like economists. This goal can be achieved by providing students with Economic skills they can apply in their daily lives, also with the intent to make effective decisions.

It is, however, noted that Economics students often show limited ability in connecting the Economics theory to real-world situations, which could be the result of the teaching approach that is more textbook and classroom confined. Ziegert and McGoldrick note that simply completing a course in Economics, let alone with good marks, does not necessarily mean that students can think like economists and apply the economic knowledge outside the classroom. Hence, Hugg and Wurdinger

(2007:19) conclude that being book smart is one thing, while demonstrating application is another thing. Hervani and Helms (2004: 268) assert that for students to attain high levels of understanding when they are learning theory, they need to be actively involved in applying and using concepts, especially when they are learning to solve complex problems. One way of actively involving students is through Service-learning, which offers them an opportunity to achieve the main objectives of teaching Economics, identified by Hervani and Helms (2004:268) as mastery of economic concepts, the acquisition of skills in applying concepts to reality, and learning to analyse policy issues systematically.

Service-learning seems to have a comparative advantage over other active learning strategies. This view is held by McGoldrick and Zierget (2002:11), who argue that this pedagogy can be used to stimulate students to study Economics and, in the process, learn to think like economists, as it requires of the teacher to go beyond the plug-and-play mentality of many active learning techniques. A similar view is held by Lopez (2009:137), who acknowledges that several models of active learning such as class discussions, debates, role play and experiments can assist students to understand abstract Economics concepts. Lopez (2009:137) argues that in addition to assisting students to master Economics concepts and theories Service-learning seems to also promote a higher level of learning because it offers students hands-on, real-world experience through their engagement in the service projects they undertake outside of the classroom.

Much learning from service projects is realised when students reflect on their experiences. Lopez (2009:137) argues that Service-learning enhances students' prospects of applying and relating Economics concepts and theories to real-world experiences and allows them to reflect on the connection between theory and practice. Reflection on service experiences is done mainly through writing activities and classroom discussions. Umpleby (2011:1) states that in their writing exercises, students describe the work they did and use as many concepts from the course as they can when they reflect on their service experiences. In that way, they are able to connect concepts in the textbook with real-world encounters during their service period. Banks, Schneider and Susman (2005:347) argue that these exercises enable students to analyse theoretical concepts and their applications critically. The potential benefit of exposing students to such exercises, as noted by Mathews

(2001:2), is that students are provided with relevant, real-world experiences, which also serve to prepare them for life after graduation.

It is against this background that the incorporation of Service-learning pedagogy into Economics education is seen as having the potential to provide students with authentic contexts within which they can start to put Economics theories and concepts to practice. Ayers, Gartin, Lahoda, Veyon, Rushford and Neidermeyer (2010:55) contend that, given the inherently theoretical nature of Economics, Service-learning can help to narrow the gap between theory and practice for Economic students. They further argue that Service-learning can be the answer to students who often ask themselves if and how will they be able to convert a myriad of classroom concepts into real-world situations once they have completed their schooling. This pedagogy can help students, as it enhances the learning process by linking theory and practice, thus assisting students to attach abstract concepts to daily life occurrences (Banks *et al.*, 2005:348).

3.4.3.2 Benefits of Service-Learning

Service-learning appears to have the potential to benefit Economics education and to strengthen students in many ways. Levkov and Umpleby (2009:32) argue that because Service-learning is learning in context, students remember what they have learnt better and longer and are also motivated to learn more as they often take part in decisions about service projects. These projects assist students by enriching their cognitive skills, and through reflection on those service activities, students gain a deeper understanding of the material they learn in class and are able to transfer their learning to different contexts. Mathews (2001:2) also agrees that service participation can have positive effects on students as it connects students' living with their learning, since it requires of them to use the material they learn in class actively, students may gain improved retention and improved Economic literacy. Madsen and Turnbull (2006:67) argue that an effectively designed Service-learning project can go beyond just helping students with the understanding of course concepts, but can also assist them with retention and application of these concepts. It may further inspire them to raise their performance, which can result in improvement in learning.

The practical experience provided by service activities seems to be a catalyst for the change that Service-learning aims to bring to Economics education. As Madsen and Turnbull (2006:737) assert, the practical experience which students gain through academic Service-learning prepares them more fully for the challenges in the real world instead of only being exposed to lecture and bookwork educational model. In addition, Mathews (2001:2) contends that by participating in service projects, student academic performance can improve. They are provided with real-world experiences that prepare them for life after the classroom. Lopez (2009:138) asserts that a Service-learning context presents students with opportunities to apply and relate the concepts and theories they have learnt to actual world experiences and reflect on the relationship between theory and practice. In this context, students are able to undertake a critical and thorough examination of the theories and models they study. This is particularly useful to students who often doubt the relevance and applicability of economic models to the real world.

The engagement of students in Service-learning projects is further seen as having the potential to strengthen their understanding and application of Economic theory and Economic concepts. To this effect, the Colorado Department of Education (2004:11) argues that well-planned Service-learning activities can create an experience for students that stimulates higher-order thinking skills and intensify learning because students use such activities as a platform to apply their learning to problems in their communities. Prentice and Robinson (2010:2) concur with this assertion by stating that Service-learning exposes students to experiences that can be traced back to content studied in their course. These experiences allow students to gain, what is noted by Hussey and Smith (2002:230), as ‘knowledge that’ (i.e. knowledge of facts, rules and procedures) and ‘knowledge how’ (i.e. learned skills and abilities).

The comparative advantage Service-learning brings to Economics education is its ability to bring students closer to a real economic world where they are expected to use the knowledge of Economics theories and concepts they have only encountered in class. Banks *et al.* (2005:348) argue that this pedagogy enhances the learning process, because it brings together theory and practice by helping students to link abstract concepts to real-world situations. In agreement with this argument, Lopez (2009:139) states that Service-learning pedagogy can enhance students’ Economic

literacy and their ability to use Economics in their daily lives. He further argues that when students are able to connect the Economic theory with actual world issues, they become more motivated and empowered to learn more as they realise that such knowledge has the potential to benefit them. In the same breath Madsen and Turnbull and (2006:725) argue that academic Service-learning allows students to put to practice what they learn in the classroom, and some of those activities are the ones that they will end up doing once they have graduated and enter the workforce.

Service-learning can also impact positively on the student as a person and also on the society. Banks *et al.* (2005:348) contend that the other benefit of Service-learning is that it can bring about personal and social change in the sense that when students are involved in service projects they start find out more on their role in a problem that is being analysed and this may instil personal change. This can further encourage students' engagement in a social action which can bring about social transformation.

3.4.4 Problem-Based Learning (PBL)

3.4.4.1 Problem-Based Learning and its relevance to Economics education

Problem-based learning is one pedagogy which Arul (2007:1) identifies as having the potential to assist the students to achieve more meaningful learning in Economics. Problem-based learning (PBL) can be used effectively in Economics teaching to enhance the acquisition, understanding and application of Economics theories and concepts as it presents students with real-life or simulated problems to which they have to find solutions after conducting the necessary research, drawing from what they have already learnt. Smith, Roberts and Ravitz (2007:2) state that Problem-based learning is an approach to teach material in such a way that students are presented with a problem they have to solve. The PBL problems are usually structured within the context of a specific subject and presented in combination with a set of core theories or concepts. For example, in Economics a problem can be presented in conjunction with concepts such as demand and supply, elasticity, comparative and absolute advantage, monetary and fiscal policy. Tick (2007:365) points out that in the Problem-Based learning environment the aim of learning is not to reproduce or recall information that has been received passively; instead, the aim is to engage students actively and creatively in both collaborative and self-study so

that they are able to transfer skills and knowledge. Tick (2007:368) further states that problems in PBL can be applied in different forms, for instance, as case studies, simulations or role plays.

This pedagogy has the potential to prepare the students in such a manner that they not only gain Economics knowledge, but they also demonstrate the ability to apply that knowledge in their lives and later in the workplace. This view on PBL is highlighted by Rigall-I-Torrent (2011:2), who notes the PBL not only fosters a deep learning and better knowledge retention, but it also helps students in the application of the subject knowledge. A better application of the subject knowledge that may demonstrated by students could be as a result of the problem solving nature of PBL. Schmidt, Rotgans and Yew (2011:793) posit that in Problem-based learning students are confronted with a problem that helps to trigger their prior knowledge. The Economics concepts and theories which students have already learnt become relevant and valuable as students use them as a foundation in working towards finding the solution to the problem they are confronted with. Maxwell *et al.* (2004:489) assert that Problem-based learning like other active-learning pedagogies, is founded on the idea that learning is improved when it takes place in context. Teaching Economics using PBL, a context which is in the form of a real-world problem is created. Students are therefore confronted with an authentic problem situation, which has multiple solutions, and requires of them to construct knowledge to be used to propose a solution.

The study of Economics focuses on how people and institutions try to efficiently use the limited resources to satisfy unlimited wants in a manner that is equitable. There is therefore a need to ensure that problem-solving skills of Economics students are developed at an early stage to ensure that they will be able to use them in making rational choices and decisions when using resources to satisfy their wants. Students thus need to be presented with real-world problems so that they can start applying the knowledge they gain in this study to practise problem solving. Savery (2006:12) states that with the use of Problem-based learning (PBL) as an approach to instruction, students are empowered to carry out research, bring theory and practice together, and apply knowledge and skills to propose a feasible solution to an identified problem. On the other hand, Hung (2013:32) maintains that in PBL real-world and ill-structured problems are used to assist students to find out how theory

and practice connect as there is potential for them to develop the ability to deal with complex daily life problems.

Problem-based learning can be used in Economics teaching to create opportunities for students to practise applying their knowledge of Economics theory and concepts in problem solving. With regard to this, Smith *et al.* (2007:5) note that a PBL environment can benefit student learning, because it creates a context within which students are able to tap from their previous knowledge, thus requiring them to use their prior knowledge and new knowledge in proposing solutions. Artino (2008:2) points out that, in contrast to the objectivist approach to teaching that focuses on identifying the elements that students must know, PBL is a constructivist approach which emphasises the learning in context. In this way, it is acknowledged that it is no longer enough for students to learn concepts in isolation, they should develop and continually adapt the understanding which they have formed about the world as they collaborate with other students to solve realistic problems presented to them.

On the other hand, Problem-based learning is described by Ravitz and Mergendoller (2005:2) as a teaching and learning approach where students are confronted with simulated or even real-world problems to which they have to find solutions. Problem-based learning seems to be a relevant approach that can be used in Economics to create opportunities for students to apply the abstract theories and concepts they study in the subject. Hung (2013: 32) points out that the main functions of using real-life, authentic problems in PBL are to contextualise the content knowledge to be learned and also to help the students establish their situational knowledge. Ravitz and Mergendoller (2005:4) argue that the proponents of Problem-based learning believe that this approach encourages students to develop skills such as planning, meta-cognition and self-regulation. Furthermore, it is also argued that a PBL environment affords students the opportunity to practise doing research, constructing knowledge and applying the newly gained knowledge beyond the classroom.

Problem-based learning is a much more student-centred approach that can be used beneficially in Economics education, as it seeks to fully engage the students in the learning process by confronting them with simulated or real-world Economic problems to research and solve by building on the knowledge they have already gained. Bloemhof (2012:5) notes that Problem-based learning, which is in contrast to

the lecture method or teacher-centred approaches prevalent in the Economics classes is designed to arouse curiosity, critical thinking, engagement and self-reflection from students for them to succeed in an Economics course. Savery (2006:12) notes the following as essential characteristics of a Problem-based learning class; students take responsibility for their learning; authentic or real-world problems are used; problem simulations are ill-structured; and learning is integrated from a wide range of subjects. This instructional strategy has the potential to foster interest in the subject, develop confidence into students and who can become autonomous lifelong learners, for it provides them with opportunities to explore a messiness of economic issues and develop their proficiency in economic ways of arguing. Furthermore, Bloemhof (2012:5) notes that PBL can help students to understand that knowledge is contextual and to know why they believe what they believe and can also assist them to adjust the beliefs which they have in the face of credible evidence. PBL can thus enhance proficiency in transferring knowledge to new situations.

The relevance and benefit of Problem-based learning in Economics education is also noted by Maxwell, Bellisimo and Mergendoller (2001:73), who assert that adopting PBL in Economics teaching assists in deviating from the conventional instructional strategies to a teaching and learning environment that emphasise active and self-directed learning by students. In this environment, students are enabled to formulate and follow self-defined learning objectives and further to decide on the learning resources they believe are suitable for the solution of a problem they are dealing with. In a PBL environment students have the responsibility of researching a situation, developing relevant questions and proposing their own solutions to a problem while the teacher coaches them with suggestions for further research instead of directly providing them with solutions. Hung (2013:32) further states that by engaging with a PBL task or assignment, students can directly apply their subject knowledge in their attempts to provide a solution to the problem. As a result, students will realise that the knowledge they have gained is something that can be used practically and that it is not just a theory of concepts and principles. PBL can thus assist students to overcome the problem of transferring theoretical knowledge into practical knowledge.

The paradigm shift in the Economics teaching and learning strategies proposed by this study also seems to accommodate the contemporary insights into learning on which Problem-based learning hinges. Dolmans *et al.* (2005:732) contend that PBL is likely to effectively prepare Economics students for the future as it encompasses the elements of learning often referred to as the four modern insights into learning i.e. constructivist, self-directed, collaborative, and contextual learning. In a constructivist teaching and learning environment learning is believed to be a process in which students play an active role to construct or reconstruct their knowledge networks, create meaning and build personal interpretations of the world according to individual experiences and interactions. In this environment, competence is fostered by teaching in a manner that stimulates certain cognitive activities, e.g. by elaboration and not necessarily by teaching to co-construct knowledge. Elaboration usually takes different forms, e.g. when students discuss, take notes or answer questions. Engagement of students in such activities enhances their chances to learn to relate new information to existing knowledge structures. Students are put in a position where they can uncover the relations between concepts and activate their prior knowledge. Students can further attain a deep and rich understanding of the content they learn, which allows them to have an improved use of the knowledge gained.

Self-directed learning, according to Dolmans *et al.* (2005:733), implies that students are active participants who takes responsibility to plan, monitor and evaluate the learning process. By this it is meant that students should be able to consider different ways to approach a task, set themselves clear goals, select strategies for achieving these goals and should at all times be aware of what they are doing and what they need to do next, by looking back and forward. Looking at collaboration as another modern insight in learning, Dolmans *et al.* (2005:733) state that collaborative learning is promoted when students who are having the same goal tackle a task as a group with the aim to reach consensus through open interaction. Members of the group divide responsibilities amongst themselves and are mutually dependent. Collaborative learning in PBL context transcends a mere division of tasks among students; it is characterised by a common understanding of an issue to be resolved and a mutual interaction.

Another key principle of Problem-based learning that can benefit Economics education is that learning should be contextual, which is the main argument raised by this study. Dolmans *et al.* (2005:733) point out that contextual learning is rooted on the understanding that the ultimate use of knowledge is determined by the context within which it was created and that transfer of knowledge can be improved by placing learning in contexts that are meaningful, revisiting content for diverse purposes, and from different points of view. One other advantage of Problem-Based Learning, as noted by Forsythe (2002:7), is that because PBL requires of students to engage in regular communication and discussion of the subject, they are compelled to talk Economics. It is through this engagement that the relevance of subject in the students' daily lives becomes more apparent to them and this puts them in a better position see how various concepts and theories work in reality. In addition, Maxwell, Mergendoler and Bellisimo (2005:317) argue that Problem-based learning is an engaging learning strategy that can lead to sustained and transferable learning. According to Maxwell and Bellisimo (2005:317), sustained and transferable learning can be achieved in PBL with students grappling with a scenario that reveals the actual world context with its limitations. As this problem scenario requires of students to undertake research aimed at solving the identified problem, their retention of the newly gained knowledge may increase and improvement is also likely to be achieved in their problem-solving skills. This will further promote the use of self-directed learning strategies and enable students to apply their knowledge of the subject to new and unfamiliar situations.

Hattingh and Killen (2003:40) caution that despite the benefits that Problem-based learning can offer, it is unlikely that a fully-fledged Problem-based learning where the entire curriculum content is organised around authentic problems will be easy to implement on a large scale in a public school system, as it may require too many resources and teacher re-training. In spite of these potential challenges, Hattingh and Killen (2003:40) recommend that teachers should adapt their teaching to incorporate some of the principles and techniques of Problem-based learning. This observation and recommendation seem to be supported by Nowak (2007:66), who argues that in a high-stakes testing system of education a direct teaching method could be purposely used during a Problem-based learning project in the form of mini-lectures. The argument is that when properly done, the advantages of both a direct

teaching method and Problem-based learning can be used to create a teaching and learning experience in which the benefits of these methods are implemented in the best possible way so that students gain most out of the learning experiences provided.

3.5 CONDITIONS OPTIMAL FOR THE INCORPORATION OF A CONTEXT-BASED APPROACH

A Context-based approach with its potential to assist the Economics students to relate the abstract concepts learnt in class to the real world and to enrich their ability to apply such abstract concepts in their daily lives requires the prevalence of certain conditions. The following are some of such conditions:

3.5.1 Orientation in Context-Based Strategies

Professional development appears to be a necessity to smooth the progress in the use of Context-based teaching and learning, as many teachers might still be accustomed to a highly teacher-centred, textbook-driven and classroom-confined direct teaching approach, commonly known as the lecture or chalk and talk method. Avargil *et al.* (2012:210) note that on-going professional development programmes, reflection and continual support seem to be a prerequisite in the efforts to change the current teaching approach to a new curriculum. Additionally, teachers need to go through a conceptual change in order to adopt new teaching methods. Kalchik and Oertle (2010:3) further argue that teachers need to be orientated for them to learn to teach effectively through a Context-based approach. Professional development can assist the teachers to clarify the learning outcomes envisaged by the use of Context-based strategies, and help them to develop and search for materials to be used, and to teach in a contextualised manner.

In demonstrating the need for teacher orientation and development in using the Context-based techniques, Bangs (2012:52) indicates that teachers may need orientation in writing Context-rich problems because of certain factors which have to be considered when writing these problems. These factors include: first, ensuring that focus is on learning goals rather than course content so that the teacher's centre of attention is on what he or she would want the students to be able to do and not on

the facts that he or she wants them to know. Secondly, Context-rich problems should provide a realistic context to the students, i.e. a scenario or situation where students are likely to see themselves in and that puts them in a decision-making position. However, students should not be restricted to common scenarios, as exposing them to unusual settings can be helpful in creating opportunities for students to find innovative ways to show their conceptual knowledge and understanding.

Another factor that needs to be taken in consideration when the teacher writes Context-rich problems is the creation of an appropriate level of difficulty. The teacher should strive to create interest and enthusiasm in this approach. One way of achieving this is to pitch these problems at an appropriate level of difficulty. Maier *et al.* (2010:175) propose that the teacher should start with a problem that has a target variable and no missing or extra information and, as students get used to this approach, the teacher can raise the level of difficulty by not specifying a target variable, omitting certain information or adding excess information to the problem. In this way, students' attitudes towards Context-rich problems and success in solving them can be improved.

Maier *et al.* (2010:174) further state that adding excess information to the problem replicates the actual world situation in which appropriate data must be selected before using a formula or concept, while missing information in the problem requires of students to recognise the need for readily available data or to make reasonable estimates. In the same breath, Dalton and Shaffer (2010:149) contend that a Context-rich problem may require of the student to distinguish between relevant and less relevant information. Students are further required to supply their current knowledge, e.g. reasonable estimates for generally experienced events in order to find a solution to a problem or to reach a decision. As students are not given information on the model they can apply, Context-rich problems prompt them to do a qualitative analysis of a problem before they can arrive at a solution. In this way, their critical thinking abilities are put to test. Bangs (2012:54) notes the following factors pertaining to the level of difficulty in a Context-rich problem: first, whichever information students can find on their own can be part of the missing information required to solve the problem; secondly, any surplus information supplied must be checked for relevance to the problem, even if it may not be needed in solving the problem; and lastly, even though students are given a problem that lacks an explicit

target, it is recommended that clues that guide them in the right direction should be included in the problem.

In Problem-based learning, teachers also need to learn how to create appropriate problems that will challenge students to use their knowledge of various Economics concepts and theories to solve such problems. Kumar and Refaei (2013:68) assert that amongst others, the success of Problem-based learning relies on the development of ill-structured problems and on developing teachers so that they will be able to guide students throughout the PBL process. Hung (2013:34) maintains that the problems used in PBL must be authentic and contextually meaningful and they should embed profession specifics in cases where the future professions of the students are apparent. This context component may assist students to uncover the actual application of concepts in specific professions and what constraints a professional may possibly come across in applying such concepts. Maurer and Neuhold (2012:12) note that problems presented in the students' assignments have a significant bearing on the success of PBL and this especially relates to how the problems are set up and communicated.

Regarding what students and teachers may view as a good Problem-based task, Schimidt, Rotgans and Yew (2011:793) note that a good Problem-based task should, amongst others, have the following attributes: (i) be authentic, (ii) adapted to student prior learning, (iii) involve students in discussions, (iv) guide students in identifying relevant learning issues, (v) promote self-directed learning, and (vi) should be of interest to students and teachers. Maurer and Neuhold (2012:12) assert that when students are confronted with problems that contain these attributes, they will be forced to engage with relevant literature, learn the required facts and engage with suitable concepts to be able to propose suitable solutions.

It should also not simply be assumed that students will automatically find adopting Context-based learning strategies an easy task. As an example in a study conducted in New York high schools where 10 units of Problem-based learning were implemented to teach both macro- and micro- economic concepts through the use of authentic problems, Moeller (2005:2) notes the implementation was met with some challenges. One of the noted challenges was that working in small groups was an unfamiliar experience for students and they were not used to having discussions with

one another, partly because their schools predominantly used the Lecture-based approach. As a result, group work was not as effective as desired and this led teachers to find extra time to use on scaffolding student-to-student interactions and small-group work. Orientation of the students in the use of these strategies therefore seems to be a necessity in ensuring that a Context-based approach can succeed. Bangs (2012:51) contends that students who are used to plug-and-chug problem-solving will possibly need help to get started and he suggests the use of the cognitive apprenticeship model when introducing Context-based strategies in class. According to Maier *et al.* (2010:178), this model includes three key steps, namely modelling, coaching and fading.

A recommendation by Bangs (2012:52) when using the cognitive apprenticeship model is that the problem-solving approach used in Context-rich problems should first be modelled to the students, i.e. showing students step by step how a Context-rich problem can be tackled, such as looking for missing information, as well as discriminating between relevant and less relevant information in the analysis process. Next, the teacher should set aside time for coaching when students embark on working independently with Context-rich problems. These problems can be designed in such a manner that they provide their own coaching, e.g. by proving a clear target or leads within a problem. Opportunities for students to coach one another may also be created, e.g. by using a think-pair-share cooperative learning technique where students are given time to engage independently with the problem and are later put in pairs to share their answers prior to discussing their varying viewpoints and reaching conclusions. According to Bangs (2012:52), students will require less coaching (fading) as time pass and they begin to show some ability to work on the Context-rich problems on their own.

3.5.2 Identification of Purposes for Context-Based Strategies

It is important that teachers must be able to identify and explain the intended purposes of particular Context-based strategies they will use. For instance, in using the Case method, the teacher must first review the syllabus to identify material that can best be taught with cases, as they can be used for several purposes. Carlson and Valenchick (2006:61), for example, state that cases can be used to motivate new material, to introduce theoretical concepts, or can be used as empirical

examples to reinforce the learning of theory. Cases that are used to motivate instruction on an issue are best when they help students to value the necessity of a theoretical framework or empirical tools to construct sound answers to the questions arising from the case. On the other hand, cases that are developed to teach theory, must have students focus on finding a solution to a well-defined problem, as this will allow them the chance to derive a solution technique at some point in their discussion of the case. Lastly, it appears that cases that are used as applications can yield the best results when they call on students to decide on theoretical concepts they deem the most suitable to address the problem at hand. As a result, students are required to think deeply about the tools of analysis they have already learnt and the type of questions which can be answered by those tools. Teachers therefore need to have specific, well-defined pedagogical goals that will guide them in selecting and incorporating cases in their teaching.

Also, in recognising the need to identify the purpose of a Context-based strategy Ziegert and McGoldrick (2008:48) point out that in Service-learning the existence of clearly identified course and student learning objectives, relevant community organisations to be served, and issues or problems that are consistent with the course content are important. In preparing for a Service-learning activity or project Mathews (2001:3) recommends that the teachers need to consider whether the goals of Service-learning, including putting theory into practice, fit in with their overall course and teaching goals. Jenkins and Sheehey (2011:54) also recommend that the aims and objectives which the course intends to achieve should be aligned with the goals of Service-learning and further argue that the course syllabus should be consistent with the course goals and objectives specific to Service-learning.

Regarding the existence of an issue or problem in the community, Ayers *et al.* (2010:58) contend that both the teacher and students should be involved in the identification of urgent needs in the community which are at an appropriate level for students and are possible for students to address. It is also important that the service project idea be aligned with the interests of the students and also to make sure that the project provides an authentic learning experience to students. Ayers *et al.* (2010:59) further argue that the teacher should require of the students to reflect continually on the experiences provided by Service-learning activities in which they are engaged. Reflection can be done in different ways, e.g. it can be the form of

journal entries, arranged meetings, interactive web discussions or through team evaluations. Students could at the end of a service project also be asked to write reflective essays about that project in which they were participants or they could also be asked to make a presentation of their service project experiences to their classmates or to other relevant stakeholders.

3.5.3 Thorough Preparation

In the light of the observation that Economics teaching has been dominated by the lecture method or direct instruction for a long time, the successful incorporation of Context-based learning strategies necessitates thorough preparation by both teachers and students. Mansor *et al.* (2015:260) note that one of the challenges that was identified in Problem-based learning is that it requires a lot of planning by the teachers. A similar challenge has also been identified in the use of the Case method and, as an example, teachers need to master the art of incorporating cases in their teaching. The students must also be shown how they stand to benefit from this method. Popescu (2014:276) asserts that the success of teaching using the Case method rests with teacher preparation, for the reason that an in-depth case discussion occurs when the teacher has extensively familiarised himself or herself with the contents of case.

It has also been noted that the use of Context-rich problems requires thorough preparation. With regard to this, Maier *et al.* (2010:181) note that at the initial stages of using this strategy, the preparation of problems takes a bit more time and effort and execution may also require more time, e.g. when helping the students to understand exactly what they are required to do. Bangs (2012:54) recommends that teachers can make use of a cognitive apprenticeship model which includes: modelling the problem solution by the teacher; observing by the students and allowing time for fading to set in, i.e. time when students gradually start to solve the Context-rich problems on their own without much reliance on the teacher.

Volpe (2002:3), who asserts that student preparation is vital for the success of the Case method, recommends that students must be conversant with the facts of the case when they come to class and must also be highly prepared to analyse these facts. Teachers can assist in this regard by providing questions that guide student preparation, to give them focus and to help them to begin the analysis process. This

preparation taking place before the case discussion is important to eliminate or reduce minimal or non-participation during the actual case discussion. Mostert (2007:437) asserts that success of the Case method by and large relies on the debate that can ensue during the case discussion and also on the discussions around possible solutions available. Minimal or non-participation by students tends to defeat the intentions of the Case method, because the teacher and other students are not able to benefit from the thoughts and views of fellow students on the case. This problem of minimal or non-participation may further hamper the teachers' efforts to evaluate students' understanding of the case problem and its possible solutions.

Student preparation can follow the three steps, noted by Popescu (2014:276) as explaining, modelling and reflecting. Explaining implies that students must be provided with clear explanations of the reasons for using the Case method, as well as its didactic goals, and expectations on student performance. Teachers can model what case discussion requires of the students by asking them questions that open up the discussion, listening to the discussions and avoiding to respond to all students' statements, rather letting other students respond to them. Reflecting means that after each case discussion, the teacher and students should debrief the case discussion. The focus of the debrief should not only be on the outcomes of the discussion, but also on the discussion process itself.

3.5.4 Physical Classroom Setting

The physical setting of the class also seems to be a factor that facilitates classroom discussions, which are common in the use of most Context-based strategies. As an example, Mostert (2007:440) maintains that the physical setting of the case discussion can potentially add to or reduce from the case analysis, since case discussions can be deep and produce high levels of emotion. It is recommended that students are seated in a circle or a horseshoe-shaped arrangement in order to improve eye contact and to enable effective verbal or nonverbal communication. Schwartz (2014:4) suggests that in a horseshoe-shaped seating arrangement, the open part of the U should face the chalkboard or the whiteboard so that students can see what the teacher may write on the board. Schwartz (2014:4) further recommends that by writing students' comments on the board, student engagement in the lesson improves, as they realise that their comments are actually heard.

Teacher mobility in the class should also be made easy by the physical setting, as he or she may be required to engage with students in their groups during the case discussions. Movable chairs will also allow for team discussions in large groups.

3.5.5 Role Changes for Both Students and Teachers

The successful execution of Context-based strategies further calls for an adaptation in the roles and perceptions of both students and teachers in the teaching and learning process. Rose (2012:2) points out that with a Context-based approach the roles played by the teacher and the student are redefined such that the teacher becomes a facilitator in the teaching and learning process and assists students to take ownership of the knowledge, while on the other hand, students assume a role of active participants in this process. As an example, in Problem-based learning, Maurer and Neuhold (2012:17) argue that all the parties involved need to revise their roles in the teaching and learning process. Teachers now act as facilitators instead of being direct transmitters of knowledge in the learning process, while the students become active co-constructors of knowledge and relinquish their passive role in class. Mansor *et al.* (2015:261) also point out that PBL, requires of students to be more responsible for their learning while the teacher is more of a facilitator of collaborative learning who guides the learning process through open-ended questions instead of being a dispenser of knowledge. Hung (2011:531) also states that in PBL, the teacher's role is to model to the students the problem-solving techniques and reasoning processes industry experts usually follow and not just dispense knowledge to them. As the students continue to observe and emulate the teacher's reasoning and problem-solving skills, they are presented with an opportunity to practise and develop problem-solving skills independently and to become active co-constructors of knowledge rather than passive recipients of knowledge.

In Service-learning, Ziegert and McGoldrick (2008:52) argue that the role of the teacher should rather be to plan the envisaged learning experience and design the follow-up activities that can be used to encourage well-thought out and reflective learning. In the event that unexpected experiences and project outcomes arise, Ziegert and McGoldrick (2005:52) recommend that such student experiences be used as teachable moments at an appropriate time while the discussions are

underway, as they can contribute to deep learning. The teacher, according to Tick (2007:367), becomes a facilitator in the learning process and is responsible for creating conditions where students feel comfortable and are encouraged to form their ideas freely. The teacher as a facilitator has the role to ensure that discussions remain on the right track. In this way the teacher is responsible for helping students to develop their cognitive abilities further and also becomes a coach supporting the students' efforts to be independent and self-directed in the learning process.

The need for teachers to adapt their role in class is also noted by Mansor *et al.* (2015:261), who assert that teachers need to relinquish their roles as knowledge imparters, as PBL environment requires of them to become facilitators of collaborative learning. From time to time, the teacher will use open-ended questions which are meant not only to guide the learning process but also to encourage maximum participation of students and to reveal their thoughts on the issue at hand. In the same vein, Smith (2010:24) asserts that to be able to use Contextual teaching and learning strategies skilfully, teachers' focus during the learning process should be more on guiding, discussing, questioning, listening and clarifying. This will facilitate the teacher's departure from the accustomed role of a dispenser of knowledge to a role of a facilitator in knowledge construction. Trimmer, Laracy and Love-Gray (2009:1) concur, stating that the role of the teachers who use a Context-based approach are facilitators of learning and they help students to become creative and critical thinkers. It therefore becomes apparent that teachers adopting this approach will not only require new materials and skills, but will also need an adjusted or new philosophy of teaching, which can be assisted by availability of opportunities for professional development.

Students also need to change their customary role of passively receiving knowledge in class and should now assume an active role of co-constructors of knowledge in the learning process which, according to Smith (2010:24), includes engaging in the following activities: exploring, investigating, validating and discussing. For instance, when Problem-based learning is adopted, Tick (2007:367) maintains the role of the student turns from passive to active which is in contrast to the passive knowledge recipient role they usually assume in the conventional teaching and learning environment. In addition, Savery (2006:12) argues that students need to be responsible for their own learning, and should tackle the problem scenario by using

what their current knowledge allows them. They should take the responsibility to search for relevant information, which will be brought to the group members for discussion and ultimately for developing a feasible solution.

This adaptation of the roles of students in a Context-based learning environment also requires a change in their perception of what the learning process is all about. Rose (2012:2) asserts that the learning process must be seen as being governed by interest and not as a mere rote learning of facts. When learning is perceived in this way it means that students recognise that there is so much they stand to gain in the learning process which is contrary to the perception that learning is only about a mere desire to pass examinations. As these roles are new to students, some might at first not be comfortable with the open-endedness of Context-based strategies and their accompanying requirement of more self-directed learning. It is therefore recommended that care should be taken to gradually initiate students into this approach through carefully planned orientation activities.

3.5.6 Collaboration and Institutional Support

Collaboration seems to be another condition necessary to implement a Context-based approach successfully. As in Kalchick and Oertle's (2010:3) argument, teachers need to collaborate with their colleagues, relevant stakeholders and those with a keen interest in the subject. The formation of teams that comprise colleagues, workplace representatives and practitioners of the subject from the public and private sector can develop a well-rounded instruction base which allows students to apply their current knowledge to authentic real-life experiences. Moreover, in forming such teams, it becomes easier to access useful materials for the creation of relevant contexts within which abstract Economics concepts and theories can be taught. Teachers can therefore use the support of their collaborators to develop their own teaching and learning support materials using resources availed by industry partners or by using student experiences.

Student inputs also seem to be essential in the design and implementation of Context-based teaching and learning strategies. Kalchick and Oertle (2010:4) argue that teachers should elicit the views of the students on the type of strategies they find helpful in assisting them to achieve the learning outcomes. It is therefore necessary that they should be included in collaboration teams, as this will help teachers to

understand what the students' thought processes are in problem solving and to guide discussions as students pose questions in their quest to understand the Context-based teaching and learning strategies.

Teachers will find it difficult to implement Context-based strategies if they do not have the support from the institutions where they are based and if there is no continuous research and evaluation on the Context-based approach. Jameson-Meledy (2015:2) identifies institutional support, ongoing research and evaluation as other important conditions for a Context-based approach to thrive. According to Jameson-Meledy (2015:2), institutional support is one of the factors that is crucial for the success and sustainability of intervention strategies contained in Contextual Teaching and Learning. Furthermore, continuous research and evaluation also seem to contribute positively to the success of Context-based strategies, as it can provide the necessary facts prior to and subsequent to the implementation of these intervention strategies so that continuous improvement can be realised.

3.6 PLAUSIBLE THREATS IN IMPLEMENTING A CONTEXT-BASED APPROACH

3.6.1 Time Constraints

A review of the related literature on various strategies that formed a Context-based approach proposed by this study showed that time factor is the most notable possible challenge in the implementation of this proposed approach in Economics education. What seems to be a widespread concern is that teachers may not have enough time at their disposal to prepare and present the Context-based lessons thoroughly. As a result of this perceived limited time, teachers may find it difficult to adopt this approach for fear that with their pursuit for depth and breadth of content coverage they risk not covering enough content to prepare students for standardised high stakes tests. Mansor *et al.* (2015:260), for example, note that a teachers adopting Problem-based learning run the risk of not covering as much content material required by the curriculum as they would by using the traditional lecture approach.

A number of studies in incorporating the Case method in teaching Economics demonstrate that more time is needed to identify and prepare good cases. As an example, Popescu (2014:276) argues that success in teaching through the Case method depends on thorough preparation by the teacher and it is for this reason that introduction of this method can be time consuming. In addition, Carlson and Valenchick (2006:60) maintain that the identification and integration of good cases in the syllabus take time as well as preparation to teach them. Golich *et al.* (2000:57) also note that it can be difficult to find a relevant case to deal with particular pedagogic objectives and content. Teachers should not just use cases because they might be fun, but should always focus on what the case can help the students with and what the case should emphasize in class. In noting the challenge teachers may have in finding appropriate cases to address certain pedagogical objectives and content accuracy, Golich *et al.* (2000:57) recommend that the teacher may create his or her own cases in order to meet specific teaching objectives or may use newspaper articles, congressional testimony or proceedings of international meetings as cases.

Mostert (2007:437) also argues that preparing cases for teaching is a demanding activity, which involves much more time even for students. Students, for example, are required to study the case prior to class so that they familiarize themselves with it and specifically with the facts it carries and its entire content. Students also need to identify apparent or probable problems carried in the case, match the subject content with the problems identified in the case, and reflect on probable solutions or plans of action. In the event the teacher provides reflective rubrics or guiding questions, students should also study and respond to them before the actual case discussion. Case discussion and analysis may also be time consuming and as Mostert (2007:439) notes, the analytical levels of the case depends amongst other factors on the difficulty of the particular case, students' willingness to take part in focused discussions and the skill of the teacher in leading case discussions. Mostert (2007:439) further notes that as the difficulty of the case becomes apparent, a teacher with little exposure to the Case method often runs out of time to achieve the teaching objectives; hence it is recommended that the depth of case analysis should be limited to what teaching objectives are.

The time factor challenge has also been noted in the use of Context-rich problems. Teachers accustomed to the lecture method, often called chalk and talk in teaching Economics usually use the standard textbook problems, which in most cases require of students to use a plug and chug approach to arrive at solutions. This approach in teaching has been lauded for allowing teachers to cover large amounts of content within a short space of time. On the other hand, teaching Economics with Context-rich problems requires of the teacher to find time to prepare these problems, taking into consideration various factors, e.g. information to be omitted, excess information to be included in the problem, prompts and guidelines to give to students to direct them towards what they need to do. In acknowledging that time can be a threat in incorporating Context-rich problems in class, Maier *et al.* (2010:181) state that at least initially, the preparation takes a bit more time and effort, although this can get easier with more practise. They further argue that the execution also requires more time, especially when helping students to understand exactly what is required of them. This challenge is also noted by Bangs (2012:54), who affirms that time can be a challenge, as teachers will need more time especially at the initial stages of writing these problems. Time must also be set aside to orientate students into this approach, e.g. by using the cognitive apprentice model.

In Service-learning, preparation time on the part of teachers has also been identified as a possible challenge in the successful implementation of this strategy as part of a Context-based approach. Ziegert and McGoldrick (2008:52) note that much time investment usually occurs at the planning stage, and that it is common to find teachers complaining that they are simply ill-prepared to incorporate Service-learning in the teaching and learning process. Time is usually needed to match students with the community organisations and in ensuring that service activities are well linked to the course content. Furthermore, Al Barwani *et al.* (2013:113) note that one of the reasons usually given by teachers to explain why they do not incorporate Service-learning in their programmes, is that the curriculum is already overloaded and as a result the door is practically shut for anything else. Al Barwani *et al.* (2013:113) further note that the need to succeed in national examinations is another reason given by teachers as to why they do not include anything else in their programmes, as they often see participation in Service-learning activities as conflicting with study time.

Time and workload are issues that have also been raised as a potential challenge in the implementation of Problem-based learning. Hung (2011:541), for example, notes that students need a substantial amount of time for an in-depth investigation of a problem which may result in students experiencing discomfort or anxiety because they are not used to being self-directed and active participants in the learning process. As PBL is new to students, they may at first be uncertain about what their role is in the learning process and which aspect of the problem they need to concentrate on. This uncertainty, according to Hung (2011:541), may result in unproductive research and minimal learning, for example, students may find themselves spending much of their research time on trivial issues. Teachers, on the other hand, also need to assign more time to preparing suitable problems and to ensuring that they provide quality facilitation and guidance to the students.

Teachers also face the challenge of covering a certain amount of content within a stipulated period of time and this often does not allow them time to incorporate Context-based teaching and learning activities in their classes. Predmore (2005:4) notes that a state curriculum may not always allow sufficient time for teachers to administer tasks such as experiments, projects and other Context-based teaching and learning activities, which by their nature require more time to complete. Teachers may therefore be sceptical of using the afore-mentioned activities for fear that they may not get to cover sufficient scope of work or not have enough time to prepare students for high-stakes testing. Savery (2006:17) notes that most public schools are regulated by a government authorised curriculum and an expectation to produce a similar product. This curriculum is also dominated by high stakes standardised testing that tends to support methods that are inclined towards a teaching to test approach. These methods seem to encourage rote learning as they are dominated by techniques such as drill and the use of practice tests to rehearse.

To mitigate the challenge of limited time available for content coverage, which is often as a result of unfamiliarity with most of the contextual learning methods, Mostert (2007:437) asserts that teachers who use the Case method may gain deeper insights in the use of this method by repeatedly using the same cases for the same or different teaching objectives. By practising with the same cases, the amount of time spent on case preparation and discussion can be vastly reduced and teachers may be able to approach the teaching of a particular case from different

angles. A further recommendation is made by Mostert (2007:437) that students should study the case well before its discussion in class and prepare the notes to record their understanding of the case and the links which case has with the subject content and their personal experiences. With regard to content coverage, Hattingh and Killen (2003:44) note from the use of Problem-based learning that pressure for content coverage has often been raised as one of the challenges in implementing this method and that this challenge has also led to a debate of whether emphasis of teaching should be on breadth or depth of content. It is, however, noted that a partial Problem-based learning environment can be created where students are still presented with problems to solve instead of adopting a fully-fledged PBL approach. Rigall-I-Torrent (2011:2) explains that in a partial Problem-based learning environment, PBL coexist with the conventional lecture method. Teachers may then use PBL activities to foster students' application of concepts or theories and revert to the use of the lectures to cover certain topics. This combination may allow the teachers to cover the required content in a stipulated period of time.

With regard to the use of the Case method, Golich *et al.* (2000:7) also argue that case teaching does not mean that content coverage is sacrificed, as high-quality cases are usually full of information and necessitate the application of textbook theory by students to analyse complex real-world events. Golich *et al.* (2000:7) also suggest that teachers should by all means try to pick cases that will meet identified learning goals and that the teacher may use plus minus six cases in conjunction with other teaching methods. In response to the concern that less academic content will be covered due to Service-learning activities, Ziegert and McGoldrick (2008:51) acknowledge that with Service-learning student experiences may serve as an additional text that can be introduced in the classroom and that deep understanding may be achieved if students are to integrate this experiential text with the theory they learn in class. This integration occurs during the sessions of reflection and discussion of service experiences by students.

Service learning should therefore not be seen as reducing content coverage, but rather as situating learning outside of the classroom as students learn through their experiences. This approach has the potential to provide students with an opportunity for richer analysis of content covered and pave way for them to develop lasting and deep learning. Time investment should thus be seen as a necessity to ensure that

students achieve deeper and broader understanding of the course material. Faculty Resource Guide for Service-learning (2015-16:9) also points out that if applied properly Service-learning can provide more rigour as students are not only required to master the standard book and lecture material, but must also integrate their service experiences into that content. It can therefore be said that Service-learning does not change what is taught, but how it is taught.

3.6.2 Lack of Exposure to Context-based Techniques

The students are usually exposed to the teaching approach where the teacher takes a dominant role in class while students play a more passive role of mainly listening, responding to the teacher's question and taking notes in class. However, the learning techniques that are part of a Context-based approach require of the students to be active in learning and take responsibility for their learning. This requirement on the part of students might frustrate them because of their limited exposure to these methods. In the use of the Case method, Mostert (2007:436) states that for many students, case discussion and analysis are an unfamiliar experience to which they may react in different ways for example, students might have a perception that the teacher is not carrying out his or her duty as their instructional leader by not providing them with an answer or solution to a problem raised in the case, or they may not be able to grasp the lessons which the case discussion and analysis is supposed to teach. This may result in frustration with and disinterest in the topic under discussion, especially when students are not confident of their own judgements and those of their classmates.

It has also been noted that when students encounter the Context-rich problems for the first time, they may get frustrated and confused as they find it challenging to work with these kinds of problems, which are different from the usual end-of-the-chapter problems. Maier *et al.* (2010:175) note that students might object to Context-rich problems, preferring problems with single objective answers. This situation is likely to be experienced when Context-rich problems are first introduced in the class, as students may find it difficult to use this approach that aims to help them to work with the actual economic problems. Maier *et al.* (2010:182) argue that a factor which can lead to this frustration in dealing with Context-rich problems results from some of its elements namely; the deliberate omission of some information, addition of excess

information and lack of a specific target. Bangs (2012:55) concurs by stating that teachers should expect that students will demonstrate some degree of frustration when this approach is first introduced to them. However, Bangs (2012:55) recommends that the teacher can minimise this element of frustration by pitching Context-rich problems at a level of difficulty appropriate for students.

Case method, Context-rich problems and Problem-based learning usually rely on group-work, which requires of students to have developed group skills. A lack of such skills can also add to student frustration with these techniques of a Context-based approach. In implementing Problem-based learning, for example, Mansor *et al.* (2015:262) noticed that a relatively better performance was observed from groups whose members show higher academic abilities than from groups with academically slower members. The latter groups often find difficulties at the early stages of the implementation of PBL as they are no longer being spoon fed by teachers and have to work collaboratively to find solutions to the ill-structured problems. It may also happen that groups formed to deal with allocated problems become dysfunctional. Dolmans *et al.* (2005:735) note that a group may have members who come unprepared to the meetings resulting in more work load being carried by those who always prepare for the class. This might discourage those students who were initially motivated by this learning strategy and further lead to their less involvement. With these types of groups, learning will not be as collaborative as it was intended and PBL may fail to yield positive effects on students.

3.6.3 Resistance to Change

Teachers often find themselves being comfortable with the tried and tested chalk and talk or the lecture method, which gives them absolute control over the class. The result is that because of the student centeredness of Context-based approach strategies teachers may be sceptical to adopt these methods because of the perception that these strategies require of them to share their absolute power and control in class. In line with this, Trimmer *et al.* (2009:1) note that one of the barriers identified in implementing a Context-based approach is the resistance of teachers to change from a teaching practice that is more content-driven to a process that is more student oriented. In a Context-based teaching and learning environment, the teacher's role changes from what is often referred to as sage on stage to the guide

on sides. In this way the teacher becomes more of a facilitator in the learning process than a powerful expert whose role is to transmit knowledge. Trimmer *et al.* (2009:1) state that the facilitator's role is to guide, question and challenge. As a result, the idea of not being in control seems to be a challenge for teachers. Ziegert and McGoldrick (2008:52) also note that as he or she stands behind the podium at the front of the classroom the teacher often gets a sense of authority over the classroom proceedings. This position further provides the teacher with a feeling of being in charge of what the story of the day is, how it unfolds and the extent to which student intervene in the lesson.

Teacher scepticism in adopting new techniques in their practice is also noted by Predmore (2005:4), who contends that it might be difficult to some seasoned teachers to be receptive to Context-based teaching and learning strategies, because of the perception than they are more demanding specifically when it comes to classroom control. This is because CTL activities often require of students to move around the room as they form discussion groups. As such the teacher constantly needs to monitor them to ensure that student discussions do not get derailed from their intended purposes. Avargil *et al.* (2012:210) also note that in many instances these teachers would argue that limited time and resources are the factors that inhibit them from embracing a Context-based approach.

Difficulty to adopt Service-learning may be an example of teacher resistance to change and is noted by Heffernan (2001:2) who argues that this pedagogy challenges teachers to reconceptualise their role as educators. It may be difficult for teacher to bow out of their comfortable zone that is made up of the expected and predictable classroom activities which have become part of their daily routine over a long time. The reason for this difficulty maybe found in the perception by teachers that Service-learning may tend to be unpredictable and uncomfortable, especially in the initial stages of its implementation. Mansor *et al.* (2015:260) argue that one possible challenge in adopting Problem-based learning is that it can be difficult for teachers to relinquish their customary roles of knowledge transmitters and act as facilitators or guides in the learning process. Teo (2001:115) also notes an unwillingness to change mind-sets as a possible challenge faced in the adoption of PBL in classes, as teachers might view it as bringing extra work with no added benefit. This is often the case, as teachers might still want to hold on to long-held

beliefs about teaching and learning. Efforts of teachers to incorporate Problem-based Learning in their subjects may also be met with resistance and resentment from their colleagues who continue to use conventional teaching methods with the same students.

Students can also demonstrate a resistance to adopt Problem-based learning, largely because of the passive role they have become accustomed to in class. Mansor *et al.* (2015:261) argue that the inclination of students towards the conventional methods of learning makes it difficult for them take responsibility for their own learning, which amongst others requires of them to source information individually or collectively. Students may also perceive the new facilitator role of the teacher as being unhelpful, which can be an effect of the conventional learning mode to which they have been initiated, and especially if they are still exposed to such learning strategies in other subjects. This resistance is often exacerbated by teachers who may still want to hold on to their dominant roles, leading to a lack of commitment and active participation from the students and, as Dolmans *et al.* (2005:735) note, this might be a reason that Problem-based learning may fail to achieve the goal of developing self-directed learning.

Research has noted that to mitigate students' resistance in adopting these strategies that require their active participation in the learning process and which hold them accountable for their learning, concerted efforts should be taken to gradually introduce them to the use of such strategies. Tharayil *et al.* (2018:5), for example, propose amongst others that teachers should explain the course expectations to students and how the use of the strategies such as the Case method will help them to achieve the course expectations. Teachers should also explain what is expected from each activity by providing them with guidelines on how to carry out the assigned tasks. In addition, Tharayil *et al.* (2018:7) propose that teachers should adopt facilitation strategies, which include moving around the class, using encouraging gestures, engaging with the non-participants, encouraging students to ask questions, allowing them to give feedback, and rewarding participation. Tharayil *et al.* (2018:9) further suggest that teachers should establish a routine for introducing these student-centred strategies and that this introduction should be done in incremental steps.

In an effort to encourage the adoption of Context-based strategies there is a further recommendation that when these innovative strategies are introduced, teachers and students should be part of the introduction processes. Taconis *et al* (2016:9) believe that successful implementation of a Context-based approach and the creation of a Context-based learning environment are critically dependent on the teachers and assert that the ideas and rationale behind the use of this approach must be communicated with the teachers at very early stages. Teachers should also have values on education that are fitting to those in the materials they will be using. They should also have the necessary skills to create the Context-based learning environment where such materials will be used.

Fensham (2009:10) notes that choice of contexts in a Context-based approach is often not done by teachers, especially those who are new in the use of this approach. Fensham (2009:10) instead notes that contexts are usually stipulated in the curriculum or its accompanying materials; hence an argument that teachers and their students should be allowed an opportunity to choose contexts to ensure that relevant contexts are chosen. One advantage of involving the teachers in the choice of contexts for their teaching is noted by Fensham (2009:10), who states that it might be advantageous to allow teachers to choose contexts for the reason that they work with students on daily basis and they might therefore also know which contexts could be appropriate and engaging for them. One possible advantage of teachers choosing their own contexts is that they may get immediate feedback from students on the chosen contexts. Teachers may also find it more psychologically easy to engage with topics and contexts they have chosen themselves, as opposed to contexts prescribed to them.

Trimmer *et al.* (2009:1) also share the view that the role of the teachers who use a Context-based approach is to make the process of learning easy and to instil creativity and critical thinking in students. It therefore becomes apparent that teachers adopting this approach will not only require new materials and skills, but will also need an adjusted or a new philosophy of teaching. This can be assisted by the availability of opportunities for professional development.

3.6.4 Class Size and Resources

Another challenge in the use of Context-based techniques such as the Case method, Context-rich problems and Problem-based learning, which rely on group work and requires group discussions, relates to the class size and availability of resources which are used as teaching and learning aids. Golich *et al.* (2000:57) argue that when using the Case method, in larger classrooms, regular attention must be paid to the conduct of students in order to create a culture and atmosphere that encourage participation and to have good control over case discussions. Some students may not be comfortable to speak in front of a big audience in the form of classmates. It may also happen that those who volunteer might sometimes be either the brave ones or those who enjoy being on stage and who may not necessarily be that good in analysis. Big classes might also force the teacher to call on those who are not participating, which might embarrass them. There is also a low incentive for participation in large classes, as students might think that the teacher may not remember those who have contributed and those who did not contribute.

An observation is made Mostert (2007:439) that Case method teaching seems to work best when used in classes with a small number of students, as student participation in case discussion seems to be high in such classes and varied insights on the case are revealed. This seems to be in contrast to bigger classes where it becomes less likely that everyone will get an opportunity to contribute to the discussion. Mostert (2007:439), however, cautions that classes with too few students might defeat the noble intentions of case teaching as it may not be possible to get different opinions, understandings, and views on the case under discussion, particularly in situations where some students do not seem to be thinking deeply about the case or responding to matters raised in the case.

With regard to the availability of resources, Predmore (2005:4) notes that the challenge of limited time in covering the curriculum is often coupled with availability of resources needed for Context-based teaching and learning. Limited resources may restrict the teacher in terms of the kinds of activities which he or she may want to carry out. It has been found that Problem-based learning places too great a demand not only on time, but also on resources. Maurer and Neuhold (2012:11), for example, assert that this kind of teaching requires that an appropriate number of

smaller rooms with the necessary equipment, e.g. a whiteboard should be available. Deo (2013:47) has identified that a typical PBL session requires a well-equipped tutorial room with proper seating arrangements, a whiteboard, overhead projector and preferably with internet (WiFi) connection. A fully equipped library is another requirement to facilitate self-study and research by students. A school may not have such small rooms to allow for break-away groups to discuss their assignments or enough room space to allow tables to be arranged in a circle (an arrangement preferred for discussions). The school may also not have a well-resourced library or internet facilities to assist in student research thus making the intended self-study by students difficult to accomplish.

While acknowledging that schools need to have rooms equipped with resources such as audio-visual aids for Problem-based learning sessions and which is something that may be unaffordable, AlBuali and Khan (2018:38) recommend that only a few rooms could be equipped with such resources, while the other ones are equipped with manual devices such as whiteboards and flipcharts. A further recommendation is that as much as the development of PowerPoint presentation skills by students is encouraged, such presentations should rather be limited to sessions where the whole group is involved, e.g. in group presentations or in sessions where groups respond to questions posed earlier on by other groups. Students are encouraged to use flipcharts when groups meet separately for some specific purpose e.g. for brainstorming exercises.

3.6.5 Assessment and Grading

Assessment methods and grading of students' work seem to pose some difficulties in using Context-based techniques, since most teachers are used to the conventional high stakes tests and examinations. This challenge is highlighted in an argument by Taconis *et al* (2016:8) that it is a challenge for teachers to measure the attainment of the learning outcomes fairly when using Context-based strategies. This is partly because it seems to be difficult for traditional tests to recognise the value of the learning outcomes in Context-based education. It is for this reason that an appeal is made that testing should not over-emphasise de-contextualized knowledge and should incorporate and reward competencies that are addressed in a Context-based education. Velasco *et al.* (2012:463) argue that changes in the teaching

methods need to be accompanied by innovative assessment methods that will encourage assessment of both the knowledge and competencies of students. Assessment of students' competencies includes an examination of the levels of effort attained by students in the application of their subject knowledge to particular situations. This assessment also includes an examination of the ability of student to demonstrate the attitudes and values attained in an integrated manner.

Assessment of the impact of Service-learning on student outcomes has also been cited as an area of concern in adopting this pedagogy. Ziegert and McGoldrick (2008:53) state that identification and measurement of appropriate learning outcomes, which Service-learning might be specifically intended to achieve is one great challenge found in the use of this pedagogic method. In the use of Context-rich problems, Bangs (2012:55) notes that one of the challenges teachers may experience is that it may be difficult for them to grade unexpected answers which students may provide. It maybe against this background that Smith (2010:24) argues for incorporation of alternative assessment methods as this seems to be a requisite for the Context-based approach to succeed.

Authentic assessment, explained by Mueller (2005:2) as a method of assessing students by requiring them to carry out real-world tasks in order to check their ability to appropriately apply fundamental knowledge and skills, seems to be a suitable method of assessment when using contextual learning strategies. Calma and Draper (2010:3) assert that authentic assessment differs from the conventional methods of assessment in that it specifically refers to connecting assessment with real-world practice, e.g. through simulations where students are required to create products or performance that apply to situations outside of the classroom. Smith (2010:24) also recommends that teachers should incorporate alternative methods of evaluation to assess students' progress in contextual teaching and learning environments, which may include the use of student portfolios, journal entries and self-evaluations. All these methods may be used in addition to the usual assessment tasks.

Darling-Hammond and Snyder (2000:523) note that teaching that focuses on ensuring that students understand and are able to apply their subject knowledge instead of promoting rote memorisation and recall can result in unpredictability. This is often the case, as teachers must understand and make the most of student

thinking for them to be able to manage the knowledge construction process. In an attempt to minimize this challenge of unexpected answers from students when using Context-rich problems, Bangs (2012:55) suggests that the teacher can give students a grading rubric, which can serve as a guideline on what is expected of the student in completing a task given. The rubric also gives students an idea of how much information they have to provide. In agreement with the use of a rubric as a grading instrument, Peterson (2010:8) argues that a rubric serves as a helpful tool in grading Context-rich problems, as it provides a way of letting the students know in advance how the question will be graded. It also helps the teacher to remain consistent when grading what may be different responses from the students. Calma and Draper (2010:6) are also of the view that in assessing the authentic tasks, students need to perform based on some standards of performance, which should be communicated to students beforehand. Such standards are not necessarily norm-referenced, but are rather in reference to some specific criteria.

Economics teachers therefore need to note and acknowledge the existence of these challenges when contemplating to incorporate Context-based learning strategies. It should, however, be noted that a Context-based approach cannot just be dismissed due to the challenges accompanying it. It becomes incumbent on the teachers, students and the institutions of learning to uncover methods and resources to mitigate the effects of these challenges in order to ensure that Economics education can benefit from what this approach stands to offer.

3.7 BEST PRACTICES IN THE USE OF A CONTEXT-BASED APPROACH

A review of literature on Context-based learning techniques demonstrates that these techniques have been applied with some notable measure of success in different countries in addressing the problem of students' inability to apply the abstract Economics concepts and theories in real-world situations. The findings on a practical application of Context-rich problems, Case method, Service-learning and Problem-Based learning show encouraging signs about the effectiveness of this approach in addressing the research problem of this study.

Conway (2012:40) identifies a case study titled, "Requiem for a Dying Sea", an example of the successful use of the Case method. This case study was used to

teach an Economics concept of externalities in an upper-level development Economics course. The case study is based on the desertification of the Aral Sea found in Central Asia. The case study was intended to help students to demonstrate higher-order mastery of the concept externalities at the end of the lesson. Conway (2012:41) reports that as students engaged with this case study they demonstrated proficiency in the application of the externality concept in water use, analysis of the consequences of this externality on the population living down the stream, connecting externality concept with the property rights concept, which students had previously learned, and in evaluating other policies to internalize the external costs of excessive water use upstream. Conway (2012:42) further reports that the written tests and other formative assessments administered after students had been exposed to the Case method showed the following results: a greater number of the students were able to apply the relevant concepts effectively in situations different from where the concepts were learnt, many of the students in class demonstrated an ability to use concepts effectively for analysis of information, many of the students managed to bring and use different concepts together, i.e. they could synthesize, and most of them managed to achieve and retain higher-order mastery of concepts for longer periods, compared to students who were not taught through the use of a Case method.

Volpe (2015:15) notes that in the studies that were undertaken to evaluate the benefits of using the Case method for, e.g. in the course, International Trade Policy the results showed that students exposed to case discussion demonstrated a better understanding of the theory and performed well in examination questions that required of them to analyse events in the real-world using the theory. Again, students in the Development Economics course taught with the Case method also reported that the Case Method enhanced their learning of Economics and they felt that cases make a classroom much more real.

Good practices have also been reported in the use of Context-rich problems. As an example, Dalton and Shaffer (2010:152) refer to the results of the study where Context-rich problems where used in two principles of a Macro-Economics class. The outcome of the application, which was part of a Teaching Innovations Programme, jointly sponsored by the Committee on Economic Education of the American Economic Association, showed that many innovative and stimulating

papers were written and submitted by students. The results also showed remarkable improvement in class discussions by students after they had dealt with the assignments based on the Context-rich problems. The outcome further showed that many reports from students indicated that through their engagement with Context-rich problems in an Economics course they had to think broadly about various aspects of this subject and were also able to understand submissions posted by their classmates for discussions. Students were also happy with the grades received for their assignments, which averaged above 80%.

Dalton and Shaffer (2010:153) further note that the outcome of the use of Context-rich problems in these two macro-economic classes supported the argument of some Economics teachers who maintain that a similar degree of success can still be achieved when students are required to solve Context-rich problems in tests or summative assessments like when they are required to do assignments. Students also demonstrated more creativity and effective problem solving as the Context-rich problems forced them to think more broadly about the application of the Economics concepts they have learned. In another study, Kitaoka (2013:107) notes the results of a quiz that students completed individually a week after they had worked on a Context-rich problem using a Cooperative learning exercise known as think-pair-share strategy. The results of the quiz showed that students' logical thinking and understanding of the subject improved and their ability to apply the Economic theory to actual economic problems improved.

Joann Bangs from the College of St. Catherine in USA also developed and applied Context-rich problems in the principles of the micro-economics class. The first problem was meant to illustrate the concepts of profit maximization and the shut-down condition in the perfectly competitive firm. The second Context-rich problem dealt with the concept of price discrimination, while the third Context-rich problem dealt with the concept of oligopolistic competition (Bangs, 2007:3). The results of this application show that despite some mistakes which students made while attempting to solve the assigned problems, there was an improvement in class discussion and group work, students also showed creativity in their responses, and students applied some economic concepts that were relevant in solving the Context-rich problems they were assigned (Bangs, 2007:10). To demonstrate satisfaction with the use of Context-rich problems in enhancing students' application of economic concepts,

Bangs (2007:15) concludes that in spite of the challenges encountered in the application of Context-rich problems, time is well worth the outcome of having students better prepared to apply economic principles to the situations they encounter in their own lives.

In the study by Govekar and Rishi (2007:5), Service-learning was incorporated into an Economics course known as Money and Banking at a College of Business Administration. The use of this method in this course was based on the belief that Service-learning is an active technique that enables students to study Economics theory through authentic experiences. The aim of the instructors of the course was to develop creative and critical thinking skills of students and their ability to respond to change. Furthermore the aim was to expose students to real-world diversity, and to improve their understanding of the concepts they learnt in class by giving them an opportunity to teach others.

Qualitative evidence generated from the student essays, their journal entries and from the comments made during the evaluation of the impact of the course indicated that students in a Money and Banking course who engaged in Service-learning projects displayed a better understanding of financial concepts. Furthermore, when comments in reflective journals of students were analysed it was found that 89% of the class indicated that their involvement at adult and teen learning centres had enhanced their comprehension of Economics. Again, when the students were teaching in a high school class, about 80% of them indicated an improved understanding of financial topics because they felt that by explaining a particular concept to others their own comprehension of the concept was enhanced. Students were also able to show linkage of service projects to classroom concepts, to the extent that those in a non-profit Management course even showed an interest in applying classroom ideas by taking the projects further (Govekar & Rishi, 2007:5).

In a study on Service-learning at the University of Maine in the US by Sullivan (2013:7), a report by lecturers and students showed that Service-learning enriches the ability of students to apply their subject knowledge in the real world. Improvement in student academic outcomes brought about through engagement in student learning was demonstrated through, amongst others, problem analysis, critical thinking and cognitive development. Richards Elliott (2009:271) reports that in

a study where Service-learning was applied in a Development Economics class, students reported that Service-learning provides them a chance to reflect on, analyse, and apply development theories and that they managed to attain a better understanding of the course. As a result, students recommended that Service-learning projects that supplement lectures with service hours should continue as they believe this pedagogic method contributes positively to their comprehension of Development Economics. Richards Elliott (2009:274) further notes that the satisfaction from the students with Service-learning can be linked with the claims by Economists that improvement in learning outcomes can be achieved with Service-learning as this pedagogy requires of students to do what Economists do and also to put to practice Economic theories. Service-learning is further believed to have the potential to improve learning outcomes, for the reason that it assists students to know how useful the Economic models can be and what their possible limitations are.

In a report by Prentice and Robinson (2010:7) on the effects of Service-learning on students in a study undertaken by American Association of Community Colleges in 2009, students remarked that the usefulness and relevance of information that they usually receive in class were made more apparent through their engagement in Service-learning projects. They mentioned that these service projects were helpful as they provided them with real-world experience. Furthermore, students mentioned that Service-learning assisted them to understand and apply the information learned in textbooks. Students further mentioned that Service-learning taught them some other skills, e.g. getting into a real-life situation and thinking about it in a critical and logical manner. Comments by students suggested that Service-learning helped them retain content knowledge much longer because it exposed them to experiences which had real-life consequences.

The successes of Problem-based learning in Economics education have also been noted by various authors, e.g. Finkelstein *et al.* (2010:6), who reported the results of a study, which used a Problem-based Economics unit, “The President’s Dilemma”, which focuses of macro-economics. In that study, data were generated from 252 Economics students and five teachers from five high schools. The results of the study showed that Problem-based Economics increased learning of Macro-Economics. Finkelstein *et al*. (2010:52) further report that the Test of Economics

Literacy taken by students showed that the gains in students' Economics content knowledge could be attributed to Problem-based learning. Regarding its impact on enhancing students' ability to apply content knowledge, Chang (2009:6) notes the results of a study conducted where PBL approach was applied in an undergraduate development Economics course. Students were expected to be able to use Economic theories and policy instruments to detect problems in economic development and tackle them rigorously and critically at the end of the course. Chang (2009:10) reports that the Problem-based setting persuaded students to work on a learning goal defined by themselves so that they are able to apply their knowledge to new situations. De Witte and Rogge (2012:64) also report that a study by Dochy, Sergers, Van den Bossche and Gijbels, which investigated a link between problem-based learning, student knowledge and knowledge application found that problem-based learning had a positive and statistically significant effect on students' application of knowledge.

3.8 CHAPTER SUMMARY

The chapter demonstrated that Economics students often find the subject to be very abstract and as such find it difficult to relate to it and understand how it can be of value to their lives. The result is that students find themselves being unable to apply the subject knowledge in real-life, which is the problem this study aims to address. One reason that has been cited for this apparent difficulty for students apply the Economics theories and abstract concepts in the real world, is that the teaching of the subject is dominantly through a lecture method and is textbook and classroom confined. It for this reason that the chapter concludes that there is a need for a paradigm shift in Economics teaching, which will see a shift from the use of a more content-based approach to a more Context-based approach. The Context-based approach is believed to have a potential to address the research problem by amongst others: allowing students opportunities to practise the application of the Economic theories and concepts, contextualising Economics content, enhancing students' ability to transfer their knowledge and developing their higher-order thinking skills.

The related literature reviewed showed that a Context-based approach in Economics education can be facilitated by using pedagogic methods such as the Case method,

Context-rich problems, Service-learning, and Problem-based learning. The rationale for the use of each of these methods was provided. The chapter further outlined the conditions that need to prevail for a Context-based approach to be implemented successfully. The plausible challenges which may act as inhibitors to the adoption of a Context-based approach were identified and measures to mitigate their impact were also suggested. Lastly, the chapter made a case for a Context-based approach by reflecting on the best practices in using the Context-based strategies in Economics.

CHAPTER 4 :
RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

This chapter will provide an explanation on the methodology that was followed to conduct this research, i.e. Participatory Action Research (PAR), reflecting amongst others on its historical background, its main features and on its compatibility with social constructivism, which is the theoretical framework that couches this study. It will further explain the reasons for the choice of this methodology, its relevance to the study and how the PAR process was followed. The challenges and possible risks of using a PAR methodology in conducting research are also highlighted in this chapter. The chapter will further elaborate on data generation methods that were used and on how the generated data were analysed. An explanation will also be given of issues related to the ethics of research that were considered and attended to when this study was carried out.

4.2 PARTICIPATORY ACTION RESEARCH (PAR)

Participatory Action Research (PAR) was used as an informing methodology for this research project. Gray (2009:171) states that PAR builds upon the Action Research (AR) model developed by Kurt Lewin by seeking to understand the power of group dynamics in a research process and relationships that exist between individuals, groups and communities. However, PAR is different from Action research, because participants in the PAR project usually show interest in the political and cultural context in which the action takes place and they constantly reflect critically on such a context. As the principal researcher I worked with, amongst others, high school Economics teachers, Economics lecturers from the local university and Economics students in conducting this study. Participatory Action Research is described by Mackenzie, Tan, Hoverman and Baldwin (2012:12) as an applied research approach in which people with interest in the outcomes of the research participate in the research process by taking active, co-researcher roles. The primary investigator, who might be an academic researcher enters into a mutual partnership with those people who have keen interest in the outcomes of the research. The aim of this type

of research is usually to facilitate improvement in practice by directly applying the findings of the research in a practical context. This mutual partnership is noted by Blanche *et al.* (2006:430), who contend that the aim of PAR is to generate knowledge in partnership with those who can reap its benefits which amongst others include improvement in social, educational and material conditions.

In a similar breath, Young (2006:499) reiterates the view that PAR is a kind of enquiry that lends itself to a participatory view of knowledge generation in which researchers work in collaboration with stakeholders through a repetitive cycle of fieldwork or practice, reflection, planning research and action. Furthermore, Young (2006:499) notes that PAR moves social research from a linear cause and effect set-up to a participatory set-up that is rooted in the experiences of those with a keen interest in the research process that is underway. In distinguishing PAR from other research approaches Whitman, Pain and Millidge (2015:625) argue that PAR offers a democratic model that is driven by people who have a stake in the issue under investigation. It further demonstrates who is capable to produce knowledge, to own and use it. It is a collaborative effort that involves bringing together different skills, discussions and working together with the aim to produce an action or actions that will result in a change or improvement in the identified problem area. Whitman *et al.* (2015:626) further note that PAR should not only be interpreted as a platform for a mere co-production of knowledge but should be seen as a model in which different research process stages are driven and owned by research participants.

The description of PAR offered in the preceding paragraphs seems to boil down to the assertion made by Wimpenny (2013:4), who states that PAR is a research that involves the two elements, i.e. participation and action. PAR has the concerns experienced by a group, community or organisation as its fundamental premise. In a PAR project, members of a group, community or organisation that experiences a common problem coalesce and participate collaboratively in a concerted effort to understand the problem and propose solutions and an action plan to improve their conditions or eradicate the problem they experience. Wimpenny (2010:89) further points out that PAR is a research method that involves a group of people who experience a certain problem or issue and decide to work together to find out how they can best address the issue or the problem. To highlight the transformational intent of PAR, Brydon-Miller and Maquire (2009:80) contend that PAR is a structured

approach meant to effect positive change at personal, organisational and structural levels. Brydon-Miller and Maquire (2009:80) further point out that PAR regards positive social change, critical consciousness development and human self-determination as the fundamental objectives of social research. In adding a political dimension to the description of PAR, Guishard (2009:87) contends that PAR intends to address the politics of knowledge creation by engaging in a reflective dialogue. This dialogue has the aim to deal with issues such as, to whom do the ideas and viewpoints that are traditionally privileged belong and to whom do the views that are excluded in research belong. As Kidd and Kral (2005:187) note, the groups that are without power are rarely involved in research for various reasons, e.g. knowledge produced by stigmatized people is often not valued and the tendency of established forums and academic researchers to seek complete ownership of methods of knowledge production and approaches to change. Datta, Khyang, Prue Khyang, Prue Kheyang, Ching Khyang and Chapola (2015:582) maintain that PAR is an approach that reflects a relational research framework as in that process, the participants' thoughts and experiences are respected and given importance, resulting in their empowerment. Reason and Bradbury (2001:9) argue that the political element in participatory research asserts the right and ability of people to be part of the decisions that affect them and which are said to be generating knowledge about them. Looking at PAR from this dimension also underlines the importance of liberating the silenced voices of those held down by amongst others the class structure in a society, poverty, sexism, racism and homophobia. Furthermore, bringing forth this political dimension emphasises that while it is acknowledged that the main goal of PAR is to solve practical problems in a community, this type of research also aims at the shift of balance of power in favour of the poor and the marginalised members of the society.

What stands out from the various descriptions offered for PAR is that it is a methodology that is based on participation in a research process by people who are affected by a common problem with the aim to find solutions to the problem that affects them. The intervention which the research participants seek will benefit all those concerned by improving their condition or solving the identified problem. This study was conducted within a framework that should encourage Economics students, teachers and other relevant stakeholders to share their views and use daily

experiences with this subject to formulate an approach that intends to encourage the teaching of Economics in relevant and authentic contexts, i.e. a Context-based approach. The aim of this approach is to enrich Economics students' ability to apply to real-life situations the abstract concepts and theories they are taught. This approach to conducting social research seems to be consistent with the description of PAR offered by Kelly (2005:65), who argues that PAR is a social research approach that is educational and action oriented. Participatory Action Research therefore offers a platform for participants to learn from one another during this investigative process and to act on the problem they have identified.

4.3 HISTORICAL BACKGROUND OF PARTICIPATORY ACTION RESEARCH

The practice of PAR has been tracked down the history lane by various authors who report that its development was shaped by three trends. Among those authors are Brydon-Miller and Maguire (2009:8) who point out that those trends include post-colonial re-conceptualisation of international development assistance; reframing of adult education; and the critiques of positivist social science research and its claim to value-free knowledge production. Similar trends that shaped the development of PAR are also noted by MacDonald (2012:37), who notes that PAR also surfaced from the operation of movements which were active in the fields of social sciences, international development, and adult education. These movements notably had a vision of society that was free from domination. McDonald (2012:37) further states that PAR was linked to various the trends, e.g. approaches that advocated reform to international economic development and assistance; the perception of adult education as an alternative to traditional approaches to education due to its empowering effects; and the continuing debate about which social science paradigm dominates the social sciences field.

Another claim on the historical development of PAR is based on the argument noted by Kidd and Kral (2005:188) which holds that PAR emerged in the late 1960s at the time when positivism came under questioning and due to the calls for active participation of community members in research. This participative research was thought to have the potential to bring about practical benefits for members of the communities and organisations where research is conducted. Kidd and Kral further note that it was at that time that professionals such as Saul Alinsky started

participatory community organisations with disadvantaged community members, while writers like Frantz Fanon and Paulo Friere advanced an ideology that sought equal status and a just treatment for the disempowered. Whitman *et al.* (2015:625) contend that Paulo Freire, an emancipatory educator, emphasised mutual learning and the development of conscientisation, which describes developing of awareness that occurs among people engaged in self-inquiry as a catalyst to transform lives and situations through political action. MacDonald (2012:37) notes that Freire held the opinion that critical reflection contributes immensely to personal and social transformation and that Freire further emphasizes the critical consciousness to social change which requires that people should know about contradictions in the political, social, and economic spheres, and should also act against elements of oppression to set free the oppressed. This approach by Freire focused on the empowerment of the marginalised and impoverished society members regarding issues such as literacy and land reform analysis.

Along the lines of emancipation and empowerment of the marginalised groups in the community, Frisby *et al.* (2005:369) further note that PAR emerged during the period of reflection on the purpose of social science research and also on issues related to power differentials among researchers and research participants, the ethics of data generation and reporting. To this effect, MacDonald (2012:37) notes that other groups of researchers, e.g. feminists, took participatory research further by analysing power differentials which were based on gender and the value of joint effort that involves the researcher and the research participants. Various locations around the world have been associated with the development of PAR. These included India, Brazil, Tanzania and Colombia, as noted by Brydon-Miller and Maquire (2009:80). Names like Marja Lisa Swantz and Orlando Fals Borda also seem to be common in the literature on the historical development of PAR. According to Brydon-Miller and Maquire (2009:80), Marja Lisa Swantz, who was a social scientist working in Tanzania, is often credited with first using the term *Participatory research* in the early 1970s and Orlando Fals Borda, on the other hand, is often cited as coining the term *Participatory Action Research*.

There is also a view that PAR developed out of Action Research, for example, Reza (2007:29) argues that the story of the emergence of PAR starts with a psychologist named Kurt Lewin, who disputed the practice paradigm of his equals by offering an

alternative. According to Reza (2007:29), Lewin believed that social science should be able to improve the conditions of people by closing the gap between social theory and social action. Lewin suggested that an investigation into social problems would produce general laws and propositions that could be used to provide solutions to the problems. During the 1960s and 70s, this unorthodox way in social research was reshaped as a result of mounting challenge on the positivist paradigm, which believed in value-free research. The challenge on this paradigm was mainly based on growing perceptions that it was unable to provide solutions to the issues of real life. At that time, pressure on the need for social research to change was rising. A change in social research was deemed necessary so that it could make a contribution in the socio-political transformation. This resulted in the emergence of academics and social practitioners devoted to generating practice-oriented research.

The view that the emergence of PAR can be linked to Kurt Lewin is also held by MacDonald (2012:37), who mentions that the origins of PAR can tracked to the work of Kurt Lewin, who is considered to be the founder of Action Research. Lewin believed that worker motivation would be increased if they could be made part of the decision-making process regarding the day to day running of their workplaces. Lewin introduced the term *Action Research* as a way to simultaneously study a social system and to put in place changes. Lewin's action research emphasised amongst others the view that it is important that attempts to solve particular social problems should be client orientated. Action research further gave emphasis to the need to address segregation, discrimination, and assimilation problems. This research also provided assistance to people to resolve issues, to initiate change, and to study the impact of that change on those who are affected. This background on Lewin's action research seems corroborate the assertion noted by Young (2006:49) that PAR has its origins in action research and hence it is often referred to as one category of action research in which a researcher works in collaboration with stakeholders on an identified problem through a repetitious cycle of field work or practice, planning, research, action and reflection.

4.4 FEATURES OF PARTICIPATORY ACTION RESEARCH

Participatory Action Research has been defined and described in numerous ways by various authors. From such definitions and descriptions there are features which

seem common to all those descriptions and which also seem to set it apart from other research methodologies. Those features include amongst others democracy, equitability, empowerment, action, transformation, collaboration and cyclic process. These features, which are believed to be the cornerstones of community-based action research, are noted by Moore (2004:150), who points out that this type of research should be democratic, which means that it should enable participation of all. It should be equitable, i.e. it acknowledges equality of people participating in the research process. Furthermore, this research should be liberating, meaning that it should provide people with freedom, thus emancipating them from oppression or from depriving conditions. This research should also be life enhancing, meaning that it should enable the expression of people's full potential. Moore (2004:152) further states that researchers engaged in a PAR process will from time to time reflect, act and change the direction of the research process to ensure that the principles of democracy, equity, emancipation, and life enhancement are maintained throughout the process. The cyclic nature of the PAR process is believed to provide chances for the research problem to be understood holistically, to increase opportunities for all the voices to be heard, and for the development of high levels of trust between research participants.

These key features of a PAR are reiterated by McDonald (2012:39), who notes that PAR is a democratic and equitable process in that it enables participation of all those affected by a problem in finding its solution and also acknowledges equity of people's worth. It is further believed to be a liberating process that provides opportunities for people to free themselves from oppressive and weakening conditions. PAR is also regarded as life enhancing in that it enables the expression of people's full human potential. Also reiterating these key features of PAR is Whitman *et al.* (2015:625), in arguing that PAR offers a democratic model of who is capable to produce knowledge, own and use that knowledge. Participatory Action Research in this light is seen as process that is driven by participants, i.e. people with a stake in the issue being investigated, as opposed to be driven by an outsider. An outsider may, however, still become an equal participant in a PAR project, e.g. funders or academic researchers.

The democratic nature of PAR and its quest to equity are echoed by Young (2006:500), who argues that its core principles guide the researcher to conduct the

research in such ways intended to address, amongst others, the issues of power dynamics, voices and inclusion in the research process those affected by the identified problem, and collaboration. In this way, inequities, injustice and deprivations are brought to the fore, given attention and are dealt with using appropriate and meaningful ways, such that knowledge generated in the process is disseminated among those for whom it is most relevant and to those who have influence. Guishard (2009:7) further states that PAR intends to initiate a transparent, democratic and collaborative process involving academic researchers and the members of disempowered groups who all have an interest in the problem being investigated. This type of research does not view the research participants who are not part of the academia as passive research subjects, but it gives them full status of research participants who can share helpful insights and practical knowledge on the circumstances and problems that affect their daily lives. The non-academic research participants are further deemed to possess expertise that is of equal importance to that which can be provided by the academic researcher.

The collaborative nature of PAR is noted by Whitman *et al.* (2015:625), who assert that PAR is a collaborative process that involves the bringing together participants with different skiils which culminates in discussions intended to produce an action aimed at effecting a change or improvement on the problem identified. Also recognising the collaborative nature of PAR is Baldwin (2012:468), who maintains that PAR is a cooperative or collaborative enquiry, since it is a form of research that is conducted with people and not on people. The people affected by the problem being investigated are included in the research process as research participants who collaborate to generate knowledge intended to inform practice and provide a solution(s) to the problem(s) identified. PAR thus intends to ensure that the actions of research participants are better informed or are even changed through their participation in the research process.

The cooperation and collaboration between the principal researcher and research participants seem to promote the spirit of equality, mutual respect and redistribution of power in this form of inquiry. As Walter (2009:2) notes, a central element of Participatory Action Research is that power is diffused or relocated from the researcher to the research participants. This relocation of power is emphasised by the assertion that within this methodology, the researcher acts as an instrument to

facilitate change instead of being an expert who owns and directs the research project. In the same breath, Savin-Baden and Wimpenny (2007:334) state that this diffusion of power means that the researcher will, amongst others, be respectful, genuine, open to experience, listen and respond to requests by research participants, and negotiate points where there seems to be differences in opinions and views, and where there seems to a common understanding.

The manner in which a PAR project is undertaken is likely to be mutually beneficial to all those involved. One such benefit is empowerment of both the principal researcher and the research participants as a result of pooling of different skills, information sharing, valuing indigenous knowledge and awareness by research participants of resources and abilities they have to solve their problems. Blanche *et al.* (2006:438) argue that the ultimate goal of a successful PAR project is not only to understand the problem affecting people better, or to take an effective action to eliminate the problem, but to raise awareness in people that they have the capacity and resources to take action about the problems that affect them. A PAR project should thus aim at ensuring that people are empowered through their participation in the project. MacDonald (2012:40) contends that PAR aims to empower the marginalised groups to partner in social change, as this has the potential to encourage capacity development and building for the research participants. Empowerment of research participants is likely to be achieved as the collaboration of individuals in a research process means that they bring diverse skills, knowledge and expertise that would be shared in the process. Furthermore, active participation of individuals in the research process may also strengthen their confidence and belief in their own abilities to find solutions to their problems and in their decision-making powers. Blanche *et al.* (2006:439) believe that at an individual level, empowerment means that people start to see themselves as being able to make a difference and being worthy of voicing their opinions. Frisby *et al.* (2005:370) also argue that through PAR, people are empowered to take the necessary action to improve their living conditions, since this research methodology assumes that people have the ability to produce progressive knowledge through analysis of their own circumstances.

Participatory Action Research is a type of inquiry conducted with the purpose of bringing change to the conditions of the individuals or communities affected by an

identified issue. This change can be brought about through various ways, e.g. implementing intervention strategies to improve practice in a profession or trade, in a workplace, in an organisation, or in a community. The action part of this research process means that the research participants seek an intervention to the problem that affects them. As Baldwin (2012:469) argues, an action focus is pivotal to PAR, as the research methodology is built on the idea that when people are involved in a research which concerns them directly, they can generate useable knowledge and enhance the possibility of problem-solving action. Furthermore, Baldwin (2012:469) asserts that people's participation in a research project as research participants has the added impact of removing power differentials between them and the principal researchers. Moreover, the subjective perceptions, interests, and experiences of these research participants seem to be an important driving force in the search for practical solutions and they also have a potential to make a difference in the lives of research participants who are often the oppressed and marginalised groups.

The aim of PAR, as Wimpenny (2009:91) contends, is also to offer practical problem-solving approaches at grassroots level with the intention that an action taken should lead to meaningful social change for those directly involved and should generate alternative practices. Seemingly concurring with Wimpenny's contention is Whitman *et al.* (2015:625), who argue that an intended outcome of PAR is some action, change or improvement in the problem under investigation. In addition to this, Baldwin (2012:468) states that PAR is a research process that involves action and reflection and that it is intended to develop knowledge that can be used to solve real-life problems to facilitate a positive difference in the lives of those affected. It is therefore worthy to note that ideally, PAR aims to have a transformative effect on the lives of those affected by the problem for which a solution is sought. As Blanche *et al.* (2006:438) put it, a collaborative relationship in PAR is aimed at achieving a well-thought out change and improvement in the lives of the participants.

Another distinguishing characteristic of PAR is its cyclical nature. This cyclical process allows the research process to go through the cycles of planning, acting, observing and reflecting. Savin Baden and Wimpenny (2007:335) argue that strategies used in a PAR process involve the research participants engaging in a sequence of self-reflective cycles where; (i) plans for a change are made; (ii) action is taken; (iii) observation of the process and the consequences of a change is done;

(iv) reflection on these processes and consequences is undertaken; and further cycles of planning, acting, observing and reflecting follow. It should, however, be noted that the subsequent cycle of the PAR process is not a repetition of the previous cycle, but as Walter (2009:4) points out, the planning, acting, observing and reflecting activities from the previous cycle rather inform and give shape to the next cycle, which allows for self-evaluation of the research process.

The improvement or the desired change on the issue under investigation can therefore be achieved through this iterative process. Mackenzie *et al.* (2012:12) seem to affirm this claim in stating that through multiple cycles of stages of planning, acting, observing and reflecting, improvements to the knowledge and understanding of those involved in the research process lead to social action, while reflections on the action lead to new understandings. As a result, this iterative process forms the foundation for continual improvement. In addition, Baldwin (2012:470) asserts that PAR uses cycles of reflection and action to create new forms of knowledge and understanding in an effort to link knowing and doing. This assertion is often seen as the basis for the claim that PAR has the potential to produce useful knowledge that can transform the lives of those involved through their actions and as a result of the research process.

4.5 RELEVANCE OF PARTICIPATORY ACTION RESEARCH FOR THIS STUDY

In line with the constructivist theoretical framework, which is the lens through which this study is viewed, PAR also seems to be based on the notion that knowledge can be useful in solving practical problems and can be constructed by individuals working collaboratively. Baldwin (2012:468) holds that PAR takes a social constructivist perspective with its belief that knowledge is socially constructed. It is therefore a social constructivist's view that human beings in relationships with others and in interaction with one another, co-create their reality from their particular world view; hence the research methodology should reflect this inextricable relationship. In addition, Wimpenny (2013:5) maintains that the focus of PAR, when it is situated in a constructivist paradigm, is on how research participants work in unison to create a common understanding of the issue they are investigating. It further helps individual

participants to become aware of their actions and that they can learn through dialogue with others.

This study proposes a Context-based approach in Economics, which the study believes has the potential to create a teaching and learning environment that can enrich the students' application of abstract Economics concepts and theories to their daily lives. The researcher intended to draw on the lived experiences, opinions and viewpoints of the participants in this study, i.e. Economics students, teachers, lecturers and other relevant stakeholders in Economics education on the need, possible components, potential benefits and plausible challenges of the proposed Context-based approach. This intention seems to be supported by the contention by Frisby *et al.* (2005:367) that PAR is applicable in a research project where the aim of the researcher is to understand the lived experiences of those affected by the problem under investigation and to surface their experiential knowledge as distinct and important. The participation of these groups in this study generated the knowledge that was required to collectively suggest and put to action the strategies that formed a Context-based approach in Economics. It was therefore the intention of the principal researcher to have this inquiry conducted in a true spirit of collaboration, openness, mutual respect and democracy, which are some of the values the researcher believed will lay a foundation for mutual trust and full participation.

The principal researcher firmly believed that the identified research participants had the relevant and useful knowledge to build a strong case for the adoption of a Context-based approach in Economics education, which seems to offer opportunities for students to make connections between the Economics concepts and theories they learn in class with the outside world and thus be in a position to see their relevance and application in their daily lives. The inclusion in a research process of people affected by an identified problem as research participants with equal value and status to that of the principal researcher is articulated by Mash (2014:2), who asserts that PAR is participatory and is a process carried out with people rather than on people. As a result of this collaboration between academic researchers and people who have a stake in the identified problem, Mash (2014:2) further asserts that PAR requires that attention be given to hierarchical and power related issues, so that the research process should be truly respectful, transparent and democratic.

Additionally, Wimpenny (2010:91) states that in PAR, the research participants are encouraged to see themselves as a group of individuals with common objectives and decision-making powers who are driving the study forward. The reason to instil such a self-concept in participants is that PAR is based on the ideal of conducting research with people and not on conducting research on people.

A change or an improvement in the way Economics content is communicated to the students was deemed necessary, as students participating in this research demonstrated that it is often difficult for them to relate some of the Economics concepts to the real world and to apply them in their daily lives. Teachers who were the research participants also stated that students have difficulty in answering the data response questions as they require of them to demonstrate the application of the content. These are the reasons which prompted the researcher to seek the views and opinions of these stakeholders in Economics education to improve the state of affairs. This envisaged change in practice seemed to be possible if a platform were to be created where those who affected by the problem raised could come together and share ideas on how change and improvement could take place. The relevant platform was to adopt PAR as the guiding methodology. This seems to be supported by Wimpenny's (2013:4) contention that PAR can be of assistance to a group of people in the same field to collectively consider a certain aspect in their practice. This platform created by PAR will also enable this group of practitioners to study the effectiveness the aspect under consideration, find out more on how it is informed by knowledge and determine where improvement may be required and implemented. The other reason that informed the choice of PAR as a suitable methodology to conduct this study stems from the observation by Miskovic and Hoop (2006:270) that PAR is a practice-oriented methodology. It is not an abstract, self-referential method that is shared within a narrow disciplinary circle, but it is context based and focuses on real-life problems that communities face.

As mentioned in the preceding paragraph, PAR was chosen to conduct this study because the primary researcher wanted to create a platform where Economics students and teachers could come together and share their experiences on the challenges and best practices in the teaching and learning of this subject. The aim was to jointly develop an approach that will result in positive change and improvement in how teachers teach the subject and how students learn it. The

choice of PAR as a methodological approach, which can provide a framework for change and improvement in a particular practice, further seems to be echoed by Walter's (2009:3) statement that PAR is also used in educational research, especially with the aim to improve teaching and learning practice. Wimpenny (2013:4) further contends that approaching a research process using PAR can thus benefit the practice, as it can assist to discover and develop the sustainable conditions and actions necessary for a change. This contention dovetails the goal that this particular study aims to achieve, i.e. to bring about improvement and transformation in Economics education.

This study envisaged that a collaboration of the principal researcher and the research participants will have an empowering effect for all the participants in this process. PAR can provide a platform where members of the research team, apart from sharing their views on how the identified problem can be solved, also stand to learn skills on how to conduct a research, learn more about the resources available to address their problems or issues affecting them negatively, as well as their potential, abilities and power to contribute to improving their conditions. The contribution by stakeholders in Economics education from the private and public sectors was beneficial to the teachers and students as they were provided with the view of how Economics theory actually applies out of the textbook and outside the classroom. This prospect for research participants' empowerment is noted by McDonald (2012:40), who argues that a collaboration of research participants who contribute variety of skills and expertise in PAR project promotes the sharing of knowledge development. The fact that research participants learn by doing, will assist them to start to develop stronger self-belief in their abilities and their resources.

In this process of co-generating knowledge, possible measures were put in place to address the problem of limited application of abstract Economics concepts and theories by students. The researcher held the belief that he would benefit from the contributions made by the research participants as they might have suggestions on how the subject could be approached using the avenues and resources that were previously not considered. The principal researcher also believed research participants also stood to learn from his experience of conducting a research. This potential that PAR process has in empowering the research participants is also

noted by Kidd and Kral (2005:189), who assert that in a PAR project, the principal researcher(s) stand to learn from the lived experiences of the research participants, e.g. what perceptions they have about their problems and strengths, the different the ways in which they come to know one another and their community, and how, as active agents, recipients and beneficiaries of change themselves they experience change. The principal researcher thus gains access to the expert knowledge of the research participants, while the research participants, on the other hand, also benefit from the research skills and knowledge of the principal researcher. The outcome of this collaboration is that the knowledge which the principal researcher brings to the research process and the knowledge brought by the research participants is put together to enhance understanding and changing of the practices and structures that were once thought to be insurmountable barriers.

Participatory Action Research's potential to bring about a desired change or a solution to an identified problem is further noted by Baldwin (2012:470) in stating that PAR brings an action dimension to research, thus generating useful knowledge in practice. This is achieved through cycles of reflection and action to create new forms of knowledge and understanding with the aim to link knowing and doing. This action-oriented nature of PAR, which is one of its features that influenced the choice of this methodology for this study, is further highlighted by Kindon and Elwood (2009:21) in their argument that PAR's goal is not merely to describe or analyse social reality, but to change it. Kidd and Kral (2005:189) also maintain that in a PAR project, research participants are not only interested in simply knowing about the problem being studied, but they have the intention to generate a collectively developed action, which is meant to result in a positive change. It is due to this intent of any PAR project that its success is best measured by the changes brought by the project to the lives of those who participated in it and the broader group they represent. In this way, PAR should therefore not be seen as a mere fact-finding mission, but should rather be seen as a problem-solving endeavour.

This study maintained that ordinary people like students with their lived experiences in the problem under investigation, which in this study is the seeming difficulty to apply the abstract Economics concepts to real-life situations, could contribute equally to its solution. Baldwin (2012:470) notes that PAR promotes inclusive participation by giving voice to local people and by shifting views on what constitutes useful

knowledge. MacKenzie *et al.* (2012:12) also allude to the point that equality between researchers and research participants can be achieved in a PAR process, as they believe that one characteristic of this research methodology is that there is no difference between researchers and research participants. This equality can be attained through a collaborative effort in which the principal researcher and the research participants collaborate to co-construct knowledge through a continuous process of communication and by jointly implementing the research findings. Guishard (2009:87) reiterates the point made earlier on that in PAR, non-academic research participants are not seen as less knowledgeable and passive subjects, but as research participants full of insights and practical knowledge about the conditions and problems affecting their lives.

While recognising the potential benefits of adopting PAR methodology to conduct this particular study, it is worth noting that this methodology carries some risks and challenges. Amongst others, risks associated with a PAR project are the possible inflation of hopes and expectations of research participants. It might also be possible to experience an issue of power differentials between the principal researchers and the community members who are research participants, as well as between the research participants themselves during the research process. Blanche *et al.* (2006:439), for example, caution about expectations by academic or professional researchers that PAR projects can instantly turn their research collaborators into empowered individuals simply by allowing them a say in the research process. This might be as a result of an inflated expectation people have about the ability of researchers to change local conditions. This expectation often stems from the belief by ordinary people that academic or professional researchers represent the world of wealth, opportunities and power. Unfortunately, as Blanche *et al.* (2006:439) point out, it might not always be easy to achieve desired outcomes, especially due to possible resistance and opposition from parties with vested interest in the status quo, as they might not benefit from the intended shift on who has access to knowledge and resources in the society. Blanche *et al.* (2006:431) identified denial of individuality and sacrifice of personal uniqueness for the good of the community as two other potential risks associated with PAR projects. Moreover, solutions generated from a particular project may not extend further than the immediate contexts.

Participatory Action Research project may also face some challenges and, as noted by MacDonald (2012:40), it may be difficult for research participants to remain committed to the research project for a long period of time. Again there may be disagreements stemming from differing perspectives, value systems, and abilities of the research participants. It may thus be difficult for participants to reach a consensus in determining the social issues that warrant urgent attention and the time frame expected for the change to be seen. There can also be doubt or disagreement with regard to the direction and the general purpose of the research project, which may result in wrong questions being asked, or a wrong direction being followed, culminating in the generation of irrelevant data. Relationships between research participants may also pose some challenges in a PAR projects. Kidd and Kral (2005:190) state that the principal researcher may come across research participants who form goals, follow research processes and take actions that differ from those that he or she envisaged. In such a situation the principal researcher will be faced with a challenge of whether to continue with the research project to which he or she feels in opposition. Again, fundamental differences may occur between the research participants themselves, which will make it difficult for the principal researcher to make possible the advancement of group understanding and action. It may also be possible that there may be a lack of diversity, which may lead to what is called consensus tyranny, a situation in which individual viewpoints are silenced and negative social tendencies like intimidation and group thinking subdue democratic processes.

In an quest to tone down the impact of some of these challenges, Macdonald (2012:40) notes that all research participants should be made aware that it may be necessary that different styles of leadership may have to be adopted at different stages during the research project. For instance, the principal researcher may be required to take a lead in the process of data analysis, while it may also be necessary for particular research participants to lead in the implementation of strategies to improve the social issue under investigation. It would also be necessary that research participants are from the onset made aware that PAR projects take a lot of time and require utmost dedication from all those involved. Furthermore, with the observation that PAR is time consuming, needs a variety of resources, and requires high levels of personal investment by the principal researcher, Mackenzie *et*

al. (2012:19) advise that the researchers need to develop close working relationships with the research participants.

4.6 ROLES OF THE RESEARCHER AND PARTICIPANTS IN A PARTICIPATORY ACTION RESEARCH PROJECT

The principal researcher in this particular study used the knowledge on conducting a PAR project with the aim to undertake the study using a methodology that shifts from the conventional way of conducting a research were the principal researcher is seen an expert, with some blueprints on how the members of the community of research interest should solve an identified problem. In the traditional type of research, knowledge and experiences of the locals are often not accorded much value, as community members are not viewed as research participants, but often as objects of a research project. Rademacher and Sonn (2007:63), who assert that PAR has the capacity to attend to the acute differences in power between the principal researcher and the research participants, also note that the customary research dynamics are changed in PAR. For example, the researcher adopts a learner position, while the research participants become experts, given their contextual knowledge and experience. To this effect, Guishard (2009:87) maintains that in a PAR project, ordinary people who participate in a research project are not regarded as passive and unintelligent subjects of research, but as research participants who posses important insights and practical knowledge into the conditions and problems that affect their lives. These insights and knowledge are therefore seen as a proficiency that is legitimate and parallel to academic knowledge.

The principal researcher in this study was more of a guide and coordinator throughout the process which is the role that ensured that activities are carried out as planned or necessary changes are effected, focus of the research is not lost and that the research participants remain motivated and interested. Gray (2009:323) asserts the role of the principal researcher is more of a facilitator than that of an expert coming into the community with blueprints on how to solve their problems. Mackenzie *et al.* (2012:12) seem to concur with this sentiment by pointing out one of PAR's characteristics, which is a faded distinction between the researcher and the researched. According to these authors, the principal researcher in a PAR project and group of people who have a stake in the problem identified and who are to be

known as research participants work together to generate knowledge throughout different cycles of the research process and jointly implement the research findings. A basic understanding by the principal researcher that a participatory action researcher does not go into the community of research interest as an expert, made it possible for the researcher to be willing to share skills and knowledge in conducting research with the research participants in this study. To this effect, Rademacher and Sonn (2007:63) state that in PAR, although the principal researcher does not bring into the process an expert tag, he or she is required to possess qualities such as skilfulness, resourcefulness and be supportiveness. Gray (2009:323) further states that the principal researcher is seen as playing a catalytic role in the efforts to bring about change by initiating a review of current practices by the people affected, by enabling them to analyse issues they are faced with and to accept the need for change. The research participants therefore have the role to consider a wide range of possible solutions to the issues affecting them and the consequences of the proposed solutions.

With regard to the role of the research participants it is important that the principal researcher should from the onset endeavour to create an atmosphere of power sharing and joint decision-making in the research project. Savin-Baden and Wimpenny (2007:334) assert that a principal researcher can encourage power-sharing by being genuine, showing respect, and being open to the experience. This sharing of power can further be facilitated if the primary researcher is willing to listen and respond to requests made by research participants, negotiate points of difference and commonality, and to have a framework for action that can be broadly applied. Blanche *et al.* (2006:432) note that in a PAR project, community members are treated as research participants who become full partners who are committed to its success and not as mere objects of the study. Blanche *et al.* (2006:432) further contend that in PAR the main researcher tries to construct knowledge with the research participants, rather than construct knowledge about them, and to create a new conception of knowledge as something that lives among people, rather than as some sort of barricade between them. In noting the importance of relations between all research participants, Gray (2009:323) asserts that the research project should be organised in democratic, therapeutic and equitable ways. This has the potential to engender a community spirit as the aim is to create sustainable social and personal

relationships which are free from exploitation tendencies and to improve the social and emotional lives of all the research participants.

4.7 CYCLES THE PARTICIPATORY ACTION RESEARCH PROJECT WENT THROUGH

This PAR project went through three different cycles, which included the Planning cycle, the Action and Observation cycle and the Reflection cycle. The Planning cycle in this project contained four phases, i.e. initiating the research project, putting the team together, the information session and development of a strategic plan. The Action and Observation cycle followed and at that stage participants focused on three activities, i.e. the actual implementation, observation and monitoring of the proposed intervention strategies. Lastly, the Reflection cycle specifically reviewed the impact which the research project had on the participants and in addressing the problem for which a solution was sought. Savin-Baden and Wimpenny (2007:335) assert that the strategies used in a PAR project to bring about a positive social change include working with a group of people affected by an issue at the centre of an investigation in a sequence of self-reflective cycles. In these cycles research participants work together to plan for a desired change, put the plan into action and observe how their plan unfolds and consequences of change, and lastly reflect on how the research process unfolded and its consequences. Depending on the outcomes of the research process, research participants may engage in further cycles of planning, acting, observing and reflecting.

A brief summary of the PAR Cycles is provided by Kelly (2005:67), who states that the PAR process follows numerous cycles that involve; planning for change, putting the plans to action and reviewing the process and its outcomes. In the planning cycle research participants engage in intensive discussions which are based on their understandings and views about the issue identified as a problem. The details of these discussions are recorded as the strategies to address the identified problem usually emanate from such discussions. In the acting cycle, the principal researcher and research participants implement the programmes agreed upon and ensure that planned activities occur. In the review or the reflection cycle, goals are reassessed with a view to establish if the desired change has been achieved. With this brief summary of the PAR cycles in mind, it is worth noting that Savin-Baden and

Wimpenny (2007:335) caution that the PAR process is not a clear-cut set of neat, independent cycles of planning, acting and observing, but in reality stages can overlap and changes might be made to the original plans as a result of experience and learning. As such, these authors believe that the success of a PAR project is not gauged on whether research participants have followed certain prescribed steps in conducting research, but rather on whether they have managed to get a sense and understanding of how their practice has developed.

These PAR cycles are recurring in nature and lead to a repetitious process which continues until research participants are convinced that a positive change has been brought about. Mackenzie *et al.* (2012:12) note that PAR consists of recurring multiple cycles and follows an iterative process that forms the basis for continual improvement. Also noting the cyclic nature of PAR, is Wimpenny (2010:92), who states that in the event that the reflection done by the principal researcher and research participants deems the action or intervention strategy unsuccessful in addressing the issue under investigation, the PAR process is likely to move to the next cycles which involve; revision of plans for action; further action and observation; and lastly reflection on the action taken. Walter (2009:3) argues that PAR is cyclic and works its way through various iterations of planning, acting, observing and reflecting and does not follow a standard linear model of research. Walter (2009:3) further explains that it is important to note that the new cycles do not repeat the previous ones, but are rather informed and shaped by the old cycles.

4.7.1 The Planning Cycle

4.7.1.1 Initiating the Research Project

The initial steps in a PAR project, as noted by McDonald (2012:44), include assessing the community with the aim to find a community partner, taking note of the available resources which are at hand to implement a PAR project, and ethical approval from the relevant authorities. The first step of this project, referred to as an investigative phase by Wimpenny (2013:8), started when the principal researcher undertook to meet with some of the Economics lecturers and teachers individually to find out if they also experience the problem of students' inability to put into practice the Economics concepts and theories they learn in class and how they deal with it.

The principal researcher was encouraged to find out more on this problem and dig deep for solutions, as some teachers and lecturers often mentioned in passing that students were not doing well in data response questions (questions that need application of economic concepts and theories). In the words of Wimpenny in Savin-Baden and Major (2010:91), community members may be aware of a problem that needs to be addressed and maybe advised that PAR can be an appropriate way forward. A PAR project may be initiated as a result of an accidental meeting of the principal researcher and some individuals affected by an issue that is also of concern to the principal researcher. The researcher also talked to some Economics students in an effort to gauge the magnitude of this problem and some pointed to the difficulty in finding the relevance and use of this subject in their daily lives.

Once satisfied that this problem warrants attention, the principal researcher invited Economics teachers and student teachers for a joint meeting to present this problem to them formally. The aim of the meeting was to open a discussion around this problem, to develop among the participants a common understanding and a clear vision of the problem issue and further assess the prospects and capacity to collectively seek the ways and means to address the problem. It is the argument of Kidd and Kral (2005:189) that most of the time the first step towards finding a solution for an identified problem is for the principal researcher to organise a forum which allows for initiation of the discussion around the problem and also for sharing of experiences. In this meeting the principal researcher presented the problem based on the initial assessment of the problem done during the earlier one-on-one discussions with teachers and students. These are the initial discussions which led the principal researcher to believe that there was something to work on. Kelly (2005:69), who argues that the researcher does not come into community of interest as ‘a tabula rasa’, states that if the researcher has raised a certain issue with some people in the community of interest and got an indication that the issue is also of concern to them, the decision on whether the information presented by the researcher might be of any use rests with the people affected. They can also decide on how and when to use such information. At this stage, which Mackenzie *et al.* (2012:12) refer to as the inquiry stage, the principal researcher and some members of the community of interest identify practical problem that is common to them and

start to engage in an investigative process meant to find methods to jointly address the problem.

It was at this meeting that teachers and students showed enthusiasm to work together to find possible solutions to this problem. A suggestion was also made to bring on board other individuals with an interest in Economics education, like the academic researchers and people from both the private sector and public sector who might have an interest in Economics education. It was a general feeling that by working together, it would be possible to tackle the problem from different angles and also bring together resources and different skills that may be needed for this investigation. The principal researcher was then tasked with the responsibility of convening another meeting with all the relevant stakeholders where the intention was to establish a formal research team.

4.7.1.2 Establishing the Research Team

During the second phase of the planning cycle, attempts were made to put together a research team comprising Economics lecturers, teachers, students and other individuals who were deemed relevant to suggest possible solutions to the problem under investigation. Krishnaswamy (2004:3) states that the second stage in this type of a research is the identification of stakeholders and facilitation of their participation in the research project. MacDonald (2012:45) again notes that the planning cycle basically focuses on the identification of community members who can be part of the research team and also on involving a variety of individuals and groups as much as possible. Krishnaswamy (2004:3) contends that bringing diverse parties to the research project increases the prospects for a more wide-ranging identification of issues relevant to the investigation, builds relations between diverse groups and also contributes to the usefulness of the research to the community members who have an interest in proposed research. On the other hand, Hooley (2005:70) contends that in a research undertaken by a group where democratic principles guide the process, opportunities are created to discover the unknown and to formulate innovative solutions to the problem under investigation. One of the steps to conduct such a research is to establish a participatory research team, which includes a number of practitioners who share the same interests and who are willing to participate in a structured investigation, usually of longer duration.

The establishment of this research team for this particular project was guided, amongst others by the three principles identified by Morrell (2006:6). The first principle is the collective investigation of a problem. The principal researcher believed that with the participation of other stakeholders in Economics education, a better, deeper and broader investigation of the problem could be achieved. The second principle is reliance on indigenous knowledge to understand the problem better. The principal researcher also believed that the teachers and students were the ones mostly affected by the identified problem and that with their lived experiences in the subject Economics, a better understanding of the problem could be realised. The third principle is the desire to deal collectively with the identified problem. With this principle in mind, the researcher firmly believed that through a collaborative effort, different perspectives and skills could be brought to the research process and generate broadly acceptable solutions. This would provide research participants an opportunity to mobilize, organise and collectively implement suggested solutions to the problem. Mackenzie *et al.* (2012:13) maintain that PAR needs to include a mixture of people with differing capacities and experiences in order to get inputs, even from those who might have been previously marginalised and ensure that the research process and its findings are accepted and owned by all those involved.

The core of the team was made up by the Economics teachers who returned the informed consent forms that were issued with the invitations to this meeting and the student teachers from the local university who took Economics as one of their major subjects. Local university Economics lecturers were also identified as having the potential to contribute to this study. Participation by the fellow Economics lecturers and teachers in this project were deemed important as they were in a position to share their classroom experiences and their individual attempts to deal with this problem and this had a potential for mutual learning. Gray (2009:317) notes that while it may be easier for an action-oriented researcher to change his or own professional practice than that of others, the success of the research project depends, amongst other things, on identifying a range of people the researcher would be working with as research participants, who might include colleagues or fellow employees.

The deliberate inclusion of student teachers in this project as research participants was based on the ideal to shift from the familiar practice noted by Brydon-Miller and Maguire (2009:83) in which teachers engage in action research to scrutinize and improve their classroom practices as encouraged by teacher-as-researcher movement. However, Brydon-Miller and Maguire (2009:83) note that students are mostly involved in the research as mere respondents rather than as research participants or as collaborative partners. Furthermore, Brydon-Miller and Maguire (2009:83) note that more often, research activity that involves the youth usually focuses on finding out more about their perspectives and taking action on their behalf, research activity seldom involves acting with the youth in order to bring about improvement and to change the conditions that affect them. It was therefore important to include student teachers as equal partners in this study to get their thoughts on the problem, understand it from their viewpoint and allow them an equal stake in proposing a course of action. With regard to this, Brydon-Miller and Maguire (2009:84) argue that a practitioner enquiry that is conducted on the principles of PAR encourages teachers, students and other community partners' collaboration to explore social, economic and political contexts of schooling and to examine the role teachers and students can possibly play in creating a society where the principles of democracy, justice and equity are exercised.

As a research project facilitator, the researcher believed there were prospects of also learning from all the stakeholders identified, given that they had first-hand information about the problem under scrutiny. The inclusion of teachers and students as part of the research team seems to be in line with the argument by Wimpenny (2010:91) that the PAR methodology supports the premise that knowledge should be constructed collaboratively with local experts and the voices of the knowers, i.e. those who face the research problem on daily basis. Kidd and Kral (2005:189) also assert that in a PAR project, researchers learn from the daily life experiences shared by research participants, e.g. their perceptions on the problems they experience and on the strengths they have, how they get to know about one another and their community. The researcher can also take lessons from how the research participants who are both active agents and beneficiaries of change experience it. In this way, the principal researcher accesses specialist knowledge shared by those who take part in the research process. As such, the knowledge that he or she brings

to the project, combined with the knowledge of these participants, can potentially assist people to understand and change the systems previously thought to be immovable barriers.

It was the researcher's aim to get a deeper understanding of how the research participants socially construct meanings, hence a collaboration was formed from which views, opinions and experiences could be shared. Blanche *et al.* (2006:287) argue that it is the aim of qualitative researchers to understand the people's experiences, feelings and social situations as they happen in the real world, which is the reason they have the need to study them in their usual surroundings. This can be achieved by entering the research setting with necessary care and engaging with the research participants in an open and emphatic manner. Furthermore, Mackenzie *et al.* (2012:12) argue that in a PAR process people who are likely to benefit from the outcomes of the research work collaboratively with the principal researcher as active research participants to make it possible that improvement or positive change in their conditions is achieved by applying findings of the research in a practical context.

4.7.1.3 Information Session

The third phase, which was an information session, kicked off once the potential participants had agreed to take part in this project. This session was necessary to get things going. To this effect, Savin-Baden and Wimpenny (2007:334) maintain, the initial meetings in a PAR project provide a platform where, among others, the research participants are introduced to one another and start to know more about one another; the PAR method of conducting research is explored, a culture of joint decision-making, and a spirit of openness during the deliberations is developed. This session was also intended to build trust and rapport among the research participants. Gray (2009:412) notes that even though there are no hard and fast rules about how rapport is established, honesty, friendliness and openness seem to be crucial virtues in building rapport. These three virtues are important, as participants are likely to feel being of value to the research project as interest is shown in them. Gray (2009:412) also warns that the moment research participants start to believe that the principal researcher has been dishonest or manipulative, all trust will evaporate and it might be impossible to re-build it.

The researcher also used this session to address the issue of power relations, and explained to research participants that they all have the same powers and rights to make contributions in this project. The principal researcher further emphasised to the research participants that their lived experiences on the research problem is an expertise and valuable knowledge that can be used constructively throughout the research process to find the desirable answers. During this session the research participants were encouraged not to hold back on sharing their views and opinions, something which could be possible because they may perceive the principal researcher as an expert whose knowledge is superior to theirs and who holds the rights answers. Swantz (2008:38) maintains that in a PAR project the principal researcher needs to show openness to learn from the research participants, since PAR rejects science as a dominating knowledge; instead, it values everyday knowledge. Hence, in a PAR project the principal researcher and research participants share their knowledge as equals.

It was during this session that the researcher invited a local university researcher who had previously conducted research projects using PAR methodology to make a presentation on how research was conducted using this method. The presentation emphasised the relevance and appropriateness of this method in finding solutions to the problems or issues raised and experienced by the community or organisations. Furthermore, the guest speaker explained that PAR methodology emphasises the importance of participation in a research project by ordinary people affected by the same problem as research participants with equal status to that of the principal researcher. The guest speaker also highlighted the possible challenges often experienced when engaging in a PAR project and outlined possible ways and means to avoid or to deal with such challenges. Participants also used this session to choose the focus for this research project so that they were able to set priorities. As Gray (2009:318) maintains, choosing the focus for a research project may seem a relatively easy task, although reality shows that this is often not the case, as there is always a problem of how to prioritise many issues that are always there to be addressed. It was then after the research participants in this study had agreed on a common focus of the research project, a suggestion was made for everyone to go home and think about the resources that might be available for this project and the

type of skills members of the team might have or which might easily be accessed to get the project moving.

The next meeting was arranged where participants were to make their presentations, from which priorities were to be set and a strategic plan, mission and vision for this project were to be developed. As the facilitator, the researcher also tried to encourage the participants to approach this meeting with a spirit of openness and respect for one another's views, as this had the potential to create a safe platform for sharing viewpoints and ensuring maximum participation. The ideal was also to ensure that all participants' efforts were geared towards achieving the same goals and developing a sense of ownership of the project by all those involved. This could also ensure that the results of the research project were appropriate and were broadly accepted as solutions to the identified problem. Frisby *et al.* (2005:371) note that dialogue occupies a key position in research, as it enables a creation of a social space in which research participants are able to share experiences and information, as well as to create common meanings and work out concerted actions together. In similar vein, Mackay (2016:2) points out that participation in communicative action occurs within a space that is marked by the freedom of participants to air their views on the matter under discussion, openness, honesty, and respect for the ideas and viewpoints of other participants. This type of space is further characterised by; demonstration of mutual respect during conversations, appreciation of differing viewpoints, and genuine attempts by research participants to reach consensus without any of them being put under any undue pressure. Safety is also created in such a space as participants stimulate a sense of cohesion by adopting a culture of joint decision-making.

4.7.1.4 Setting Priorities, Developing a Mission Statement and a Strategic Plan

The fourth phase of the planning cycle focused on developing a strategic plan after the research team had identified and set the priorities. Gray (2009:319) notes that a meeting with all the stakeholders is necessary where the voices of all those involved are heard in order to reach consensus on the actions that are planned so that appropriate goals can be set. Gray (2009:319) further points out that the focus of the research participants at this stage should be on establishing the following: why actions are required; what actions need to be undertaken; how tasks are to be

accomplished; identification of those responsible for each activity; where the tasks are going to take place; when are the activities going to start; and when are they going to be completed. This action plan is usually dependant on the contextual evidence available as the PAR process is inclined to using the well-recognised research methods that are chosen on the basis of best-fit for the situation.

In conducting a SWOT analysis, the participants were given an opportunity to identify the resources and skills they believed were at their disposal which could be used to conduct the research. With regard to their strong points, most of them mentioned that with proper arrangements, one of the schools could be used for the team meetings, based on convenience to access and centrality. They also indicated that since most of them had cellular phones that are WhatsApp and Facebook compatible, they could create a group chat that could be used for information sharing at any time. The researcher's experience in conducting research was also identified as one of the skills which could benefit this project. The pooling of Economics teachers and students was also thought to have a potential to bring into the project their lived experiences in the subject which could benefit the study.

The SWOT analysis also revealed some weak points, which could prove to be challenges in this project. The research participants were of the opinion that the tight school programme for the teachers and students could result in limited time being devoted to the research project. Another weak point that was identified was that even though a climate of mutual respect and free sharing of ideas was created, by and large, students might still perceive themselves as junior partners who were more of information recipients than co-creators of knowledge. This could have a limiting effect on the inputs which students could make in the discussions. Limited exposure to conducting research by most of the participants was another weakness identified. This impacted negatively on the self-belief by research participants that they had the power and abilities to bring about the desired change. As this project was not funded, research participants also had to rely on their own resources and had to finance their own activities, e.g. buying data to access internet to search for information and travelling to the venue the meetings.

The SWOT analysis also demonstrated that this research project presented some opportunities, for example, it was believed that this collaborative effort could develop

good working relations between the teachers and the students. Students also had an opportunity to create cooperative learning groups from which they could benefit. This research project was also believed to have the potential to empower the participants in conducting research and in being able to identify the problems, using their abilities and resources to find solutions to such problems. As Mackenzie *et al.* (2012:20) argue, one of the strengths of PAR seems to be found in its potential to provide vigorous testing and application of the research findings in the real world and to make certain that the research directly responds to the concerns identified by the participants in the research process. This research project was therefore deemed to have a catalytic effect for further research in other areas of Economics education.

Academic and other social commitments of the research participants were identified as possible threats to this project as such commitments could at times be prioritised over the research project. Most of the time, teachers were engaged in the extra classes conducted after the normal school hours, which had the potential to clash with the scheduled meetings of the research team. The need to complete the syllabus at a specified time also put pressure on the teachers to focus more on teaching than on research. The issues of power relations within the group also presented another possible threat in conducting this research.

The findings that were made during the SWOT analysis session allowed the research participants to turn focus on setting themselves priorities so that the project could take full swing. Of the priorities identified, they firstly indicated that it was important to have a schedule for the team meetings so as to allow members time to make necessary arrangements to be able to attend the research team meetings. Secondly, members stated that it was necessary to identify other possible stakeholders at this early stage as they could also contribute positively to this project. Thirdly, the members stated that it was important to decide on ways of generating the necessary information to assist in addressing the problem under investigation. Fourthly, the research participants indicated that they needed to agree on the vision and the mission statement for this research team, which would clarify the aspirations and the dream of the research team and ways to achieve the dream of this project. Fifthly, participants agreed that they should also formulate a strategic plan that was meant to state the research project goals and various actions needed to achieve those goals. Lastly, the research participants suggested and agreed that

a code of conduct should be drafted, as they believed that it could be used as a document that provides guidance in their operations and in the conduct of the members.

The research participants agreed to schedule weekly meetings Wednesdays at 15:00, which seemed to be convenient for most of the participants. The research participants were also of the opinion that they could start using the focus group discussions, as well as participant observations to generate the information they need to address the problem under investigation. The use of these methods was explained in the earlier presentation on the PAR methodology by the university lecturer who was invited to one of the meetings. Participants, however, agreed that other data generation methods could still be used, depending on their appropriateness to the study and their feasibility. Virtues such as tolerance, openness, the right to differ, and respect for one another were the basis for the code of conduct developed by the research participants. All these virtues pointed to the democratic nature of a PAR project. Members also agreed that it should be necessary for apologies to be sent in the event a member is unable to attend a scheduled meeting. This could be done via text messages on the group chart. Punctuality was also emphasised on the code of conduct.

In order to ensure that there was a common understanding of the purpose and aims of the research project, members engaged in an exercise to clarify the vision and develop a mission statement for this project. To this effect, Krishnaswamy (2004:2) states that at the initial stages of a PAR project, research participants should clearly understand what the research project intends to achieve because without this, it might be difficult to design a feasible and effective project. The vision for this project, i.e. the dream which the research participants wanted to achieve in the long period of time was stated as the adoption of a Context-based approach in Economics teaching and learning to demonstrate the relevance and value of Economics content to students' daily lives and enrich their application of the subject knowledge to the real world. Krishnaswamy (2004:2) further states that research partners could develop a mission statement for the research project. This is a statement from which the desired outcomes of the project can be identified and which also explains the general strategy of achieving those outcomes. Even though this statement need not describe the details of the research or specific strategies as they will be identified

through the participatory project, Krishnaswamy (2004:2) recommends that it should describe the goals, general strategy and values of research partners.

The mission statement which is a statement that was to provide a direction as to how the vision of this research team was to be achieved was formulated as: **Demonstrating the daily life relevance of the abstract Economics concepts and enriching their real-life application by students through a collaborative development of Context-based learning approach in Economics**. Guided by the vision and the mission statement of this team, the research participants agreed that they needed to identify activities that would put this research project in motion and those activities should also be also used to draw up a strategic plan. These activities were to be guided by the SWOT analysis which the research participants had conducted earlier on. This strategic plan was to be used as a road map to achieving the goals of this research project. To develop this strategic plan the research participants agreed that once they had determined the different activities they would also determine the exact tasks to be carried under each activity and allocate individual members to be responsible for carrying out each activity. Time frames were also to be set for each activity and the monitoring plan for execution of the strategic plan was also to be developed. The strategic plan was also meant to reflect the core values that underlined this collaborative effort to solve the identified problem. The strategic plan was also to include the monitoring and evaluation processes to be undertaken to ensure that the plan remains on the right track. A continuous comparison of the actual outputs and the set targets was also identified as a task to be carried out throughout the research project.

The research participants then convened for another meeting, which focused on drawing up the activities that were to be undertaken while working towards developing an intervention strategy. The first activity was to identify the seemingly abstract concepts which could possibly be related to everyday life if they were to be taught in a contextualised manner. The second activity was to suggest and propose various methods that could be used to contextualise the teaching of the identified concepts. The third activity was to identify individuals to conduct information sessions intended to enhance the teachers and students' knowledge on the use of proposed contextual teaching methods. The fourth activity was to develop a timetable for the actual teaching of the identified concepts with the proposed

Context-based methods. The timetable would also allow for the rotation of teachers to observe the lessons as presented by their colleagues. The lesson presentations and observations were also meant to provide an opportunity to identify the challenges of using particular Context-based strategies and optimal conditions for the effective use of particular strategies. The fifth activity was to reflect on the identified challenges in the use of Context-based strategies and propose measures to address such challenges, as well as to take steps to create an environment conducive to the optimal implementation of these Context-based strategies. The sixth activity was to formulate an intervention strategy out of the Context-based learning methods used in class. This intervention strategy represented the Context-based approach envisaged in this study. The seventh activity was to draw a plan to monitor the use of the Context-based approach and assess how effective it was in addressing the problem under investigation.

4.7.2 Action and Observation Cycle

The main aim of the acting cycle in a PAR project, according to Kelly (2005:70), is the creation of consciousness and to work towards achieving an agreed-upon goal. The attainment of these goals can be made possible through a joint effort of the principal researcher and the research participants and can result in the desired social change. Kelly (2005:70) cautions that of some challenges that may be experienced during the acting cycle is the need to maintain a balance between the demands of the research process and the need for outcomes, as well as to keep together a group comprised of diverse individuals and to sustain their interest in the project. It is therefore important that the principal researcher ensures that research participants maintain a feeling of involvement as the research project is moving towards the desired changes. In this particular project regular meetings meant to assess the project and to address the concerns and challenges faced by the research participants were held to ensure that all research participants still felt valued in this project.

In the action and observation cycle of this research project, the research participants focused on putting into action all the planned activities, while at the same time observing the impact of the proposed methods on the problem at hand. With regard to this, Mackenzie *et al.* (2012:12) assert that, during the action cycle, a well thought-

out intervention is implemented and each research participant has a specific role to play during the execution process. At this stage, research participants also observe and closely monitor the changes in the situation throughout the execution of the intervention strategy.

In this research project, the research participants were divided into four groups that were named Module 1, Module 2, Module 3 and Module 4, based on the four modules covered in the Economics syllabus. These four modules are Macro-economics, Micro-economics, Economics pursuits and Contemporary Economic issues, respectively (DBE, 2011). Each group was made up of students and teachers and was tasked with identifying the concepts from the module they are named after that seemed difficult to relate to real life and for which Context-based strategies could be used to show their real-life application and relevance. Each group also had the responsibility to identify Context-based strategies that could be used to teach each concept that was identified to be difficult to relate to or put to practice. Groups were each assigned two weeks for this activity. They also had to identify individuals from within the group or outside of the group to conduct an information session for the group members on how various Context-based strategies, deemed relevant to teach the identified concepts, could be applied.

Once the concepts were identified in different groups and group members were orientated regarding the use of selected Context-based learning methods, a timetable was put in place for each group to demonstrate in a classroom situation how contextual learning strategies could be used to contextualise the concepts students found difficult to relate to in real life. After the classroom presentations, which were also observed by members of other groups, the research participants scheduled a meeting with the intention to give all the research participants an opportunity to ask clarity-seeking questions on the Context-based learning strategies they observed in class. These meetings were also meant to give the research participants a platform to highlight the possible challenges regarding the use of contextual learning strategies. Participants also used this platform to propose solutions to the identified challenges. Research participants further focused on the factors that could easily facilitate the adoption of those Context-based learning strategies in Economics classes. At this stage, the efforts of the research team

members were geared towards the creation of an environment conducive to the use of a Context-based approach in Economics education.

After all the proposed Context-based learning methods had been tested in class by the four groups and proposed solutions to the challenges in the use of each strategy had been implemented, research participants met again to discuss the observed short comings and benefits of individual Context-based learning strategies. At this stage, the research participants also ensured that a conducive environment had been created to test those contextual learning strategies that were identified by the members in their four groups. It was out of these discussions that the members agreed on certain strategies that would be the components of a Context-based approach to be used to enhance students' application of the Economics concepts and theories in real life. Once the components of a Context-based approach were identified, a monitoring plan for the use of this approach and its effectiveness in bringing the desired change was developed.

4.7.3 Reflection Cycle

In the monitoring plan, research participants agreed that they would meet quarterly with a view to reflect on the implementation and the impact of the intervention strategy. Kelly (2005:71) states that at this stage of a PAR project, research participants collaborate to evaluate the research process and its impact, and information on this evaluation of the process could be issued in reports issued on monthly or quarterly basis. Mackenzie *et al.* (2012:12) maintain that during the reflection stage, research participants observe and reflect on the effects of the action or intervention strategy on the problem identified. In order to be effective and to maintain focus, Mackenzie *et al.* (2012:12) further argue that it is important that a strategy must be developed to roll out the monitoring and evaluation plan. This will therefore require that effective procedures for monitoring and evaluation are in place as they bring thoroughness to the assessment of the extent to which the intervention strategy is effective, relevant and appropriate. Kelly (2005:71) advises that the use of complicated statistics should be avoided when documenting changes resulting from the intervention strategy, or when reporting the outcomes of the project. It is therefore necessary to ensure that evaluation of the project is simply not limited to a mere statistical summary. Simple comparisons are advised, as they often provide a

clear picture of how much has been achieved. Additionally, quotes from the research participants and community members may also provide a flavour of the community, highlight challenges faced, and reflect on the accomplishments of the project.

In collaboration with the research participants, a monitoring instrument was developed and was based on the components of a Context-based approach to be used in the teaching of the concepts and theories, which seemed difficult for students to connect with and apply in real life. These components were also seen as the tools the envisioned Context-based approach intervention strategy would employ in pursuit of the desired outcomes. They are as follows: Component 1. Case method and newspaper articles; Component 2. Context-rich problems; Component 3. Service-learning; and Component 4. Problem-based learning. The monitoring instrument provided a description of each component, its aims and the indicators of success of each component. The research participants agreed that at a stipulated time, once the intervention strategy had been rolled out, they would convene to evaluate the effectiveness of each tool on the problem under investigation. This was to be done by allowing participants to give feedback and assessment of the impact of each component on solving the problem of this study. The feedback was to be provided during the convened focus group meetings. Mackenzie *et al.* (2012:18) indicate that the benchmark for the effectiveness of each tool used in the PAR project is the degree to which it meets the desire of the research participants to address an issue that concerns all of them.

Mackenzie *et al.* (2012:18) further indicate that this evaluation can be done through, amongst others, participant feedback, interviews, peer reviews, workshops, focus groups and structured observations.

4.8 MONITORING INSTRUMENT INDICATORS

4.8.1 Case Method as component 1 of a Context-based approach in Economics

Description: A case is described by Conway (2012:37) as a group of source materials on a single subject, e.g. a short written summary, a video, an image and a

collection of news articles, drawn from real experience and placing participants in a decision-making analytical role.

Aims of using Case method in Economics:

- Case method aims to incorporate real-world situations in the learning environments.
- Cased-based method further aims to instil Context-dependent practical problem solving.
- Case method encourages higher-order learning.
- Case method aims to facilitate discussion, independent decision-making and debate.

Mostert (2007:435) further notes that the Case method aims to achieve the following goals, namely to:

- help students develop analytical and problem-solving skills;
- provide analyses of problematic situations at various levels of abstraction and from multiple points of view; and
- increase practical knowledge through discussion, simulation and reflection.

Indicators of success:

- Students are able to connect the economic theory and the real-world situations.
- Students are able to answer questions that require the application of higher-order cognitive skills, e.g. analysis, synthesis and evaluation.
- Students participate in meaningful discussions and debates on various economic issues, e.g. economic policies and current economic issues.
- Students are able to use structured problem-solving.

4.8.2 Context-rich problems as component 2 of a Context-based approach in Economics

Description: According to Dalton and Shafer (2010:147), Context-rich problems are short scenarios in which the student is the major character, with a plausible motivation for deriving a solution. These problems require of the student to transfer an understanding of a core concept to a new situation and are not as formulaic as

the standard textbook problems. As such, they force the students to determine which concepts to apply and what is a satisfactory outcome. Peterson (2009:2) also states that Context-rich problems put the students in a real-world setting, requiring them to use the Economic concepts they have learned to accomplish a certain task. Additionally, Bangs (2012:48) states that Context-rich problems are one active learning technique that put students in realistic scenarios so that they can practise applying Economic concepts.

Aims of Context-rich problems:

Amongst other aims of using Context-rich problems, Kitaoka (2013:104) states that Context-rich problems are designed to focus students' attention on the need to use conceptual knowledge to analyse problems qualitatively. Secondly, Context-rich problems are used with the aim to encourage students to practise using the prescribed problem-solving strategy. In Dalton and Shaffer's (2010:149) assertion, it is also the aim of Context-rich problems to encourage students to qualitatively analyse a problem before attempting to solve it or before determining the answer. Another aim of Context-rich problems is identified by Jonsson, Gustafsson and Enghag (2007:26) as development of collaborative behaviour through the use of cooperative learning groups in problem-solving exercises.

Indicators of success:

- Ability to apply a logical structure in solving a problem.
- Ability to use conceptual knowledge to analyse a problem.
- Ability to meaningfully apply the Economics concepts and economic theory from class to the real-world situations. This could be demonstrated by the way students answer the data response questions or the scenario-based questions.
- Improved peer communication.

4.8.3 Service-learning as component 3 of a Context-based approach in Economics

Description of Service-learning: Banks *et al.* (2005:347) describe Service-learning as a credit-bearing educational experience through which students learn academic concepts in an organised community service. Heffernan (2001:2) states that Service-

learning affords students an opportunity to explore connections between the theoretical realm of the classroom and the practical needs of the community. In Economics education, Lopez (2014:2) notes that Service-learning is a form of experiential learning that connects the classroom and the local community through service. Service-learning provides students with the opportunity to apply Economics concepts and theories to real-world experiences within the community and to reflect on the relationship between theory and practice.

Aims of Service-learning:

- To encourage students to connect the service experience with academic learning, i.e. Economic concepts and theories in this study;
- To enhance the learning process by linking theory and practice;
- To enrich students' application of abstract Economic concepts and theories to real-world situations; and
- To help students develop the following proficiencies in Economics as identified by Hervani and Helms (2004:267):
    i. Ability to access existing knowledge
    ii. To demonstrate command of existing knowledge
    iii. Ability to interpret existing knowledge
    iv. Ability to apply existing knowledge
    v. Ability to create new knowledge

Indicators of success:

- Ability to recognise the community needs which can be addressed through knowledge gained in classroom.
- Ability to link the Economics concepts and theories with the real-world situations.
- Ability to apply the knowledge of Economics concepts and theories in daily life experiences.
- Ability to demonstrate the five proficiencies in Economics outlined by Hervani and Helms (2004: 267).

4.8.4 Problem-based learning as component 4 of Context-based approach in Economics

Description of Problem-based learning: Problem-based learning is described by Savery (2006:12) as an instructional student-centred approach that empowers students to conduct research, integrate theory and practice, and apply knowledge and skills to develop a viable solution to a defined problem.

Aims of Problem-based learning: Lenkauskaite and Mazeikiene (2012:78) state that Problem-based learning aims to shift the students from being passive recipients of knowledge to becoming active co-constructors of knowledge in the learning process and trains them to take part in the process of cognition from the beginning to the end. Students will therefore be able to identify actual problems of the real world, interact with one another, use information from various sources, make their own decisions and assess it. Furthermore, Looi and Seyal (2014:69) maintain that a PBL environment aims to encourage students to learn to apply knowledge and not just to acquire it.

Indicators of success:

The success of using Problem-based learning in achieving the goals of this study will amongst others, be demonstrated by the following competencies:

(i) Students are able to retain newly acquired knowledge.
(ii) They are able to engage in self-directed study.
(iii) They are able to apply what they have learned to new and unfamiliar situations.

4.8.5 Implementation of the Monitoring Plan

This monitoring plan developed by the research participants was aimed at keeping in check the actual implementation of the proposed intervention strategy, i.e. the adoption of a Context-based approach in Economics and to indicate whether the intervention strategy yields the desired outcomes. The teachers agreed that students would be given tests and other tasks to complete once they had been exposed to the use of particular components of the Context-based approach in teaching certain topics. The research participants would then meet quarterly to analyse the

performance and results of the students with a specific view to assess their responses in the questions that require the application of Economics concepts and theories and which also require of them to use the higher-order cognitive skills such as synthesis, analysis and evaluation, which previously seemed difficult for students.

The other purpose served by this monitoring instrument was to create a platform for the research participants to identify areas where improvements were still necessary and the type of intervention that was required. Participants agreed that, should a need arise, they would engage in further cycles of planning, action and reflection until they were satisfied with the outcomes of the process. According to Walter (2009:4), the exercise of planning for change, action and reflection would carry on in numerous iterations until the problem is resolved or the desired objective is reached. It will therefore require a collaboratively reached agreement to declare that a problem has been solved and the process can come to an end.

4.9 DATA GENERATION

Different sources of data generation were used in this study to ensure that the problem under investigation is thoroughly understood, such that an appropriate intervention strategy could be developed and put in place. The use of different data generation methods was also intended to ensure that research participants would be comfortable with them and that some of these methods could be used to generate data from other stakeholders in Economics education who might not necessarily form the core of the research team. Marincowitz (2003:596) notes that data in a PAR project data can be generated through various means, which amongst others, include research participants' diaries, field notes taken by researchers, reflective diaries of the research participants. Marincowitz (2003:596) further identifies the minutes of meetings held by research participants and the two different forms of interviews, namely focus group interviews and free attitude interviews as possible sources of data in a PAR project. The use of these data generation methods in PAR is also noted by MacDonald (2012:41). Additionally Gray (2009:184) identifies field studies as part of a wide range of the sources of qualitative data. The field studies, according to Gray (2009:184), involves the researcher entering a selected setting to generate data. Young (2006:501) also maintains that because PAR has its focus on the voices and daily experiences of the research participants, qualitative data

generation methods are usually used in this research to elicit participants' experiences on the problem under investigation, the meanings they have formed about the problem and how they interpret it. McDonald (2012:41) contends that for each particular issue or situation the principal researcher and the research participants should work together and agree on methods relevant to and suitable for the project. McDonald (2012:41) further recommends that at least three data generation methods be used to surpass the limitations associated with each separate method.

4.9.1 The Methods Employed to Generate Data

Focus groups meetings and participant observations were found to be appropriate and were used for data generation in this project. In addition, the research participants suggested that useful data could still be generated by other stakeholders who showed an interest in the study, but they could not become part of the core team. One way that was suggested to tap from the experiences of those individuals on the research problem was by engaging them in one-on-one discussions at their convenience so that they could share their views, suggestions and recommendations. The use of these data generation methods seems to be consistent with the assertion by Young (2006:501) that since PAR focuses on the voices and daily experiences of research participants, qualitative data generation methods are usually used in this research methodology to find out what are the research participants' experiences about the identified problem, what meanings they attach to it, and what are their interpretations of that problem.

4.9.1.1 Focus Groups

As it is the aim of PAR to solve real-world problems based on the contributions made by those who experience the problem, this research project created a platform where the principal researcher and the research participants would regularly come together and share their views on the problem under investigation. This platform was in the form of focus group meetings where discussions were held on the broad topic Context-based teaching and learning and subtopics, such as the need to have a Context-based approach in the teaching of Economics, the strategies that would comprise such an approach, the conditions under which those strategies could be

implemented successfully, the possible challenges in adopting a Context-based approach and evidence of the success of that approach in enhancing the students' application of the abstract Economics theories and concepts. Smith (2009:137) asserts that the collaborative ethos of participative methods of doing research suggests that appropriate data generation methods will include focus groups, possibly acting iteratively so that collective understandings can be generated, shared and refined. A focus group is defined by Walliman (2015:132) as a type of group interview, concentrating in-depth on a particular theme or topic with an element of interaction. These groups often comprise people with a particular experience of or knowledge about the subject of the research or those with a particular interest in it. Engel and Schutt (2013:292) further argue that focus groups are comprised of individuals who have the time to participate, have some knowledge relating to the focus group topic and share key characteristics of those who might also be affected by the problem under investigation and who emphasise the discovery of unanticipated findings and exploring hidden meanings.

In order to encourage maximum participation during the focus group meetings, the principal researcher had to ensure that all the participants felt safe and comfortable to share their views within the focus group. It was important for the researcher to create a spirit of mutual trust and a feeling among research participants that all views and perspectives were equally important for this research project. McDonald (2012:41) notes that during a focus group meeting, the principal researcher acts as a facilitator, creates a supportive environment that encourages discussion and sharing of differing viewpoints, such that all participants have an equal opportunity to communicate and all viewpoints are recognised and valued. The role of the principal researcher in creating an atmosphere of mutual trust among the participants is further noted by Engel and Schutt (2013:292) in stating that focus group leaders should begin the discussion by creating the expectation that everyone will participate and that the principal researcher will not favour any particular perspective or viewpoints. The researcher was also ensured that efforts are taken to avoid a situation where an individual dominates the discussions and that no participant is coerced to agree with the views of others. Babbie (2011:316) cautions that controlling the dynamics within the group is a major challenge; hence the principal researcher needs to be a skilled moderator during the focus group meetings who

must also guard against imposing his or her own views during the discussions. In so doing, the principal researcher will be able to avoid situations where an individual dominates the discussion. Domination of discussions by an individual may negatively impact on the intended maximum participation. Individual dominance might also generate the problem of group conformity, which is a tendency often observed in a group discussion where other participants merely conform to the viewpoints of the most outspoken group members.

The teachers and students who agreed to be part of this research project believed that by having group discussions around the research problem would improve their understanding of the problem and possibly find solutions to it. They also thought that by holding such focus group discussions, different stances they held individually on certain issues would be understood better and varied ideas would be brought to the table and shared. In line with an argument by Young (2006:501) that PAR focuses on the voices and daily experiences, a focus group in this study was used to elicit participants' experiences, meanings and interpretations of issues under discussion. Walliman (2015:133) notes that focus groups can create a platform where it becomes possible to understand why people may think in a particular way about a certain issue and that focus group discussions may reveal the ideas and opinions of the participants that the principal researcher may not have anticipated.

Bryman (2016:475) also contends that the focus group technique allows the principal researcher to understand why people have a particular feeling about a certain issue, as it gives participants an opportunity to look into the reasons offered by each of them for taking a particular stance on a certain issue. During the focus group discussions, a participant may respond to a question in a certain way, but as he or she listens to the responses provided by others, he or she may want to explain a particular viewpoint. A participant may even register an agreement to an issue that he or she might not have thought of, had it not been for this focus group discussions platform that allows participants to listen to one another's views. Focus groups may as such elicit a wide variety of views on an issue under discussion.

Participants in this research project also believed that with regular group discussions, they may be able to get to the root of the research problem and be able to critique each other's views and recommendations constructively on how the

problem might be solved and, in the process, collectively construct ways of addressing the problem. Walliman (2015:133) notes that members can challenge one another on the issues under discussion and thus get to the bottom of the problem under discussion, and that the interactions that occur within a group setting resemble the real-life process in which sense is made of issues and understanding is developed. Bryman (2016:475) also argues that in a focus group setting, participants often argue the issues and challenge views raised by others, which gives the researcher a chance to know and understand the views and perspectives held by people on an issue under scrutiny. Moreover, because the principal researcher acts more as a facilitator in a focus group discussion, he or she shares control with the research participants. This power and control sharing arrangement may likely encourage research participants freedom to raise issues related to the topic which they believe are of importance and significance to the inquiry. Furthermore, Bryman (2016:476) contends that focus groups can maximise prospects for the principal researcher to examine ways used by research participants to understand and create meanings collectively about a phenomenon. According to Bryman (2016:476), it can therefore be said that focus groups reflect the processes through which people construct meaning in their daily lives.

The focus group that was formed in this particular study created an opportunity for the empowerment of participants, especially those who are often marginalised in research activities, e.g. students, since one notes that when they are involved in research they mainly serve as respondents or subjects in the research project. However, their inclusion in this focus group stood to benefit them through sharing the ideas with the teachers and other members of the group. The feeling that they were equally valued in this researcher process was created as the principal researcher relinquished power and control to all research participants. Smith (2009:118) asserts that focus groups are intrinsically empowering for the vulnerable members of the society. They may even encourage their participation and commitment in the research process and promote ownership of the research by the participants. Furthermore, Smith (2009:119) states that focus groups have the potential to enhance the quality of findings as a result of interactive exchanges and to enable the often vulnerable or marginalised groups to feel comfortable about expressing their views.

4.9.1.2 Participant Observations

During the preparatory meetings of this project, participants suggested different strategies that could be used as part of a Context-based approach in Economics and it became clear that not everyone was familiar with all strategies proposed. The participants decided on drafting a programme that would allow them to observe one another when using a particular strategy to present identified abstract concepts. Engel and Schutt (2013:276) state that participant observation is a data generation method that allows researchers to study the natural social processes as they occur, i.e. in the field rather than in the laboratory. The method further affords the principal researcher an opportunity to view the social world in the same manner as the research participants, creating an understanding of the research participants' interpretations of that world. In addition, MacDonald (2012:42) notes that participant observation puts the principal researcher in an advantageous position to interact with research participants in a setting that represents the context of the behaviour or actions as he or she becomes part of the process being observed. The researcher becomes part of the social setting, which allows him or her to hear, see and experience the reality of the observed social situation with the research participants. In such a setting, the principal researcher not only observes the actions and behaviour of research participants, activities and different facets of the situation but also engages in such activities.

Participant observations provided participants an opportunity to see how each Context-based strategy could be incorporated in the teaching of Economics teaching and to figure out the optimal conditions for the strategy to work, possible difficulties in implementing the strategy, and the results of the strategy in addressing the research problem as they were presented under normal classroom settings. The role participants played during the observations is one described as observer as participant. Kawulich (2005:7) maintains that the observer as participant stance allows the researcher to participate in the activities of the group that is under observation and which is aware of the researcher's observer role. Throughout the observation activity the teachers and students who were observing the implementation of particular context based strategies took notes on the proceedings and these notes assisted them make contributions during the focus group meetings. Gray (2009:399) states that the main aim of participant observation is to generate

data through observing and listening to people in their natural setting, and to discover their social meanings and interpretations of their own activities. With this role, it was easier for observers to get to understand how and why different strategies were used in the presentation of particular Economic concepts and theories. One benefit of participant observation as noted by Dahlke, Hall and Phinney (2015:1119), is that it can potentially assist the researcher to understand the research participants' worlds as a result of deeper conversations the researcher might have with them.

4.9.1.3 One-on-one Discussions

One-on-one discussions with other consenting stakeholders outside of the core research team were conducted to elicit their views on how the problem under investigation could be solved. These stakeholders were identified by other research participants as having the potential to offer valuable insights into the research project. The principal researcher and research participants firmly believed that with their lived experienced those individuals could generate the ideas necessary to find a solution to the research problem. Prior arrangements were made with the identified individuals so that the principal researcher could meet with them to have discussions around the problem of the study at a time and place convenient for each of them. Permission was sought from them to audio-record the discussions for accurate data capturing purposes. These discussions gave the principal researcher an opportunity to understand the current situation in Economics teaching, and the ideas and thoughts of those research participants in their own words, which were later shared with the core team.

The role of the principal researcher during the one-on-one discussions, was to ensure that the conversation is initiated and maintained mainly by using exploratory questions throughout the discussion. These exploratory questions gave the participants maximum opportunity to present their views and perspectives on the issue on the table, as well as developing dialectic and reciprocal relationships between the principal researcher and the participants. It was also the responsibility of the principal researcher to ensure that conversations move and remain in the direction of the research focus. Data generated from these discussions were

organised under the five key objectives of the study so that the themes that emerged under a particular objective from the discussions could be analysed separately.

4.10 INSTRUMENTS USED FOR DATA CAPTURING

In an effort to ensure that data are captured accurately, permission was sought from the participants to audio record the focus group discussions and the one-on-one discussions. These recordings were kept safely and could only be accessed on request by the research participants. They were later transcribed for data analysis purposes. The value of using different instruments in capturing data is highlighted by Gray (2009:326), stating that they can be used either to encourage discussion or to make a recollection of events throughout the research process. Moreover, they can be used as a way to capture evidence during the data generation process. For example, an audio recording can be used as a kind of talking diary that captures an entire conversation.

4.11 ETHICAL CONSIDERATIONS DURING DATA GENERATION

In conducting research where human beings are involved, care should be taken to avoid violating the human rights of those research participants, exposing them to potential harm or deceiving them in any way. Reza (2007:31) also mentions that there will always be ethical issues related to the integrity of the participants, informed consent, and the confidentiality and integrity of the data. In an attempt to deal with these ethical issues, Reza (2007:32) notes the three questions that may assist a researcher, i.e. (i) how can the principal researcher steer clear of doing harm to research participants?; (ii) if the principal researcher and research participants work collaboratively, how to safeguard confidentiality of information and anonymity of research participants?; and (iii) if the research, e.g. PAR is an ongoing process evolving over time, how does the research group establish purpose and importance for the concept of informed consent. In spite of the view that there is less risk of violating participants' rights in PAR efforts are made to ensure that all ethical issues that may impact on the research process are attended to. Reza (2007:32), for example, maintains that the potential risk of ethical violation and harm to participants is minimal in PAR, because it is a consensus-based approach between the primary

researcher and the research participants where knowledge is co-created and action is taken in a democratic process; however cautioning that things should not be taken for granted.

In the light of the view that possibilities for violation of participants' rights are minimal in a PAR project the principal researcher in this study followed the necessary research protocols to ensure that the rights of the research participants were not violated and that they are not deceived in any way. Informed consent forms were issued to the prospective research participants, clearly stating that their participation in this research project was voluntary and that they were free to withdraw from the project without any repercussions. These informed consent forms also clarified that they would be given pseudonyms to keep their identities confidential so that they could not be recognised by mention or by inference. Furthermore, participants were informed that this project was not sponsored, but it was purely for academic reasons and no financially reward should be expected for participating. Participants were also assured that professional help will be sought on their behalf in the event that one experiences some discomfort as a result of their participation in the project. The informed consent form further indicated no risks were anticipated by participating in the project, as the research would be conducted in their everyday life setting.

Permission was also sought from the district office of the Department of Education and from the institutions where the research was to be conducted. The researcher also requested permission from the participants to use an audio recorder during the data generation process. Participants were assured that the recordings were meant for accurate data capturing and for analysis purposes only. The researcher further informed them the recordings would be safely stored and could only be accessed via a password known by the principal researcher. After the analysis of data had been completed, the tapes would be stored in a locked safe by the supervisor who would then safely dispose of them after a five-year period. The contact numbers of the supervisor were captured on the informed consent forms for participants to consult, if necessary.

4.12 DATA ANALYSIS

Discourse analysis was followed in the analysis of the co-generated data in this research, as the researcher believed that a focus on the meanings constructed by the participants in the study which are found in the spoken word or written texts had the potential to demonstrate what the causes of the problem under investigation were, how they were reinforced and what the possible solutions were. The theoretical framing of this study seems to support the use of discourse analysis and, as Henning, van Rensburg and Smit (2004:45) posit, discourse analysis has become a focus of researchers working from a critical perspective or whose epistemological position is social constructivist. The discursive perspective in discourse analysis views the forming of certain modes of symbolising reality, such as in language and in pictures, as a strong determinant of meaning constructed individually or collectively. Discourse analysis sees the data as a socially constructed set of information that become useful for various reasons, e.g. because of the text of the data itself, the broader social and historical context and conventions within which the text has been created and the way in which it has been created.

The focus of discourse analysis, according to Gray (2009:515), is on how both spoken and written language are used in social contexts. In using discourse analysis the researcher gives attention to the structure and organisation of language and emphasises how research participants' account of events are constructed. Unlike in the content analysis, discourse analysis rejects the view that language is a transparent medium that merely reflects reality. Contrary to this view, Walliman (2015:174) argues that in discourse analysis, language is not seen as a neutral medium for transmitting information but is rather seen as being bedded in a social situation and helps to create and recreate it. Language is seen as having the power to shape people's perceptions of the world, their attitudes and identities. Greener (2011:99) further points out that discourse analysis tends to involve an interest in text that is naturally occurring, i.e. text as used by real language users and focuses on larger units of text than individual words or sentences. This type of analysis further tends to focus on the strategies used in texts to persuade or dissuade, whilst at the same time trying to examine the social contexts within which texts are produced and, in the process, political questions are drawn into analysis about how texts preserve or disturb power relationships.

It is however worth noticing that discourse is not analysed in one particular method, but various approaches have been developed for discourse analysis. In relation to this, Waller (2006:8) notes that many different tools have been developed to analyse discourse, and it is because of this diversity that some authors such as Weiss and Wodak (2002) contend that studies in analysing data are multifarious, influenced by different theoretical backgrounds, and are orientated towards different methodologies and epistemological influences. According to Waller (2006:8), when these different tools are carefully scrutinised, they can be seen as representing two poles on a continuum. On one hand, there are those who focus on a detailed analysis of texts, i.e. the linguistic features of texts. This is often considered to be a narrow approach in discourse analysis. On the other hand, there are those that focus on the social aspects of text production, transformation, distribution, consumption and redistribution. This approach is regarded as a wider approach to discourse analysis. Two further categories can be discerned within these two poles, namely the normative approach and a critical approach, with the former striving to understand the configurations of a discourse operating with standard status quo, while the latter aims at deconstructing hegemonic relations of power in and over discourse. The critical approach is therefore intent on challenging the status quo.

The variety in the approaches to discourse analysis is also noted by Greener (2011:100), who asserts that the diversity of approaches used in discourse analysis makes it a vibrant field of study; yet, at the same time a frustrating one for a researcher to enter, as it can be difficult to get a clear view of what those within it are analysing methodologically. Despite this diversity, Greener (2011:100) contends that a clearer explanation within the field of discourse analysis is provided by Norman Fairclough in his framework for Critical Discourse Analysis (CDA). Waller (2006:8) argues that Critical Discourse Analysis seeks to transcend the vertical and horizontal divisions explained earlier by the different poles within which different discourse analysis tools are categorised. Critical Discourse Analysis aims to bridge the text and social aspect of text production's divide and merge the normative and critical approach, which exists within textual analysis and social analysis of the text production process. Waller (2006:8) further states that Fairclough's CDA approach provides a theory-method linkage, which is not found in many sociological discussions of everyday life and language use and in many linguistic discussions of

social dynamics. Jorgensen and Phillips (2002:65) assert that the difference between Fairclough's CDA and Critical Discourse Analysis in general is found in the stance maintained in Fairclough's approach that discourse is both constitutive and constituted. In this approach, discourse is seen as being in a dialectical relationship with other social dimensions. Thus discourse is regarded as an important form of social practice, which both reproduces and changes knowledge, identities and social relations, including power relations, while at the same time it is also shaped by other social practices and structures.

4.13 ORIGINS OF CRITICAL DISCOURSE ANALYSIS (CDA)

Tenorio (2011:188) argues that the philosophical and linguistic underpinnings of CDA include certain branches of social theory and earlier discourse analysis, text linguistics and interactional sociolinguistics. Tenorio further points out that some proponents of CDA are influenced by the work of Karl Marx, for instance, his critique of the capitalist exploitation of the working class, his historical dialectical method, his definition of ideology as the superstructure of civilisation, and his notion of language as a product, producer and reproducer of social consciousness. Other proponents of CDA draw from Althusser's conception of interpellation, which describes the way individuals become aware of themselves as constructed subjects within discourse on their becoming part of someone's utterances. Other CDA scholars are believed to be influenced by Antonio Gramsci's concept of hegemony, which formulates the idea that power can be exercised and domination achieved not only through coercive, oppressive and exploitative measures, but also through the persuasive potential of discourse, which leads to consensus and complicity. CDA, according to Woodak and Meyer (2009:6), can further be seen to be influenced by the Critical Theory of the Frankfurt school and Jurgen Habermas. Critical theory is mainly based on the 1937 essay of Max Horkheimer, which urged social theory to be oriented towards critiquing and changing society, as opposed to the traditional theory, oriented solely to understanding or explaining it. According to Tenorio (2011:187), critiquing and changing society meant improving its understanding by integrating social sciences to show how social phenomena are interconnected, to produce knowledge that helps social actors emancipate themselves from domination through self-reflection, and to

describe, explain and eradicate delusion by revealing structures of power and ideologies behind discourses, for example by making causes visible that are hidden.

Zglobiu (2017:1) contends that the origins of Critical Discourse Analysis can be traced to the emergence of a new form of discourse and text analysis in the 1970s. This form of analysis not only dealt with the organisation of the language, language variation, language change and the structure of communicative interaction, but it also recognised the role of language in the structuring of power relations in society. Zglobiu (2017:2) further notes that during the 1990s the label, Critical Discourse Analysis, became popular and was used with reference to this critical approach to linguistic analysis. The leading scholars in CDA amongst others included Norman Fairclough, Ruth Woodak, Teun van Dijk, Paul Chilton, Margaret Wetherrell, Michael Billig Christina Schaffer, Theo van Leeuwen and Gunther Kress. The impetus of the development of CDA is highlighted in Wodak and Meyer (2009:3), who points out that CDA as a network of scholars surfaced in the early 1990s after the symposium held in Amsterdam in January 1991. With support from the University of Amsterdam, Teun van Dijk, Norman Fairclough, Gunther Kress, Theo van Leeuwen and Ruth Wodak were able to come together for two days to discuss theories and methods of discourse analysis, in particular Critical Discourse Analysis.

The theoretical origins of Critical Discourse Analysis are also traced by Liu and Gou (2016:1076), who argue that CDA has its origins in Critical Linguistics and, more specifically, CDA can be seen as a development of Critical Linguistics that broadens the criticism element in discourse analysis studies. Critical Linguistics is the term that was first coined in the book *Language and Control* by Rodger Fowler and Gunther Kress in 1979. The authors adopted Systemic Functional Linguistics (SFL), proposed by Halliday as the fundamental theoretical framework. Tian (2018:434), who also acknowledges that the term ‘Critical Linguistics’ was first mentioned in the 1979 book *Language and Control,* further states that ten years later, the term ‘Critical Discourse Analysis’ was introduced by the English linguist Norman Fairclough in his book *Language and Power.* Liu and Gou (2016:1077) also posit that the term ‘Critical Discourse Analysis’ is derived from Critical Language Study whose characteristics are discussed by Fairclough in the book *Language and Power,* often regarded as the landmark in the development history of CDA. According to Liu and Gou (2016:1077), in that book, Fairclough introduced his thoughts and definitions of some key

concepts about CDA, e.g. discourse, power, ideology, social practice, and common sense. Fairclough, who seems to draw more from Systematic Functional Linguistics, also argued that language is a social practice and not a simple linguistic phenomenon that is independent from society. He further argued that language should be studied as discourse both in speaking and in written forms.

The influence of Systemic Functional Linguistics on CDA is noted by Tian (2018:435) in the contention that CDA takes language as a multi-functional system. This seems to be similar to Halliday's Systemic Functional Linguistics in regarding language as a reflection of its function as well as having to fulfil the three needs of its users. Language, according to SFL, has three functions, namely ideational, interpersonal, and textual functions. Cervera, Postigo and Herrero (2006:9) also note that, according to Halliday's Systemic Functional Linguistics, the ideation function means that language represents the experience that speakers have of the world. Tian (2018:435) states that it is through the ideation function that speakers or writers embody in language their experience of the phenomena of the real world, which might include the speaker or writer's experience of the internal world of his/her consciousness, his/her reactions, cognition, perceptions and his/her linguistic acts of speaking and understanding. The interpersonal function is explained as the expression of the speaker or writer's comments, attitudes and evaluation and the relationship between him/herself and the listener. This particularly refers to the communicative role that he/she adopts in questioning, informing, greeting or persuading. The textual function, on the other hand, means that language is concerned with the creation of text. It is through this function that language makes links with itself and with the situations. Discourse becomes possible, because the speaker or writer can produce a text and the listener or reader can recognise it.

To summarise these three functions of language, Tian (2018:436) states that ideation function is language's function as an expression of experience of the real world; the interpersonal function is language's communicative function which establishes, maintains and reflects the speaker or writer's social relationship with others, the textual function is the function that transfers information and language, and compose a coherent and discursive text associated with its social and communicative text.

The origins of Critical Discourse Analysis can also be explained from an assertion by Liu and Gou (2016:1077) that the birth of CDA is related to two concepts: the first is that CDA retains the term ‘critical’, as it insists on the critical essence of the former studies. The second aspect also highlights that the birth of Critical Discourse Analysis theory is that it uses the term ‘discourse analysis’ instead of the term ‘linguistics’. This indicates that CDA is not restricted to Halliday’s traditional Systemic Functional Linguistics framework, as it accepts the concepts of discourse from social science. CDA can thus be seen as carrying the critical feature of Critical Linguistics, rectifying the limitations of Critical Linguistics, thus broadening the analytical approaches used in discourse analysis from a critical perspective.

4.13.1 Critical Discourse Analysis as an Approach

Practitioners in the textually oriented discourse analysis field seem to agree that discourse analysis should not be considered as a single unified method. This can be seen from Vibhute (2016:725), who asserts that it is generally agreed that CDA should not be classified as a single method, but instead should be viewed as an approach consisting of different perspectives and various methods for studying the relationship between the use of language and social context. A similar view is noted from Vaara (2015:2), who states that CDA should not be viewed as a single method and instead of forming one coherent whole, there are different traditions in CDA, which include, for example, French discourse analysis, critical linguistics, social semiotics, socio-cultural change and change in discourse, socio-cognitive studies, the discourse historical method reading analysis and the Duisburg school. Wodak and Meyer (2009:5) also stress that CDA has never been or has never attempted to provide one single theory; rather, it should be noted that studies in CDA are diverse, derived from distinct theoretical backgrounds, and aimed towards different data and methodologies. Liu and Guo (2016:1077), in their contention that there are different focuses of research in CDA, note different approaches to CDA. Fairclough, for example, takes sociology, social semiotics and Systemic Functional Linguistics as the theoretical and linguistic foundation for CDA. Ruth Wodak, on the other hand, places discourses into the historical context and develops CDA from historical perspectives as a historical-discourse analysis approach. Van Dijk, as another example, puts more emphasis on text linguistics and cognitive linguistics, while also

concentrating on analysing discourse in a social cognitive approach, while Paul Chilton's critical discourse analytic approach has its foundation in developmental psychology and cognitive science.

At this point, one can therefore note that Critical Discourse Analysis is better understood as an approach in discourse analysis and not as a unitary method. Despite the multifarious nature of Critical Discourse Analysis, sameness in CDA approaches can still be found. For instance, Wang (2006:60) notes that CDA regards discourse as part of social practice and takes consideration of the context of language use to be important to discourse. In the same vein, Vaara (2015:3) argues that seeing discourse as part of social practice means that CDA scholars share a viewpoint according to which not everything is reducible to discourse. From a CDA perspective, discourses are particular moments among others in the complex social processes constituting the world. Moreover, CDA scholars emphasise the dialectics of social structure and discourse, meaning that discourses can both be the products of social structures and the producers of structures.

In spite of the differences in the perspectives on Critical Discourse Analysis, Rodgers (2003:141) notes that CDA enables the researcher working from a critical social research point of view to interpret language on the basis of its position in the social structure, as well as on what language can inform about the social structure itself. Secondly, CDA allows the researcher to transcend the stage of merely describing injustice and power/knowledge relations in interactions, but affords him or her an opportunity to interpret and explain them. CDA thus seems to allow the researcher to turn language inside out, to examine the inner workings, the detail of linguistic codes, the functioning of cultural signs and how ideology is embedded in language. Thirdly, CDA allows the researcher to contextualise discourse in the public domain and make links between texts and contexts, as discourse is intertextual, signifying past relations of significance embedded in both spoken and written language. Fourthly, this approach to discourse analysis provides insight into the social structure of social orders of discourse and how they interact and position one another, as it highlights questions and commonplace assumptions, especially between the individuals' understanding of their relationship to/with social structures.

The concepts of critique, ideology and power seem to be central in Critical Discourse Analysis as they provide a better understanding of this approach to discourse analysis. Zglobiu (2007:154) points out that the notion of critique in CDA has been understood differently. However, Zglobiu (2007:154) notes that the term “critical” in CDA has been explained by some prominent scholars in Critical Discourse Analysis like Ruth Wodak and Michael Meyer to mean having a distance to the data, embedding the data in the social, taking an explicit political stance and a focus on self-reflection by scholars doing research. On the other hand, the notion of ideology in CDA is seen as an important aspect of establishing and maintaining unequal power relations. As for power, CDA believes that texts are often sites of struggle in that they show traces of differing discourses and ideologies contending and struggling for dominance. Bryman (2016:508) states that Critical Discourse Analysis (CDA) emphasizes the role of language as power resource that is related to ideology and socio-cultural change. CDA practitioners seek to trace how discourses are structured and maintained in relation to certain phenomena. Discourse, as understood from Phillips and Hardy (2002:3), refers to an interrelated set of texts and the practices of their production, dissemination and reception. Furthermore, Bryman (2016:509) argues that CDA involves exploring why some meanings become privileged or taken for granted and others become marginalised. Discourse therefore not just provides an account of what goes on in, for example, organisations, but it is also a process of meaning creation through asking questions such as, Who uses language? How? Why? and When?

Grant, Hardy, Oswick and Putman (2004:11) contend that Critical Discourse Analysis is based on a three-dimensional framework whereby any discursive event is analysed on the basis of its being simultaneously (i) a piece of text, (ii) an instance of discursive practice, and (iii) an instance of social practice. A similar claim on the analysis of a particular discursive event is found in Bryman (2016:509), who notes that analysis of a particular discursive event usually proceeds as follows: (i) the actual content, the structure and meaning of the text which is under scrutiny is examined (textual dimension); (ii) the form of discursive interaction used to communicate meaning and beliefs is examined (discursive practice dimension); and (iii) the social context where the discursive event takes place is considered (the social practice level).

With its three levels of analysis, Liu and Guo (2016:1079) argue that CDA tries to explore the meaning of discourse and how such kind of meaning is produced by discourse. Critical Discourse Analysis aims to reveal the influence of the ideology on discourse, the counteractive influence of discourse on the ideology and how the two elements derive from and serve for social structure and power relations. CDA thus aims at revealing the relationship between language, ideology and power.

In addition, Grant *et al.* (2004:11) further argue that Critical Discourse Analysis utilises systematic and detailed forms of textual analysis, which are found in conversation analysis, studies of institutional dialogue and pragmatics. CDA further combines these forms of analysis with the concept of intertextuality. Intertextuality, according to Grant *et al.* (2004:12), serves as a reminder that while texts may be the discursive units on which the researcher focuses, discourse itself exists beyond any individual text from which it is constituted. This in a nutshell means that any text is seen as a link in a chain of texts, reacting to, drawing in and transforming other texts. Similarly, Bryman's (2016:509) explanation is that intertextuality draws attention to the notion of discourse as existing beyond the level of any particular discursive event on which analysis is focused. Intertextuality thus enhances focus on the social and historical context in which discourse is embedded. Vaara (2015:3) points out that CDA scholars emphasise the importance of intertextuality, i.e., seeing specific texts or communications as parts of longer chains of texts. Simply put, it means that the meaning created in a particular discursive act can be hardly understood without considering what common knowledge is or what has been said before.

An elaboration on Critical Discourse Analysis provided in the preceding paragraphs highlights certain principles which seem to run across different strands of CDA. As Wodak and Meyer (2009:3) put it, CDA as a school or paradigm is characterised by a number of principles. For instance, Wang (2006: 61) notes the eight principles cited by Fairclough and Wodak, which they believe provide a common ground to all CDA studies. First of those principles is that CDA addresses social problems and maintains a critical stance to social problems in its aim to make explicit power relationships, which are often hidden. It aims to derive results that are of practical relevance to the social, cultural, political and economic contexts. The second principle is that power relations are discursive and CDA explains how social relations of power are exercised and negotiated in and through discourse. The third principle

is that CDA holds that discourse constitutes society and culture, which means that every instance of language use makes its own contribution to reproducing and transforming society and culture, including power relations. The fourth principle is that discourse also does ideological work, which means that ideologies are often produced through discourse. The implication is that it is not enough only to do textual analysis to understand how ideologies are produced, but it is also necessary to consider the discursive practice, i.e. how texts are interpreted and received and what social effects they have.

Wang (2006:61) goes on to identify further principles which Fairclough and Wodak believe are central to all CDA studies. The fifth principle is that discourse is history, which means that discourses can better be understood with reference to their historical context. Factors such as culture, society and ideology play a role in understanding discourses. The sixth principle is that the link between text and society is mediated, meaning that CDA aims at making connections between socio-cultural processes and structures on the one hand, and properties on the other hand. The seventh principle is that CDA is interpretative and explaining, i.e. it goes beyond textual analysis. However, the interpretations an explanations are dynamic and open and may be affected by new readings and new contextual information. The eighth principle is that CDA is a form of social action. In this sense CDA's principal aim is therefore to uncover opaqueness and power relationships. It is a socially committed paradigm that attempts to bring about change in communicative and socio-political practices.

The critical stance of CDA seems to stand out in making it distinct from other discourse analysis approaches. As Vaara (2015:3) puts it, with its critical stance CDA aims at revealing taken-for-granted assumptions on social, societal, political and economic spheres and examines power relations between various kinds of discourses and actors. It therefore attempts to make visible social phenomena that often pass unnoticed. Tenorio (2011:187) also asserts that CDA was from its inception meant to question the status quo by detecting, analysing and also resisting and counteracting enactments of power abuse as transmitted in private and public discourse. CDA is thus critical because of its bold and unrepentant attitude with regard to values and criteria; its devotion to the analysis of the wrongs that happen in the society such as prejudice, or skewed access to power, to privileges and to other

material and symbolic resources. Furthermore, Tenorio (2011:187) asserts that CDA is critical because it is also committed to finding out which existing hegemonic social practices are the causes of different social wrongs and because it also has an interest in developing methods that can be applied to their study. It is through this critical stance that CDA has its focus on the opaque relationship between discourse and societal structure. CDA can thus be seen as aiming to expose the manipulative nature of discursive practices, and improve communication and well-being by removing the barriers of assumed beliefs, legitimised through discourse.

It can thus be said that it is this critical stance that distinguishes CDA from other discourse analysis approaches. Zglobiu (2007:155) also notes that this critical stance of CDA makes it different from much of the discourse analysis of the twentieth century, which was largely non-critical in that it did not present any critique of social practice. It was rather seen as having three main purposes, i.e. (i) to identify and describe how people use language to communicate; (ii) to develop methods of analysis that help to reveal categories of discourse and important features of each; and (iii) to build theories about how communication takes place. Critical Discourse Analysis, on the other hand, seems to have different practical objectives, which are proposed by Bloor and Bloor (2013:12) as follows; (i) to analyse discourse practices that reflect or construct social problems; (ii) to investigate how ideologies can become frozen in language and find ways to break the ice; and (iii) to increase awareness of how to apply these objectives to specific cases of injustice, prejudice and misuse of power. Additional to these practical objectives, Bloor and Bloor (2013:12) identify what they regard as the more theoretical aims of critical discourse analysis which are: (i) to demonstrate the significance of language in the social relations of power; (ii) to investigate how meaning is created in contexts; and (iii) to investigate the role of the speaker/writer purpose and authorial stance in the construction of discourse.

4.13.2 Fairclough's Framework of Discourse Analysis

Data in this study were analysed using this approach to discourse analysis known as Critical Discourse Analysis (CDA), based on Norman Fairclough's three-dimensional framework. Greener (2011:1000) argues that Fairclough's approach to discourse analysis seems to be different from those of other discourse theoreticians, because it

attempts to combine social theory with a linguistic analysis derived from Michael Halliday's Systemic Functional Linguistics. This approach therefore seems to provide analytic rigour from the perspectives of both social theory and linguistics, thus making it valuable, as it shows not only what textual effects are used in texts, but also linguistically how those effects are achieved. The data analysis process in this study was aimed at uncovering how participants in the study make meaning and how power relations impact on the meaning making process. The three-dimensional framework allowed the researcher to analyse the data based on the texts that were used either spoken or written by looking amongst others at the words used and how they were used. This framework further allowed the researcher to analyse the process of production, distribution, consumption and transformation of discourse during data generation. The researcher, using this three-dimensional framework, was also able to link the discourse to the broader socio-cultural practice and thus locate the discourse in the relevant contexts.

Liu and Gou (2016:1078) note that in 1989, Fairclough developed a Three-Dimensional Approach to Critical Discourse Analysis, which suggested that there are three dimensions of discourse, namely text, interaction, and contexts. However, in 1992, Fairclough made some modifications to the initial Three-Dimensional approach and proposed the new dimensions of discourse as: (i) text, (ii) discursive practice, and (iii) social practice.

Jorgensen and Phillips (2002:65) contend that Fairclough's approach to discourse analysis attempts to fuse the three traditions namely: detailed textual analysis within the field of linguistics, including Michael Halliday's functional grammar, macro-sociological analysis of social practice, including Foucault's theory, which seems not to provide a methodology for analysis of specific texts, and the micro-sociological, interpretive tradition within sociology where everyday life is treated as the product of people's actions in which they follow a set of shared common sense rules and procedures. Jorgensen and Phillips (2002:66) further assert that the benefit of drawing on the macro-sociological tradition is that it takes into consideration that social practices are shaped by social structures and power relations and that people are often not aware of these processes. On the other hand, the contribution of interpretive tradition is to provide an understanding of how people actively create a rule-bound world in everyday practices. Therefore, to Fairclough, text analysis alone

is not enough to analyse discourse, as it does not shed light on the links between texts and societal and cultural processes and structures.

Ravn *et al.* (2016:546) also note that this three-dimensional framework distinguishes between text, discursive practice and social practice as levels that can be analysed separately though each of them is indispensable for discourse analysis. Analysis should therefore focus on the following areas (i) linguistic features of the text and that is known as text analysis; (ii) processes related to the production and consumption of the text, i.e. analysis at discursive practice level; and (iii) the broader social practice, i.e. analysis at the social practice level. Liu and Gou (2016:1078) note that according to this framework, text is seen as the product of a communication process, or discursive practice. Furthermore, Tian (2018:434), in the assertion that Fairclough's Three-Dimensional Model has been a central theoretical framework for Critical Discourse Analysis linguists, states that this framework seems to be based on the stance by CDA that analysis of text cannot be isolated from the discursive practice and the social context where it is produced. Tian also notes that Fairclough's framework demonstrates that text is a product of discursive practice or interaction process, and this practice includes the production, distribution and the consumption of text, which are all decided by the condition of social practice.

Fairclough, in his three-dimensional framework, further distinguishes three steps or stages along with the three dimensions of discourse. These steps, as identified by Liu and Guo (2016:1078), are: (i) description, which has its focus on the description of the formal and structural characteristics of the text; (ii) interpretation, which focuses on the connection between text and interaction; and (iii) explanation, which deals with explaining the connections between interaction and social context. Tian (2018:434) sheds more light on these stages by explaining that the first stage, i.e. description, is the stage which is concerned with the formal properties of text, such as properties of vocabulary and textual structure; interpretation as the second stage is concerned with the relationship between text and interaction and in this relationship text is seen as a product of a process of production, and as a resource in the process of interpretation; while the third stage, i.e. explanation is concerned with the relationship between interaction and social context, with the social determination of the process of production and interpretation and their social effect.

As noted from the principles of CDA that discourse plays an important role in constructing the social world, Ravn *et al.* (2016:546) argue that discourse should, however, be seen as one among many aspects of any social practice and is dialectical to other social dimensions. To clarify the links between text and the wider social practice to which it belongs, it important that text must be analysed within the specific context of social practices of which it is part. The view that text should be analysed within a specific context is also noted by Cervera *et al.* (2006:10), who state that discourse is not produced without context and cannot be understood without taking into consideration the current and historical context. According to this view, discourse is thus linked to the past and the present social context, because texts can be interpreted differently by different people due to various reasons, e.g. they maybe come from different backgrounds; their knowledge may also not be the same; and they may also be in different positions of power. According to Tian (2018:435), this framework demonstrates that Fairclough believed that each discursive event has three dimensions, i.e. (i) a spoken or written language text; (ii) it is an instance of discourse practice involving the production and interpretation of text; and (iii) it is a piece of social practice. It is therefore important to note that when using CDA in discourse the analysis of linguistic features, production and interpretation of a text should be put into its relevant context, given that one of the main principles of Critical Discourse Analysis is that discourse is a social action.

4.13.3 Application of Fairclough's Discourse Analysis

In the analysis of data generated in this study, the researcher used Fairclough's three-dimensional framework with the aim of finding out how language use by research participants showed their understanding of extent of the problem under investigation, the effect of ideologies on the research problem and the impact of power relations. The intention of using this framework was further to investigate the processes through which texts were produced, distributed and consumed during the data generation process. The principal researcher was also interested in examining how the texts produced by the research participants in their quest to develop a Context-based approach to the teaching of Economics draw on other texts and which discourses these texts draw on. It was also important for the researcher to examine the connection between the texts produced by the research participants

with the wider social practice in order to place these texts in the appropriate social contexts. Jorgensen and Phillips (2002:68) maintain that, according to Fairclough's framework, every instance of language use is a communicative event consisting of three dimensions, i.e. (i) it is a text which can be speech, writing, visual image or a combination of these; (ii) it is a discursive practice which involves the production and consumption of texts; (iii) and it a social practice.

When analysing discourse of a specific communicative event using this three-dimensional framework, Jorgensen and Phillips (2002:69) contend that it is important that the researcher should cover all three dimensions. This analysis therefore focused on the examination of texts produced by research participants, specifically the linguistic features of such texts. Waller (2006:13) maintains that analysis at the textual level focuses on describing the contents of text themselves, their discursive content and how these texts are linked to other discourses, genres and styles, which is a process referred to as intertextuality. At this level Waller (2006:13) argues that the analysis is descriptive and the researcher analyses texts by looking at vocabularies, i.e., wording and metaphors, semantics, utterances, grammar (transitivity, modality), in order to identify representations, categories of subjects, objects, social positions, how subjects and objects were positioned, and instances of power relations in the use of language.

A closer focus on these linguistics features of texts is important for the analyst. As Cervera *et al.* (2006:12) posit, amongst others, vocabulary shows how words are used to show ideology, in what ways are things classified, which aspects of reality are over-worded (a sign of preoccupation), and the connotations of euphemisms and metaphors used. Transitivity may demonstrate who is depicted as an agent, and therefore empowered and over whom, i.e. the affected party. Modality of a text is set with the use of specific words, verbs or prepositional phrases, for example, may, might, could, will, can, must, seems as, without a doubt. It is also set with intonation patterns, e.g. speaking hesitantly. Therefore, modality can show the degree of certainty and authority by the speaker or writer. Blommaert and Bulcaen (2000:448) further point out that at this level of analysis, the focus should also be on cohesion, e.g. conjunction and schemata, and on the text structure, e.g. turn-taking system, which is explained by Cervera *et al.* (2006:13) as the way in which talking turns are distributed. Furthermore, Waller (2006:13) asserts that at the text level, the focus

should be on the genres to which specific discourses belong, whether the texts conform to that particular genre, the semantic relationships, how elements of social events like processes, people, objects, means, times and places are represented, how events are ordered, the angle that is taken, what is being emphasised and what is not.

Secondly, the principal researcher also focused on analysing the discursive practices during the focus group discussions and also during the one-on-one discussions, i.e. the focus was on the processes of the production, distribution and consumption of texts. Waller (2006:13) points out that at the discursive practice level, the researcher analyses what the factors are that influence how social actors interpret an event and how this process influences the production, distribution, transformation and consumption of texts. Analysis at this level includes an interpretation of discursive practices in relation to events; inter-discursivity, i.e. how different discourses are related, orders of discourse, which refers to a network of a socially ordered set of genres, social practices and discourses associated with a particular social field; and the power relations between people in an event.

Lastly, the analysis focused on investigating the broader social practices that might have had an influence on views, explanations and interpretations of the research participants. Cervera *et al.* (2006:15) contend that describing discourse as social practice implies a dialectical relationship between a particular discursive event and the situations, institutions and social structures which frame it, i.e. discourse is shaped by situations, institutions and social structures, but it also shapes them. Waller (2006:13) argues that analysis at socio-cultural practice level is important, because to explain the dynamics of a text and how it is produced, distributed, transformed and consumed, one needs to understand the wider socio-cultural, political, ideological, institutional and historical context and structures in which a text is embedded. Analysis at this level is at an explanatory level and the researcher takes into consideration the underlying power relations which might be reproduced, how they work towards the exploitation and marginalisation of certain groups and also the possibilities of change and resistance.

4.14 CHAPTER SUMMARY

The focus of this chapter was on the methodology followed in conducting this research project that was aimed at finding an answer to the research question: *how can the teachers create a Context-based Economics learning environment to enrich students' application of Economics theories and abstract concepts to real-world situations?* The PAR methodology was outlined and its choice for this study was justified and linked to constructivism, which is a broader theoretical framework which guided this study. The process of how this study unfolded, i.e. initiating the research process, formation of the research team, collaboration of teachers, students and other stakeholders in Economics education in finding an answer to the research problem was also explained. It emerged in this chapter that people who are affected by a problem are the ones better positioned to propose solutions to that problem and that co-creation of knowledge can lead to widely accepted and sustainable solutions. It also became evident that the teachers and students who in most cases are used as respondents in research have the potential to identify the problems in teaching and learning and the skills and resources and collectively assist in solving such problems. The chapter also demonstrated that PAR has the potential to empower the research participants in different ways, as it is conducted in a reciprocal and dialectic manner. The ethical issues that need to be considered in conducting research were explained and the challenges and risks associated with PAR methodology were highlighted. The aim of highlighting these challenges and risks was to forewarn and forearm the prospective researchers who might develop an interest in this method. An explanation of Critical Discourse Analysis, which is the method used to analyse data, was also provided.

CHAPTER 5 :
DATA PRESENTATION, ANALYSIS AND INTERPRETATION

5.1 INTRODUCTION

The previous chapter explained the methodology that was followed to conduct this research, i.e. PAR. The researcher explained how PAR cycles were followed and how data were generated and how data were to be analysed. The reader was introduced to a method of data analysis known as Critical Discourse Analysis. In this chapter a three-dimensional framework developed by Norman Fairclough is applied in the analysis of data generated in this study. The researcher will therefore analyse the data at the following three levels: (i) discourse at a textual level where the main focus will be on the actual text, i.e., vocabulary, grammar, coherence and the text structure, (ii) discourse as a discursive practice which examines the process text production, distribution, transformation and consumption, and (iii) discourse as a social practice where focus is on the broader social context under which texts are produced or which may have influenced the production of texts. The chapter will also make an analysis how some fundamental elements of constructivism, which is the theoretical framework that underpins this study, emerged during the data generation process. Analysis will be based on the constructs developed under each of the five objectives of this study, i.e., (i) the need for a Context-based approach in Economics education, (ii) components of a Context-based approach, (iii) conditions optimal for the implementation of a Context-based approach, (iv) plausible challenges in the implementation of a Context-based approach, and (v) functionality of a Context-based approach.

Constructs to be analysed will be taken from the literature review chapter, i.e. Chapter three, and their analysis will be based on the extracts taken from the transcripts of the conversations recorded during the data generation process. To make this cross-referencing easier to follow throughout the analysis process, the researcher will draw extracts from the literature study to be followed by extracts from the empirical study.

5.2 THE NATURE OF THE SUBJECT ECONOMICS AND ITS DOMINTANT TEACHING APPROACH

Two constructs, i.e., the abstract nature of Economics concepts and a highly textbook driven and teacher-centred approach in teaching which were developed from both a literature and empirical study, will be analysed in sections 5.1.1 and 5.1.2.

5.2.1 Abstract Nature of Economics Concepts

A review of related literature and the views of the research participants in this study seem to be in agreement that Economics is taught in an abstract manner and as result students often find it difficult to connect it to the real world and to see its relevance in their daily lives. The abstract nature of this subject is also cited as a reason for the difficulty students often face in applying its theories and concepts in real-world settings. For example, Demircioğlu *et al.* (2013:628) (Section 3.2) and the *Curriculum and Assessment Guide* (Curriculum Development Council, 2007:35) (Section 3.2) mention that the subject Economics is made out of many concepts and theories that are very abstract by nature and as a result students often struggle to see the connection to their daily lives and their application in the real world. Students therefore need to develop abstract reasoning competency and, if not, they end up having a wrong understanding of those concepts and theories and may thus be unable to link them to the actual world.

These claims from literature study also seem to be present in the comments made by participants in the study, e.g. **one participant** made this statement when asked to comment on the nature of Economics as a subject:

> **Bonjo Bee:** *What I have come to realize about this subject is that there are certain concepts which learners can do practically as they are learning but **others** seem difficult to apply in daily life...*

Analysis of discourse at a textual level

The phrase [*but others*] shows that although the research participant acknowledges that other concepts in Economics are practical, there are those that are difficult for students to apply in their lives. The emphatic nature of the word **others** seems to

imply that concepts which may be easy for students to apply are outweighed by those they cannot apply.

> **Sebata:** *When comparing the practicality of Business studies and Economics I found the language and the concepts used in Economics quite difficult to understand as compared with other subjects for example Business studies. I can say it is easy to see how most of the concepts used in Business studies relate to the business world and to your daily life. With Economics* ***Haai****! It is a different story...*

The research participant's use of a Xhosa word *Haai* seems to demonstrate that by using his/her mother tongue, it will emphasise the message that Economics concepts are seriously difficult to relate to the students' daily lives.

Analysis of discourse at discursive practice level

Sizijo shows understanding of the discourse produced in this discussion by the statement,

> *I could not really understand what this subject was all about*...

This statement contains elements of the statement made earlier by **Sebata**,

> *I found the language and the concepts used in Economics quite difficult to understand.*

Coherence is also demonstrated in **Sizijo**' statement,

> *… as compared to the other subjects I did, e.g. Accounting deals with keeping books for a business or recording financial transactions and Business studies which is concerned with managing a business enterprise ...*

This statement seems to be building on an earlier one by **Sebata** who said,

> *I found the language and the concepts used in Economics quite difficult to understand as compared with other subjects for example Business studies. I can say it is easy to see how most of the concepts used in Business studies relate to the business world and to your daily life.*

5.2.2 A Highly Textbook-Driven and Teacher-centred Approach

Teaching Economics should not just be approached as a list of concepts students need to memorise so that they can recall them when writing tests or examinations.

Students must be able to see the relevance of those theories and concepts to their lives and for them to achieve economic literacy they must be able to apply those concepts and theories in the real-world situations. It may, however, not be possible to stimulate students' ability to link economic theory with the actual life outside the class if Economics teaching is confined only to the classroom (McGoldrick *et al.,* 2000:45) (see section 3.2, Chapter 3).

Analysis of discourse at textual level

> **Mbali:** *What I can say is that this is one subject that needs high levels of thinking on the part of students. You also need to have an imaginative mind as some of the topics covered in this subject seem be so far from reality that it is not always easy to connect with...*

The use of the phrases **high-level thinking** and **imaginative mind** show that for students to understand this subject they need to move from the level of thinking they have been operating at, to another level and also that they need to create mental pictures of what they are taught, something that can be difficult for some students.

Analysis of discourse at discursive level

Omolemo seemed to show understanding and transformed the discourse produced in this discussion by saying,

> *I agree with Mbali, although the subject is not necessarily difficult, one needs to be operating at high cognitive levels to make sense of some of its abstract concepts.*

Intertextuality, i.e., transformation of what was said earlier on is demonstrated by the phrase,

> *…although the subject is not necessarily difficult...*

Omolemo further demonstrated coherence, i.e., building from the previous statement(s) by saying,

> *I mean the topics which Mbali said are like far from reality. As a student teacher you need to have developed the skills to analyse, synthesise and evaluate economic information to show that you master the subject.*
>
> **Bonjo Bee:** *I may ask them to dramatize the concept we have dealt with and this will put them in the shoes of the real economic actors. Drama can then afford them an*

opportunity to make the connection between the concept and their daily life. I might as well use relevant newspaper articles or look for case studies which cover a particular concept which I am teaching at that time. This will help them to see that the theory in the textbook is applicable in real life.

Mabena: *Do teachers usually use such strategies*?

Bonjo Bee: *No, no, no, no, they don't and that is one factor that is contributing to the problem we are talking about*.

Analysis of discourse at textual level

In the response, *No no no no, they don't* ..., the emphatic repetition of the answer 'No' three times shows that the research participant tries to emphasize teachers' non-inclusion of other methods of teaching in their lessons could be a reason why Economics students may be unable to put to practise the abstract theories and concepts.

The statement made by **Kaiser,**

I think also the approach used in teaching this subject contributed a lot...

also suggests that the problem of student difficulty to apply economic concepts in real life may be attributed to the approach used in the teaching of this subject.

Analysis of discourse at discursive practice level

Coherence is demonstrated in the statement made by **Sebata,**

...personally, I think this teacher-centred approach is not effective in bridging the gap between theory and practice...

The statement shows that Sebata adds to the text produced earlier on by clarifying what is the approach that is being referred and clarifies that with the phrase [*teacher-centred approach*].

Coherence is further noted in Sizijo' statement,

I have also noticed that teachers rely on one method, i.e. the textbook method. Teachers seem to be more comfortable on reading and explaining, they don't use other methods of teaching, e.g. role plays to demonstrate certain concepts in class.

The phrase [*rely on one method, i.e. the textbook*] further shows that Sizijo is also building on previous texts and highlights the reliance on the textbook method as one strategy that is encompassed in a teacher-centred approach.

Analysis of discourse at social practice level

The research participant provided this response to the question, *Which teaching method (s) did you use during the practice teaching period?*

> **Omolemo:** *Most of the time it was a direct or lecturer method...*

When asked if there were other reasons besides the time factor that may have prompted the use of the lecture method, the research participant responded in this way.

> **Omolemo:** *I would say during my years of school I was exposed to this method of teaching. It was then out of my experience as a learner that I also used this method. Even when you look around or go past other classes, most of the teachers are using this method and you get influenced by how those who have been in the field do things...*

Omolemo's response to the follow-up question demonstrates that the broader social practice can influence the teaching methods which novice teachers choose. This notion that one's choice of teaching methods can be influenced by how things have been done and are generally done, is echoed by Van der Sele's statement,

> *I fully agree with my colleagues here on the reasons why most of us teach that way, but I still believe that we need to change or shift to the other approaches...*

Van der Sele's statement seems to acknowledge that the teacher-centred approach, which appears to be widely used in Economics teaching may have some limitations in empowering students with the ability to put to practise the Economics content, which they learn hence emphasise on the call for introduction of new approaches. This call is demonstrated by the phrase [*we need to change or shift to the other approaches*].

Another research participant responded to a question on whether there is a need for a paradigm shift in the approach of Economics teaching in this way:

Bonjo Bee: *Absolutely, because chalk and talk approach is teacher centred and does not encourage active learning ... I think the regular use of the methods we have talked about is long overdue and we need a platform where we can sit down, share ideas and best practices, maybe we can come up with an approach that will make students see the relevance of Economics and its applicability in real-life and I think in this way this subject will be more interesting to them*.

Analysis of discourse at textual level

The use of the word **absolutely** suggests that the research participant is convinced that the with the sole reliance on the dominant teacher-centred approach in Economics teaching it may not be possible to tackle the research problem identified in this study. The phrase [*regular use of the methods we have talked about is long overdue*] further suggests that the participant believes that the use of other methods of teaching and learning discussed in one of their meetings has a potential to solve the research problem and should have already been put to practice, hence the clause [*is long overdue*].

Another research participant added to the need to introduce other methods of teaching in Economics classes with the following statement:

Danoms: *I think bold steps need to be taken to incorporate other methods in the teaching of Economics*...

The phrase [*bold steps need to be taken*] suggests that the research participant believes that teachers and other stakeholders in Economics education should start to take visible action towards introducing other methods in teaching Economics.

5.3 THE NEED FOR A CONTEXT-BASED APPROACH IN ECONOMICS EDUCATION

In this section an analysis will be done to examine the following four constructs that have been developed when investigating a need to adopt a Context-based approach in Economics education: (i) enhancing students' ability to apply Economic theories and concepts; (ii) the need to contextualise Economics content; (iii) developing students ability to transfer their Economics knowledge; and (iv) the need to develop students' higher-order cognitive skills.

5.3.1 Enhancing Students' Ability to Apply Economic Theories and Concepts

Economics teachers often confine the teaching of Economic theory to the classroom, where they present through lectures, and class discussions, while at the same time they neglect the application of this theory to the world outside. As a result, students find it difficult to recognise that there is a connection between that theory and their daily lives (McGoldrick, Battle & Gallagher, 2000:45). McGoldrick *et al.* (2000:45) maintain that while students need to develop an ability to link the Economic theory they have learnt in class with the actual life outside of the class it may be difficult to stimulate this ability if the teaching of Economics is confined only to the classroom (see section 3.2)

Arul (2007:1) asserts that effective teaching of Economics aims to enhance students' ability to apply the content knowledge properly by putting him/her in a real-world context. It is also worth noting that the achievement of this outcome does not only depend on the attitude and aptitude of the student, but also on the pedagogic methods used to present the content material (see section 3.3.1.1).

Analysis of discourse at textual level

Mbali stated,

> ...*yes, I also believe that it is better if students could be afforded opportunities to practise what they learn*...

This statement shows the research participant's confidence in the proposed shift from a more teacher centred and direct approach in the teaching of Economics to a more Context-based approach. This confidence is qualified by the statement,

> **Mbali:** *So that they know why they are taught certain things and how to use their knowledge to solve the problems they might come across in life*...

Furthermore the research participant demonstrated why there is a need for a Context-based approach with the statement,

> **Mbali:** *It will help students to put to practice the theory and concepts they learn in Economics*...

To suggest the potential benefit of a Context-based approach to the students in tests and examinations, Mbali went on to make the following two statements:

...this approach will not only help students outside of the class... and ...*We know students are always comfortable with the lower-order questions or those questions that only need them to recall but I think they will now be in a position also to be confident in answering questions that require the application of the concepts and theories they have learnt*...

In the phrase [*We know students*] Mbali inclusively used the pronoun [*We*] to suggest that the observation that students are more comfortable in answering the lower-order questions is not only an individual observation, but it is common knowledge among other research participants.

Analysis of discourse at socio-practice level

The phrase [*students are always comfortable with*] demonstrates that it is a common occurrence that students will always be at ease when they just have to recall information to provide answers.

In spite of the abstract nature of Economics and the dominant teacher centred approach that are often cited as possible reasons for the apparent difficulty of students to link or connect the subject to real-life situations, students often report good marks in the tests they write. However, Ziegert and McGoldrick (2008:39) are of the view that it is not a foregone conclusion that a student completing a course in Economics, even with high marks, can think like an economist and apply their economic understanding outside of the class situation. This view is echoed in a statement by Hugg and Wurdinger (2007:191) that “being book smart is one thing, while demonstrating application is quite another” (see section 3.2, Chapter 3).

The following responses to a question on how students are able to pass even if they cannot see the connection between the Economics theories and concepts they learn and their daily lives, were made.

Bonjo Bee: *They pass because most of them focus on memorization of the definition of this concept and also its formula*... (the participant was referring to the concept *Multiplier*)

Sebata: *To be honest with you, if you could just do as the teacher told you it was possible to pass; you could even get a distinction but all I say is that I did not pass because I understood the subject but because I could memorise a lot of information*...

Kaiser: *I think also the approach used in teaching this subject contributed a lot. It seemed as if teachers knew the subject for themselves but could not deliver the subject matter in such a manner that one can connect it to life and see its relevance to one's life. We were mainly drilled to memorise so as to pass tests and exams but not to achieve a deep understanding of the subject and how useful it is to one's life*.

Analysis of discourse at textual level

These two statements by Bonjo Bee and Sebata suggest that it is possible for students to pass the subject with very high marks, even though they do not really understand the subject. The phrase [*to be honest with you*] suggests that the student cannot think of any other possible reason for passing the subject except for memorising information.

Analysis of discourse at discursive practice level

Coherence is demonstrated in Kaiser' statement:

We were mainly drilled to memorise so as to pass tests and exams but not to achieve a deep understanding of the subject and how useful it is to one's life...

This statement seems to be building on an earlier one by Sebata that students managed to pass the subject because of memorisation. Kaiser qualifies the earlier statement with the phrase [*We were mainly drilled to memorise*].

5.3.2 The Need to Contextualise Economics Content

It is important that a teaching and learning environment is created that makes it easy for Economics content to be presented in its proper context, so that students can see where the content is applicable and what they can do with it in their daily lives, as well as how and why they will need it in the post-school life. Hung (2013:33) points out that contextualising content knowledge means that the meanings that are peculiar to a profession are attached to the abstract theoretical principles. This will help to make the subject knowledge to become practical and students will be aware of what that content knowledge can be used for, where they can apply it and how it manifests itself in the real word (see section 3.3.1.2, Chapter 3).

Hudson and Whistler (2007:54) note that contextual teaching and learning benefits students as it helps them to connect the subject content to the real-life contexts

where that content can possibly be used. Hudson and Whistler (2007:54) argue that students will be able to appropriately use the knowledge and the skills they have gained when learning takes place in an integrated, multidisciplinary manner and where appropriate contexts are used. This learning environment affords them an opportunity to review how their prior knowledge relates to the new concepts they are learning, to practise using the new concepts and also to link their new knowledge to a particular real-life scenario (see section 3.3.1.2, Chapter 3).

The following comment on the current teaching of Economics was made:

> **Danoms:** *Unfortunately the way the subject is taught makes it to be so abstract that you find some of the topics or concepts you are introduced to so detached from our lives*...

Analysis of discourse at textual level

The phrase [*so detached from our lives*] suggests that the research participant is trying to emphasise the point that with the use of the direct teaching method, which is found to be commonly applied in the Economics teaching, the subject becomes too abstract for the students to relate with some of the topics or concepts they are taught.

> **Bonjo Bee:** *I think when we teach we should always try to provide students with the real-life contexts where these Economics concepts are applicable. In this way students will then be able see the relevance of Economics and will be able to connect the textbook theory with the real world*...

Analysis of discourse at textual level

The research participant uses the pronoun [*We*], which suggests that a joint effort by teachers is needed to put Economics concepts in real-life context during the teaching and learning process, as this will ensure that students will see their relevance and applicability in the real world.

The following statements seem to support a suggestion by **Bonjo Bee** that teachers need to teach Economics in such a manner that students will see its real-life applicability and its relevance to their daily lives.

> **Sebata:** *They need to adopt a more flexible approach to help the students to make connections between the subject theory and its practical application*...

Sizijo: *They don't use other methods of teaching, e.g., role plays to demonstrate certain concepts in class. A role play for an example puts students in a situation where they are able to get a deeper understanding of the concept and how it actually applies in life*...

5.3.3 Analysis of discourse at discursive practice level

Intertextuality can be noticed in Sizijo's statement, which apart from being built on the previous statement by Sebata, also shows what the students can benefit from the use of a role play, i.e. they stand to understand the Economics concepts more deeply and see how they are applied in the real world.

5.3.4 Developing Students' Ability to Transfer their Economics Knowledge

Shamsid-Deen and Smith (2006:14) note that it is often expected of students to recall the subject content that was presented through direct instruction or lecture method and apply it in a realistic setting. However, the problem arises when they cannot identify the knowledge they need to deal with a problem that is outside of the context in which knowledge was gained. This problem points to the students' inability to transfer knowledge from one context to the other (see section 3.3.1.3, Chapter 3).

Hung (2013:29) contends that when the focus of teaching and learning is on abstract theoretical concepts and principles, the issues of how the knowledge is demonstrated in real life, i.e. how it is used to solve real-life problems seem not to receive more attention. Teaching and learning therefore take place in a de-contextualised environment, thus making it difficult for students to create situational knowledge, which is the understanding of when, where, and how the knowledge is applied (see section 3.3.1.3, Chapter 3).

The following suggestions to the question on what could be the other benefits of a contextualised approach in the Economics teaching and learning environment were made:

Bonjo Bee: *Students will be able to make sound decisions, choices and can also improve their problem-solving skills. Some of them live recklessly, e.g. their use of money and the choices which they make, when in fact they were supposed to be transferring their Economic knowledge into their daily lives to be better citizens. I think the theoretical teaching of Economics does not help us to communicate to*

students this subject and allow them to use it to make choices and sound decisions. *Take the concept Opportunity cost as an example, students can learn how to prioritize and how to spend money when they have understood it*...

Analysis of discourse at textual level

The statement [*Students will be able to make sound decisions, choices and can also improve their problem-solving skills*] suggests that **Bonjo Bee** believed that a Context-based learning approach will assist students to transfer the knowledge gained in their study of Economics to handle the situations they may come across in life, e.g. with their knowledge of the concept Opportunity cost they may be able to make sound decisions and make appropriate choices especially when coming to spending money.

Omolemo: *This way of teaching will also actually help students not only learn by memorising information for tests but to learn in such a manner that they are able to take what they have learnt in class or from their textbooks and use it in other situations they may face in life. Learning Economics thus become worthwhile as it now becomes a useable knowledge*...

Analysis of discourse at textual level

The phrase [*useable knowledge*] shows the research participant's believe that with the adoption of a Context-based approach, Economics content will become something which students can be able to use in the real world and not something that is just confined to the classroom or the textbook.

Van der Sele: *There is thus that need for us to teach Economics in context so that students can be able to connect it and apply it in the world outside of the class* ... and *In this way students will be able to transfer what they have learned in class to other situations in life*...

Omolemo: *Van der Sele is emphasizing that need to transfer learning or using what you have learned in class to solve some problems you may encounter in the Economic world. I remember when I was still doing Mathematics we used to complain every time we had to solve for X. But where do we go with this X? What do we do with this X in real life? This was frustrating because if you are taught something that you can't see its use or purpose you get discouraged and lose interest in that subject*...

Analysis of discourse at discursive practice level

Omolemo's statement builds from the statement made earlier on by Van der Sele and furthermore Omolemo showed an understanding of what Van der Sele said by making an example from the subject Mathematics, i.e. solving for X, which at that stage seemed something far-fetched and could possibly be of no value or use in their lives.

The research participants demonstrated how the teachers can encourage transfer of Economics knowledge with the following statements:

> **Sebata:** *The teacher needs to be always updated with the current news in the Economic world or other issues which have a bearing on the subject being*, *political or social and share them with the class when treating topics to which are related to. They can for example, bring newspaper articles or business magazine articles, news clips from the radio or TV that are relevant to the concepts they are going to teach. This will demonstrate to the students that what they are learning in class actually happens in the real world*...
>
> **Kaiser:** *I fully agree, the teacher can bring a newspaper article on inflation to class and distribute copies to the students and allow them to read it. He/she can then initiate a discussion of the article to have the students using their existing knowledge on Inflation to identify the causes of Inflation according to the article and to propose solutions or critique the measures taken by the monetary authorities in dealing with the situation described by in the article. This discussion also allows the students to transfer their knowledge of Economics to providing solutions to different situations. The teacher's role is to come in here and there to fill the gaps, to keep the discussion in the right track and clarify misunderstandings*...

Analysis of discourse at discursive practice level

Elements coherence and intertextuality can be noted in the statement by Kaiser who is in agreement with the use of newspaper articles to demonstrate to students that content they learn in Economics is something that is really happening in the real world. Kaiser's example of how a teacher could use a newspaper article in class to put particular topics in context and encourage students to use their prior Economics knowledge in interpreting the article seems not only have its foundation on an earlier statement by Sebata, but it seems to be influenced and shaped by that statement by Sebata.

5.3.5 Need to Develop Students' Higher-Order Cognitive Skills

It has been noted that students usually do well when answering the questions that require of them to recall information, i.e. the lower-order questions, but find it difficult when they have to respond to the questions that require of them to demonstrate the application of their knowledge and also the questions that require the ability to analyse, synthesise and evaluate information, i.e. the higher-order questions. Economics students need to attain higher-order learning for them to be able to analyse, synthesize and evaluate economic phenomena and policies. Conway *et al.* (2010:193) describe analysis as deconstructing arguments, facts and theories into component parts; synthesis as building arguments, facts and theories from component parts; while evaluation is described as justifying a decision or opinion with facts, arguments and theories. The attainment of these skills will help students to move beyond a mere knowledge and comprehension of economic concepts towards their application in real world events (see section 3.3.1.4, Chapter 3).

Broman *et al.* (2015:144) argue that the everyday life problems students might face require of them to apply higher-order thinking, since such problems are more open and broad and call for more than a mere single, limited response, meaning that to arrive at a solution or decision a student needs to make a thorough analysis, synthesis and evaluation of the data or information at hand (see section 3.3.1.4, Chapter 3).

The research participants commented as follows on the value of learning in context:

> **Bonjo Bee:** *It will deepen their understanding of the subject and they will also see the relevance of the subject in real life and use it to solve real problems in the society. As they are engaged in that community service project they are forced to get more information on the problem they want to address and analyse it, then they will synthesize that information, and propose and evaluate a solution. This will improve their responses in answering the higher-order questions in tests or in examinations when they return to class*...

Analysis of discourse at textual level

The research participant demonstrated how contextualised learning in Economics would assist the student to develop higher-order cognitive skills by using the verb [*forced*] in the statement [*they are forced to get more information on the problem*

they want to address and analyse it, then they will synthesize that information, and propose and evaluate a solution].

> **Mbali:** *But I think they will now be in a position and also confident to answer questions that require the application of the concepts and theories they have learnt*. *Students will then be able to acquire higher-order cognitive skills*...

Omolemo added to that statement by saying,

> *… that is true when students have developed the higher-order skills like analysis, synthesis and evaluation; they don't just have to recall information they have memorised and do cut and paste type of answering questions, but will have to demonstrate understanding of how Economics work* ...

Analysis of discourse at discursive practice level

Coherence in this discussion is noted by this phrase from Omolemo's statement [*that is true when students have developed the higher-order skills*]. With this statement Omolemo built on what Mbali had said earlier and this research participant went on to explain what higher-order cognitive skills are.

> **Van der Sele:** *Teaching Economics in context can further develop students' critical thinking skills, because if the subject is made concrete they will learn not to take everything as they are told, but will instead be able to use their prior knowledge to analyse information, bring back the pieces together and still use that prior knowledge to evaluate the conclusions and decisions they have arrived at. Students will then also be able to create knowledge if they have developed such higher-order cognitive skills*...

Analysis of discourse at textual level

The phrase [*critical thinking skills*] shows that Bonjo Bee believed that students would become independent thinkers and they would no longer be solely depended on teachers as illustrated by the phrase [*they will learn not to take everything as they are told*]. An element of constructivism is also noted in Van der Sele's statement [*Students will then also be able to create knowledge if they have developed such higher-order cognitive skills*].

5.4 COMPONENTS OF A PROPOSED CONTEXT-BASED APPROACH IN ECONOMICS EDUCATION

This section of analysis will examine the possibility of four methods, i.e. Case method, Context-rich problems, Service-learning, and Problem-based learning as components of the proposed Context-based approach. The research participants made suggestions which contained elements of those strategies in an attempt to narrow the gap between theory and practice in the teaching and learning of Economics and pointed to their potential to afford students the opportunities to apply their knowledge of the subject.

Different strategies have been proposed in literature to create a Context-based learning and teaching environment (see section 3.4). For example, Berns and Erickson (2001:3) state that various strategies are usually used to implement Contextual Teaching and Learning. They may include Service-learning, Problem-based learning, Cooperative learning, Work-based learning and Project-based learning. Berns and Erickson (2001:3) further assert that these strategies are not individually separate and therefore can be used in conjunction with one or more of the others. This assertion by Berns and Erickson seems to be consistent with the definition of Contextualized Teaching and Learning (CTL) offered by Kalchick and Oertle (2010:1), which states that CTL is comprised of a number of pedagogic methods which are intended to connect the learning of foundational skills and academic or occupational content coherently by directing the focus of teaching and learning on actual applications in a specific context that is of interest to the student.

Research participants made the following suggestions on what may be done to bridge the gap between theory and practice in economics:

> **Bonjo Bee:** *I may ask them to dramatize the concept that we have dealt with and this will put them in the shoes of the real economic actors. Drama can then afford them an opportunity to make the connection between the concept and their daily life. I might as well use relevant newspaper articles or look for case studies which cover a particular concept which I am teaching at that time...*
>
> **Sebata:** *They can for example, bring newspaper articles or business magazine articles, news clips from the radio or TV that are relevant to the concepts they are*

going to teach. This will demonstrate to the students that what they are learning in class actually happens in the real world...

Omolemo: *One way is the use of role play in class. With role play the students are given a scenario based on a real-life economic issue, which they have to simulate. The scenario is based on a certain concept which the teacher wants to demonstrate to students how it works in real life. Students are forced to use the Economics knowledge, which they already have in acting their roles in a scenario*...

Analysis of discourse at textual level

The phrase [*might as well*] demonstrates that besides the drama which Bonjo Bee suggested, there are other strategies that may be used to create context. The same is also noted in the phrase from Sebata's statement [*they can for example bring*]. This phrase suggests that the research participant used the items mentioned in the statement only as examples as there might be other methods which teachers can use to contextualise Economics. The phrase [*one way is the use of role play in class*] in Omolemo's statement demonstrates that this research participant also mentioned the use of role play just as another example of possible strategies that may be available to contextualise a topic, which the teacher might be handling at the time.

5.4.1 Case Method

A case is defined by Conway *et al.* (2010:19) as a group of source materials on a single subject which are taken from real experience which the reader has to analyse and make a decision. These source materials may be in the form of a short-written summary, collection of news articles or any other presentation of real events (see Chapter 3, section 3.4.1).

The potential that the use of the Case method have on assisting Economics students to make connections between the theory they learn in class and the real world practice has also been noted in the empirical study and this is demonstrated by the comments below:

Bonjo Bee: *I might as well use relevant newspaper articles or look for case studies which cover a particular concept which I am teaching at that time. This will help them to see that the theory in the textbook is applicable in real life*...

Danoms: *In that class we had to prepare and present the lessons and I remember the lecturer had introduced us to using newspaper articles and case studies in teaching. You will be expected to make copies of that article or case study that relates to the topic you will be presenting to your fellow student teachers who will be acting the role of learners*...

Analysis of discourse at textual level

The assertion made by Bonjo Bee [*This will help them to see that the theory in the textbook is applicable in real life*] suggests that if students can read a story in the newspaper or in a case study on some topic or a concept they have treated in class or they have come across in the textbook, they will soon realise that the Economics they learn in school is something that actually happens in real life.

In sharing an experience in using the case studies and newspaper articles in the class, Danoms used the pronoun [*you*] inclusively to suggest that even other student teachers were actually using this method to present their lessons.

Literature study on the Case method suggests that this method can be used by teachers to put Economics content in context, for example Popescu (2014:274) states that cases present a method rich in contextually introducing the new material and it also allows students a platform to apply the knowledge they have gained to new situations. Golich *et al.* (2000:57) also assert that the Case method promotes learning by involving the students in the learning process. The involvement of students in the learning process connects them with the subject content and in the process the responsibility for learning is shifted to the students themselves. In this process students play an active role in constructing knowledge while the teacher is acting as a guide (see Chapter 3, section 3.4.1.1).

These claims from literature study also seem to be supported by the empirical study and this is evident in the following statements by research participants,

Van der Sele: *With time I soon realised that case studies are based on real events and that they are not abstract, because they talk about real-economic world events that have happened or which are currently in the public domain, they create interest on the part of students as they bring into the classroom the actual events happening out there. Students are then provided an opportunity to tap from their knowledge of*

Economics theory and economic concepts to find solutions to the questions posed after they have read the case study...

Analysis of discourse at a textual level

The statement [Students are then provided an opportunity to tap from their knowledge of Economics theory and economic concepts to find solutions to the questions posed after they have read the case study] suggests that the research participant believes that the Case method can enhance students' potential to apply the theory or concepts already learned to handle real-life situations that they might encounter.

Economics as a subject also stand to benefit from the use of the Case method as it is believed that the Case method has the potential to help develop three key objectives in Economics, which are identified by Volpe (2015:1) as the mastering of economic concepts, application of concepts to the real life and the systematic analysis of policy issues. Apart from helping students to develop these three competencies, Volpe (2015:1) further asserts that using cases in Economics, seems to be an effective method of reinforcing theoretical knowledge, placing theory in context and can also be effective in developing transferable skills, for example, critical thinking, communication and team-working skills (see Chapter 3, section 3.4.1.1).

Some of these benefits of the Case method purported by literature have also been observed by the research participants as noted in the following comments:

Van der Sele: *This method also facilitated teamwork amongst students and peer learning because during the case discussion students propose different solutions to the case and as they argue their points they are in fact learning from each other*...

Sebata: *They can for example, bring newspaper articles or business magazine articles, news clips from the radio or TV that are relevant to the concepts they are going to teach. This will demonstrate to the students that what they are learning in class actually happens in the real world*...

Kaiser made this suggestion on how a teacher could use a case in class,

He/she can then initiate a discussion of the article to have the students using their existing knowledge on Inflation to identify the causes of Inflation according to the

article and to propose solutions or critique the measures taken by the monetary authorities in dealing with the situation described in the article. This discussion also allows students to transfer their knowledge of Economics to providing solutions to different situations...

Analysis of discourse at textual level

The phrase [teamwork amongst students and peer learning] indicates that besides enhancing students' potential to apply conceptual knowledge in different situations, other benefits can be realised with the use of the Case method, e.g. collaboration amongst students and cooperative learning.

Analysis of discourse at discursive practice level

Coherence can also be noticed in Kaiser's statement that builds from the previous statement made by Sebata. Kaiser added to that previous statement by explaining that a discussion on the newspaper article or a case study served as an opportunity for students to transfer their existing knowledge to provide solutions to the problem raised in the article.

5.4.2 Context-rich Problems

Another method which research participants have identified as having the potential to encourage students to put to practice their content knowledge is the use of Context-rich problems. Context-rich problems, as it is noted by Dalton and Shaffer (2010:147), are problems posed in a form of short scenario in which a student is the central figure with a reasonable motivation to find a solution. These are the kind of problems which require of students to transfer what he or she understands of a core concept to a new situation before using subject related tools such as formulas or diagrams so as to arrive at a solution or to make a decision. Garnet and McGoldrick (2011:15) also note that Context-rich problems assist students to transfer learning, i.e. to apply their knowledge to different situations and problems (see Chapter 3, section 3.4.2).

It has also been noted from the empirical study that Context-rich problems may be used successfully in Economics teaching to present the students with the real-world situations where they are required to use or apply their content knowledge, e.g.

Mbali: *Another strategy that can be used is what is called Context-rich problems*. *This is a question that is posed to a student which puts him/her in a position where a problem that is based on a real economic issue has to be solved. For a student to solve such a problem he/she must use prior economics knowledge. The aim of this strategy is actually to teach Economic theories and concepts the way they happen in life or in the context they occur*...

Omolemo: *As Mbali mentioned the other day,* Context-rich *problems can also be effective because with this strategy, students are given a problem to solve. The problem might contain all the information they need, some irrelevant information or some information might be missing. They then have to conduct research, to find the missing information and to be able to discard unnecessary information. This process leads the students to learning new concepts and also the application of prior knowledge*...

Analysis of discourse at textual level

The phrase [*which puts him/her in a decision-making position*] from Mbali's statement seems to demonstrate that the research participant is of the view that if students are challenged with questions that require of them to offer solutions to real-life economic events they are forced to draw from their existing knowledge of the subject and make a decision or propose a solution.

Analysis of discourse at discursive practice level

The sentence [*As Mbali mentioned the other day*] in Omolemo's statement demonstrates coherence as Omolemo's explanation how the strategy in question works is founded on the previous statement made by Mbali.

5.4.3 Service-Learning

It has been noted that Context-based learning focuses on authentic learning environments such as community and workplace settings that offer critical cues for cognitive processing, integration of students within a community of practice and further incorporates students' developmental needs and circumstances through experiential pedagogy.

The reason for emphasis on authentic learning environments seems to stem from the observation it is more challenging to try and bring into the classroom the real world than to take the students to the real world to learn.

Service-learning as one example of authentic learning environments seems to fit well in a broader Context-based approach proposed by this study and can also be seen as a positive response to calls for reforms in Education. The Colorado Department of Education (2004:11) describes it as an Educational reform model and a form of contextual learning that provides students opportunities to apply what they learn in class to authentic community needs. Peters *et al.* (2006:132) are also of the view that service experiences can provide students a context within which to situate the course content and increase their depth of understanding (see section 3.4.3.1, Chapter 3).

The comments made by the research participants also demonstrate that Service-learning can be of value in providing students with opportunities to put to practice the knowledge they have already gained in Economics e.g.

> **Bonjo Bee:** *Students may also get into the communities and use their knowledge of the subject to help community members with the needs or problems they have identified. In this way they will get the opportunity to practise what they have learnt in class to solve real-life problems*...

When further asked what could be the benefits of community service this research participants responded in this way:

> **Bonjo Bee:** *Both the student undertaking the service and the community, because for the student, this is an opportunity for them to put to practice their knowledge* and *gauge their understanding of what they have learnt*. *This will also reinforce what they have been doing in class and they will retain it for a long time* ... and ... *For an example, most communities live in poverty and students can target such communities to try and bring improvement*. *Students can use knowledge gained from the topics such as population growth, poverty, unemployment and economic growth to make them aware of the need for family planning, measures to reduce unemployment and poverty levels*. *Students will also be able to see first-hand these contemporary economic issues and link them to their textbook theory*...

Analysis of discourse at textual level

The statement [*this is an opportunity for them to put to practice their knowledge and gauge their understanding of what they have learnt*. *This will also reinforce what they have been doing in class and will retain it for a long time*] shows that Bonjo Bee believed that by engaging in this kind of service, students would have an opportunity to put to practice the knowledge they gained in class and identify possible gaps in their content knowledge. The statement further suggests that by putting to practice what they have learnt students may also retain that information for a long time.

With the statement [*most the communities live in poverty and students can target such communities to try and bring improvement. Students can use knowledge gained from the topics such as population growth, poverty, unemployment and economic growth*]. Bonjo Bee seemed to demonstrate the need and viability of this community service as the statement highlights a real socio-economic problem e.g. poverty and unemployment. The existence of these socio-economic problems can afford students to use their knowledge of the topics from the Economics syllabus (contemporary economics issues) to help the communities to overcome those problems. This platform created by community service would therefore allow students an opportunity to put to practice their subject knowledge.

5.4.4 Problem-based Learning

Problem-based learning (PBL) can be used effectively in the Economics teaching to enhance the acquisition, understanding and application of Economic theories and concepts as it presents students with real-life or simulated problems, which they need to solve by conducting the research and also drawing from what they have already learnt. Smith *et al.* (2007:2) state that the PBL problems are usually framed in the context of a particular subject and presented in conjunction with a set of core theories or concepts, e.g. in Economics, a problem can be presented in conjunction with concepts such as demand and supply, elasticity, comparative and absolute advantage, monetary and fiscal policy. Tick (2007:365) points out that in the Problem-Based learning environment the aim of learning is not to reproduce or recall information that has been passively received; instead, the aim is to engage students actively and creatively in both collaborative and self-study so that they are able to transfer skills and knowledge. Similarly, Looi and Seyal (2014:69) maintain that in a

PBL environment students learn to apply knowledge and not just to construct it (see Chapter 3, section 3.4.4.1).

The use of Problem-based learning as one method that promotes the application of subject content knowledge, is noted in the statements made by the research participants, e.g.

> **Sebata:** *I think if the teacher prepares to start a new topic or teach a certain concept he/she should first give students questions to carry out a research on that topic because with that research they will be connected to that topic using their prior knowledge and combining it with new information. In this way they might be able to apply their existing Economic knowledge on finding out more about the new topic they will be taught*...
>
> **Omolemo:** *In Problem-based learning students are put in a situation where they have to make a decision or propose a solution. They will first need to analyse the problem, again drawing from their knowledge of Economic theory and concepts*. *While in the process of using information they already have, students will be in a position to learn new concepts which the teacher might be targeting*...

Analysis of discourse at textual level

With the statement [*They will first need to analyse the problem again drawing from their knowledge of economic theory and concepts*] Omolemo seems to demonstrate that Problem-based learning could provide the students with challenges that force them to use their prior knowledge, and use relevant information to solve the problem posed by the teacher. In the process of solving the problem students might also be learning new things which the teacher wants them to know.

5.5 CONDITIONS OPTIMAL FOR INCORPORATING CONTEXT-BASED APPROACH IN ECONOMICS EDUCATION

This section of analysis will examine the five constructs that were developed from the literature study and the empirical study on the conditions that have the potential to facilitate the successful use of Context-based learning strategies in Economics education, i.e. (i) the need to orientate both teachers and students in the use of such strategies; (ii) identification of purposes for which such strategies will be used; (iii)

thorough preparation by teachers and students; (iv) physical classroom setting; and (v) the need for role changes in class by the teacher and students.

5.5.1 Orientation in Context-based Strategies

Successful incorporation of the Context-based strategies in Economics teaching depends among other factors on training and development of teachers in the use of such strategies. Students also need to be orientated in the use of these active learning strategies as their implementation will need them to be actively involved in class as co-constructors of knowledge (see Chapter 3, section 3.5.1).

> **Danoms:** *One was then forced to start reading newspapers or searching for case studies with the intention of finding something that is connected to the topics covered in Economics*. *In this way I started to make sense of the concepts which I initially thought were not related to daily life. This also improved my understanding of Economics as I was now able to see that it is really a practical subject, it is something that happens every day*...

Analysis of discourse at textual level

The sentence [*One was then forced to reading*] seems to demonstrate that the research participant was venturing into an unfamiliar method of teaching which then required more reading and research. One thus infers from the statement made by Danoms that the adoption of that method was not going to be easy without proper orientation.

Van der Sele also made this statement,

> *One thing that I have noticed is that since many teachers might not be exposed to some of the* Context-based *learning strategies they have to be trained and orientated in the use of such strategies ... This training can be in the form of workshops organised by the Department of Education or a colleague who is knowledgeable in the use of such strategies may offer to assist the others. Without this training, teachers do not feel confident in trying out new methods in class and they also feel inconvenienced when they have to break off the customary chalk and talk method*...

Analysis of discourse at textual level

Van der Sele's statement seems to acknowledge that training and development of teachers are necessary to encourage the teachers to start using the Context-based strategies, because of their lack of exposure to such strategies.

Analysis of discourse at social level practice

The statement [*they also feel inconvenienced when they have to break off the customary chalk and talk method*] suggests that because the chalk and talk approach has been a way of life for many teachers, training and development will be necessary as a way of empowering them in the use of Context-based strategies.

Van der Sele further made this statement,

> ...*it is also important that we should orientate the students to these* Context-based *learning strategies to avoid resentment from their part*...

Omolemo commented,

> *We should not assume that students would just wake up in the morning with the ability to work with these unfamiliar strategies.*

Van der Sele made the suggestion,

> *I think what needs to be done is to expose students to this* Context-based approach *at lower levels so that by the time they reach FET or higher education they already have experimented with some of the methods entailed in this approach...*

Analysis of discourse at textual level

The phrase from Van der Sele's statement [*to avoid resentment from their part*] seems to suggest that students may develop a negative attitude towards the use of the Context-based learning techniques, hence it is also important that they should also be orientated in this approach to learning. Van der Sele's second statement, the phrase [*expose students to this Context-based approach at lower levels*] demonstrates the importance which the research participant attaches to orientation of students to the Context-based approach.

Analysis of discourse at discursive practice level

An element of intertextuality can be noted in Omolemo's comment as the phrase [*We should not assume that students would wake up in the morning*] seems to have some element of the assertion by Van der Sele that students might resent the use of Context learning strategies if they have not been properly oriented. Omolemo's statement thus reaffirms the need for orientation of students.

5.5.2 Identification of Purposes for Context-based Strategies

It is necessary that teachers must identify and explain the intended purposes of particular Context-based strategies which they will use. As an example in using the Case method the teacher must first review the syllabus to identify material that can best be taught with cases, as they can be used for several purposes. Carlson and Valenchick (2006:61), for example, state that cases can be used to motivate new material, to introduce theoretical concepts, or as empirical examples to reinforce the learning of theory (see Chapter 3, section 3.5.2).

The need to know for which purpose the teacher may want to use a particular Context-based strategy has also been highlighted in the empirical study, e.g.

Omolemo said,

> *…you need to know why do you want to use these strategies because this will help you to select an appropriate strategy for a particular lesson*...

Van der Sele further mentioned,

> *We also need to explain to them (referring to students) the purpose of using these strategies and also get them to suggest other methods that can be used to assist them to apply their knowledge of Economics...*

Analysis of discourse at textual level

The phrase [*need to know*] demonstrates that in Omolemo's view, knowing the purpose for which Context-based strategies are to be used is a requirement for a teacher.

Analysis of discourse at discursive practice level

Coherence is demonstrated in the statement by Van der Sele [*We also need to explain to them the purpose of using these strategies*] This statement builds on the

one made earlier on by Omolemo that teachers should not just assume that learners would just wake up with the ability to use Context-based learning strategies.

The statement by Van der Sele also highlights one of the main features of constructivism i.e. students as co-creators of knowledge [*and also get them to suggest other methods that can be used to assist them to apply their knowledge of Economics*]

5.5.3 Thorough Preparation

In the light of the observation that Economics teaching has been dominated by the lecture method or direct instruction for a long time, the successful incorporation of the Context-based learning strategies necessitates thorough preparation by both teacher and student. As an example, teachers need to master the art of incorporating cases in their teaching and the students must also be shown how they stand to benefit from this method (see Chapter 3, section 3.5.3).

Volpe (2002:3), who asserts that student preparation is vital for the success of the Case method, recommends that students must be conversant with the facts of the case when they come to class and must also be highly prepared to analyse these facts. Teachers can assist students to achieve this by providing them with study questions intended to guide their preparation, to focus their attention and to help them to begin the analytic process. Student preparation can follow the three steps noted by Popescu (2014:276), namely explaining, modelling and reflecting (See Chapter 3, section 3.5.3).

Omolemo made the assertion,

> *…you also need to prepare thoroughly as a teacher so that you are able to guide the classroom proceedings in the desired direction*. *Your students also need to be given enough time to prepare as these strategies actually move them from their accustomed passive role in class to active participants in knowledge construction*.

Analysis of discourse at textual level

Omolemo used the word [*need*] to emphasize that preparation from both the teacher and the student is of crucial importance for them to use the Context-based strategies successfully.

Analysis of discourse at social practice level

The sentence [*these strategies actually move them from their accustomed passive role in class*] shows that for a long time students have become used to a role of passivity in class and are now faced with the challenge of stepping out of that role.

One of the features of constructivism, i.e. active learning is also noted from the phrase [*these strategies actually move them from their accustomed passive role in class*].

5.5.4 Physical Classroom Setting

The physical setting of the class also seems to be a factor that facilitates discussions, which is a common feature in the use of Context-based strategies. As an example, Mostert (2007:440) maintains that the physical setting in which the case discussion takes place has the potential to add to or detract from the case analysis since case discussions can be intense and often generate high levels of emotion. Ideally, if students are seated in a circle or a horseshoe shape the arrangement will allow for improved eye contact and for effective verbal or nonverbal communication. The teacher's mobility in the class should also be made easy by the physical setting (see Chapter 3, section 3.5.4).

> **Van der Sele:** *The classroom set-up of the tables and chairs needs to make it easy for students to do such group activities. For example, if you look at the Maths laboratories you will find that tables and chairs are arranged in a form of a circle which facilitates group work. With the usual set-up of neat straight rows, time that is already a concern will even be more wasted as students move around chairs and tables to form working stations*...

Analysis of discourse at textual level

The sentence [*For example, if you look at the Maths laboratories*] in Van der Sele's statement seems to justify the suggestion for a particular set-up of chairs and tables in the classroom, which is believed to be an enabling factor for some of the Context-based methods to be successfully implemented in class.

Analysis of discourse at social practice level

The statement [*With the usual set up of neat straight rows*] demonstrates that it is common practice in schools that chairs and table are arranged in straight rows facing the chalk board and in the view of the research participant, this set-up might not favour group discussions, which are part of the Context-based learning strategies.

5.5.5 Role Changes for both Teachers and Students

Furthermore, the successful implementation of Context-based strategies calls for an adaptation in the roles and perceptions of both the teachers and students in the teaching and learning process. As an example, in Problem-based learning, Maurer and Neuhold (2012:17) argue that all the parties involved need to revise their roles in the teaching and learning process. A teacher takes a role of facilitator of the learning process instead of being a direct transmitter of knowledge, while a student becomes an active co-constructor of knowledge and relinquishes a passive knowledge recipient role in class. The teacher, according to Tick (2007:367), turns out to be more of a facilitator whose role is to create conditions in which students feel comfortable and are encouraged to form their ideas freely (see Chapter 3, section 3.5.5).

The research participants also highlighted some reasons why the successful implementation of Context-based strategies seemed to require that both the teacher and the student change their customary roles in the teaching and learning process. The participants further suggested the ideal roles for the teacher and student in a contextual learning environment.

> **Bonjo Bee:** *Because the chalk and talk approach is teacher centred and does not encourage active learning which leads to rote learning as students end up being comfortable with their passive role in class*...
>
> **Mbali:** *The thing is most of the time the teachers enjoyed to be in charge in the class and our involvement during the class was limited*...
>
> **Omolemo:** *To a large extent that role of a teacher as a knowledge transmitter changes to that of a guide in learning. Students are encouraged to actively participate in class and the teacher acts as facilitator of learning activities*...

Van der Sele: *Exactly my point, the teacher is no longer the only one doing the talking in class, but the voices of the students must also be heard. They must be seen to be hands-on in the learning process by asking questions, raising views and opinions and sharing ideas. In this way students become partners in knowledge construction. Like Omolemo has said the teacher becomes more of a facilitator than a knowledge transmitter*...

Analysis of discourse at textual level

In Bonjo Bee's statement the phrase [*the chalk and talk approach is teacher centred and does not encourage active learning*] shows that with the direct teaching method the teacher seems to be the more dominant character in class whereas the students are mainly passive characters.

The statement by Mbali [*most of the time the teachers enjoyed to be in charge in the class and our involvement during the class was limited*] seems to be in agreement with the earlier statement made by Bonjo Bee as it also identifies the teacher as being the main character in class while the students maintain a low profile in class.

Omolemo's contention demonstrates that for a Context-based approach to succeed, both the teacher and the student customary roles as highlighted in the statements of a Bonjo Bee and Mbali, need to change.

Analysis of discourse at discursive practice level

In Van der Sele's statement the phrase [*exactly my point*] shows that the research participant is in agreement with the point made by Omolemo that both the teacher and the student must change their roles in a Context-based teaching and learning environment. The statement also shows coherence as it is largely shaped by and contains elements of the argument raised by Omolemo.

5.6 PLAUSIBLE THREATS IN IMPLEMENTING A CONTEXT-BASED APPROACH

This section will examine the five constructs which were developed through both literature and empirical study on the factors that could be possible threats in the implementation of a Context-based approach. These constructs are as follows; (i)

time constraints; (ii) lack of exposure to Context-based strategies; (iii) resistance to change, (iv) class size and resources, and (v) assessment and grading.

5.6.1 Time Constraints

Maier *et al.* (2010:181) state that, at least initially, preparation takes a bit more time and effort, although this can get easier with more practice. Maier *et al.* (2010:181) further argue that the execution also requires more time especially when helping students to understand exactly what is required of them. The threat posed by limited challenge is also noted by Bangs (2012:54), who affirms that time can be a challenge as teachers should expect to spend more time at the initial stages. Time must also be set aside to orientate students into this approach, e.g. by using the cognitive apprentice model (see Chapter 3, section 3.6.1).

> **Omolemo:** *Again you also need to prepare thoroughly as a teacher so that you are able to guide the classroom proceedings in the desired direction. Your students also need to be given enough time to prepare as these strategies actually move them from their accustomed passive role in class to active participants in knowledge construction*...

Analysis of discourse at textual level

The research participant seems to emphasise the need for time investment when using the context based strategies e.g. the two phrases [*need to prepare thoroughly as a teacher*] and [*need to be given enough time to prepare*] demonstrates that more effort will have to be put by the teachers and students respectively. The effort needed by teachers and students effectively to use may thus need more time since some of them are still accustomed to the conventional way of doing things. .

Another research participant also seems to lament the time factor as a challenge in using Context-based strategies in this statement:

> **Danoms:** *I try but I guess due the amount of work one has to cover I always resort to the chalk and talk method so as to avoid falling behind with work schedule*. *This is also the method which I see most of the teachers still using at my school*...

Analysis of discourse at textual level

The phrase [*due to the amount of work*] suggests that the research participant has tried to use some the Context-based strategies but could not continue with them and instead decided to use the direct method which seems to be time efficient.

Analysis of discourse at social practice level

The statement [*This is also the method which I see most of the teachers still using at my school*] demonstrates that due to the observation on how the other teachers are still approaching teaching, the participant seems to be influenced to do as others are doing just to be on par with the work programme and schedule.

In a discussion on the methods of teaching they used during the teaching practice period, research participants made the following remarks:

> **Omolemo:** *Most of the time it was a direct or lecturer method because the duration of the period was not enough to try out some other methods*... and ...*I did try to have group discussions so as to engage learners in lesson and have their active participation but I noticed that group discussion takes a lot of time*...
>
> **Mbali:** *Like Omolemo said time factor plays a big part in the choice of teaching method, that is why we tend to see the lecture method as being time effective*...

Analysis of discourse at textual level

The phrase [*duration of the period was not enough*] in Omolemo's statement again appears to highlight the time factor to be an impediment in the use of Context-based methods. Omolemo's second statement further demonstrates that time seems to be a challenge when teachers attempt to incorporate some other teaching methods in class.

Analysis of discourse at discursive practice level

Mbali's statement has its foundation on the one made earlier on by Omolemo and it also shows that the duration of the period seems to inhibit teachers from using other methods of teaching.

Attempts to adopt a Context-based approach in public education might also be met with challenges posed by the system itself, for example, Savery (2006:17) notes that most of the schools that are funded by government are limited by a curriculum mandated by government and by an expectation all produce a similar product. This

curriculum is also dominated by high stakes, standardised testing that tends to support approaches which are aimed at teaching to test. These methods seem to encourage rote learning as they are dominated by techniques such as drill and the use of practice tests to rehearse (see Chapter 3, section 3.6.1).

> **Omolemo:** *Our education system also seems to be focused on content coverage* and *not on the depth of coverage. This puts the pressure on the teachers to always be on par with the uniform pace setters and work schedule from the Department of Education so that by the time the common assessments are administered they have covered the required scope of work. Because of this, one might end up reverting to the traditional chalk and talk approach*...

Analysis of discourse at textual level

With this statement, Omolemo seems to argue that the expectation from the Department of Education is that teachers should have covered a certain amount of work at a particular time of the year hence the phrase [*uniform pace setters and work schedule*]. This uniformity which the system expects from teachers might also be a challenge to adopting Context-based strategies, which are said to require more time to prepare and to present lessons. Omolemo's statement also seems to imply that time may not always be on the side of the teacher to achieve depth of content coverage, hence the phrase [*one might end up reverting to the traditional chalk and talk approach*].

The chalk and talk approach is usually seen to be time effective in content coverage although sometimes it is often criticised for focusing more on breadth of content coverage.

> **Van der Sele:** *If I may go back to the point made earlier on, we said teachers are sometimes forced to stick to the chalk and talk method as they believe that they won't fall behind with content coverage. Depth of the content coverage end up being sacrificed because students will be expected to write some common tests or exams at dates stipulated by the department of education*…

Analysis of discourse at discursive practice level

The statement [*Depth of the content coverage end up being sacrificed because students will be expected to write some common tests or exams at dates stipulated by the Department of Education*] seems to be founded on the earlier assertion by

Omolemo and further emphasizes the uniformity, which the system expects from the teachers, hence the phrase [*common tests or exams at dates stipulated by the Department of Education*].

5.6.2 Lack of Exposure to Context-based Techniques

The students are usually exposed to the teaching approach where the teacher takes a dominant role in class while students are just passive recipients of knowledge and whose role is mainly to listen to the teacher, respond to the teacher's question and take notes in class. However, the learning techniques that are part of a Context-based approach require of students to take an active role in learning and take responsibility for their learning and as a result students may end being frustrated because of their limited exposure to those methods.

> **Omolemo:** *Students are often frustrated by this approach to learning as they have become used to recall questions or end of the chapter questions where they just do cut and paste like way of answering. Hence they have to be orientated and be given time to prepare and practise under the guidance of the teacher*...

Analysis of discourse at textual level

The statement [*where they just do cut and paste like way of answering*] seems to imply that while students may find it a bit easier when answering the questions at end of a chapter by just going back to the details of the chapter and finding answers for the questions posed, it becomes a bit difficult and frustrating for them if they are introduced to Context-based strategies.

Analysis of discourse at social practice level

The clause [*as they have become used to recall questions*] suggests that it is common that students are mainly exposed to the questions which only require of them to recall information, i.e. the lower-order questions. This can be one of the reasons why they get frustrated with the use of Context-based learning strategies.

Mostert (2007:436) states that for many students, case discussion and analysis is an unfamiliar experience to which they may react in different ways. Maier *et al.* (2010:175) also note that students might object to Context-rich problems, preferring problems with single objective answers. Bangs (2012:55) concurs by stating that

teachers must expect that students will demonstrate some level of frustration at the initial stages of implementation of this approach (see Chapter 3, section 3.6.2).

> **Van der Sele:** *Like I said the first time you introduce the use of case studies in your teaching, students may get frustrated as they are still comfortable with the passive role in class of merely listening and jotting down some points as the teacher is presenting a lesson. But once you do corrections or remedial work with them, they will realize how the case studies relate or link with what they learn in class and that is where they have that "AHA!" moment*...

Analysis of discourse at textual level

The statement [*Like I said the first time you introduce the use of a case studies in your teaching students may get frustrated as they are still comfortable with the passive role in class*] seems to suggest that students' inclination towards the teacher-centred method may be the reason for student discomfort when they are first introduced to problem solving required by Context-based learning strategies. The use of an exclamation ["*AHA*!"] suggests that students will soon realise that they have the potential to cope with the Context-based learning methods and it was only because they were never exposed to them hence they struggled at first.

5.6.3 Resistance to Change

Context-based techniques require of teachers and students to relinquish their customary roles in class and this is something that may be met with resistance and a consequent difficulty in adopting a Context-based approach. Ziegert and McGoldrick (2008:52) note that as he or she stands behind the podium at the front of the classroom the teacher often gets a sense of authority over the classroom proceedings. This position further provides the teacher with a feeling of being in charge of what the story of the day is, how it unfolds and extent to which student intervene in the lesson (see Chapter 3, section 3.6.3).

> **Danoms:** *I don't think it will be that easy. Teachers always want to cling to the tried and tested methods and may not want to change. They may not want to lose the class control they usually maintain with their dominant role in class*...
>
> **Mbali:** *Besides that, when you use other methods such as group discussions you tend to lose the control of the class as learners might be noisy or focus on irrelevant*

issues. With the direct method you are able to maintain order and discipline in the class...

Analysis of discourse at textual level

The statement made by Danoms [*Teachers always want to cling to the tried and tested methods*] suggests that because teachers have used certain methods for a long time they might be sceptical of the new methods that are being suggested, hence it might be difficult for them to change.

In stating that [*you tend to lose the control of the class*], Mbali seems to advance some of the reasons why teachers may be resistant to changing the order of doing things in class and in this case maintenance of classroom control being the reason.

Literature also suggests that it may not be easy for students to change from their customary role of being passive recipients of knowledge from the teacher in the learning process. Mansor *et al.* (2015:261) argue that because of the inclination to the conventional methods of learning, it becomes difficult for them to become responsible for their own learning, which amongst others requires of them to source information individually or collectively (see Chapter 3, section 3.6.3).

Danoms: *Students may also not be keen in doing things differently in class especially if they have to be active participants in class and have to take responsibility in learning. They may not want to abandon their passive role in class where less is expected of them during the lesson*...

Analysis of discourse at social practice level

The statement suggests that because students have become used to a passive role in class throughout their schooling years, it might be a challenge for them to start doing things on their own or with little assistance from their teachers.

Omolemo: *The same can be said with students, many have become so dependent on their teachers*... and ...*I agree that the adoption of a Context-based approach may be met with resistance from both teachers and students who do not want to be unsettled in their comfort zones*...

Omolemo: *Some teachers are willing to change, but may have doubts about the effectiveness of the different approaches they are asked to adopt*... and ...*There are*

those who do not want to be on the wrong side of the management team or officials of the department. They therefore prefer to be safe by maintaining a status quo...

Van der Sele: *To demonstrate this resistance you will find a teacher telling you "I have been doing this for 30 years and I am not going to be told by anyone how I should teach"*.

Analysis of discourse at textual level

In Omolemo's first comment the clause [*become so dependent*] demonstrates that over time students got used to being reliant on their teachers that they may not feel confident to work on their own with just guidance from the teacher and may thus resist change. In the second comment the phrase [*comfort zone*] implies that both teachers and students have found a home in the way things are done under a predominantly teacher-centred approach or a direct teaching method and it may be for this reason they may not want to do things differently.

In the third comment the word [*doubts*] seems to suggest that one other reason why teachers may resist to embrace the use of Context-based strategies, may be fear of the unknown. Teachers tend to be content with their tried and tested way of doing things instead of attempting to venture into new territories. In the last comment the clause [*on the wrong side of management or department of education officials*] seems to highlight the power differentials that exist between those in higher positions and the teachers. These power differentials may also be the reason why teachers may not be willing to do things differently as think they may suffer consequences in the event that the pass rate of the subject drops.

The quotation in Van der Sele's statement [*I have been doing this for 30 years and I am not going to be told by anyone how I should teach*] seems to demonstrate that it has become a norm for this particular teacher to teach in a certain way and he or she is not prepared to listen to anyone coming up, suggesting something different.

5.6.4 Class Size and Resources

Another challenge in the use of a Context-Based techniques such as the Case method, Context-rich Problems and Problem-based learning, which rely on group work and require group discussions, relates to the class size and availability of resources, which can serve as teaching and learning aids. Golich *et al.* (2000:57)

argue that when using the Case method, in larger classes regular attention must be paid to the conduct of students in order to create culture and atmosphere that encourages participation and to have a good control of case discussions (see Chapter 3, section 3.6.4).

> **Van der Sele:** *Finance can be one challenge. Like we said properly equipped discussion rooms are needed*... and ...*We usually have classes with big numbers and this can create a variety of problems, e.g., physical space may not be enough to arrange a classroom set-up to be in a form of circle for group work*.

Analysis of discourse at textual level

Van der Sele raises the issue of money as a possible challenge. Van der Sele seems to justify the need for money by using the pronoun [We], which suggests that the research participants are collectively in agreement that venues with proper equipment are needed for students to be able to do group work or have discussions that are part of the Context-based learning strategies. The statement seems to suggest that money might not always be available to have the resources, which might facilitate the adoption of a Context-based approach.

In the second statement, Van der Sele raised the issue of big numbers in classes, which may also be a challenge, especially when teachers or students want to create a classroom set-up that will be conducive to group work.

Van der Sele further comments,

> *Again control can also be a problem as students tend to discuss irrelevant issues when they realise that the teacher can't access all the parts of the class*... and ...*With these big numbers it may also be a challenge to get maximum participation of students in the class as there will always be free-riders who expect others to do work for them. There will also be introverted students who might be scared to talk in front of a big audience of fellow students*...

Analysis of discourse at discursive practice level

The phrase [*Again control can also be a problem*] seems to contain elements of coherence and intertextuality. The issue of control seems to be building on and having an influence from an earlier statement that teachers may resist adopting a Context-based approach as they want to have full control of the class proceeding,

which they think will only be possible if they stick to the direct method. The phrase [*With these big numbers*] seems to suggest that a large number of students in the class may on its own defeat the very purpose of introducing these student centred approaches, i.e. active engagement of students in learning the process.

5.6.5 Assessment and Grading

Assessment methods and grading of students work also seem to pose some difficulties in using Context-based techniques, since most teachers are used to conventional high-stakes tests and examinations. As an example, assessment of the impact of Service-learning on student outcomes has been cited as an area of concern in adopting this pedagogy. Bangs (2012:55) states that one of the challenges encountered with Context-rich problems is that students can provide answers which the teacher may not have expected thus making it difficult to grade them (see Chapter 3, section 3.6.5).

> **Omolemo:** *A teacher may also find it challenging to allocate marks for some* Context-based *learning activities that students are given to assess their understanding. For an example, responses of students to a Context-rich problem will be different when showing the application of a certain economic concept which the teacher might have wanted to test. This can be a challenge as teachers are used to objective answers type of assessment but when you look at the Context-based learning strategies they allow for individual views and opinions or subjectivity*.

Analysis of discourse at textual level

The point raised by Omolemo suggests that teachers may also find it challenging to assess and grade the students' work using the Context-based strategies, due to the subjective nature of the answers students may provide and this is denoted by the clause [*the responses of students to a Context-rich problem will be different*] This points to the statement made earlier on that teachers might not necessarily be exposed to Context-based strategies and as a result they may also not be exposed to other assessment strategies other than the high stakes tests or examinations which may largely contain the objective questions.

5.6.5 Best Practices in the Use of a Context-Based Approach

Analysis in this section focuses on the findings of literature and empirical study on the success which the Context-based strategies have achieved where they have been implemented, specifically looking at their success in enriching the students' ability to apply the abstract economic theories and concepts.

The findings on a practical application of Context-rich problems, the Case method, Service-learning and Problem-based learning provide encouraging signs about the effectiveness of a Context-based approach in addressing the research problem this study investigated. The use of Context-rich problems by Joann Bangs in the example below serves as evidence to this claim.

Joann Bangs from the college of St. Catherine in the USA have also developed and applied Context-rich problems in the principles of micro-economics class. The first problem she developed was meant to illustrate the concepts of profit maximization and the shut-down condition in the perfectly competitive firm, the second Context-rich problem dealt with the concept of price discrimination, while the third Context-rich problem dealt with the concept of oligopolistic competition (Bangs, 2007:3). The results of this application show that despite some mistakes which students made while attempting to solve the assigned problems, there was an improvement in class discussion and group work. Students also showed creativity in their responses as students also applied some Economic concepts, which were relevant in solving the Context-rich problems they were assigned (Bangs, 2007:10) (see section 3.7, Chapter 3).

The research participants also shared their experiences on the positive impact of the Context-based strategies in providing opportunities to apply the abstract Economics concepts and making connections between the textbook theory and real-world practice.

> **Danoms:** *One was then forced to start reading newspapers or searching for case studies with the intention of finding something that is connected to the topics covered in Economics. In this way I started to make sense of the concepts which I initially thought were not related to daily life. This also improved my understanding of Economics as I was now able to see that it is really a practical subject, it is something that happens every day*.

Omolemo: *I have noticed that students are able to apply their knowledge to provide solutions to the* Context-rich *problems I posed to them. Their responses also showed that students are growing in terms of their cognitive skills as they appear to be able to analyse information and evaluate the proposed solutions. It was always interesting to listen to them when they defend the actions they suggest should be taken. This strategy also encourage peer learning*.

Van der Sele: *What I have noticed is that the students' interest in the subject is starting to grow, maybe because they are now able to make connections between what they learn from the textbook and how that is relevant to their lives*.

Van der Sele further makes this example about one student,

This student was telling me that he managed to help his brother who was unemployed to turn around his fruit and vegetables small business and it started to be profitable. From his explanation of what he did to change his brother's business, I could tell that he managed use his knowledge of cost and revenue concepts, and also knowledge of demand and supply concepts.

Analysis of discourse at textual level

The statement by Danoms, [*I started to make sense of the concepts which I initially thought were not related to daily life*], suggests that it was through reading newspaper articles and working with case studies that the research participants was now able to see how the Economics theory is actually related to the real world. This apparently also helped the research participant to gain better understanding of the subject as it now become something more practical.

Omolemo's statement suggests that with the use of the Context-rich problems students managed to develop three abilities which are denoted by the following clauses (i) [*students are able to apply their knowledge to provide solutions to the Context-rich problems*]; (ii) [*students are growing in terms of their cognitive skills*] and (iii) [*defend the actions they suggest should be taken*]. This statement thus suggests that the use of the Context-rich problems not only helped the students with application of Economics concepts and theories but also helped them to work at higher cognitive levels, to debate and learn from each other thus showing the signs of being co-creators of knowledge in the teaching and learning environment.

The example by Van der Sele, [*the knowledge of cost and revenue concepts, and also knowledge of demand and supply concepts*], demonstrates that the student engaged in Service-learning and managed to use his classroom knowledge of the concepts mentioned to help his brother to revive and turn around his business.

5.7 CHAPTER SUMMARY

The focal point of the chapter was on the analysis of the data generated in this study and the focus of the analysis process was on the constructs that were developed under each of the five objectives of the study. Data were analysed using a Critical Discourse Analysis (CDA) and a three-tiered framework developed by Norman Fairclough was used in the analysis process. In this framework analysis of discourse is done at three levels, with the first level being analysis of discourse at textual level, which focused on the vocabulary, grammar and text structures, i.e. how the participants in this study used language in their deliberations. The second level at which data were analysed is the analysis of discourse as discursive practice which examined how discourse was produced during the data generation process, how it was distributed and consumed. At this level the focus was also on how the texts produced earlier influenced or shaped the texts produced later in the study. The third level of analysis from Fairclough's framework used in the study was the analysis of discourse at social practice level where analysis mainly examined the broader social structure's influence on the discourse produced by the research participants. This framework of analysis assisted the researcher to see what understanding research participants have on the research problem and meanings they attach to the Context-Based approach in Economics education. Cross referencing was done to juxtapose the findings of literature reviewed with the findings of empirical study.

CHAPTER 6 :
SYNTHESIS OF FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

6.1 INTRODUCTION

This chapter will remind the reader of the problem statement formulated in the study, aim of the study, the research question which the study wanted to answer, and the five objectives which the study pursued. The key findings from the data generated through the review of related literature and through the empirical study will be presented. The chapter will further make recommendations to facilitate the development and adoption of a Context-based approach in Economics education. To make it easy for the reader to follow this chapter the findings and recommendations made under each of the five objectives, which the study pursued will be reported. The chapter will further present a diagrammatical illustration how the Context-based approach proposed by the study can be visualised.

The aim of the study was to propose a Context-based approach in Economics education as this approach seems to have a potential to enhance the students' application of Economics theories and abstract concepts to the real world. This aim is in response to the observation that the teaching of Economics is more teacher centred, highly textbook-driven and classroom-confined, which seems to offer limited opportunities to students to put to practice or apply the theories and concepts they learn in the subject. The study therefore intended to answer the question: how can the teachers create a Context-based Economics teaching and learning environment to enrich students' application of Economics theories and abstract concepts to the real world?

In order to address the aim of the study, it was necessary to pursue the following objectives:

- To demonstrate and justify the need for a Context-based approach in Economics education;
- To identify the main components of a Context-based approach in Economics;
- To explore the conditions optimal for the implementation of a Context-based approach,

- To identify the plausible threats in the implementations of a Context-based approach; and
- To monitor the best practices of a Context-based approach in Economics education.

6.2 FINDINGS ON THE NEED FOR A CONTEXT-BASED APPROACH

6.2.1 Application of Abstract Theories and Concepts Taught in the Subject

It has been found that the subject Economics is comprised of many abstract concepts and theories and as a result of the abstract nature of these concepts and theories students often find it difficult to see their relevance to their lives. Students end up not being able to apply these concepts in real-life situations or to use the Economics subject knowledge in their daily lives. Demircioğlu *et al.* (2013:628) in Chapter 3 (Section 3.2) found that quite often students are introduced to abstract concepts in early ages which they usually find difficult to learn and visualize. These findings from the review of related literature seem to be supported by the empirical study, as research participants in this study made an observation that although there are those concepts which students can easily apply in life, there are also those which seem to be difficult to apply. It is because of this apparent difficulty in making connections with the abstract concepts which students are introduced to, that research participants also believe that Economics students need to have imaginative minds for them to make meaning out of some of abstract topics covered in this subject which seem difficult to connect with.

The study has, however, found that in spite of this abstract nature of the subject the teacher-centred, classroom and textbook-confined method widely used in this subject may not be making things easier for students to make connections with this subject and to apply it in daily life. McGoldrick *et al.* (2000:45) maintain that while students need to the ability to link the economics theory they learn in class with the actual life outside of the class, it may be difficult to stimulate that ability if the teaching of Economics remains confined only to the classroom (See Section 3.2, Chapter 3). This view by McGoldrick *et al.* (2000:45) was also raised in the empirical study which found that economics concepts seem difficult to relate to life if the

teacher relies only on the use of a textbook, because quite often the textbook does make concrete examples.

6.2.2 The Need to Contextualise Economics Content

The study also found that economics content should not be taught just as a list of abstract concepts which should be memorised in order to pass a test or an examination, hence the call for contextualising the economics content so that students can start to see the relevance of those theories and concepts in their lives. In Chapter 3, section 3.3.1.2 Ping (2003:43) noted that it is often not easy for students to answer to the 'what if?' questions in Economics as the teaching of the subject seems heavily reliant on the use of textbook and lecture methods, which appear to encourage memorisation and recall of information. It is for this reason that Ping (2003:43) further argues students must therefore to understand at the very beginning that to master Economics they need to go beyond the level of merely memorising key concepts and manipulating equations they are taught. Students should instead know that Economics as a subject requires of them to develop critical thinking skills and they should be aware of relevance of the concepts they are taught and appreciate their importance. This finding is also made in the empirical study where an observation was made that the current teaching of Economics makes the subject to be so abstract that students find some of the topics or concepts they are introduced to so detached from their lives.

6.2.3 The Need to Develop the Students' Ability to Transfer Knowledge

The study further found that there is a necessity for Economics students to develop ability to transfer learning, i.e. to be capable to use the knowledge gained through the study of the subject, e.g. in their personal lives or in the community in which they live. Students should therefore be able to use their subject knowledge beyond the classroom, i.e. from settings different from where the knowledge was gained. Shamsid-Deen and Smith (2006:14) in Chapter 3, section 3.3.1.3 note that it is often expected of students to recall the subject content that was presented through direct instruction or lecture method and apply it in a realistic setting. However, the problem arises when they cannot identify the knowledge they need to deal with a problem that is outside of the context in which knowledge was gained. This problem points to

the students' inability to transfer knowledge from one context to the other. The view that was raised in empirical study, that, the conventional teaching method in Economics mainly focuses on drilling students to memorise information to pass tests and exams seems to corroborate this finding from the review of literature. It is also according to this view that the dominant teaching approach in Economics may just come short of making apparent the relevance and applicability of the subject to the daily lives of the students.

In Chapter 3, section 3.3.1.3 Hung (2013:29) argues that knowledge is taught in an abstract manner in a conventional teaching and learning environment and that this environment provides limited opportunities to introduce students to the issues of how the subject knowledge is demonstrated in real life, i.e. how one can use it in to provide solutions to real-life problems. This type of teaching and learning therefore takes place in a de-contextualised environment, resulting in a difficulty for students to develop situational knowledge. Situational knowledge is the knowledge which helps students to understand where, when and how knowledge can be applied. The importance of situational knowledge is that it closes the gap between theoretical understanding and the practical application of the knowledge. Hung's finding is also made in the empirical study where a research participant explained that it was initially difficult to understand what Economics was all about, as compared to the other subjects such as Accounting and Business studies whose relevance in real life seemed a bit obvious. The research participant also hinted that the possible reason why Economics seemed difficult to understand, compared to the other two subjects could be that most of the concepts that they were exposed to as students were very abstract and did not seem to be part of the daily life.

6.2.4 Need to Develop Students' Higher-Order Thinking Skills

The study has also found that there is a need for students to be taught in such a manner that they develop higher-order cognitive skills, e.g. (in Chapter 3, section 3.3.1.4) Broman *et al.* (2015:144) argue that in their daily lives, students come across more open and broad problems which requires of them to use higher-order thinking since such problems call for more than a mere single limited response. In order to arrive at a solution or decision, a student will accordingly need to make a thorough analysis, synthesis and evaluation of the data or information at hand.

Research participants also made an observation that Economics is one subject that needs high levels of thinking and that development of skills to analyse, synthesise and evaluate economic information is a necessity for the students so that they are able to demonstrate mastery of the subject. This observation by research participants also seems to be in agreement with the findings from the review of literature that there is a need to develop students' higher-order skills.

6.3 THE STUDY RECOMMENDATIONS ON THE NEED FOR A CONTEXT-BASED APPROACH

It is against the findings made by literature and the research participants that this study recommends that Economics should be taught in context so that students can be able to see its relevance to their lives and be able to use or apply it in real-life situations. Hervani and Helms (2004:269) note that a teaching style that is effective creates a learning environment which assists students in the application of classroom learning to real-life situations (see Chapter 3 section 3.3). One such approach is the use of Context-based learning, which aims to link the theoretical knowledge with the daily lives of the students. In section 3.3, Chapter 3, Smith (2010:23) further notes that in a teaching and learning situation that is context based, teachers are enabled to relate content to situations where it is used in the real world, e.g. at home, in the community or at work. This context-based situation can further promote the students' transfer of knowledge and problem-solving skills from the class, to other contexts outside the class and also to prepare them for continued learning, for careers they may take up in the future and for citizenship. This recommendation from literature study is also supported by empirical study, e.g. a research participant made a case for the use Context-based learning strategy known as Context-rich problems in arguing that this strategy has a potential teach Economic theories and concepts the way they happen in life or in the context they occur.

Another recommendation is that for students to have the ability to make connections with the subject content, a contextualised teaching and learning environment should be created. This learning environment has the potential to help the students to see where in life the concepts they learn operate and how they can be used. In relation to this Hung (2013:33) points out that contextualisation of content knowledge means that the meanings that are peculiar to a profession are attached to the abstract

theoretical principles. This will help to create a general awareness on what the subject knowledge can be used for, where it can be applied and how it manifests itself in the real word and this awareness may help students to put to practise their knowledge (see section 3.3.1.2, Chapter 3). The similar recommendation was made by a research participant who mentioned that teachers should always try to provide students with the real-life contexts where Economic concepts are applicable, because this can potentially enable students to see the relevance of Economics and that they will also be able to connect the textbook theory with the real world.

On the finding that economics teaching should develop the students' ability to transfer their subject knowledge to different situations, the study recommends the use of contextual teaching and learning as it seems to have a potential to assist the students to achieve the goal of transfer of learning since learning takes place in a setting that is almost similar to the contexts where the knowledge they have gained will be applied.

Shamisid-Deen and Smith (2006:14) argue the use of Context-based teaching and learning approach has the potential to enhance students' ability to transfer learning from one teaching setting to real-life situations. (see section 3.3.1.3, Chapter 3). This view seems to be attested to by the empirical study which found that the Context-based learning strategies will actually help students, not only learn by memorising information for tests, but to learn in such a manner that they are able to take what they have learnt in class or from their textbooks and use it in other situations they will probably come across in life, which will make the content of Economics a useable knowledge.

The study further recommends that a course in Economics should equip the students with higher-order skills which include analysis, synthesis and evaluation. Economics students need to attain higher-order learning for them to be able to analyse, synthesize and evaluate economic phenomena and policies. Conway, Stimel, Davis and Hartmann (2010:193) describe analysis as deconstructing arguments, facts and theories into component parts; synthesis as building arguments, facts and theories from component parts while evaluation is described as justifying a decision or opinion with facts, arguments and theories. The attainment of these skills will help the students to move beyond a mere knowledge and comprehension of Economic

concepts towards their application in real-world events (see section 3.3.1.4, Chapter 3).

The recommendation that a course in Economics should equip students with higher-order cognitive skills, is made by the research participant who argued that teaching Economics in context can develop students' critical thinking skills because if the subject is made concrete, students will learn not to take everything as they are told but will be able to use their prior knowledge to analyse information, bring together the pieces and be able to evaluate the conclusions and decisions they have arrived at.

6.4 FINDINGS ON THE COMPONENTS OF A CONTEXT-BASED APPROACH

The literature states that contextual teaching and learning (CTL) is not one particular strategy, but comprises different strategies. This is demonstrated in an explanation of CTL offered by Kalchick and Oertle (2010:1), which states that CTL is comprised of a number of pedagogic methods which are intended to coherently connect the learning of foundational skills and academic or occupational content by directing the focus of teaching and learning on actual applications in a specific context which attracts attention of the student (see section 3.4, Chapter 3).

6.4.1 Case Method

One instructional strategy which literature study has found to have a potential to enrich the students' ability to apply the Economic theory and abstract concepts outside of the classroom is the use of Case method. In Chapter 3, section 3.4.1, Popescu (2014:274) argues for the use of Case method as one of the context teaching and learning strategies by stating that cases present a method rich in contextually introducing the new material and it also allows students a platform to apply the knowledge they have gained to new situations.

The research participants in this study also found case studies to have the ability to create a teaching and learning environment that allows students to link theory to practice, to see the relevance of this subject to the daily lives and to develop the ability to apply Economics theories and concepts in the real-world settings. To illustrate this point, one participant recalled that they were introduced to the use of

newspaper articles and case studies in presenting Economics lessons and mentioned that this method helped to elucidate some of the concepts which were initially difficult to relate to daily life. The research participant further alluded to the value of using the case studies as part of Context-based strategies by stating that case studies are based on real-world economic events; hence they are not abstract, and they can therefore bring into class the actual events happening outside of the classroom.

6.4.2 Context-Rich Problems (CRPs)

The study has also found the use of Context-rich problems technique as having the potential to develop the students' ability to transfer their content knowledge of Economics to different situations from where knowledge was gained. In Chapter 3, section 3.4.2.1 Maier *et al.* (2010:170) found that transfer of knowledge from inside the classroom to outside the classroom is not an automatic process, but that it is something that can be developed if opportunities are created for students to practise new understanding in a variety of contexts. In the same section Bangs (2012:48) regards Context-rich problems as one active learning strategy that can create an environment of learning that helps the students to think like economists. This is because under such an environment, students practise the application of newly learned Economics theories and concepts through engagement in classroom activities or scenarios in which they can find themselves out of the class.

The views from the literature study on the use of Context-rich problems as a possible component of a Context-based approach are also highlighted in the empirical study as the research participants also found Context-rich problems to be effective in developing the abilities of the students to apply and transfer knowledge. This is evident in the statement that was made during data generation, namely that another strategy that can be used is what is called Context-rich problems. The research participant explained a Context-rich problem as a question that is posed to a student, which puts him/her in position where a problem also based on a real economic issue has to be solved.

6.4.3 Service-learning

The study has found that Service learning focuses on authentic learning environments such as community and workplace settings. The emphasis on contextual teaching and learning on authentic learning environments seems to be as a result of the observation that there would be more challenges to try and bring the real world into the classroom than to take students to the real world (Hubball & Kennedy, 2009:2) (section 3.4.3.1, Chapter 3). Service-learning has been found to be an example of authentic learning environments, and according to The Colorado Department of Education (2004:11), it is a form of contextual learning that provides the students opportunities to apply what they have learnt in class to authentic community needs. In the same section and chapter, McGoldrick and Ziegert (2002:11) found that Service-learning can be used to stimulate students to do Economics, which will help them to start thinking like economists. Furthermore, Lopez (2009:137) found that Service-learning enhances the students' prospects of applying and relating Economic concepts and theories to the actual world experiences and allows them to reflect on the connection between theory and practice.

The findings from the literature study which demonstrate the potential which Service-learning has in providing the students an opportunity to apply their Economics content knowledge to address authentic community needs, have also been made in the empirical study. A suggestion was made by a research participant that one way to bridge the gap between theory and practice may be to place students into the communities so that they could use their knowledge of the subject to help community members with the needs or problems they have identified. In this way they will get the opportunity to practise what they have learnt in class to solve real-life problems.

6.4.4 Problem-based Learning (PBL)

Through a review of related literature on contextual teaching and learning, the study has found that Problem-based learning is one other pedagogic strategy that can be part of a Context-based approach in Economics education. Looi and Seyal (2014:69) found that Problem-based learning environments provide a platform where students learn to apply knowledge and not just to develop it. Furthermore in chapter 3 section 3.4.4.1, Smith *et al.* (2007:5) found that students can benefit from a Problem-based

learning environment as this environment stimulates them to access their prior knowledge and creates a context in which they can apply this knowledge as well as to apply the newly developed knowledge. In addition, Dolmans *et al.* (2005:732) found that PBL is likely to effectively prepare Economics students for the future, as it encompasses the elements of learning often referred to as the four modern insights into learning i.e. constructivist, self-directed, collaborative, and contextual learning. (see Chapter 3, section 3.4.4.1).

The empirical study also found that Problem-based learning can be effective in assisting students to apply the subject knowledge. A research participant made a suggestion that if the teacher prepares to start a new topic or teach a certain concept, he/she could start by giving students a question in the form of a problem that necessitates that they carry out a research to be able to provide a solution to that problem. The participant suggested that, while students are conducting a research they will be able to connect to that topic using their prior knowledge and combining it with new information. In this way they might be able to apply their existing Economics knowledge on finding a solution to the problem they are investigating. Another participant also alluded probable effectiveness of Problem-based learning in stating that while students are conducting research to find a solution to the problem posed by the teacher, they also learn new concepts which the teacher actually wants them to learn. They also apply their prior knowledge in the process of finding a solution to the problem.

The empirical study further found that Problem-based learning has the potential to build the students' problem-solving skills while at the same time orientating them to what they may expect when they enter the labour market or the business world. This is demonstrated by the statement made by a research participant that the research process which students conduct to find a solution to the problem, posed by the teacher, may lead students to learning new concepts and also the application of prior knowledge. According to the research participant this process has the potential also to build the students' problem-solving skills and to orientate them to what they may come across once they have completed their studies and enter the labour market or the business world.

6.5 RECOMMENDATIONS ON THE COMPONENTS OF A CONTEXT-BASED APPROACH

Based on the findings by this study on the potential of the Case method to provide a contextualised learning environment, the Case method is recommended as a component of a Context-based approach in Economics because of the benefits it carries. Some of these benefits are identified in chapter 3 section 3.4.1.2 by Volpe (2015:1), who states that the Case method has the potential to help realise three central objectives of teaching Economics, i.e. mastering Economics concepts, application of concepts to the real life and the systematic analysis of policy issues. Volpe (2015:1) also asserts that using cases in Economics seems to be an effective method of placing Economics theory in context and can also be effective in developing transferable skills such as critical thinking, communication skills and team-working skills. A recommendation on the use of the Case method was made by a research participant who stated that relevant newspaper articles or case studies that cover a particular concept, may be helpful to students to see that the theory in the textbook is also applicable in real life. The empirical study argued that the use of cases provides students with an opportunity to tap from their knowledge of the Economics theory and Economic concepts to find solutions to the questions that follow a case study. The study found that the benefit of using newspaper articles and case studies that cover a particular Economics concept, is that students would be able to see that there is actually a link between the textbook theory and the practical world.

The use of Context-rich problems in Economics education is recommended for its potential in enhancing the ability of students in transferring knowledge to situations outside of the classroom. In Chapter 3 section3.4.2.1 Maier and Simkins (2008:6) seem to be in agreement with the view that focus in teaching Economics should also be on students' ability to transfer knowledge and this is evident from their contention that one area that needs attention in an effort to improve student learning is helping them to develop the skills necessary to transfer knowledge beyond the context in which it was taught .The use of Context-rich problems has been recommended as a possible way to develop the students' skills to transfer knowledge. This recommendation is backed up by an assertion by Bangs and Maier (2010:179) that the Context-rich teaching and learning environment in Economics enhances the

students' potential to reach a point where they are capable of appropriately using economics tools instead of just learning about them. (Chapter 3 section 3.4.2.1).

Recommendation for the use of Context-rich problems was also made during one of the focus group meetings where a research participant argued that Context-rich problems have the potential to afford students an opportunity to practise what they learn so that they know why they are taught certain things and how to use their knowledge to solve the problems they might come across in life.

The study also recommends Service-learning as a component of the Context-based approach and in Chapter 3, section 3.4.3.1), Ayers *et al.* (2010:55) are of the view that the use of Service-learning can help to bridge the gap between theory and practice for Economics students and also that it can be the answer to students who often ask themselves if and how will they be able to translate countless classroom concepts into real-world situations once they have completed their studies. Banks *et al.* (2005:348) also recommend the use of Service-learning as they believe that it is a pedagogy that enhances the learning process by linking theory and practice and can thus enable students to connect abstract concepts with real-world situations.

The participants in the study recommended Service-learning as a possible component of a Context-based approach in Economics education for the reason that it helps students to learn by doing, to deepen their understanding of the subject, to see how relevant Economics is to their daily lives and to use it to solve real problems in the community. A research participant also recommends that engagement in a Service-learning project has the potential to help develop the students' higher-order cognitive skills and this may yield positive results when the student goes back to the class, especially in answering the higher-order questions in tests and examinations. Another participant argued that students stand to learn even more about the subject, because they get the chance to grapple with the finer details of the subject as they see it in action. Service-learning stands to allow students a chance to make a connection between their theoretical knowledge and how it applies in real life, which makes the subject to be even more interesting and clear. Furthermore, the empirical study found that Service-learning will deepen students' understanding of the subject and will assist them to see the relevance of the subject in real life. This is because as students are engaged in community services, they are forced to get more information

on the problem, analyse it, and see which pieces go to together. They will then propose solutions and evaluate the relevance of proposed solutions. This may impact positively on their responses to the higher-order questions in tests, assignments or exams and will also develop their ability to deal with the data response questions, such as cartoons or scenario-based questions.

Problem-based learning has also been recommended as one Context-based learning strategy which can assist students to link theory to practice and also to apply Economics content knowledge in different situations from where it was gained. In Chapter 3, section 3.4.4.1 Rigall-I-Torrent (2011:2) recommends the use of PBL over the conventional teaching method with the argument that it encourages a deeper approach to learning, develops greater knowledge retention and enhances the students' ability to demonstrate better application of knowledge that has been developed. In the same chapter and section, Savery (2006:12) recommends the use of PBL, arguing that it capacitates students to undertake research, connect theory to practice and to apply their knowledge and skills to arrive at a workable solution to a problem under investigation. Ravitz and Mergendoller (2005:2) in Chapter 3, section 3.4.4.1 also propose the use of PBL as an instructional method, stating that it requires of students to conduct research, forcing them to use concepts and theories they already know and to find out which new concepts are applicable in a quest to solve the problem. This teaching and learning environment therefore contributes positively to students' ability to retain newly developed knowledge, encourages them to do self-directed study and enriches their application of existing knowledge to new and different situations, all of which can lead to sustained and transferable learning.

6.6 FINDINGS ON THE CONDITIONS OPTIMAL FOR A CONTEXT-BASED APPROACH

The study has found that certain conditions should prevail for a Context-based approach to be effective in Economics education. Amongst them are: orientation of teachers and students, identification of purposes for which Context-based strategies will be used, preparation, physical setting of the classroom, and the change of roles by the teachers and students.

6.6.1 Orientation in Context-Based Strategies

With regard to orientation of the teachers and students, the study has found that because of the dominant use of the lecture method or the direct teaching method, they need some kind of training into the use of context teaching and learning strategies and students will also need to be coached in these strategies. As an example, the Context-rich problems, as one of the Context-based strategies, requires that teachers must learn or must be orientated into the art of writing such problems as there are particular factors that must be considered when writing Context-rich problems (Bangs, 2012:52) (see chapter 3 section 3.5.1). The need for teacher orientation towards the use of Context-based strategies has also been found in the empirical study where, for example, research participants argued that teachers have to be trained and orientated in the use of Context-based strategies as they have noticed that some of the teachers might not be exposed to the use of such strategies.

Bangs (2012:51) also points to the need for orientation of students, arguing that because students are accustomed to the plug-and-chug problem-solving method, they might struggle when they are first confronted with the Context-based strategies. The empirical study also found that students will also need help in getting started with the use of Context-based strategies, since they no longer need just to recall information they have memorised and do cut and paste type of answering when solving authentic problems, but need to demonstrate an understanding of Economics content. This finding demonstrates that the Context-based strategies will require of the students to move beyond their accustomed cut and paste way of responding to questions in assignments or tests, which is an approach similar to what was earlier referred to as the plug and chug method by Bangs (2012:51). Orientation of students in the use of various strategies encompassed by a Context-based approach was also found to be a necessary condition for the successful implementation of this approach as this orientation can help to avoid its resentment by students.

6.6.2 Identification of Purposes for Context-based Strategies

The success of the Context-based approach further requires of teachers to identify the purposes for which the Context-based strategies will be used so that they are in line with the expected learning outcomes. Section 3.5.2 of Chapter 3 demonstrates

that Context-rich problems can be used for various purposes, e.g., to enable students' to transfer knowledge to different situations, help students to practise the application of newly learned Economics theories and concepts, develop students' problem-solving skills and to assess their understanding of the Economics theory and concepts taught. In the same chapter, Ziegert and McGoldrick (2008:48) also found that in Service-learning the existence of clearly identified course and student learning objectives is important. Carlson and Valenchick (2006:61) found that cases used in the Case method have different purposes, e.g. to motivate new material, to introduce theoretical concepts or to reinforce the learning of theory. Teachers are thus required to first identify the purpose for which they want to use cases in their teaching (see section 3.5.2, Chapter 3).

Participants in the study also found the necessity of identifying the purposes for using the Context-based strategies as one condition for ensuring the successful implementation of a Context-based approach. They argued that teachers need to know why they want to use particular strategies, as this will guide them to select appropriate strategies for particular lessons. The empirical study also found that it is important to explain to students the reasons for using these strategies and also allow them to suggest other methods that can be used to assist them to apply their knowledge of Economics.

6.6.3 Thorough Preparation

Thorough preparation by both teachers and students has also been found to be a necessary condition for the successful integration of Context-based strategies in Economics education (see section 3.5.3, Chapter 3). It has been found amongst others, by Maier *et al.* (2010:181) that the use of Context-rich problems requires thorough preparation. Maier *et al.* (2010:181) notes that at the initial stages of using this strategy, preparation of problems takes a bit more time and effort and execution may also require more time, e.g., helping the students to understand exactly what they are required to do. Popescu (2014:276) also found that in the use of the Case method, teacher preparation is the key to the success of this method and asserts that an in-depth case discussion occurs when the teacher has extensively familiarized himself or herself with the contents of case. Volpe (2015:3) also found that in the use of the Case method, students must be prepared and acquainted with

the facts carried by the case when they come to class so that they are in a position to analyse those facts. A need for thorough preparation is also noted in the empirical study, where participants noted that students may at first be frustrated as they may not have developed the ability to work with these unfamiliar strategies. It for this reason that a suggestion is made in the empirical study that students have to be orientated and be given time to prepare and practise under the guidance of the teacher.

6.6.4 Physical Classroom Setting

In Chapter 3 section 3.5.4 the physical classroom setting was found to be another factor that has a bearing on the success of the Context-based strategies, especially where mostly cooperative learning exercises are undertaken. Mostert (2007:440) found that an ideal seating arrangement is the one which improves eye contact and is suitable for verbal and non-verbal communication. This classroom setting should also allow for teacher mobility in class, such that engagement with students in their groups is made easier and order is maintained. The empirical study has also found the classroom set-up as another condition which can facilitate the successful incorporation of Context-based strategies, since these strategies are largely based on group work and requires of students to engage in a group discussion. It was noted that with the usual set up of neat straight rows, time will be wasted as students move chairs and tables around to form working stations.

6.6.5 Role Changes for Both Teachers and Students

The change of roles by teachers and students in the teaching and learning environment is another factor that has been found to have an influence on the success of the Context-based strategies (Chapter 3, section 3.5.5). Rose (2012:2) found that Context-Based approach redefines the roles of both the teacher and the student where the teacher's role is to facilitate the students' taking part in knowledge construction and the students' role is to be an active participant in the learning process. Maurer and Neuhold (2012:17), in the same chapter and section, found that in Problem-based learning, all the parties involved need to revise their roles in the teaching and learning process. Teachers take the role of facilitators of the learning process, instead of being direct transmitters of knowledge, while the students

become active co-constructors of knowledge and relinquish their passive roles in class. Again in the same chapter and section, Tick (2007:367) also found that the teacher becomes a facilitator in the learning process and is responsible to create conditions where students feel comfortable and are encouraged to freely form their ideas.

The need for adaptation in the roles of the teacher and students has also been noted by the research participants who argued that to a large extent, the dominant teacher's role of transmitting knowledge to students' changes as he or she assumes the responsibility of guiding the activities in the learning process. The empirical study further argued that a Context-based learning environment encourages students' active participation in the learning activities. The teacher, on the other hand, is encouraged to adopt the role of a facilitator of learning activities and to also ensure that the desired outcomes of a lesson are achieved.

6.6.6 Collaboration and Institutional Support

The study has also found collaboration to be another condition that has to be met in order to implement a Context-based approach successfully. In chapter 3 section 3.5.6 Kalchick and Oertle (2010:3) found that teachers need to collaborate with their colleagues, relevant stakeholders and those with a keen interest in the subject. Student contributions have also been found to be key in the design and implementation of Context-based teaching and learning strategies, while Kalchick and Oertle (2010:4) further argue that teachers should afford students the opportunity to suggest strategies, which may work best in achieving the learning outcomes.

Institutional support is another factor that has been found to facilitate the implementation the Context-based approach. Jameson-Meledy (2015:2) identifies institutional support, ongoing research and evaluation as other important conditions for a Context-based approach to thrive (see Chapter 3, section 3.5.6).

The need for collaboration and institutional support has also been found in the empirical study and is demonstrated by the research participants' contention that teachers need to work together to identify the purposes for which Context-based strategies are to be used, identify concepts or topics which can best be taught using

particular strategies and also share material and best practices. Another contention is that teachers need to meet regularly to reflect on challenges they face, how to mitigate those challenges and also reflect on the effectiveness of this Context-based approach. The empirical study further identified that the success of this approach also depends on the support from the institutions of learning, which may include provision of facilities such as discussion rooms fitted with data projectors, interactive whiteboards and also ensuring that teachers and students have access to internet for research purposes. Institutions of learning, e.g. universities, may need to help in the placement of students where service relevant to their course objectives is to be rendered. At a school level the school management may need to accommodate the programme of the Economics teacher who may want to have students going into the communities to offer a service relevant to what they have already being taught and which can reinforce their learning.

6.7 RECOMMENDATIONS ON THE SUCCESSFUL IMPLEMENTATION OF CONTEXT-BASED APPROACH

6.7.1 Orientation in Context-based Strategies

The findings of this study showed that teachers and students might not be familiar with the use of Context-based strategies and it may not be easy to incorporate them with any measure of success in Economics education. It is therefore a recommendation of the study that both teachers and students need to be orientated in the use of various Context-based strategies. Professional development is recommended to introduce and empower teachers into the use of these strategies. In Chapter 3, section 3.5.1 Avargil *et al.* (2012:210) argue that on-going professional development programmes, reflection and continual support seem to be a prerequisite in the efforts meant to change the current teaching approach to a new curriculum. Additionally, teachers will also need to go through a conceptual change in order to adopt new teaching methods. In the same chapter and section Kalchik and Oertle (2010:3) further argue that, teachers need training in order to learn how to teach effectively, using a Context-based approach. The importance of professional development is to assist the teachers to clarify the learning outcomes envisaged by

the use of Context-based strategies, help them to develop and search for materials to be used and to teach in a contextualised manner.

The participants in the study have also recommended teacher training and development as an important factor towards the adoption of a Context-based approach in the subject Economics. Teachers therefore need to be trained and orientated in the use of such strategies. A recommendation was made that this training can be in the form of workshops, organised by the Department of Education or that a colleague knowledgeable in the use of such strategies may offer to assist the others. In using Service learning as a Context-based strategy, a recommendation was made that teachers should be properly introduced to this method of learning, as many may still be too reliant on the lecture method. The orientation into Service learning is intended help teachers to realise the potential benefits of this pedagogic method and empower them on how to incorporate it in the Economics teaching and learning environment.

Orientation of students to the use of Context-based learning strategies has also been found to be a necessity for the successful implementation of a Context-based approach in Economics and the study recommends a cognitive apprenticeship model to orientate students into the Context-based learning strategies. Maier *et al.* (2010:178) note that this model follows three steps, namely modelling, coaching, and fading. Bangs (2012:52) explains that modelling involves showing students step by step how a particular strategy works, e.g. how a Context-rich problem can be tackled, looking for missing information, as well as discriminating between relevant and less relevant information in the analysis process. Coaching means that the teacher sets aside time for students to practise working with a particular strategy, e.g. students work independently with Context-rich problems. These problems can be designed in such a manner that they provide their own coaching, e.g. opportunities can also be created for students to coach each other, e.g. by using a think-pair-share cooperative learning technique. Fading means that students will require less coaching (fading) as time pass by and they begin to show some ability to work on their own (see Chapter 3, section 3.5.1).

The empirical study has also recommended orientation of students as being among the factors that are likely to contribute positively to the use of a Context-based

approach in Economics education. Research participants stressed that orientation that is given to the teachers should also be extended to students who themselves might also be used to the chalk and talk method and also to the passive role in the learning process. Moreover, the study recommends that students should be given time to prepare and practise under the guidance of the teacher, as it should not just be assumed that students will automatically develop the ability to work with these unfamiliar strategies.

The study suggests that teachers should take an active role in orientating the students to the use of Context-based strategies. This can be made possible when they assume a role of facilitating and guiding activities than being knowledge transmitters in the learning process. That role is more like scaffolding, where the teacher starts by providing intensive support to students at the initial stages of introducing Context-based learning strategies and gradually decrease that support as students adapt and gain confidence with this approach to learning.

6.7.2 Identification of Purposes of Context-based Strategies

A further recommendation which is based on the findings of the study is that teachers first need to identify the purposes for which they want to use the Context-based strategies, as this will help them to choose appropriate strategies to achieve particular learning objectives. Literature study, for example, recommends that when writing Context-rich problems, teachers need to know which core concept will be addressed by the Context-rich problem so that the intention should be to make it possible for the students to use the concept in the context and not just to memorise it. The teacher should also state identified concepts as a learning objective, i.e. an outcome to be achieved by a student rather than the content he or she will learn, i.e. focus is on what students should be able to do and not on facts they should know, e.g. a learning objective can be stated as, students must demonstrate ability to apply the theory of Price discrimination to the real-world setting (Bangs, 2012:53; Dalton & Shaffer, 2010:147).(see Chapter 3, section 3.5.2)

Bangs (2012:48) in section 3.5.2 of Chapter 3 further recommends that when writing a Context-rich problem, a scenario depicted should be based on a situation relating the events which a student can associate with e.g. those taking place in the school, the business world, or in a community at large. Students may then be able to go

further than a mere learning of the tools of Economics but will be able demonstrate the ability to use those tools appropriately (Bangs & Maier, 2010:179). In Service-learning it is further recommended that teachers need to consider whether the goals of a service project, e.g. putting theory into practice, fit with their overall course and teaching goals and to ensure that the course syllabus should be consistent with the course goals and objectives specific to Service-learning (Jenkins & Sheehey, 2011:54; Mathews, 2001:3) (see Chapter 3, section 3.5.2).

In the use of the Case method, Carlson and Valenchick (2006:61) recommend that cases that are meant to foster applications of concepts should contain information that requires of students to decide which theoretical concepts are most suitable under particular circumstances described in the case (chapter 3 section 3.5.2). The recommendation that teachers need to identify the purposes for using Context-based learning strategies, has been noted in the empirical study where research participants mentioned that as a teacher you need to know why you want to use a certain strategy, because this will help you to select an appropriate strategy for a particular lesson.

6.7.3 Thorough Preparation

The study also found that Context-based learning strategies require that teachers and students should always be prepared thoroughly, since the use of these strategies moves them out of the routine they have been accustomed to. Volpe (2015:3), for example, recommends that before the actual case discussion, teachers using a Case method can provide students with study questions intended to guide their preparation, to focus their attention and to help them to start the analytic process. Bangs (2012:54) further recommends that to help the students to prepare to work with Context-rich problems, teachers may make use of a cognitive apprenticeship model. The model includes three phases or stages, i.e. (i) modelling the problem solution by the teacher; (ii) observing by the students; (iii) and allowing time for fading to set in, i.e. time when students gradually start to solve the Context-rich problems on their own without much reliance on the teacher (see Chapter 3, section 3.5.3).

6.7.4 Physical Classroom Setting

The physical setting of the class also seems to be a factor that facilitates discussions that usually play a major role in the use of Context-based strategies. Mostert (2007:440) recommends that students should ideally be seated in a circle or in a horseshoe shape as this arrangement will facilitate better eye contact. Improved verbal and nonverbal communication can also be achieved through such seating arrangements. In addition, Schwartz (2014:4) recommends that in a horseshoe-shaped seating arrangement, the open part of the U should face the chalkboard or the whiteboard so that students are able to have a good view of what the teacher may write on the board (see Chapter 3, section 3.5.4)

Teacher mobility in the class should also be made easy by the physical setting as he or she may be required to engage with students in their groups during the group discussions. Movable chairs will also allow for team discussions in large groups. The observation that the classroom setting arrangement may need to be changed in order to facilitate class discussions, is noted in the empirical study where a recommendation was made that since most Context-based strategies methods are largely based on group work, tables and chairs should be arranged in the form of a circle. This arrangement is believed to have a positive impact on the envisaged purposes of group work, movement of the teacher between the groups and maintenance of order in the class.

6.7.5 Role Changes for Both Teachers and Students

The study has found that Context-based learning strategies are rooted in a Constructivist learning theory in which students are regarded as co-constructors of knowledge. Students are thus required to shed their customary passive knowledge recipient roles and should take an active role in knowledge construction. In the constructivist learning theory, teachers are also expected to relinquish their accustomed roles of knowledge transmitters in class. Literature study recommendations on what roles teachers and students should adopt in a contextual learning environment, are numerous. Smith (2010:24) recommends that the teacher's role is to provide guidance, facilitate discussions, ask questions, listen to students' views and opinions and make clarifications; thus the teacher becomes a facilitator of knowledge construction and moves away from being a dispenser of

knowledge. Trimmer *et al.* (2009:1) also recommend that the role of the teachers who use Context-based strategies, should be to facilitate learning and to help students to become creative and critical thinkers (see chapter 3, section 3.5.5).

Students also need to change their customary role of passively receiving knowledge and should now assume an active role of co-constructors of knowledge in the learning process. Savery (2006:12) recommends that students must be responsible for their own learning, and should engage with the tasks at hand with whatever their current knowledge affords. Students should thus take responsibility to search for relevant information and to share it with the group members so that they can develop a feasible solution. In addition to searching for information, Smith (2010:24) recommends that to be active participants in the learning process, students should also be engaged in activities like: exploring, investigating, validating and discussing (see Chapter 3, section 3.5.5).

Recommendations that teachers and students should adopt new roles in the teaching and learning process were made by research participants who argued that in a Context-based learning environment, students are encouraged to participate actively in class and on the other hand the teacher who now becomes a facilitator of learning activities strives to ensure that the desired outcomes of a lesson are achieved. Furthermore, the empirical study also recommended that the voices of the students must also be heard and they must be seen to be hands-on in the learning process by asking questions, raising views and opinions and sharing ideas. In this way students become partners in knowledge construction. The teacher thus becomes more of a facilitator than a knowledge transmitter.

6.7.6 Collaboration and Institutional Support

The study recommends that it is through collaborative efforts of all stakeholders in Economics education and support from institutions of learning that Context-based approach can be a success. Kalchick and Oertle (2010:3) recommend that teachers need to work together with their colleagues, relevant stakeholders and those with keen interest in the subject. The formation of teams that comprise colleagues, workplace representatives and practitioners of the subject from the public and private sector can develop a well-rounded instruction base which allows students to apply their current knowledge to authentic real life experiences. Furthermore, Kalchick and

Oertle (2010:4) recommend students should also be included in the collaboration teams as this will help to understand their problem-solving thought processes and assist them to understand the Context-based teaching and learning strategies as they ask questions and make their own contributions (see section 3.5.6, Chapter 3).

In chapter 3 section 3.5.6 Jameson-Meledy (2015:2) recommends institutional support, ongoing research and evaluation as other important conditions for a Context-based approach to thrive. According to Jameson-Meledy (2015:2), continuous research and evaluation can provide necessary facts prior to and subsequent to the implementation of these intervention strategies so that continuous improvement can be realised.

Research participants also alluded to the importance of collaboration and institutional support, as they argued that it is important for teachers to work as a team as this will enable them to learn from each other and to support each other. They also mentioned that institutions of learning also have a supportive role to play in ensuring the success of a Context-based approach, e.g. by providing the necessary resources.

6.8 FINDINGS ON PLAUSIBLE CHALLENGES IN IMPLEMENTING A CONTEXT-BASED APPROACH

6.8.1 Time Constraints

The study has found that time may be a challenge to teachers when trying to incorporate the Context-based strategies in their teaching. Teachers realise that they need more than a textbook and they are forced to search for or develop material they can use to teach the Economics content in context and time may not always be on their side. Teachers may find that less time is available for preparation needed to teach in context. This apparent limited time seems to be a concern to teachers that less subject content will be covered by adopting Context-based learning strategies. Mostert (2007:437) for example, found that preparing cases for teaching is a labour intensive activity that requires more time for both the teacher and students. Hung (2011:541) also found that in Problem-based learning, students need a substantial amount of time for in-depth investigation of a problem. Ziegert and McGoldrick

(2008:52) also found that ample time is required to plan Service-learning projects as there is a need to match students with community organisations and to ensure that service activities are well linked with course content. Maier *et al.* (2010:181) state that more time and effort is usually needed in the initial stages of introducing context-based strategies (see Chapter 3, section 3.6.1)

The empirical study also found the time factor to be a challenge in the use of Context-based strategies. This is evident from the observation made by research participants, namely that, due to the amount of work teachers have to cover, some may always resort to the chalk and talk method to avoid falling behind with their work schedule. As an example, group discussions were found to be time consuming and hence teachers tend to see the lecture method as being time effective.

6.8.2 Lack of Exposure to Context-based Techniques

Learning techniques that are part of a Context-based approach require of students to be active participants in learning and take responsibility for their learning, which might frustrate them as a result of their limited exposure to those methods. Using Context-rich problems as an example, Bangs (2012:55) found that when students are introduced to this approach they may demonstrate some degree of frustration and teachers are cautioned to be aware of this possible frustration. In the use of the Case method, Mostert (2007:436) also found that because case discussion and analysis is an unfamiliar experience to students, they may have a perception that the teacher is shifting to them his or her responsibility of providing them with answers or solutions in class. This may result in frustration or even disinterest in the topic (see Chapter 3, section 3.6.2). Research participants also found lack of exposure to contextual learning strategies to be one other the factor that may frustrate efforts to implement a Context-based approach. The impact of this factor is usually strong during the initial stages of using Context-based strategies and this is often demonstrated by confusion and frustration by students.

6.8.3 Resistance to Change

The study has found that teachers and students have become comfortable with their roles where the teacher plays a dominant role of transmitter of knowledge, and controller of the class activities while the student is a receiver of knowledge and an

instruction carrier. The Context-based techniques, however, require of teachers and students to relinquish their customary roles in class and this seems to be a challenge. In section 3.6.3, Chapter 3, Heffernan (2001:2), who makes reference to Service-learning, found that it may be difficult for teachers to abandon the comfort and predictability of the classroom work which they have become used to if they have to adopt to this method as they may find it unpredictable and uncomfortable. In the same section Teo (2001:115) using PBL as an example, found that a change of mind-sets by teachers and students may be difficult to achieve, which may serve as another reason for them to resist change and adopt Problem-based learning as teachers and students might perceive it as bringing additional work with no additional benefit (see section 3.6.3, Chapter 3).

Trimmer *et al.* (2009:1) section 3.6.3 chapter 3 found that because the facilitator role which a teacher adopts in the contextual teaching and learning environment, requires of him to relinquish some power to the class; the idea of not being in control appears to be a challenge to teachers. In section 3.6.3 chapter 3, Ziegert and McGoldrick (2008:52) found that standing behind the podium at the front of the classroom often provides the teacher with a sense of authority over the classroom proceedings. This position further provides the teacher with a feeling of being in charge of the story of the day, how it unfolds and the extent to which students intervene in the lesson. The feeling which the teachers get when occupying this position can thus make it difficult for them to venture into something unknown. In the same section, Mansor *et al.* (2015:261) also found that because of the inclination to the conventional methods of learning, it becomes difficult for students to be responsible for their own learning. Taking responsibility for their learning may amongst others require of students to source for information individually and collectively.

In section 3.6.3 chapter 3 perceived additional classroom management has also been found to be a possible reason for teacher resistance to adopt Context-based strategies. Predmore (2005:4), for example, argues that it might be difficult for some seasoned teachers to welcome Context-based teaching and learning strategies as they seem to require more classroom control and management. This is because, as students participate in CTL activities they often move around the classroom to form

groups for discussions and this requires of the teacher to be constantly monitoring them to ensure that order is maintained and that they do not lose focus.

Resistance to change, as a possible challenge in adopting a Context-based approach, was also noticed by the participants in the study who found that because the teachers and students have become comfortable with the teacher-centred approach, it will not be easy for them to abandon the comfort they have found in this method. The desire to hold on to tried and tested methods was found to be one reason why teachers may resist change. Teachers may not want to lose control of the class that they usually maintain when they use the lecture method. On the other hand, students have been found to be heavily dependent on their teachers, so that it seems difficult for them to work independently. Others may even think that teachers are shifting their responsibility of teaching to them; hence, they may resist anything that requires of them to step out of their customary role of passivity in class. Students may also not be keen on doing things differently in class, especially taking a responsibility role in the learning process. They may not want to abandon their passive role in class where less is expected of them during the lesson. Parents may also not be supportive of this approach to learning, as they might think it makes it difficult for them to help their children with schoolwork as they themselves were never exposed to methods used in Context-based learning.

6.8.5 Class Size and Resources

Another challenge in the use of a Context-based techniques such as the Case method, Context-rich problems and Problem-based learning (PBL), which rely on group work, relates to the class size and availability of resources that can serve as teaching and learning aids (see section 3.6.4 chapter 3). In the use of the Case method, Golich *et al.* (2000:57) found that larger classes require regular attention in order to develop and sustain a culture that encourages students to participate in case discussions. Constant attention will also permit the teacher to manage the case discussion. Large classes are often difficult to manage, as students may easily be tempted to discuss irrelevant issues and it may also be difficult for the teacher to get maximum participation, as free-rider problem is often found in big classes. The empirical study also found that finances and classes with big numbers to be possible challenges in adopting contextual learning strategies. The research participants

further noted that control and maintenance of order can be other challenges in classes with big numbers.

Regarding the availability of resources, Maurer and Neuhold (2012:11), for example, found that an appropriate number of smaller rooms with the necessary equipment, e.g. a whiteboard is necessary in Context-based learning. In Problem-based learning, Deo (2013:47) has identified that a typical PBL tutorial session requires a well-equipped tutorial room with proper seating arrangements, a whiteboard, over-head projector and preferably with internet (WiFi) connection. A fully equipped library is another requirement to facilitate self-study and research by students. The empirical study found that Context-based learning strategies require that students should be encouraged to work on their own as these should be seen to be the catalysts of student-centred approaches to learning. Availability of resources such as laptops and easy access to internet is thus needed for them to do research on their own, e.g. by accessing e-books and animated case studies. Lack of such resources stalls the process of incorporating the use of Context-based strategies.

6.8.6 Assessment and Grading

Assessment methods and grading of students' work are two other areas which have been found to pose a challenge for teachers to incorporate Context-based techniques, since most of them are used to the conventional high-stakes tests and examinations (see Chapter 3, section 3.6.5). Taconis *et al* (2016:8) have found that it is usually difficult for traditional tests to recognise the value of the learning outcomes of a Context-based education; hence there is a call that testing should not overemphasise de-contextualised knowledge and should incorporate and reward proficiencies that are dealt with in a Context-based education.

Smith (2010:24) found that the incorporation of alternative assessment methods seems to be a requisite for the Context-based approach to succeed. Bangs (2012:55), for example, found that in using Context-rich problems, students can provide varied and unanticipated answers, which the teacher may find difficult to grade. In another example, assessment of the effect of Service-learning on student outcomes has been cited as an area of concern in adopting this pedagogy. Ziegert and McGoldrick (2008:53) found that identifying and measuring suitable learning

outcomes that a Service-learning project is specifically intended to effect seem to be one major challenge with the use of Service-learning.

The empirical study also found that teachers may find it challenging to allocate marks when assessing Context-based learning activities that allow for individual views and opinions or subjectivity. This was found to be the case as teachers are used to objective answers type of assessment. For example, students may provide different responses to a Context-rich problem that requires of them to demonstrate the application of a certain economic concept.

6.9 RECOMMENDATIONS TO MITIGATE PLAUSIBLE CHALLENGES IN IMPLEMENTING A CONTEXT-BASED APPROACH

6.9.1 Time Constraints

To mitigate the challenge posed by time available for content coverage which the study has found to be one possible challenge in the use of Context-based strategies, various recommendations have been made (see Chapter 3, section 3.6.1). As an example of the use of a Case method, Mostert (2007:437) recommends that a particular case can be repeatedly used for the same teaching objectives or for different objectives, as this can assist the teacher to find different approaches to teaching the same case over time. In an effort also to save time when using Case Method a recommendation is made to restrict the intensity of case analysis according to both teaching goals and time limitations. Another recommendation is made by Golich *et al.* (2000:7) that the teacher may create his or her own cases in order to meet specific teaching objectives or may use newspaper articles, congressional testimony or proceedings of international meetings as cases. This will reduce time that is spent on searching for relevant cases to teach certain topics.

In order to assist students to be ready for case discussions and perhaps also save time to be spent on case discussions, Mostert (2007:437) recommends that students should study cases well ahead of time and prepare some notes to be used during case discussions in class. Maier *et al.* (2010:181) recommend that with more practice, teachers will ultimately be able to spend less time in the preparation of lessons and further recommends the use of the cognitive apprentice model to

orientate students into the Context-based strategies. Golich *et al.* (2000:7) recommend that teachers should always ensure that they get appropriate cases to address particular learning goals as they argue that good cases are often packed with information that will require the application of textbook theory by students in order to analyse complex real-world events.

Literature study suggests that Context-based strategies can be used together with teacher-directed instruction, such that both the breadth and depth of content coverage are achieved. For example, with the Case method, Golich *et al.* (2000:7) recommend that the teacher may use approximately six cases in conjunction with other teaching methods. With regard to the use of PBL the study noted that in a public education system, characterised by high stakes testing a fully-fledged Problem-based learning curriculum may not be possible to implement as it is a time and resource intensive pedagogy. Nowak (2007:66), however, recommends that a teacher-directed instruction could be embedded purposely within a Problem-based learning project in the form of mini-lectures. In this way, the advantages of both methods are implemented in the best possible way, such that students gain most out of the learning experiences provided. These recommendations suggest that teachers can go for a mixture of various pedagogic methods to have a balance in the breadth and depth of content coverage.

Ziegert and McGoldrick (2008:51), on the other hand, recommend that the reflection sessions and class discussions can be arranged to compensate for time that may be lost for content coverage. They are of the view that Service-learning brings to the classroom additional text in the form of student experiences from service projects and a deep understanding may be achieved if students are to integrate this experiential text with the theory they learn in class. This integration occurs when students reflect on their service experiences during the class discussions on their service experiences. The empirical study recommended that Service-learning should only be adopted when teachers have identified the areas in the syllabus or the concepts which students can best understand when they engage with them in the real world. Other sections of the syllabus can then be taught with other methods, as this can allow for breadth and depth of content coverage.

6.9.2 Lack of Exposure to Context-based Techniques

Bangs (2012:55) recommends that to minimise student frustration, which should be expected at the initial stages of introduction of the Context-based strategies, the teacher can adjust tasks given to students to an appropriate level of difficulty. A similar recommendation is made by Mostert (2007:439), who found that in the use of the Case method, limiting the depth of case analysis may encourage student engagement in class (see Chapter 3, section 3.6.2)

Research participants also made various recommendations, which are aimed at mitigating the challenges posed by students and teachers' lack of exposure to Context-based learning strategies. One recommendation is that students need to be orientated to the use of these strategies and time should be created where they will prepare and practise, under the guidance and supervision of the teacher, until they reach a stage where they are able to work independently. A further recommendation is that students should be exposed to the use of Context-based learning at early stages in their schooling so that when they reach the Further Education and Training (FET) phase or higher education, they are already initiated in the use of some of the methods entailed in Context-based learning.

6.9.3 Resistance to Change

Taconis *et al* (2016:9) believe that teachers' willingness to embrace change is one other factor that is of critical importance in the efforts to adopt a Context-based approach. It is for this reason that a recommendation is made that the ideas and rationale behind the use of this approach should be made known to teachers. Fensham (2009:10) notes that teachers are usually not involved in choosing contexts and have to use the contexts stipulated in the curriculum. However, it is recommended that teachers and students be afforded the opportunity to choose contexts, as this can ensure that relevant contexts are chosen. Fensham (2009:10) believes that the knowledge teachers have about their students puts them in a good position to share ideas on contexts that may be relevant and of interest to students, who may even provide immediate feedback on the chosen contexts. Teachers may also find it to motivating when they engage with topics and contexts they have chosen themselves rather than with contexts imposed on them. Trimmer *et al.* (2009:1) further recommend that in addition to the new material and skills that which

are required to adopt the Context-based approach, teachers will also need an adjusted or new philosophy of teaching, which is something that can be assisted by the availability of opportunities for professional development (see section 3.6.3, Chapter 3).

The empirical study recommended that, as a way to introduce teachers to the Context-based strategies, workshops should be arranged for teachers where they will be able to ask questions and get more clarity on different aspects related to the use of Context-based strategies. The study also recommended that demonstration lessons should be conducted by teachers who are well versed in the use of Context-based strategies where other teachers will be invited to observe those lessons. These suggestions may serve as a platform to give teachers an opportunity to raise their concerns and share their views. Teachers may feel empowered and confident, which may reduce possible resistance to adopting a Context-based approach.

Tharayil *et al.* (2018:5) recommended several strategies to reduce student resistance and they include: explaining the course expectations and how they can be met by the new strategies introduced, explaining the activity expectations, using facilitation strategies such as walking around the room, approaching the non-participants, using encouraging gestures, inviting questions from students, giving the opportunity to provide feedback, and rewarding participation. It was also recommended that teachers should develop a routine for introducing new strategies and also introduce them at an incremental pace. The empirical study further recommended that teachers should involve students when introducing the Context-based strategies. The study recommends that when students' views are acknowledged during the planning stages of introducing change, they will feel valued and see the importance of adopting these alternative strategies in learning.

6.9.4 Class Size and Resources

It has been noted that schools need to have rooms equipped with resources such as audio-visual aids, for example, in Problem-Based learning sessions where presentations have to be made, which is something that may be unaffordable. With regard to this (AlBuali & Khan; 2018:38), it is recommended that only a few rooms could be equipped with such resources while the other ones are equipped with manual devices such as whiteboards and flipcharts. A recommendation was also

made in the empirical study that teachers may arrange with the local media houses to bring to school unsold newspapers and magazines, as they may contain articles that are relevant to the subject matter dealt with in class. Students would then have free access to these publications, which will help them connect the theory they learn in class with the real world. To deal with complexities of big classes, a suggestion was also made that teachers can always put students in groups. Once a group task has been completed, one group member may be requested to present the work of the group to the entire class. The teacher can then find teachable moments as the groups present their work. The study also recommended that teachers may also arrange to use bigger venues like a school hall where a planned activity requires more space (see section 3.6.4, Chapter 3).

6.9.5 Assessment and Grading

Literature recommends that in addition to the usual methods of assessment and grading, teachers may incorporate alternative methods, for example the use of authentic assessment (see chapter 3, section 3.6.5). Mueller (2005:2) recommends the use of authentic assessment, which includes methods which necessitate students to carry out real-world tasks in order to demonstrate ability to meaningfully apply their knowledge and skills. Calma and Draper (2010:3), asserts that authentic assessment seems to differ from the conventional methods of assessment in that it specifically refers to connecting assessment with real-world practice, e.g. through simulations where students are required to create products or performance that apply to situations outside of the classroom.

In order to assess progress made by students when using context based strategies Smith (2010:24) recommends that teachers should incorporate alternative methods of evaluation, e.g. portfolios and journal entries compiled by students and self-evaluations in addition to the usual assessment tasks. Empirical study also recommends the use of alternative methods of assessing student-learning when using Context-based strategies, e.g. to assess the impact of Service-learning a suggestion was made that students can write individual reports on what they have learnt from their service experiences. Teachers can also arrange sessions where students will be reflecting on how their service experiences related to the theory they have learnt in class and how they used that theory to assist where they were placed.

In an attempt to minimize the challenge of having to deal with unexpected answers from students when using Context-rich problems, Bangs (2012:55) recommends that the teacher can give students a grading rubric that serves as a guideline on what is expected from students in completing a task. The use of rubrics as a way to assist teachers in grading the Context-based activities is also noted in the empirical study. The empirical study further recommended that teachers should be trained in designing rubrics, as some may not be used to using it as a grading instrument and students should also be orientated in how the rubrics work.

6.10 FINDINGS ON THE BEST PRACTICES OF CONTEXT-BASED STRATEGIES

The literature and empirical evidence have found positive results linked to the use of various strategies which form a Context-based approach proposed by this study in improving the students' understanding and enriching their ability to apply the theories and abstract Economics concepts in real-life situations.

6.10.1 Case Method

Conway (2012:42) found that in a study where the effectiveness of the Case Method was investigated, written tests and other formative assessments administered after students had been exposed to this method showed most students demonstrated amongst other competencies the ability to apply the relevant concepts effectively in new circumstances, use concepts effectively in analysis, combine these concepts with others, i.e. they could synthesize information. Most of the students also demonstrated higher-order mastery and retention of concepts than in classes where a Case method was not used in teaching (see section 3.7, Chapter 3).

Volpe (2015:15) also found from the studies evaluating the benefits of using Case method that students exposed to case discussions in the course, International Trade Policy, had an improved grasp of the theory and did better in examination questions requiring analysis of real-world situations using theory. Again, students in a Development Economics course taught with the Case method also reported that the use of cases helped them to learn Economics and they felt that cases make a classroom much more real. The effectiveness of the Case method is also noted in

the empirical study. As a research participant explained, after starting to use case studies in the class, some of the concepts, which initially seemed not related to daily life, became clear and their connection to the real world became apparent (see section 3.7, Chapter 3).

6.10.2 Context-Rich Problems

Kitaoka (2013:107) notes the results of a quiz that students completed individually a week after they had worked on a Context-rich problem using a Cooperative learning strategy known as think-pair-share. The results of the quiz showed that the students demonstrated better understanding, improved logical thinking and enhanced application of Economic theory to actual economic problems (See section 3.7, Chapter 3).

Joann Bangs of the college of St. Catherine in USA also developed and applied three Context-rich problems in the principles of micro-economics class, which were meant to illustrate the following Economics concepts: profit maximization and the shut-down condition in the perfectly competitive firm, price discrimination, and oligopolistic competition. The results of this application showed an improvement in class discussion and group work; students also showed creativity in their responses and they also managed to apply relevant Economic concepts in solving the Context-rich problems they were assigned (Bangs, 2007:10) (see section 3.7, Chapter 3).

The empirical study also found that students demonstrated the ability to apply subject knowledge to provide solutions to the Context-rich problems the teacher posed to them. The use of Context-rich problems also contributed to the development of higher-order skills among the students as they demonstrated the ability to first analyse the Context-rich problems and to evaluate different solutions they proposed.

6.10.3 Service-Learning

Sullivan (2013:7) reports that in a study on Service-learning at the University of Maine in the US, the faculty found that Service-learning enables students to apply their subject knowledge in the real world. As a result of this enhancement students demonstrated better analysis of problems, improved critical thinking and cognitive

development. Richards Elliott (2009:271) also found that in a study where Service-learning was applied in a Development Economics class, students reported that this strategy improved their understanding of development economics. Students reported that a learning process that uses lectures in conjunction with service hours helps them to have a chance to reflect on the development policies, to analyse and apply them and they recommended that Service-learning should continue (see section 3.7, Chapter 3).

The research participants mentioned that Service-learning seems to develop students' interest in the subject as it gave them an opportunity to make connections between what they learn from the textbook and how it is relevant to their lives. The pedagogy also allowed some of the students to use their subject knowledge to assist in solving real-world problems in their communities. Service-learning not only benefited the communities; as a research participant mentioned, that by offering the service at a particular school, it was then possible to link the subject theory to practice and to see the real-life application of some the abstract concepts that students usually learn by rote.

6.10.4 Problem-based Learning

Regarding the impact of PBL on enhancing students' ability to apply content knowledge, De Witte and Rogge (2012:6) report on a study by Dochy, Sergers, Van den Bossche and Gijbels investigated a link between Problem-based learning and student knowledge and knowledge application. According to De Witte and Rogge (2012:6) that study found that PBL had a positive and statistically significant effect on students' application of knowledge (see section 3.7, Chapter 3).

Research participants also mentioned that Problem-based learning affords students an opportunity to connect to the topic which they are investigating, because in that process they are able to apply the economic theory and concepts which they have already learned. One participant stated that in Problem-based learning, students also learn new concepts, which may actually be the concepts the teacher wants them to learn during the problem-solving process. Furthermore participants mentioned that Problem based learning puts students in a decision-making position. Students are therefore forced to apply the economic theory or concepts they have already learned

when evaluating the probable solution and in finally making a decision or proposing a solution to the problem.

6.11 CONCLUSIONS

The aim of this study was to find out how the teachers can create a Context-based Economics teaching and learning environment to enrich the students' application of Economics theories and abstract concepts in the real world. This was prompted by the observation that Economics students are often unable to link the classroom and textbook theory with the outside world. Students struggle to make connections between the abstract Economics concepts with their daily lives and as such they often show deficiencies when it comes to the application of their content knowledge. The result is that students end up failing to see the value of this subject in their lives.

It is against this background that the study concludes that one contributing factor why Economics students' difficulty in applying their content knowledge in real life is the dominant use direct, teacher centred, or a lecture method in teaching this subject. This approach which is often referred to as a chalk and talk approach is heavily reliant on the textbook and is mostly classroom confined, thus making the subject very theoretical and abstract to the students; hence, their inability to connect it to their daily lives. The study concludes that there is a need to ensure that teachers strive to teach the abstract Economics theories and concepts within a real-life context so that students can start to see how the subject relates to the real world. This will also give them a picture of what they might come across after they have completed their studies and become active and independent participants in the economy. The study thus concludes that there is a need for a paradigm shift in Economics teaching from a highly Content-based, lecture-based approach towards a more Context-based approach.

The study concludes that a Context-based approach will, amongst others, enrich the students' ability to apply Economics theories and concepts, contextualise the subject content, enhance their ability to transfer learning, and also to develop the students' higher-order thinking skills. The attainment of these competencies will contribute towards the realisation of Economics literacy among students, which is the overarching goal of teaching this subject. The study also concludes that a contextual

teaching and learning environment can be created in Economics by incorporating other pedagogic methods such as Case Method, Context-rich problems, Service-learning, and Problem-based learning. These methods were found to have the potential to provide context to Economics content.

As it is often said that change is not always an easy task, the study also concludes that the adoption of a Context-based approach will not be an easy and smooth process as desirable, since there are challenges that might be encountered in the process of adopting this approach. The study concludes that there are plausible challenges that should be acknowledged and for which efforts should be made to mitigate their impact. The time factor has been identified as one of the challenges, as teachers usually cite limited time for curriculum coverage as a reason why they may not want to use Context-based strategies. It is noted that a lack of exposure to Context-based techniques by teachers and students may act as a barrier in the adoption of this approach. Coupled with lack of exposure is resistance to change, which is often demonstrated by teachers and students who may not want to shed their customary roles in the teaching and learning process. Class size and resources have also been cited as possible challenges in incorporating Context-based strategies, as teachers often cite classes with a large number of students and which are short of resources as impediments in their efforts to use Context-based strategies. The study further noted that assessment and grading are notable challenges to using Context-based strategies, as teachers have become used to the conventional methods of assessment and grading of students' work.

In the light of these challenges the study concludes that a gradual incorporation of various Context-based strategies will lead to a full-scale adoption of a Context-based approach in Economics education and this can be facilitated by the prevalence of certain conditions. The study identified that teachers as well as students need to be properly orientated in the use of Context-based strategies. There is also a need to identify purposes for using various Context-based strategies. Furthermore, both the teacher and the student always need to be thoroughly prepared when using these strategies. The physical classroom setting may also need to be rearranged from the traditional layout to a more interactive layout. Teachers and students will also need to change their customary roles in class, for example, the teacher is required to relinquish the role of a dominant figure in class who is in charge of transmitting

knowledge. On the other hand, students also need to shed the role of being passive receivers of knowledge. There is also a need for collaboration among all stakeholders and institutional support for implementation of Context-based strategies. Despite all the possible challenges in the adoption of a Context-based approach in Economics education, the study concludes that based on the best practices which have been noted on the use of the pedagogic methods recommended in this study, a Context-based approach in Economics education has the potential to enrich the students' ability to apply the Economic theories and abstract concepts in real life.

6.12 A DIAGRAMMATIC REPRESENTATION OF A CONTEXT-BASED APPROACH IN ECONOMICS EDUCATION

The Context-based approach proposed in this study is based on the use of teaching methods that have a specific goal of putting the subject content within its real-life context. This approach is intended to enrich students' ability to apply the theories and abstract concepts they are taught. The attainment of this goal depends amongst others on the use of the teaching methods that incorporate activities that encourage five essential components of learning identified by Jameson-Meledy (2015:3) as: Relating, Experiencing, Applying, Cooperating and Transferring or REACT. In a contextual teaching and learning environment the strategy used in pursuit of realisation of these five components is often referred to as REACT strategy. This strategy will be used to introduce the Context-based approach in the teaching and learning of Economics. It has been noted by Ozbay and Kayaoglu (2015:93) that the teaching activities based on the REACT strategy help the students to analyse the information and make connections between the academic content and the context of their field and further help them to experience activities in collaboration with their peers.

Implementing a Context-based approach through the use of a REACT strategy will see a combination of the use of the following pedagogic methods: Case Method, Context-rich problems, Service-learning and Problem-based learning in Economics. These pedagogic methods contain elements which seek to develop an environment of learning that affords students opportunities to: Relate the material they learn to their prior knowledge; Experience what is contained in the subject content by

practising, exploring and making own discoveries; Apply their theoretical knowledge in the real-world situations; Cooperatively or collaboratively learn the content material with other students; and Transfer their learning to contexts different from where learning occurred.

The diagram below demonstrates how the elements or activities of the four pedagogic methods used in this study combine in a REACT strategy to implement a Context-based approach.

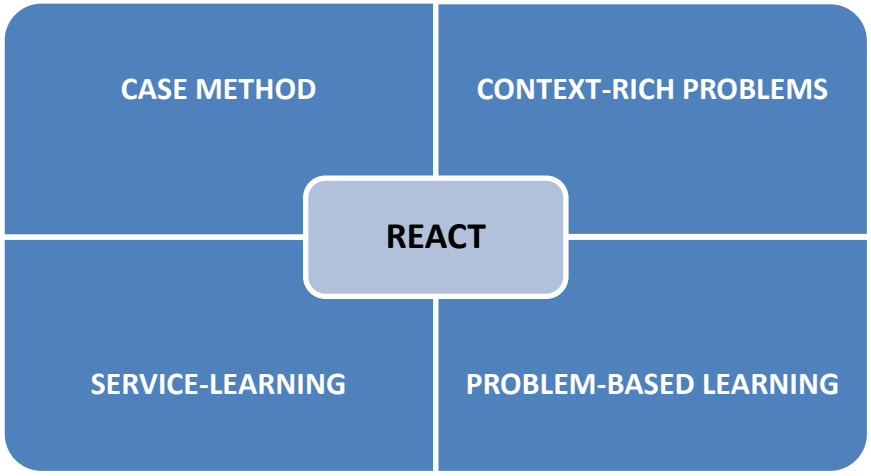

Figure 6.1: A Context-based approach through the use of REACT strategy

The above diagram illustrates a Context-based approach made up of the four components namely, Case method, Context-rich problems, Service-learning and Problem-based learning which are represented by the four quadrants. In the middle of the quadrants the five elements with the acronym REACT which are envisaged by contextual learning can be seen to be holding together the four quadrants showing that all four components use the activities embedded in a REACT strategy. Therefore the four pedagogic methods all contribute in various ways to develop students' ability to relate what the newly gained knowledge to their prior knowledge, to experience in authentic environments what they are learning in class, to apply their theoretical knowledge, to learn cooperatively and collaboratively with their peers and to transfer their knowledge to context different from where the knowledge was acquired.

- **CASE METHOD:** students learn economics concepts through the use of real-world cases in class. Students are required to apply text-based theory to analyse the actual economic events.
- **CONTEXT-RICH PROBLEMS:** A student is put in a position where s/he has a plausible motivation to solve a particular economic problem. When dealing with these problems a student first needs to transfer what he or she understands by a certain concept to a new situation before he or she can apply tools related to the subject such as formulas or diagrams to arrive at a solution or to make a decision. Context-rich problems can be included into other active learning techniques used in class, such as cooperative learning to allow students to see these kinds of problems in many different contexts.
- **SERVICE-LEARNING:** Students are placed in organisations or institutions where they apply their theoretical knowledge by rendering a service. Students are connected to the real world by having to provide a valuable service, which is linked to the course content to an organisation such as a governmental institution or a non-profit seeking organisation.
- **PROBLEM-BASED LEARNING:** Students are given a situation, e.g. a problem which they have to solve collaboratively or in self-study. The problems are usually framed in the context of a particular subject and presented in conjunction with a set core theories or concepts. Students are empowered to conduct research, integrate theory and practice, and apply knowledge and skills to develop a viable solution to a defined problem.

It is therefore through the REACT strategy that a Context-based approach can be implemented in Economics education as the strategy is inclined at promoting the use of methods that encourage linking the subject content to its context, authentic learning, and affording students the opportunity to see the relevance of what they are learning.

6.13 CHAPTER SUMMARY

The chapter reported on the findings and recommendations from the literature study and empirical study on the five objectives of this study, namely the need for a Context-based approach in Economics education, possible components of a Context-based approach, identifying the conditions conducive to the successful

implementation of this approach, identifying the plausible challenges in the implementation of a Context-based approach and investigating the best practices reported on the use of various components of a Context-based approach.

The study found that a need for a Context-based approach in Economics education exists as sole reliance on the direct approach or the lecture method may come short in assisting the students to see the relevance and practicality of the abstract concepts they learn in class. It was reported that a Context-based approach seems to have a potential to enrich students' ability to apply abstract concepts in real-life situations, which is made possible because this approach contextualises Economics content. The Context-based approach also seems to enable students to transfer their learning, i.e. to use their content knowledge in different contexts and that it can also help to develop the students' higher-order cognitive skills.

The chapter also demonstrated that Case Method, Context-rich problems, Service-learning and Problem-based learning could be used as some of the contextual teaching and learning strategies to form part of a Context-based approach in Economics education. It was, however, noted that for these strategies to be incorporated successfully into Economics teaching there are a number of conditions that need to prevail, which amongst others are: orientation of both the teachers and students in the use of these strategies; identification of purposes for which these strategies will be used, more preparation; change in the physical layout of the classroom and adaptation of the roles of teachers and students in the teaching and learning process. The chapter further reported that there could be challenges that might impede the adoption of this approach and they include; time constraints, lack of exposure to Context-based strategies, resistance by teachers and students to change, classes with big numbers and lack of resources, rigid systems of education and problems relating to assessment, and grading of student work. The chapter reported that both the literature study and empirical study demonstrated positive effects of the Context-based strategies in Economics teaching. Conclusions of the study were presented, and the visualisation of a Context-based approach was done through a diagrammatic representation.

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Appendix A: Ethics Clearance

Faculty of Education

21-Aug-2017

Dear **Mr Gailele Sekwena**

Ethics Clearance: **Context Based Approach to enrich students application of abstract economics concepts**

Principal Investigator: **Mr Gailele Sekwena**

Department: **School of Education Studies (Bloemfontein 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-HSD2017/1068**

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

Prof. MM Mokhele
Chairperson: Ethics Committee

Education Ethics Committee
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T: +27 (0)51 401 9683| F: +27 (0)86 546 1113 | E: NkoaneMM@ufs.ac.za
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Appendix B: Letter Requesting Permission to Conduct Research in an Academic Institution

APPENDIX : LETTER REQUESTING PERMISSION TO CONDUCT RESEARCH IN AN ACADEMIC INSTITUTION

Researcher:
GL SEKWENA

Email@email address
sirkwena@vodamail.co.za

Supervisor:
Dr MM Nkoane

University of Free State
Nelson Mandela Drive
Bloemfontein
0822004359
Email nkoanemm@gmail.com

31-07-13

INFORMED CONSENT:

Dear Sir/ Madam

I am a PhD student with University of the Free State and also a part-time lecturer at CUT Bloemfontein campus. I would like to ask your permission to allow me to conduct an academic research with Economics students at your institution. Only student who will give consent to be part of this research project will be included in the study. The research project titled:
(A Context Based Approach to enrich the students application of abstract economics concepts)

This study is about the use of context based teaching and learning strategies aimed at enhancing the student's application of economics theories and concepts which are often taught in high level of abstraction thus making it difficult for students to apply the content they are taught to the actual economic world.

I would like your students to participate in this research because they will be able to share their views with other focus group members comprising economics teachers and lectures on how best Economics topics can be put in relevant contexts in an attempt to improve their connection of theory and practise. Students also stand make more meaning out of what they learn in class and transfer their learning in different situations outside of the class.

The study will not expose the institution and students to any kind of risk. Students will also be assigned pseudonyms to protect their identities and data generated from this project will strictly be used for the purpose it was intended for i.e. creating a context based teaching and learning environment in Economics. The study will be conducted in such a manner that it does not interfere with the normal day to day activities of the institution and efforts will be made ensure that focus group meetings are scheduled such that they do not clash with classes which students attend.

While I greatly appreciate your institution's participation in this important study and value the contribution students can make, participation is entirely voluntary and the institution is under no obligation to be part of this study. If you grant me permission to undertake the study with your institution and an issue arise which makes you feel uncomfortable you may at any time withdraw the permission you granted.

If you experience any discomfort or unhappiness with the way the research is being conducted, please feel free to contact me directly to discuss it, and also note that you are free to contact my supervisor (indicated above).

Yours sincerely,

GL Sekwena

Please fill in and return this page. Keep the letter above for future reference

Title of research project: _____

Researcher's name: _____

Permission letter issued by:

Name and Surname: _____

Contact number: _____

- I hereby give you permission to conduct the abovementioned study at our institution.
- I understand what the study is about, the reasons for participation of the students and what the risks and benefits are.
- I give the researcher permission to make use of the data generated from participation of the students, subject to the stipulations indicated in the above letter.

Signature: _____ Date: _____

Appendix C: Teacher Consent Form

Researcher:
GL SEKWENA

Email@email address
sirkwena@vodamail.co.za

Study Leader:
Dr MM Nkoane

University of Free State
Nelson Mandela Drive
Bloemfontein

0822004359

Email@email address
nkoanemm@gmail.com

31-05-17

INFORMED CONSENT:

Dear Economics teacher

I would like to invite you as an Economics teacher to take part in this research project:

(CONTEXT-BASED APPROACH TO ENRICH STUDENTS APPLICATION OF ABSTRACT ECONOMICS CONCEPTS).

This study is about the adoption of context based teaching and learning strategies aimed at increasing the economics students real world application of the abstract economics concepts and theories.

We would like you to participate with us in this research because of your experience in teaching the subject Economics. We believe that you will be able to share your knowledge of various teaching methods that can be used to create contextual teaching and learning environment in Economics. The reason we are doing this study is to propose an approach that will enrich the students application of economic theories and concepts in situations they encounter in the real world thus enhancing the students connection of theory and practice.

We are going to assign you a pseudonym for this study to protect your identity. You will not be exposed to any kind of risk by participating in the study. Data generated from this study will only be used for the purpose the study was conducted for.

I am sure you will benefit from this study as teacher because during the data generating process, joint meetings with other Economics teachers and Economics students will be held where context based teaching and learning strategies will be discussed. You will also have an opportunity to observe how other teachers implement the context based strategies.

While I greatly appreciate your participation in this important study and valuable the contribution you can make, your participation is entirely voluntary and you are under no obligation to take part in this study. If you do choose to take part, and an issue arises which makes you uncomfortable, you may at any time stop your participation with no further repercussions.

If you experience any discomfort or unhappiness with the way the research is being conducted, please feel free to contact me directly to discuss it, and also note that you are free to contact my study supervisor (indicated above). Should any difficult personal issue arise during the course of this research, I will endeavour to see that a qualified expert is contacted and able to assist you.

Yours sincerely,
GL Sekwena

Please fill in and return this page. Keep the letter above for future reference

Title of the research project: .....

Name of the researcher: .....

Details of the participant

Name and Surname: _____

Contact number: _____

- I hereby give free and informed consent to participate in the abovementioned research study.
- I understand what the study is about, why I am participating and what the risks and benefits are.
- I give the researcher permission to make use of the data generated from my participation, subject to the stipulations he/she has indicated in the above letter.

Signature: _____ Date: _____

Appendix D: Student Consent Form

Researcher:
GL SEKWENA

Email@email address
sirkwena@vodamail.co.za

Study Leader:
Dr MM Nkoane

University of Free State
Nelson Mandela Drive
Bloemfontein

0822004359

Email@email address
nkoanemm@gmail.com

31-05-17

INFORMED CONSENT:

Dear Student

I would like to invite you as an Economics student to take part in this research project:

(A CONTEXT-BASED APPROACH TO ENRICH STUDENTS APPLICATION OF ABSTRACT ECONOMIC CONCEPTS).

This study is about the adoption of context based teaching and learning strategies aimed at increasing the economics students real world application of the abstract economics concepts and theories.

We would like you to participate with us in this research because we believe that your experience in studying the subject Economics can assist in the creation of a context based teaching and learning environment. The reason we are doing this study is to propose an approach that will enrich the students application of economics theories and concepts in the real world thus enhancing their connection of theory and practice and encouraging them to see the relevance and value of what they ate taught.

We are going to assign you a pseudonym for this study to protect your identity. You will not be exposed to any kind of risk by participating in the study.
I am sure the joint data generating meetings with Economics teachers, other Economics students and participants with real world economics experience from the public and private sector will be of value to you as discussions around context based teaching and learning strategies will be held. Data generated from this study will only be used the reasons why this study was conducted.

While I greatly appreciate your participation in this important study and valuable the contribution you can make, your participation is entirely voluntary and you are under no obligation to take part in this study. If you do choose to take part, and an issue arises which makes you uncomfortable, you may at any time stop your participation with no further repercussions.

If you experience any discomfort or unhappiness with the way the research is being conducted, please feel free to contact me directly to discuss it, and also note that you are free to contact my study supervisor (indicated above). Should any difficult personal issue arise during the course of this research, I will endeavour to see that a qualified expert is contacted and able to assist you.

Yours sincerely,
GL Sekwena

Please fill in and return this page. Keep the letter above for future reference

Title of the research project: .....

Name of the researcher: .....

Details of the participant

Name and Surname: _____

Contact number: _____

- I hereby give free and informed consent to participate in the abovementioned research study.
- I understand what the study is about, why I am participating and what the risks and benefits are.
- I give the researcher permission to make use of the data generated from my participation, subject to the stipulations he/she has indicated in the above letter.

Signature: _____ Date: _____

Appendix E: Interview Transcripts

Transcript No 1

THE NEED FOR AN ALTERNATIVE APPROACH IN ECONOMICS TEACHING AND LEARNING

Mabena: Ma'am, let me start by thanking you for making time to share your views and experiences as an Economics teacher on the nature and the teaching of this subject.

Bonjo Bee: Thank you, Sir, what I have come to realize about this subject is that there are certain concepts which learners can do practically as they are learning but **others** seem difficult to apply in daily life.

Mabena: Right, you mention that some concepts in Economics seem not to be practical and that is something which I have also noticed as a teacher of this subject and also through my lecturing experience. You find situations where you teach certain concepts but students find it difficult to relate them to real life and seem not to see how relevant they are or how they are applied in real life situations. Take the concept *Multiplier;* students find this concept to be something very remote and abstract and think it is something that exists only in the textbook. My question is that what intervention strategy can be used to assist students to make connections between these concepts and the actual economic world, I mean how can we bridge the apparent gap between theory and practice in Economics.

Bonjo Bee: I think the alertness and open-mindedness of students can play an important role. If they are observant of happenings outside of the class, they may be able to connect or link some of the topics they learn with the events outside of the class. If I may use the concept that you have just mentioned, the *Multiplier*, if they come across or read about any infrastructural development programme by government, they will know that government is going to spend money on that project and that some of the unemployed people will get jobs in that project. An observant student will realize that the initial investment by government in this project will lead to a chain reaction of income and expenditure throughout the economy which in the end will lead to a bigger increase in national income compared the original investment. If they can be able to do this then they will be able to link this process with the concept *Multiplier*.

Mabena : From your experience do you think that students are able to do that?

Bonjo Bee: No, not all of them just a few in a class can be able to. The rest will not see that connection and they don't realize that they actually come across real-life situations that are described by that concept.

Mabena: But then how do they perform if you test them on the concept?

Bonjo Bee: They pass because most of them focus on memorization of the definition of this concept and also its formula.

Mabena: What can then be done to bring such concepts closer to the students as the textbook might not have practical examples.

Bonjo Bee: I may ask them to dramatize the concept we have dealt with and this will put them in the shoes of the real economic actors. Drama can then afford them an opportunity to make the connection between the concept and their daily life. I might as well use relevant newspaper articles or look for case studies which cover a particular concept which I am teaching at that time. This will help them to see that the theory in the textbook is applicable in real life.

Mabena: Do teachers usually use such strategies?

Bonjo Bee: No, no, no, no, they don't and that is one factor that is contributing to the problem we are talking about. Teachers seem to be comfortable with the lecture approach in class; hence I believe that a concerted effort needs to be taken to incorporate other strategies in the teaching of this subject. I think when we teach we should always try to provide students with the real life contexts where these economics concepts are applicable. In this way students will then be able see the relevance of Economics and will be able to connect the textbook theory with the real world.

Mabena: Besides linking theory and practice, what else will the Economics students benefit from contextualisation of Economics teaching?

Bonjo Bee: Students will be able to make sound decisions, choices and can also improve their problem-solving skills. Some of them live recklessly, e.g. their use of money and the choices which they make, when in fact they were supposed to be transferring their economic knowledge into their daily lives to be better citizens. I think the theoretical teaching of economics does not help us to communicate to students this subject and allow them to use it to make choices and sound decisions. Take the concept *Opportunity cost* as an example; students can learn how to prioritize and how to spend money when they have it.

Mabena: From what you have said there seems to be a need to change the approach which we have long adopted in Economics teaching.

Bonjo Bee: Absolutely, because the chalk and talk approach is teacher centred and does not encourage active learning. It leads to rote learning as students end up being comfortable with their passive role in class. They end up achieving only surface learning, as in most cases they simply memorise information instead of gaining deep learning and ability to use Economics in their daily lives.

Mabena: Besides using newspaper articles and case studies what other strategies can bridge that gap between theory and practice for Economics students.

Bonjo Bee: Students may also get into the communities and use their knowledge of the subject to help community members with the needs or problems they have identified. In this way they will get the opportunity to practice what they have learnt in class to solve real life problems.

Mabena: What could be the benefits of this community service?

Bonjo Bee: Both the student undertaking the service and the community because for the student, this is an opportunity to put to practice their knowledge and gauge their understanding of what they have learnt. This will also reinforce what they have been doing in class and will retain it for a long time. Community will also benefit as they will be having someone knowledgeable in the areas which are of concern to them to help finding solutions. They are also likely to learn from the student who is assisting them and may end up being independent and empowered. For an example, most the communities live in poverty and a student can target such communities to try and bring improvement. Students can use knowledge gained from the topics such as population growth, poverty, unemployment and economic growth to make them aware of the need for family planning, measures to reduce unemployment and poverty levels. Students will also be able to see first-hand these contemporary economic issues and link them to their textbook theory.

Mabena: The sort of community involvement that you are referring to seems to resemble what is known in pedagogic terms as Service-learning. I think it also has a lot of potential in enhancing the students' ability to apply economics.

Bonjo Bee: Ok, I believe that this Service-learning has a lot of potential as it gives the students an opportunity to learn by doing. It will deepen their understanding of the subject and they will also see the relevance of the subject in real life and use it to solve real problems in the society. As they are engaged in the community service they are forced to get more information on the problem they want to address and analyse it, then they will synthesize that information, and propose and evaluate a solution. This will improve their responses in answering the higher-order questions in tests, assignments or exams when they return to class. This will also help them with the data response questions such as cartoons or scenario-based questions. I have noticed that most of them struggle when they have to interpret a cartoon and link it to some concept they have learnt in Economics. Even with the questions where they are required to first read a case study, for an example, they still don't link the case study with some topic or concept they were taught. They will read a question and take a word or term contained in the question, look for a paragraph in the case

study where that term is mentioned and then rewrite the whole sentence from the paragraph where that term is mentioned.

Mabena: That is something that I have also noticed and it shows that they don't really understand what the cartoon or case study is all about as they can't connect it to what they have already learnt. What can you suggest should be done to encourage teachers and students to adopt the use of alternative methods in teaching and learning?

Bonjo Bee: I think the regular use of the methods we have talked about is long overdue and we need to a platform where we can sit down, share ideas and best practices. Maybe we can come up with an approach that will make students see the relevance of Economics and its applicability in real life and I think in this way this subject will be more interesting to them. Workshops should be arranged to orientate teachers into the use of these alternative methods so that when they go to class they feel confident and empowered to use them. Teachers should in turn also gradually introduce these methods to students. They should try to encourage students to self-study and collaborative learning and expose them to doing research using internet, e.g. searching for e-books and animated case studies. I think when other teachers and students who were initially not keen on trying new methods realise the difference made by the use of these alternative methods the change process will be accelerated.

Mabena: I cannot agree with you more, that platform is needed as it can lead to the improvement in our practice. Thank you for sharing your ideas with me and I believe they will go a long way in addressing the problem of my study.

Transcript No 2

THE NEED FOR AN ALTERNATIVE APPROACH IN THE TEACHING AND LEARNING OF ECONOMICS

Mabena: Good afternoon, Ma'am. I believe that you studied Economics in high school and it was also one of your major subjects at University.

Danoms: Afternoon, Sir. Yes I did.

Mabena: Can you kindly relate how you experienced Economics as one of your subjects. How did you find this subject, was it easy, difficult, was it practical or was it something complex?

Danoms: Well one thing I can about Economics is that it is a practical subject as it talks about things that we see in our daily lives. Unfortunately way the subject is taught makes it to be so abstract that you find some of the topics or concepts you are introduced to look so detached from our lives. Even though I used to pass this subject most of the time was because of the drill method which my teachers used and I was also able to memorise a whole lot of information.

Mabena: But were you confident of your knowledge of the subject?

Danoms: Not necessarily because it was not always easy to explain some of the things in Economics to someone who does not do it or I can say to a layman. I would really not see how some of the concepts we were taught actually relate to the actual world or how relevant they are in my life. Sometimes I just saw the as bombastic terms with which I can do nothing. I remember one day during a lesson on demand and supply, the teacher asked one student if he goes shopping and finds that the price of a certain products have increased does he actually think of some Economics concepts that he might have come across. The student's answer was that he does not necessarily relate the price increase to Economics but he just sees a price increase and almost all of us in class were in agreement with that student.

Mabena: Was that still the case when you got to varsity?

Danoms: Yes it was, as you know at university they just lecture there is no time for spoon feeding. That was frustrating because as I have mentioned Economics was my major and I was also going to teach it once I completed my studies. I was asking myself how am I going to teach something that I can't also relate with.

Mabena: Basically that is also my experience. Students seem to be more content with just studying to pass and they don't seem to be interested in how Economics connects or relates to their daily lives.

Danoms: Yes it was quite difficult to make such connections or even to put to use what we were taught in class. I think the approach which our teachers used was mainly focused on pushing us to pass at the end of the year but at the end students end up not being able to transfer what they learn in Economics to real life situations. Sir if I may ask you in your experience what could be the reason for all this?

Mabena: I think one reason could be that with the direct method of teaching that most of us adopt in teaching focus is more on finishing the syllabus and ensuring that students know things by heart so that they can pass tests and exams. This does not do much to assist them to make Economics a useable subject.

Danoms: I tend to agree with you sir.

Mabena: But today you are a teacher, do you still have the same problem.

Danoms: Things got much better when we started with the subject methodology course. This is a course where we deal with the pedagogic knowledge. We are exposed to amongst others, the different methods of teaching, teaching aids, and different learning styles.

Mabena: How did that course help you with the problem that you faced?

Danoms: In that class we had to prepare and present the lessons and I remember the lecturer had introduced us to using newspaper articles and case studies in teaching. You will be expected to make copies of that article or case study that relates to the topic you will be presenting to your fellow students teachers who will be acting the role of learners. One was then forced to start reading newspapers or searching for case studies with the intention of finding something that is connected to the topics covered in Economics. In this way I started to make sense of the concepts which I initially thought were not related to daily life. This also improved my understanding of Economics as I was now able to see that it is really a practical subject, it is something that happens every day.

Mabena: To what extent are you able to use this strategies that you have learnt during teacher training in your classes?

Danoms: I try but I guess due the amount of work one has to cover I always resort to the chalk and talk method so as to avoid falling behind with work schedule. This is also the method which I see most of the teachers still using at my school. Students are also reluctant when you ask them to search for newspaper articles that capture the topics they learn in class. Even when you give them a case study they seem to be confused and frustrated and I

think it is because they were never exposed to doing things on their own and some are still comfortable with just listening and answering when requested to do so by the teacher. One is therefore sometimes forced to teach the way we were taught.

Mabena: But then don't you think you should take initiative to implement the other techniques you have been exposed to.

Danoms: Yes I do but the urge to do as others are doing is always strong as you also want to avoid criticism from your colleagues. And like I have mentioned the duration of the periods does not always allow you to experiment with new methods.

Mabena: Anything that can be done to change the situation?

Danoms: I think bold steps need to be taken to incorporate other methods in the teaching of Economics. For example we should try to teach in such a manner that students are encouraged to see the relevance of what they learn and the applicability of that content in their lives. Context-based learning can do much to put the abstract Economics concepts in real life contexts so that they are brought closer to the students. Using case studies and newspaper articles can assist to demonstrate the contexts in which economics happens. Furthermore I have also learned about a method known as Problem-Based Learning, where the teacher develops a problem around a concepts which he/she wants the students to learn. The students are given this problem mostly in groups and are required to use their existing knowledge of Economics and do further research to find a solution to the problem. In so doing they apply their existing knowledge and they also learn new things as they conduct research.

Mabena: Will it be easy to incorporate such methods in economics education?

Danoms: I don't think it will be that easy. Teachers always want to cling to the tried and tested methods and may not want to change. They may not want to lose the class control they usually maintain with their dominant role in class. Students may also not be keen in doing things differently in class especially if they have to be active participants in class and have to take responsibility in learning. They may not want to abandon their passive role in class where less is expected of them during the lesson. Parents may also not be supportive of this new methods which make it difficult for them to help their children with schoolwork as they themselves were never exposed to such methods.

Mabena: You have said a mouthful and I think we can go far with the inputs you have made. Let me thank you for your time and your interest in this research project. Feel free to contact me whenever there is something that you may want to add.

Transcript No 3

POSSIBLE COMPONENTS OF AN ALTERNATIVE APPROACH IN ECONOMICS TEACHING AND LEARNING

Mabena: Welcome lady and gentlemen to this meeting. As you already know today we will still at look at the nature and teaching of the subject Economics and your experiences in the subject as student teachers majoring in this subject. We will further focus on whether there is a need to infuse are other methods into the teaching and learning of this subject and what those methods are.

Kaiser: Like I said before, I have always liked Economics as a subject. Studying this subject only from the textbook made it difficult to relate it to real life as some textbook do not provide concrete examples. This was despite the fact that the teacher always told us that Economics is everything we do it happens in our daily lives.

Sebata: With me, I found the language and the concepts used in Economics quite difficult to understand as compared with other subjects for example Business studies. I can say it is easy to see how most of the concepts used in Business studies relate to the business world and to your daily life. With Economics **Haai**! It is a different story. At times when you ask for more clarity e.g. the concept elasticity, the teacher would tell you "Just study the elasticity is elasticity." One would then be forced to memorise the definition of elasticity and its kinds so that you can pass.

Mabena: But were you able to pass the subject?

Sebata: To be honest with you, if you could just do as teacher told you it was possible to pass. You could even get a distinction but all I am saying is that I did not pass because I understood the subject but because I could memorise a lot of information.

Sizijo: I also liked the subject and when I studied it for the first time I could not really understand what this subject is all about as compared to the other subjects I did e.g. Accounting which deals with keeping books for a business or recording its financial transactions and Business studies which is concerned with managing a business enterprise. Therefore it was easy to see how these two subjects relate to life and how their subject content could be used in the daily life. With Economics I always asked questions like, who is Economics or does this Economics refer to the government.

Mabena: What was the reason for that?

Sizijo: I think it is because most of the concepts that we got exposed to were very abstract and did not seem to be part of daily life.

Kaiser: I think also the approach used in teaching this subject contributed a lot. It seemed as if teachers knew the subject for themselves but could not deliver the subject matter in such a manner that one can connect it to life and see it relevance to one's life. We were mainly drilled to memorise so as to pass tests and exams but not to achieve a deep understanding of the subject and how useful it is to one's life.

Mabena: Do you suggest that the direct method of instruction does little to help the students to link the textbook theory with the practical world.

Sebata: Personally I think this teacher-centred approach is not effective in bridging the gap between theory and practice. I think if the teacher prepares to start a new topic or teach a certain concept he/she should first give students questions to carry out a research on that topic because with that research they will be connected to that topic using their prior knowledge and combining it with new information. In this way they might be able to apply their existing economic knowledge on finding more about the new topic they will be taught.

Kaiser: I agree with my colleague here, teachers need to be creative in their approach such that students are able to be involved in the learning process and ultimately become competent to use this subject in their daily lives.

Sebata: I would really say teachers need to change their approach in teaching Economics, they need to adopt a more flexible approach to help the students to make connections between the subject theory and its practical application.

Sizijo: I have also noticed that teachers rely on one method i.e. the textbook method. Teachers seem to be more comfortable with reading and explaining, they don't use other methods of teaching, e.g. role plays to demonstrate certain concepts in class. A role play for an example puts students in a situation where they are able to get a deeper understanding of the concept and how it actually applies in life.

Mabena: Ok, I do understand what you are all saying but what can be done to bring that real economic world into the classroom so that students can be able to see the relevance of the subject Economics.

Sebata: Teacher needs to be always updated with the current news in the economic world or other issues which have a bearing on the subject being political or social and share them with the class when treating topics which are related to them. They can for example, bring a case study, a newspaper articles or business magazine articles, news clips from the radio or

TV that are relevant to the concepts they are going to teach. This will demonstrate to the students that what they are learning in class actually happens in the real world.

Kaiser: I fully agree, the teacher can bring a newspaper article or a case study on inflation to class and distribute copies to the students and allow them to read it. He/she can then initiate a discussion of the article to have the students using their existing knowledge on Inflation to identify the causes of Inflation according to the article and to propose solutions or critique the measures taken by the monetary authorities in dealing with the situation described by in the article. This discussion also allows the students to transfer their knowledge of Economics to providing solutions to different situations. The teacher's role is to come in here and there to fill the gaps, to keep the discussion in the right track and clarify misunderstandings.

Sizijo: Additionally you can ask the students to watch the news and report to the class the next day which parts of the news bulletin they can link with what they are currently studying in Economics or what they have already learnt. The part on economic indicators can especially be relevant to make the connections with topics such as Exchange rates, Balance of Payments and Inflation. This is one way of teaching the economics content in its proper context and may benefit students to see how the textbook theory applies in real life.

Mabena: Thank you once again for your time and sharing your ideas and experiences. The suggestions you made can go a long way to in helping students to see the relevance of what they study in Economics and in their ability to apply the subject knowledge in real life.

Transcript No 4

POSSIBLE COMPONENTS OF AN ALTERNATIVE APPROACH IN ECONOMICS TEACHING AND LEARNING

Mabena: Good afternoon, and welcome to this meeting. Let me start by apologising on behalf of our team members Van der Sele, Pintha, Danoms, Sizijo, Kaiser and Sebata who cannot join us today due to some commitments. Anyhow, we can always continue with the meeting.

Omolemo: Afternoon, Sir, we can continue.

Mbali: Afternoon, Sir, yes, we have so much to say as we both studied Economics at high school and also at university level.

Mabena: Starting with the nature of the subject what is that you can say about i?.

Mbali: What I can say is that this one subject that needs high levels of thinking on the part of students. You also need to have an imaginative mind as some of the topics covered in this subject seem be so far from reality that it is not always easy to connect with them.

Omolemo: I agree with Mbali, although the subject is not necessarily difficult, one needs to be operating at high cognitive levels to make sense of some of its abstract concepts. I mean the topics which Mbali said are like far from reality. As a student teacher you need to have developed the skills to analyse, synthesise and evaluate information economic information to show that you master the subject.

Mabena. I get your point but do students always demonstrate development of such abilities.

Omolemo: Not always as students particularly when we were still in high school we were lazy we, always relied on our teachers.

Mbali: The thing is most of the time the teachers enjoyed to be in charge in the class and our involvement during the class was limited. As a result it would be difficult for us when we had to answer the section C questions, i.e. the essays.

Mabena: You also mention that the subject is quite abstract ...

Omolemo: Yes it is true although some topics are practical easy to relate to e.g. money and banking as it deals with what we encounter on daily basis, other topics that seem not easy to see in daily life e.g. that one of eh eh .... balance **what what** (trying to remember)

Ffi: (interjecting) balance of payments

Omolemo: (laughter) Yes, yes! balance of payments. Honestly speaking I could not see how that topics speaks to me.

Mabena: I understand that but what about the teaching of this subject.

Omolemo: Like Mbali mentioned, teachers were like the ones doing most of the work during class, they taught mainly using the textbook method.

Mbali: The teaching of Economics was not that different from other subjects, even in other subjects teachers will always read from the textbook, explain to us and write some notes on the chalk board. It was only here and there when we would be grouped to discuss some topic in class or given project or an assignment to do on our own.

Mabena: Was that method helping you to grasp the subject?

Omolemo: I can say to some extent it was helping because like we have mentioned there were some topics which just needed you to listen when the teacher was teaching and just study that work. But there were some topics it was difficult to follow what the teacher was saying.

Mbali: Yes, it is true because the teacher will be talking too much theory that appears not to be linked to things that happen around us.

Mabena: As student teachers are the any methods besides the one you mentioned that you got exposed to which can the bridge the gap between theory and practice?

Omolemo: One way is the use of role play in class. With a role play students are given a scenario based on real life economic issue which they have to simulate. The scenario is based on a certain concept which the teacher wants to demonstrate how it works in real life to students. Students are forced to use the economics knowledge which they already have in acting their roles in a scenario. They may be able to link theory and practice and apply what they already know to new situations and learn how the theory works in the actual world.

Mbali: Yes, I also believe that it is better if students could be afforded opportunities to practice what they learn so that they know why they are taught certain things and how to use their knowledge to solve the problems they might come across in life. Another strategy that can be used is what is called Context-rich problems. This is a question that is posed to a student which puts him/her in position where a problem also based on real economic issue has to be solved. For a student to solve such a problem he/she must use prior economic knowledge. The aim of this strategy is actually to teach economic theories and concepts the way they happen in life or in the context they occur.

Mabena: What dimension will such contextualisation of economics add to teaching and learning of this subject?

Omolemo: I think it will improve student participation in class and students will also become active in constructing knowledge as learning things in context assists them to see and understand how they happen and they can be able to analyse them, to question, to comment and make some conclusions.

Mbali: Students will also be able to realize that some of the terms they use daily actually refer to the concepts they learn in Economics, e.g. we always talk about the satisfaction that we got after using a certain product or after buying it not knowing that satisfaction is actually the concept ***Utility*** we have been taught.

Omolemo: Mbali is right, I can also think of another example, in everyday language when we save by buying a product at an amount lesser than what we were prepared to pay we always refer to that as a bargain or a special when in actual fact that saving we make is the concept ***Consumer surplus***.

Mabena: I cannot agree with you more, I think for quite a long time we have been teaching Economics in isolation from where it happens.

Omolemo: This way of teaching will also actually help students not only learn by memorising information for tests but to learn in such a manner that they are able take what they have learnt in class or from their textbooks and use it in other situations they may face in life. Learning Economics thus become worthwhile as it now becomes a useable knowledge.

Mbali: This approach will not only help students outside of the class. We know students are always comfortable with questions that only need recall or the lower-order questions. I think they will now be in a position also to be confident in answering questions that require application of the concepts and theories they have learnt. Students will then be able to acquire higher-order cognitive skills.

Omolemo: That is true when students have developed the higher-order skills like, analysis, synthesis and evaluation they don't just have to recall information they have memorised and do cut and paste type of answering questions but will have to demonstrate understanding of Economics work.

Mbali: But that does not mean that the lecture method or textbook method has no value in teaching Economics but there is a need also to adopt or incorporate other approaches in Economics like this contextual teaching and learning.

Mabena: I guess what we need to do is to go and find more about the use of the strategies we mentioned and others that may work to bridge the gap between theory and practice. And

as we do this lets also consider the conditions that should prevail for these strategies to work, assess their effectiveness and also consider the challenges that can be expected when using such strategies. Thank you very much for your time and valued inputs.

Transcript No 5

POSSIBLE COMPONENTS OF AN ALTERNATIVE APPROACH IN ECONOMICS TEACHING AND LEARNING

Mabena: I want us to look at the manner in which you were taught Economics from high school to the tertiary level and try to compare it with methods that you have come across as student teachers that you suggest should be incorporated in the teaching and learning of this subject.

Van der Sele: I was taught by different teachers and I remember the other one was reliant on the use of the textbook. The other one seemed to know the textbook by heart. This teacher would come to class and start by providing background information on the topic to be covered that day. From there on he would tell us more on that topic. I think that teacher relied more on this telling method.

Mabena: Between the teacher and the learners whose voice was more dominant in class?

Van der Sele: The teacher, because, like I said, one used to explain to us directly from the textbook while the other one liked the telling method.

Mabena: When you were doing practice teaching which method did you use?

Omolemo: Most of the time it was the direct or the lecturer method because the duration of the period was not enough to try out some other methods. I did try to have group discussions so as to engage learners in the lesson and have their active participation but I noticed that group discussion takes a lot of time, even before you can cover the scope of work you intended to cover the bell will go signalling the end of the period and you have to leave and go on another class. The direct method then seemed to be very time effective.

Mabena: Besides the time factor, is there any other reason why you were using the lecture method?

Omolemo: I would say during my years of school I was exposed to this method of teaching. It was out of my experience as a learner that I also used this method. Even when you look around or go past other classes most of the teachers are using this method and you get influenced by how those who have been in the field do things.

Mbali: Like Omolemo said, time factor plays a big part in the choice of teaching method, that is why we tend to see the lecture method as being time effective, besides that when you use other methods such as group discussions you tend to lose the control of the class as

learners might be noisy or focus on irrelevant issues. With the direct method you are able to maintain order and discipline in the class.

Van der Sele: I fully agree with my colleagues here on the reasons why most of us teach that way, but I still believe that we need to change or shift to the other approaches. My teacher used to tell us that Economics is a way of life; it is something that we encounter in our daily lives. I therefore believe that for students to be able to relate to Economics and apply it in their daily lives it must be taught in such a manner that one can easily see how it is connected to the real world. I mean, it should be taught such that even when the student is watching TV or reading a newspaper the student is able to find connections between whatever he/she is watching on TV or reading in the newspaper with the subject Economics. There is thus that need for us to teach economics in context so that students can be able to connect it and apply it in the world outside of the class. By so doing Economics will become less abstract and students will realise that this subject is not rocket science, but it is something real. Students would also gain deeper understanding of this subject and move away from the normal practise of just memorizing information for the sake of passing a test or an exam. In this way students will be able to transfer what they have learned in class to other situations in life.

Omolemo: Van der Sele is emphasizing that need to transfer learning or using what you have learned in class to solve some problems you may encounter in the economic world. I remember when I was still doing Mathematics we used to complain every time we had to solve for X. But where do we go with this X? What do we do with this X in real life? This was frustrating because if you are taught something that you can't see its use or purpose you get discouraged and lose interest in that subject.

Van der Sele: Teaching Economics in context can further develop students critical thinking skills because if the subject is made concrete they will learn not to take everything as they are told instead they will be able to use their prior knowledge to analyse information, bring back the pieces together and still use that prior knowledge to evaluate the conclusion and decisions they have arrived at. Students will then also be able to create knowledge if they have developed such higher-order cognitive skills.

Mabena: With you experience in this subject, what strategies can be used to ensure that a Context-based learning approach is followed in this subject? I remember the last time you mentioned things like Case studies, Context-rich problems and Problem-based learning. Can you then elaborate on the possible use of these strategies and their potential in addressing our research problem?

Van der Sele: You know when I was first exposed to teaching using cases; I was not fond of the case studies as I found it to be something demanding and outside of the usual way of learning. With time I soon realised that case studies are based on real events and that they are not abstract, because they talk about real economic world events that have happened or which are currently in the public domain, they create the interest on the part of students as they bring into the classroom the actual events happening out there. Students are then provided an opportunity to tap from their knowledge of economics theory and economic concepts to find solutions to the questions posed after they have read the case study. Students would then be able to see that there is actually a link between the textbook theory and the practical world. Like I said the first time you introduce the use of a case studies in your teaching students may get frustrated as they are still comfortable with the passive role in class of merely listening and jotting down some points as the teacher is presenting a lesson. But once you do corrections or remedial work with them they will realize how the case studies relate or link with what they learn in class and that is where they have that "AHA!" moment.

Mbali: Again in case studies the students need to use the steps followed in problem-solving then apply the theory which they already have in finding solutions.

Omolemo: The same as in Context-rich problems and in Problem-based learning students are put in a situation where they have to make a decision or propose a solution. They will first need to analyse the problem again drawing from their knowledge of economic theory and concepts. While in the process of using this information they already have, students will be in a position to learn new concepts which the teacher might be targeting. Once they have evaluated the appropriateness of a decision they propose, then they finalize the decision-making process. For example the student is put in a position of a Governor of the Reserve Bank and is presented with some problems for which he/she needs to make a decision. The student will first analyse the problem, use his/her knowledge of monetary policy and its instruments to arrive at a decision. The student will once again use his/her knowledge of Economics and awareness of the current economic conditions locally and globally to evaluate that probable decision and then take a final decision. This strategy has the potential to force students to apply the theory and economic concepts.

Van der Sele: If I may go back a bit to the Case method. This method also facilitates teamwork amongst the students and peer learning because during the case discussion students propose different solutions to the case and as they argue their points they are in fact learning from each other.

Mbali: Again, at the end, when they do a debrief of the case with the teacher the misunderstanding of the concepts already treated come to the fore and can be corrected. Therefore the case provides them an opportunity to practice the application of economic theory also appropriate application.

Omolemo: As Mbali mentioned the other day, Problem-based learning can also be effective as with this strategy, students are given a problem to solve. The problem might contain all the information they need, some irrelevant information or some information might be missing. They then have to conduct research to be able to solve the problem. This process leads the students to learning new concepts and also the application of prior knowledge. It has the potential also to build their problem-solving skills and to orientate students to what they may come across once they have completed their studies, and enter the labour market or the business world.

Mabena: I get your point, but let's then talk about the prospects of all these strategies in addressing the research problem.

Van der Sele: I think they have that potential; they have the potential. Remember we have identified them as possible intervention strategies since they are all capable of bridging the gap between theory and practice. From our discussion I think we have noticed that all of them encourage application by bringing the outside world into the classroom. Rather let me say they work in both directions, they bring into class what is happening outside, and they also take what is learned in the classroom to the outside world.

Mabena: Thanks for all that, I believe that you have all made a strong case for the adoption of the contextual teaching and learning in Economics. I think what we can do from today as you continue with your teaching practice at different schools try to incorporate these strategies in your classes and see what impact they will have. You can also use the lesson presentations you do in your Economics subject didactics class as an opportunity to try out these methods. Once again thank you for your time and valued inputs let us pause here until our next meeting.

Transcript 6

RESEARCH PARTICIPANT' REFLECTION ON SERVICE-LEARNING AS A COMPONENT OF CONTEXT-BASED APPROACH

Mabena: Good afternoon, Madam, and let me take this opportunity to thank you for availing yourself for to share your experiences on Service-learning with me.

Pintha: Thanks sir. Basically I am a student teacher specialising in Accounting, Business Studies and Economics. I am currently offering my service to one of the schools here in my neighbourhood teaching a learning area called Economic and Management Sciences (EMS) which entails all the three subjects which are my majors at University.

Mabena: If I may ask why did how did you find yourself offering in that service project?

Pintha: The thing is when I was doing my practice teaching I realised that the teacher in charge of this subject had some challenges when it came to the Economics section of EMS. The reason is that the teacher only had Accounting and Business studies as major subjects during teacher training course. I saw that as a gap which could actually help me with the opportunity to put to practice the Economics knowledge which I have acquired through my studies. I specifically focused on the Economics section working together with the subject teacher.

Mabena: What do you mean when you say you saw that as an opportunity to put to practice your Economics knowledge.

Pintha: To be honest with you sir, throughout the years I studied Economics I wanted to know more about it and gain a deeper understanding of this subject so that I could be able to make meaning out of it. I can say that even though I always passed it I was not sure that I really know what it is all about, how it relates to my daily life. The subject seemed to be more of theories and concepts that were out of my world. Therefore I thought if I were forced to sit down and prepare to present classes on this subject I would learn more about it and understand the theoretical knowledge of the subject which I have gained.

Mabena: I understand what you say but did you find this service project beneficial?

Pintha: So much, you know every time I had to prepare a lesson I would think of the real life examples to use to link to some of the concepts I taught. In that way it became a bit easier to relate my theoretical knowledge with the actual life situations. This service experience confirmed that most of the time I depended on memorising the subject content hence it was difficult for me to can actually connect with it and relate it to the real life.

Mabena: Why would you say you mainly depended on memorisation?

Pintha: You know sir the way we were taught this subject it seems as if we were in a race to finish the syllabus and prepare for tests or examinations. You would be bombarded with so much information in a short space of time that it really become difficult for me to get to the bottom of this subject hence one would always be happy just to memorise and recall what has been said in class.

Mabena: Would you then recommend Service-learning to other Economics students?

Pintha: Most definitely, Sir, like I said before, not only the organisation where the service is rendered benefits but you as a student also stand to learn the subject even more. This is because you get the chance to grapple with the finer details of the subject and you see it in action now. As you start to make the connection between the theory that you have and how it applies in real life the subject become even more interesting and clear.

Mabena: What do you think should be done to done to promote the use of this learning method in Economics education?

Pintha: First of all, I think students and teachers should be properly introduced to this method of learning as many may still be too reliant on the lecture method. The orientation into Service learning may thus help them to realise the potential benefits of this pedagogic method and empower them on how to incorporate it in the Economics teaching and learning environment. I think information sessions should be held were academics familiar with this method could be invited to share their knowledge with teachers or workshops can be arranged to induct the teachers on the method. This orientation should also be extended to students who themselves might also be used to the chalk and talk method and also to the passive role in the learning process.

Mabena: Will it be easy for Service-learning to be adopted by both teachers and students?

Pintha: Not necessarily. As I have already mentioned teachers and students may have become used to the lecture method and to passive learning respectively that it may not be easy to take them out of their comfort zones. The success of this method will also depend on the support teachers and students receive from their institutions of learning. Institutions of learning, e.g. universities may need to help in the placement of students where service relevant to their course objectives is to be rendered. At a school level the school management may need to accommodate programme of the Economics teacher who may want to have students going into the communities to offer a service relevant to what they have already being taught and which can reinforce their learning. This support may be in form of identifying the community needs which link with the subject content which students can help to address with the Economics knowledge they have acquired. Where possible

resources such as transport to the service sites may have to be provided by the institutions of learning.

Mabena: I understand that and basically what you imply is that Service-learning is not going to be something just between the teacher and the students but the senior management of the institution of learning also needs to be involved.

Pintha: Exactly my point, Sir, and I can also mention some other possible challenges to adopting this method of learning. When I was talking to some teachers about the possibility of engaging students in Service-learning projects they seemed sceptical about it citing limited time to complete the syllabus as one reason they may not be able to incorporate it in their teaching. They were also asking me how is it going to be possible to evaluate the impact of Service-learning on the students who were involved in service projects.

Mabena: With your experience how would you respond to these concerns raised by the teachers.

Pintha: I think with the concern raised about time to cover the content the teachers can identify the areas in the syllabus or the concepts which learners can best understand when they engage with them in the real world. Other sections of the syllabus can then be taught with other methods. To assess how much students have learnt from their service experiences, teachers can ask the students to write and file individual reports on what they have learnt from their service experiences. Teachers can also arrange sessions where students will be reflecting on how their service experiences related to the theory they have learnt in class and how they used that theory to assist where they were placed.

Mabena: Do you think Service- learning is something that should be promoted in Economics teaching?

Pintha: Definitely, like I said earlier on, I personally benefitted from it. Like when I went to the school where I offered my service I wasn't that confident of my knowledge of Economics. I must confess that throughout my study of this subject I relied mostly on memorising and I think that is the reason I couldn't make connections between its concepts and what they mean in reality. At that time passing the tests was what mattered the most. Basically we were mainly exposed to the direct teaching method and seemingly focus was on absorbing as much information as possible during the class and being able to recall it when writing tests. As I started with my service project, I really began to see the connection between the theory and practice. I could also see how most of the abstract concepts which I used to memorise were applicable in daily life. I can say I now realised how practical Economics is.

Mabena: You have really said a mouthful and thanks for sharing your experiences with me.

Pintha: It is a pleasure sir.

Transcript No 7

REFLECTION ON THE OPTIMAL CONDITIONS AND PLAUSIBLE CHALLENGES IN IMPLEMENTING CONTEXT-BASED APPPROACH

Mabena: Last time we agreed that we would go and implement the different Context-based learning strategies in our classes. The aim was to find out amongst other things; the conditions which are conducive to the implementation those strategies, the possible challenges that may hinder its successful implementation and also to assess their effectiveness. Remember our aim is to knit together these strategies into a seamless Contex-based approach that can be adopted in teaching Economics such that students are able to apply its theory to practice.

Van der Sele: One thing that I have noticed is that since many teachers might not be exposed to some of the Context-based learning strategies they have to be trained and orientated in the use of such strategies. This training can be in the form of workshops organised by the Department of Education or a colleague who is knowledgeable in the use of such strategies may offer to assist others. Without this training, teachers do not feel confident in trying out new methods in class and they also feel inconvenienced when they have to break off the customary chalk and talk method.

Omolemo: Two other things that I have noticed about incorporating Context-based learning strategies in class is that you need to know why do you want to use this strategies for because this will help you to select an appropriate strategy for a particular lesson. Again you also need to prepare thoroughly as a teacher so that you are able to guide the classroom proceedings in the desired direction. Your students also need to be given enough time to prepare as these strategies actually moves them from their accustomed passive role in class to active participants in knowledge construction.

Van der Sele: It is also important that we should orientate students to these Context-based learning strategies to avoid resentment from their part. We also need to explain to them the reasons for using these strategies and also get them to suggest other methods that can be used to assist them to apply their knowledge of Economics. Like Omolemo and Fifi mentioned the other day, time factor is also important. The duration of the lesson should be long enough to accommodate the use of these strategies.

Mabena: You both mention that students also need to be orientated to the Context-based learning strategies, how do students react when you first expose them to some of these strategies?

Omolemo: They find it challenging as they have to do a lot of thinking. These strategies for an example, Context-rich problems do not just require them to recall information but to analyse the problem, discard unnecessary information, find the missing information and apply their prior knowledge to solve these problems. Students are often frustrated by this approach to learning as they have become used to recall questions or end of the chapter questions where they just do cut and paste like way of answering. Hence they have to be orientated and be given time to prepare and practice under the guidance of the teacher. We should not assume that students would just wake up in the morning with the ability to work with these unfamiliar strategies.

Van der Sele: I think what needs to be done is to expose students to this Context-based approach at lower levels so that by the time they reach FET or higher education they have already experimented with some of the methods entailed in this approach. I have also noticed that these methods are largely based on groupwork which requires of the students to engage in a group discussion. The classroom set up of table and chairs need to make it easy for students to do such group activities. For example if you look at the Maths laboratories you will find that tables and chairs are arranged in a form of a circle which facilitates groupwork. With the usually set up of neat straight rows, the limited time that is already a concern will even be more wasted as students move around chairs and tables to form working stations. The classroom set up should therefore allow the teacher to move around the tables to monitor students, help them when they get stuck, and guide the discussions in the right track. In this way the teacher is also able to maintain order in the class.

Mabena: You remind me of something when say the classroom set up should allow the teacher free movement around the tables and to provide assistance when required. Does this mean that the teacher does no longer occupy a position in front of the class next to the chalk board from where he delivers the lesson.

Omolemo: To a large extent that role of a teacher as a knowledge transmitter changes to that of a guide in learning. Students are encouraged to actively participate in class and the teacher acts as facilitator of learning activities who will always ensure that the desired outcomes of a lesson are achieved.

Van der Sele: Exactly my point, the teacher is no longer the only one doing the talking in class but the voices of the students must also be heard. They must be seen to be hands on

in the learning process by asking questions, raising views and opinions and sharing ideas. In this way students become partners in knowledge construction. Like Omolemo has said the teacher becomes more of a facilitator than a knowledge transmitter. That role is more like scaffolding, where the teacher starts by providing more support to students at the initial stages of introducing Context-based learning strategies. The teacher will gradually decrease that support as students start to adapt and gain confidence with this approach to learning. I also realised that Economics teachers need to come together to plan how to implement this approach so that all the Economics students in different levels can be exposed to the Context-based learning strategies. This will avoid a situation where students get frustrated when they are to be taught by a teacher who has adopted this approach. The teacher might also get discouraged when everyone else sticks to the traditional way of teaching which also makes it difficult for students to shed their customary passive role in class.

Omolemo: I also believe that cooperation of the teachers is important. As already mentioned together as a team they need to identify the purposes for which Context-based strategies are to be used, they also need to identify concepts or topics which can best be taught using particular strategies and also share the material and best practices. From time to time they will need to come together to reflect on challenges they face, how to mitigate those challenges and also reflect on the effectiveness of this Context-based approach. The success of this approach also depends on the support from our institutions of learning. I think by providing facilities such as discussion rooms fitted with data projectors and interactive whiteboards. Internet access must also be made possible so that teachers and students may be able to do research.

Mabena: Any other thing than you think can assist to make the adoption of this Context-Based approach in Economics a success?

Van der Sele: That is all that I say for now.

Omolemo: Yes for now that is my contribution but you know you sometimes forget certain things when you are in a discussion. I will raise some should I remember.

Mabena: Let us then focus on the possible challenges that one may come across in trying to implement a Context-Based approach.

Van der Sele: Finance can be one challenge. Like we said, properly equipped discussion rooms are needed. Money might not be available to have such facilities and this might be an impediment.

Omolemo: Time factor is another possible challenge. As we have already mentioned the duration of the class periods is not always enough to allow the teacher to do all what he/she

wanted to do using a particular strategy. Our education system also seems to be focused on breadth of content coverage and not on the depth of coverage. This puts pressure on teachers to always be on par with the uniform pace setters and work schedules from the Department of Education so that by the time the common assessments are administered they have covered the required scope of work. Because of this, one might end up reverting to the traditional chalk and talk approach.

Van der Sele: Another challenge can be the number of students in a class. We usually have classes with big numbers and this can create a variety of problems, e.g. physical space may not be enough to arrange a classroom set up to be in a form of circle for groupwork. Again control can also be a problem as students tend to discuss irrelevant issues when they realise that the teacher can't access all the parts of the class. With these big numbers it may also be a challenge to get maximum participation of students in the class as there will always be free-riders who expect others to do work for them. There will also be introverted students who might be scared to talk in front of a big audience of fellow students. I think when teachers realise that they do not have ample physical space for a certain activity they may arrange to use bigger venues in school like e.g. a school hall. Another challenge that I have noted is that it is sometimes difficult for people to change or to try to do things differently. Teachers appear to be comfortable with their daily routine of going to class presenting a lesson and writing some notes as he/she goes along, asking students some questions to see if they have stored the information that he/she has passed on to them. So if that routine has to be broken by introducing different approaches to teaching there is a possibility of resistance to adopt proposed changes.

Omolemo: The same can be said with students, many have become so dependent on their teachers that it may be difficult for them to work independently or to do more than listening, writing notes and answering questions when asked to. Others may even think that teachers are shifting their responsibility of teaching to them hence I agree that the adoption of a Context-Based approach may be met with resistance from both teachers and students who do not want to be unsettled in their comfort zones. Having said that you will also find that some teachers are willing to change but may have doubts about the effectiveness of the different approach they are asked to adopt. They may fear that they will be blamed or ridiculed by their colleagues in the event the results or the pass rate drop once they start adopting the Context-based learning strategies. The are those who do not want to be on the wrong side of the management team or officials of the department. They therefore prefer to be safe by maintaining a status quo.

Van der Sele: To demonstrate this resistance you will find a teacher telling you, "I have been doing this for 30 years and I am not going to be told by anyone how I should teach." This

mindset can often be seen during family gatherings. You will find an older relative or family member telling people “this is how we cook in this family and we don’t do it any other way finish and klaar” (that is all).

I think what can be done to allay some people’s fears when something new is to be introduced is to emphasise that a new approach may not produce instant results but with time its benefits will start to show. Remember unlike in science we don’t have laboratories where we can test things until we are satisfied that we can put them to practice. Besides the mindsets, this unwillingness to change maybe as a result of inflexibility of the system we work under. If I may go back to the point made earlier on we said teachers are sometimes forced to stick to the chalk and talk method as they believe that they won’t fall behind with content coverage. Depth of the content coverage end up being sacrificed because students will be expected to write some common tests or exams at dates stipulated by the department of education.

Omolemo: A teacher may also find it challenging to allocate a marks for some Context-based learning activities that students are given to assess their understanding. For an example the responses of students to a Context-rich problem will be different in showing the application of a certain economic concept which the teacher might have wanted to test. This can be a challenge as teachers are used to objective answers type of assessment but when you look at the Context-based learning strategies they allow for individual views and opinions or subjectivity.

Mabena: I understand that but is there any way which teachers can use to grade the students work?

Van der Sele: I suggest that teachers can use rubrics even though they may need time to learn how to design rubrics.

Mabena: Ok whilst you have raised the issue of assessment and grading can I just find if there are any signs that the Context-based strategies that you have applied can really assist students to be able to apply their economics knowledge in real life situations.

Omolemo: I have noticed that students are able to apply their knowledge to provide solutions to the Context-rich problems I posed to them. Their responses also showed that students are in terms of their cognitive skills as they appear to be able to analyse information and evaluate the very solutions which they have suggested. It was always interesting to listen to them when they defend the actions they suggest should be taken. This strategy also encourage peer learning.

Van der Sele: What I have noticed is that the students' interest in the subject is starting to grow may be because they are now able to make connections between what they learn from the textbook and how that is relevant to their lives. I can also cite an example of a student who managed to take the knowledge that he gained in class to help to solve a real problem. This student was telling me that he managed to help his brother who was unemployed to turn around his fruit and vegetables small business and it started to be profitable. From his explanation of what he did to change his brother's business I could tell that he managed use his knowledge of cost and revenue concepts, and also knowledge of demand and supply concepts.

Mabena: Thank you very much I think we have touched on very important issues today that can assist us to make a strong case for the adoption of a Context-Based approach in Economics.

Appendix F: Letter from Language Editor

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30 March 2020

TO WHOM IT MAY CONCERN

Herewith I, **Cornelia Geldenhuys (ID 521114 0083 088)** declare that I am a qualified, accredited language practitioner and that I have edited the following PhD thesis:

A CONTEXT-BASED APPROACH TO ENRICH STUDENTS' APPLICATION OF ABSTRACT ECONOMIC CONCEPTS

by

GAILELE LUCAS SEKWENA

All changes were indicated by track changes and comments **for the author to verify, clarify aspects that are unclear and finalise.** The editor takes no responsibility in the instance of this not being done.

.....
C GELDENHUYS
MA (LIN – *cum laude*), MA (Mus), HED, Postgraduate Dipl, Library Science, UTLM

ACCREDITED MEMBER OF SATI – Membership number: 1001474 (APTrans)
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Appendix G: TurnItIn Report