

Creating authentic learning environments in a grade 10 Economics classroom via a
progressive teaching design

by

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Declaration

I declare that **Creating authentic learning environments in a grade 10 Economics classroom via a progressive teaching design** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Wayne Gary Theo Flanagan

Date

DEDICATION

I dedicate this study to my late father Freddie Flanagan who laid the foundation for my academic career and for always showing active interest in my school work from primary school through to my tertiary education. Thank you for always being proud of my scholarly achievements, for sharing your time and caring for my future. Thank you dad for looking over me from heaven, I miss and love you and wish you were here to share this achievement with me.

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ABSTRACT OF THE STUDY

The researcher wants to create a learning environment where learners are much more involved in their own learning. The progressive teaching design implies that the contribution of the learner to the development of knowledge is recognised. The educator also acknowledges the learner as a social being reliant on interaction with others to generate meaning.

The problem statement for this study is based on the researcher's opinion that In South African schools rote learning and memorisation are still the main methods of learning. The reason for this is because the majority of educators have been schooled in the traditional educational paradigm where the teaching process essentially revolves around the educator. In such a system learners who can recall facts best and obtain the best grades are regarded as having learnt well. The researcher contests the assertion that the learners learnt authentically. The progressive teaching approach is proffered by the educator as an alternative for the attainment of authentic learning in a grade 10 Economics classroom.

In an authentic learning environment learners are prepared to face challenges in the real world through the development of critical thinking and problem-solving skills. Learners collaborate and cooperate as members of a group to unravel problems.

The researcher makes use of a qualitative research design for this study. The grade 10 Economics class of the researcher is used a case study to ascertain whether a progressive teaching approach can enhance authentic learning. Twelve learners out of 26 that indicated that they would participate eventually took part in the study. The research instruments used were the video recorded lessons, teacher observation sheets and learner focused-group interviews.

One of the findings from the study was that authentic learning skills such as problem-solving and critical thinking can be developed through the educator using the progressive teaching approach. This is in line with the principles of the CAPS for Economics. Another finding is that although more learner involvement is required for the progressive approach, the role of the educator remains crucial as a knowledge expert and a facilitator in the classroom. A further finding was that learners embraced the co-operative learning strategy which is one of the fundamentals of authentic learning. They enjoyed teaching to and learning from one another in group work. Finally, learners appreciated the use of cartoons and team-games by the progressive educator as additional strategies to further authenticate and enhance the learning experience.

In summary the researcher wants to contend that from the literature study, the findings of the empirical research and the recommendation of this study that by working within the parameters of the CAPS for Economics, authentic learning can be achieved via a progressive teaching design.

Key terms:

Progressive teaching approach

Constructivism

Learner-centred

Critical thinking

Problem-solving

Peer learning

Co-operative learning

Real life learning

Higher levels of thinking

Authentic learning

Acronyms

CAPS: Curriculum Assessment Policy Statements

CEDU: College of Education

DBE: Department of Basic Education

GDE: Gauteng Department of Education

HOD: Head of Department

NCS: National Curriculum Statement

PAVOT: Perspective and Voice of the Teacher

PEEL: Project for the Enhancement of Effective Learning

REC: Research Ethics Committee

SIG: Special Interest Group

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CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION AND BACKGROUND

The researcher started his teaching career in 1985 as a teacher of commercial subjects. This was at the zenith of Christian National Education and its emphasis on fundamental pedagogics. Up to 1996 the researcher taught in the traditional South African manner where the teacher's main role was to be the purveyor of knowledge and the learner's role was that of a passive recipient. The researcher therefore practised this traditional approach for eleven years. He then started to work as an administrator in one of the provincial education departments from 1997 to the end of 2007. From 2008 till the end of 2010, the researcher worked as a project manager for a training and development company in the private sector. He returned to the classroom as a subject teacher at the beginning of 2011 and remains so.

While out of classroom teaching, the researcher heard so much about two curriculum changes and their concomitant implications for classroom practice (Department of National Educational, 2009). The researcher found to his amazement on returning to a school, that the majority of teachers still followed the traditional method of teaching where knowledge was transmitted by teachers with minimal learners' input. Teachers told the researcher that they had a curriculum to complete on which learners would be examined. Those that he spoke to were concerned about the magnitude of the content they had to cover within their curricula.

The researcher could not bear to think that, on returning to the classroom after an absence of thirteen years, he should continue with a classroom practice that

teachers purportedly abhorred under apartheid National Education but still practised currently under the guise of completing a syllabus. The reason for disliking the practice was due to the curriculum being prescribed and textbook driven. A learner-centred approach to teaching sounded especially desirable to the researcher. The recently introduced Curriculum and Assessment Policy Statements (CAPS) seemed to be the ideal base for the researcher to use to transform his classroom practice.

The researcher prepared himself from the start of 2012 by reading literature on the topic. It took him to the writings of the late Professor Yusuf Da Costa from the University of the Western Cape. In *Let the Voices be Heard* he wrote that schools and specifically classrooms can be places which equip teachers and students to undertake a meaningful role in working for educational change (Da Costa, Julie & Meerkotter, 1994:162). Fullan in Da Costa, Julie and Meerkotter (1994:166) suggests that educational change involves 'change in practice'. Although change in practice can occur at many levels, he uses the classroom or teacher because this level is closest to teaching and learning.

In spite of obtaining political liberation in 1994 and the consequent democratisation of society and its institutions, schools and classroom practice in particular is a constrictive experience for the majority of learners. In conversing with educators, the researcher found that they were confused in comprehending and implementing the assumed progressive curricula that the government put in place through Curriculum 2005 and the National Curriculum Statement. The researcher is concerned that even the most recent CAPS is implemented by teachers using the traditional teaching approach which is teacher led and textbook driven.

Since returning to teaching at the beginning of 2011, the researcher found that learners were still learning by rote. Top learners with the highest marks made very little contribution to classroom discussion and debate. Their answers to the question papers bore facts that they recorded straight from the textbook and not from their own insights. The researcher as an educator does not know whether learners actually understood the topics covered or whether true learning actually transpired.

Learners in Economics, for example, could not relate newly taught knowledge to what was occurring in society. They could not comprehend how the collective bargaining process was disregarded in the strikes at some gold mines in 2012. The researcher hoped that he would succeed in guiding learners to real understanding. Through curriculum change relating to classroom practice specifically, he hoped that his learners would gain 'new' knowledge and insight.

Curriculum change does not have to do with only the change of 'content' but it implied that teachers should become critical practitioners who would actively facilitate the involvement of their learners in the learning process. Teacher research in the classroom is considered as the methodology which can contribute to the empowerment of educators to work transformatively in their practice (Da Costa, Julie & Meerkotter, 1994:264).

The researcher read the criteria for classroom research as set out by Stenhouse in Hopkins (2002:36), suggesting that teaching can be improved by self-monitoring by the teacher. Educators need the necessary skills, the discipline of being able to reflect critically and learning how to observe with a sharpened perception, so that it becomes part of their daily teaching experience. Teacher research provided a way for teachers to be actively involved in the improvement or change or transformation of their classroom situations. This can be achieved by "encouraging them to become more aware of their own teaching practice, to learn to be critical of that practice and then be prepared to change it through their understanding of what has happened in the classroom" (Da Costa, Julie & Meerkotter, 1994:266).

Based on the preceding paragraph it was clear that educators could either accept or transform their practice. The researcher decided to transform his classroom practice to achieve authentic learning. He made the choice to use the progressive teaching approach to transform his teaching and assist learners in obtaining authentic learning. This choice was made owing to his disillusionment with the traditional approach to teaching and learning that the researcher was experiencing after returning to the classroom after a thirteen year absence. The researcher committed

himself to this study which is one of the criteria listed by Stenhouse (Hopkins, 2002:36) for effective classroom research by educators. The researcher decided to make use of a case study at the school where he is teaching to drive this particular teacher research project.

The researcher used his Grade 10 Economics class as a case study to create authentic learning environments via a progressive teaching approach.

1.2 LITERATURE REVIEW

1.2.1 Theoretical constructs: Traditions of teaching

Teachers draw from two traditions of teaching. From the early 19th century, teacher-centred and student-centred traditions have dominated classroom instruction.

1.2.1.1 *Teacher-centred or traditional paradigm*

The teacher-centred tradition refers to teachers controlling what is taught, when and under what conditions. Anybody sitting for a few minutes in such a classroom would notice that the furniture is usually arranged in rows of desks or chairs facing the front chalkboard. Teachers talk far more than students. The entire class is most often taught as one group with occasional small groups and independent work, and students regularly use textbooks to guide their daily work. Scholars have traced the origins of this pedagogical tradition to the ancient Greeks and religious schools centuries ago and have called it by various names: 'subject-centred, teaching as transmission and direct instruction' (Da Costa, Julie & Meerkotter 1994:268). If one should currently walk into a typical South African government school classroom, one would find oneself among the ancient Greeks where teachers are the 'sages on the stages'.

Emanating from the latter, Hopkins (1994:212) believes that since the 19th century, the dominant mode of teaching in America has been the “classroom management paradigm,” which centred on “principles of engineering, behaviourism and mechanism.” It involves “the purposeful manipulation of students toward predetermined ends and ignores the experience of the students themselves, viewing it as a contamination of the process” (Hopkins, 1994:215). This assembly-line method of schooling, which grew out of America’s obsession with efficiency, is still pervasive today where the overwhelming number of students and the strictures of curriculum preclude experimentation in the classroom. Lecture and instruction take precedence over risky strategies such as discovery learning and experiential activities (Reese, 2013:321). This teaching practice is still very prevalent in most South African schools despite three curriculum changes since the advent of democracy in 1994. Teachers in South African government schools are judged by their learners’ results and they therefore prepare learners according to the lecture method for examinations. Learning by discovery has no place as it takes too much time out of the curriculum.

Not until the progressive education movement brought new tactics to light did teachers find an alternative to the classic or traditional paradigm. The seeds of progressive education can be found in British and American Romanticism, particularly in the writings of Rousseau. According to Rousseau, learning can and should occur naturally (Evers, 1997:2). Provided that the child is given a suitable learning environment, his or her instincts should guide the learning process. The American philosopher, John Dewey, applied this notion to American education, espousing a belief in the child's “instinct of investigation” (Dewey, 1956:44). In his work, *Experience and Education*, Dewey juxtaposes traditional and progressive perspectives as follows:

“To imposition from above is opposed expression and cultivation of individuality; to external discipline is opposed free activity; to learning from texts and teachers, learning through experience; to acquisition of isolated techniques by drill, is

opposed acquisition of them as means to attaining ends which make direct vital appeal; to preparation for a more or less remote future is opposed making the most of the opportunities of present life; to static aims and materials is opposed acquaintance with a changing world” (Dewey ,1956:65).

The experience of the researcher was that the majority of teachers are struggling with the refusal of learners to submit to external discipline (Zimiles, 2008: 167). The opening up of society after 1994 and the corresponding liberties afforded to learners presented a key challenge to teachers who were not used to be challenged intellectually or in terms of power relations by learners. Teachers did not have the enthusiasm to think of different classroom practices in this challenging environment. The current corps of teachers, in the opinion of the researcher, maintained their customs in terms of the traditional approach to teach learners.

1.2.1.2 Student-centred paradigm

This second tradition of instruction was student-centred. It refers to classrooms where students exercise a substantial degree of responsibility for what is taught and how it is learned (Hopkins, 1994:222).

Teachers see children as more than intellect; they bring to school an array of physical, psychological, emotional and intellectual needs plus experiences that require both nurturing and prodding. Were anybody to sit for a while in such a classroom they would observe that the furniture is arranged and frequently rearranged to permit students to work independently or together in large and small groups.

Student talk is at least equal to, if not greater than, teacher talk. Varied materials (e.g. science and art centres, maths manipulative) are spread around the room. Guided by teachers, students learn content and skills through different tasks such as going to activity centres in the room, joining a team to produce a project, and working independently. Scholars have tracked this tradition to its historical roots in

ancient Greece and labelled it over the centuries as “child-centred,” “progressive,” and “constructivist” (Dewey, 1956:74).

The researcher intended to use this progressive tradition to allow learners to engage in topical issues as much or even more than he would. They should not be afraid to express themselves as they carried experiences with them that he might not be aware of.

1.2.1.3 *Justification for the chosen paradigm for this dissertation*

Champions of the traditions above believe that all learners, regardless of background, grasp subject matter, acquire skills, cultivate attitudes and develop behaviours best through their practices (Hopkins, 1994:230). Yet the accumulated evidence of actual classroom practices producing desired learner outcomes for every tradition has been both mixed and unconvincing. Most observers confuse good teaching with successful teaching. Moreover, researchers have yet to link ways of teaching to learner test performance because so many variables influence achievement, notably family background, teacher experience, peers, school safety and many other factors, including pedagogy.

In response to Prof Michael van Wyk’s inaugural lecture in which he sets out to explain the causal link between teaching and learning, Prof Louis van Niekerk noted that many academics have tried and many have failed (Van Wyk, 2013). The relationship between teaching and learning is not quite as simple as it seems. The debate continues and it forms part of the researcher’s dissertation.

Lacking evidence to support one form of teaching over another, faith, not facts, has driven proponents of each tradition. Fierce rhetorical struggles emerged over which ways of teaching and learning are best for all or some students - often mirroring larger conservative vs. liberal ideological battles over exclusive opposites: instruction vs. facilitation, didactic vs. inferential, passive vs. active, traditional vs. progressive (Hopkins, 1994:212).

By selecting the progressive paradigm, the researcher attempted to utilise a more scientific basis for his research, hoping that his research would assist in this regard. The researcher believes that the South African education system is currently floundering because there is no consistent vision as to what constitutes a successful learner and through which teaching practices such learners can be produced.

1.2.2 The progressive teaching approach

1.2.2.1 *Progressive education in practice*

Progressive educators do not merely say they endorse ideas such as “love of learning” or “a sense of community.” They are willing to put these values into practice even if doing so requires them to overturn traditions (Kohn, 2010:5).

The reason why progressive education makes sense is that a truly impressive collection of research has demonstrated that when students are able to spend more time thinking about ideas than memorising facts and practicing skills — and when they are invited to help direct their own learning — they are not only more likely to enjoy what they are doing but to do it better (Kohn, 2010:12). Progressive education is not just more appealing; it’s also more productive.

Progressive education may not be able to transform a whole school, or even a classroom, at least not by the end of a year, but whatever progress it can make is likely to benefit its students. By doing what is best for the students is the reason all teachers got into this line of work in the first place.

In an action research project conducted for the Department of Higher Education (Gravett, 2004:265), a researcher from the University of Johannesburg, studied the possibility of Education lecturers transforming their practice from the traditional to a more progressive mode at three universities. Lecturers at one of the universities embraced the intentions of the study and involved the students more in their teaching practice. This involved a break with the past and required more preparation from the lecturers and a change in teaching didactics. Lecturers from the second

university initially embraced the study but abandoned it as the examinations were approaching. The progressive approach did not make provision for the structured approach that lecturers were used to. They found themselves running out of time to complete the curriculum as the examinations approached and much content still had to be covered. The third university's lecturers did not even start with the project as they were not ready to move out of their comfort zone of structured lessons and lecturer control of the teaching situation (Gravett, 2004).

In summary, emanating from the above paragraph, research could have easily been conducted at a South African government school and the outcomes would have been the same. The researcher's impression is currently that the majority of educators are comfortable with the *status quo* and the way they have been teaching over the years. They consider issues such as discipline and the completion of the curriculum to be more pressing and do not have the time or realise the need to adjust their teaching practice. For these teachers, learning is reflected in the results obtained for examinations or tests.

1.3 THE PROBLEM STATEMENT

Research needs to be conducted in order to gain a better understanding of how a progressive teaching approach can be used to enhance learning in a Grade 10 Economics class.

The problem statement for this dissertation is: Will a progressive teaching approach enhance authentic learning in a Grade 10 Economics class in a selected school via a case study research design?

In conducting this research the researcher's assumptions are:

- As mentioned in the introductory section, despite the implementation of three post-apartheid curricula since 1997, the unintended outcome of the current

method of teaching by educators in the present school system remains the lecture method of teaching and rote learning.

- Secondly, the researcher observed that the top academic achievers of the class were those learners who never participated in discussions or activities.
- Thirdly, it seemed that there was a lack of applying acquired knowledge to everyday life situations (e.g. the collective bargaining process during labour disputes).
- Finally, the majority of educators are just following the formal curriculum with minimal or no learner input at all.

Emanating from these assumptions, the problem statement of this dissertation of limited scope was formulated to address the primary research question.

1.4 THE RESEARCH QUESTIONS

The following specific research questions were formulated to achieve the primary research question for this dissertation:

- What constitutes a progressive teaching approach and what enabling theories could be identified which will foreground the literature study for this investigation?
- What is authentic learning and how can this strategy be used in empowering Grade 10 learners to develop problem solving skills and critical thinking in the Economics class?
- In which way will the role of the educator influence the process that authentic learning could take place and how?
- How do learners react to attempts to apply authentic learning from a progressive perspective?
- What strategies could be formulated to strengthen the teaching of Economics through a progressive teaching approach?

1.5 THE AIMS AND OBJECTIVES OF THE STUDY

Research aim

The aims of a research proposal are statements that broadly point out what is hoped to be accomplished and the desired outcomes from the research (Blanche & Durrheim, 2002:105).

Aims focus on long-term intended outcomes. The main aim of this qualitative research was to determine how a progressive approach to teaching can lead to real understanding and problem solving, and contribute to authentic learning.

Research objectives

Research objectives lay out how accomplishing aims is planned. Objectives are focused and practical. They tend to pinpoint the more immediate effects of research (Blanche & Durrheim, 2002:112).

The following objectives were formulated on the basis of the specific research questions above:

- To understand what constitutes a progressive teaching approach.
- To establish what authentic learning is and how it could be utilised as an empowering tool in a Grade 10 Economics class to develop problem-solving skills and critical thinking.
- To explore the role of the educator in creating an authentic learning environment.
- To investigate how the learners react to the efforts of the educator to create an authentic learning environment.
- To formulate strategies to strengthen the teaching of Economics through a progressive teaching approach.

1.6 RESEARCH DESIGN AND METHODOLOGY

Research design

Research design is the science (and art) of planning procedures for conducting studies to obtain the most valid findings (Blanche & Durrheim, 2002:115). The qualitative research approach was used in this study to lead learners to a better understanding of authentic learning. A qualitative approach means that researchers study aspects in their natural settings and attempt to make sense of or interpret phenomena in terms of the meanings people attach to them (McMillan & Schumacher, 2010:321). The primary goal of studies using this approach is defined as describing and understanding, rather than explaining, human behaviour (Babbie & Mouton, 2003:270).

The qualitative approach was used within the parameters of a case study research design. A case study is a choice of what to investigate, identified as a single case according to Stake in McMillan & Schumacher (2010:344). It is the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances (Stake, as quoted by Patton, 2002:297). A case may be an individual or group activity or it could be a process such as how Grade 10 Economics learners can learn authentically.

In this proposal, the qualitative researcher did not know enough to begin the study with a precise research design; an emergent design feature that evolved as the study progressed was used (McMillan & Schumacher, 2010: 323). The study was conducted at the school, i.e. the natural environment where understanding and learning is supposed to happen. The educator as the main researcher focused on why rote learning continues to dominate in Grade 10 Economics classrooms. The researcher intended to challenge this passive acceptance by learners of what they are taught and to transform them to become more critical thinkers and problem solvers which would be indicative that they understand the subject material. By

focusing on participants' understanding of authentic learning (participant perspectives are also characteristic of qualitative research), research was conducted according to the process orientation method which is a further characteristic of qualitative research (McMillan & Schumacher, 2010:323). The researcher attempted to understand why educators persisted with the traditional method of teaching which in most cases result in learners not questioning and therefore not learning but reproducing the facts via rote learning during assessments.

Sampling

For this study, the researcher used the following qualitative sample strategies to increase the utility of information obtained from small samples (McMillan & Schumacher, 2010:326). The site selected was the school where the research questions were interrogated. Comprehensive sampling, which involved 26 out of a class of 34 Grade 10 learners who agreed to participate in the study, was the preferred strategy. The reason for this type of sampling was to obtain different perceptions about the research study. The size of the sample was determined by every form being completed in conjunction with the participating learners or educators. It is worth noting that qualitative researchers view sampling processes as dynamic, *ad hoc* and phasic and can be in a range of one to forty (McMillan & Schumacher, 2010: 328). Two educators and twelve learners eventually participated in the study.

Data collection method

The primary data collection strategy was the focused group interviews conducted with learners by one of the educators who assisted the researcher. The systematic teacher observation sheet completed by another educator who observed the researcher on video was another primary data collection method. These methods of data collection are confirmed by Babbie and Mouton (2003:270) who view them as part of qualitative data collection.

Secondary informants were any other educator or learner who was not actually involved in the study or learning materials that could give input to this study.

Research methods

The researcher applied the qualitative research method as mentioned in the previous section for investigation purposes. In so doing, the researcher considered himself as a complete insider in terms of research language. According to McMillan and Schumacher (2010:350), a complete insider is “a researcher who has an established role in the setting in which data is collected, engaging in genuine and natural participation”.

This case study research allowed the researcher to take a systematic, close, critical look at the way in which he teaches, with a view to changing it so that the classroom experience becomes more meaningful for learners and educators. This project provided a way for the researcher to be actively involved in transforming his traditional classroom practice to a progressive one by investigating his own practices. This would hopefully have enabled him to learn to be critical of his own teaching practice and then becoming prepared to change it in order to lead his Grade 10 Economics learners to real understanding and therefore more authentic learning. Put in another way, this particular case study was a way of trying out ideas in action, understanding these actions and then attempting some changes and learning in the teaching and learning setting.

The strength of this study will be to bring about “a dialectical interplay between practice, reflection and learning” (Gravett, 2004:262). The researcher would facilitate, get feedback from the educator and learners, reflect on the feedback and determine whether learning took place through observation and interviews.

Regarding observation, researchers can see and hear what is occurring naturally in the research site. McMillan and Schumacher (2010:350) state that by observing naturally occurring behaviour over many hours or days, the researcher hopes to obtain a rich understanding of the phenomenon being studied. Observation is a way

for the researcher to see and hear what is occurring naturally on the research site. This method is the mainstay of qualitative research and is elaborated on for its specific role in chapter 3.

Interviewing may be the primary data collection strategy or a natural consequence of observation strategies (McMillan & Schumacher, 2010:355). The researcher would utilise the interview guide approach with predetermined interview questions. With this approach, topics are selected beforehand, but the researcher decides the sequence and wording of the questions during the interview. The researcher believed this approach would make the learners feel at ease.

Analysis of data

To conduct the research, practical measures had to be employed. Researchers need to find various ways to gather data and methods to use in analysing the data. It is important to mention that a significant characteristic of qualitative research is that analysis takes place during data collection as well as after the data have been gathered. Analysis is an ongoing part of the study; data collection and analysis are interwoven, influencing one another (McMillan & Schumacher, 2010:367).

This particular study of how the progressive approach in teaching could be used to aid understanding authentic learning in a specific school may also be regarded as a phenomenological study. The purpose of phenomenological study is to describe and interpret the experiences of participants regarding a particular event in order to understand the participants' meanings ascribed to that event (McMillan & Schumacher, 2010:346).

The gathering of data for this phenomenological study was the focused group interviews with learners and systematic observation of the educator. Learner participants were interviewed in a group context (three groups of four learners each) by the educator who agreed to assist the researcher with this activity. The reason for these multiple interviews was that the researcher needed to establish what causes rote learning and how this can be replaced by authentic learning. To accomplish this,

the researcher's assistant had to be skilled at interviewing (McMillan & Schumacher, 355). A definite skill was needed to keep to the structure of the topic and also to have the ability to probe participants to elaborate on certain responses.

The use of a tape recorder for interviews and the systematic observation of the educator were essential for verbatim analysis of the data. This means using word-for-word quotations from the interviews and the systematic observation sheet (Bothma et al., 2009:128).

Qualitative analysis is a relatively systematic process of coding, categorising and interpreting data to provide explanations of a single phenomenon of interest. Most qualitative researchers have learned that there are no set standard procedures for data analysis or for keeping track of analytical strategies. Babbie et al. (2003:490) agree that there is no one neat and tidy approach to qualitative data analysis, nor even one approach to each specific type of qualitative data analysis. Making sense of the data, however, depends largely on the researcher's intellectual rigor and tolerance for tentativeness of interpretation until the analysis has been completed (McMillan & Schumacher, 2010:367). The analysis of the data for this study was conducted according to the predetermined categories of the research problem.

1.7 VALIDITY, TRUSTWORTHINESS AND TRIANGULATION

Validity is the degree to which a study actually measures what it purports to measure (Bless & Higson-Smith, 2000:157). The potential of a design to establish a relationship between the independent and dependent variables with a high degree of certainty is referred to as the validity of the design (Bless & Higson-Smith, 2000:80). Internal and external validity are two separate but related dimensions according to which validity is measured.

Lincoln and Guba (quoted by Babble & Mouton, 2003:276) writes that the key principle or criteria of good quality research is found in the notion of trustworthiness:

neutrality of its findings or decisions. The basic issue of trustworthiness is about the researcher persuading his/her audience that the findings of the study are worth paying attention to or worth taking account of. The audience would include him/herself.

In referring to triangulation, Denzin (quoted in Patton, 2002:555) refers to it as the combining of multiple observers, theories, methods and data sources by researchers in the hope of overcoming the intrinsic bias that comes from single-methods, single-observer and single-theory studies. Triangulation can be done according to paradigms, methodologies, methods and researchers. It is generally considered to be one of the best ways to enhance validity and reliability in research.

1.8 ETHICAL CONSIDERATIONS

As a researcher one should show respect for the privacy and anonymity of the respondents by respecting all stakeholders in the research project and avoiding violation pertaining to research integrity and public reporting. It must be ensured that honest co-operation among all the research parties and stakeholders is maintained and all parties must be informed of the research intent (McMillan & Schumacher, 2010:336).

The goal of ethics in research is to ensure that no one is harmed or suffers adverse consequences from research activities. Ethical considerations are philosophical by nature and protect the rights and responsibilities of the researcher, the user of the research results and the respondents (UNISA, 2007:5).

The researcher should have integrity, be honest and not distort any of the research findings. Plagiarism and disclosure of defective information should be discouraged by the researcher (UNISA, 2007:5).

In this research project qualitative researchers will use discussion and negotiations to resolve any ethical dilemmas by negotiating the attainment of consensus on situational priorities. The main researcher should assure the participants of confidentiality and anonymity regarding the intended use of the data. The confidences of participants should be protected from other people in the setting and from the general public. A sense of caring and fairness must be part of the researcher's thinking, action and personal morality (McMillan & Schumacher, 2010:338).

1.9 PRELIMINARY CHAPTER OUTLINE

The project will be dealt with in the following chapters:

Chapter 1: This is the introduction and comprises the broad summary of the rationale for the study.

Chapter 2: This represents the theoretical framework for the study. The literature review examines the traditions of teaching, the progressive approach to teaching and the progressive approach in action.

Chapter 3: This chapter defines the research design and data collection strategies. It underscores the value of qualitative research. The role of action research is also discussed here.

Chapter 4: Is proposed as the presentation of the action research study results and a thorough discussion thereof.

Chapter 5: Conclusions, recommendations and limitations of the study.

1.10 CHAPTER SUMMARY

In conclusion, the study investigated why teachers are still following the former teaching paradigm and why learners are still following the traditional way of learning. The chapter outlines the different teaching approaches, namely the teacher-centred or traditional paradigm against the learner-centred paradigm and the justification for using one of the approaches. It further outlined why the progressive approach is not successfully implemented despite its vast potential. Reasons for this are arguments by teachers that they must complete a curriculum and that they are running out of time, forcing them to re-implement the traditional style of teaching.

The chapter showed clear concern that the learners with the highest marks (top learners) cannot fully comprehend the subject matter and that they replicate their answers by rote (straight from the textbook) with no relationship to everyday economic life. This is one of the main rationales for the researcher to undertake this study. The researcher aimed to employ a qualitative research methodology in the form of a case study. The researcher wanted to critically assess what constitutes the progressive learning approach, and how the researcher can motivate learners to achieve authentic learning through his teaching.

In other words, through this case study the educator or researcher wanted to modify the teaching method in order to illustrate that the progressive teaching method could be effective and that the learners would be able to relate their knowledge to what happens in society, solve problems and think critically. The following chapter will give a broad outline of the literature review and theoretical basis underlying this study.

CHAPTER 2

THEORETICAL FRAMEWORKS AND LITERATURE REVIEW

2.1 INTRODUCTION AND BACKGROUND

After 1994 South Africa experienced an important paradigm shift in education (Van Wyk, 2007). The South African education system was based on an Outcomes-Based Education (OBE) approach as the key underlying principle of the National Curriculum from 1998 till 2011 (Van Wyk, 2007). For various reasons, the OBE approach was formally disbanded in 2011 and replaced by the Curriculum and Assessment Policy Statement (CAPS) for the different subjects [Department of Basic Education (DBE), Questions and Answers: 2012:2] The CAPS curriculum continues to focus on the active involvement of learners as a principle. This principle characterises progressive education which captured the attention of the researcher.

Maintaining a progressive pedagogy as an individual teacher working within a traditional public school is a challenge, given that, like so many of our public schools, the one in which the researcher teaches, learners respond only to external reinforcement (Weber, 2009). The researcher anticipates learners to battle to come to terms in a classroom that is decisively different (progressive) from those of others that they attend (traditional). The researcher's Grade 10 Economics class would be the only class where learners must participate, for example, in talking about the topical Economics issues of the day. Learners would be encouraged to come to class prepared to discuss a particular topic on which they should do research beforehand. The researcher expects that the majority of learners would not be used to this and would come to class unprepared and therefore not actively participate. The researcher is concerned that he would be disillusioned should he hear some learners refer to his lesson as a 'free period' if the majority should not participate in it.

In the general curriculum arena from 2012, the two National Curriculum Statements for Grades R-9 and Grades 10-12 were combined into a single document and is simply known as the National Curriculum Statement Grades R-12. (DBE, Questions and Answers, 2012:6).

The National Curriculum Statement Grades R-12 represents a policy statement for learning and teaching in South African schools and comprises the following:

- Curriculum and Assessment Policy Statements (CAPS) for all subjects, including Economics.
- National Protocol for Assessments Grades R-12.
- National Policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12 (DBE, 2012:7).

With the introduction of CAPS, the former curriculum's outcomes and assessment standards were replaced with the general aims of the South African curriculum, the specific aims of every subject, clearly delineated topics to be covered per term and the required number and type of assessments per term (DBE, Curriculum News 2011:7). OBE policy terminology such as Critical and Developmental Outcomes, Learning Outcomes and Assessment Standards were omitted from CAPS. They have reappeared in a different form under the General Aims section of the CAPS document and the Specific Aims sections in each of the subject documents (DBE, Curriculum News 2011:14).

Characteristics of the new curriculum such as a learner-centred, active, teaching/learning environment, is entirely congruent with the constructivist perspective (Donald, Lazarus & Lolwana, 2002:107). This perspective is adhered to by progressive educators. Progressive educators are those imparting integrated subject matter, act as facilitators, using discovery techniques for learning, motivate learners intrinsically and accentuate co-operative group work and creative expression (Da Costa, Julie & Meerkotter, 1994:168).

The researcher's contention from the outset is that good teaching can occur without learning and, equally, that learning can occur without effective teaching (Donald, Lazarus & Lolwana, 2002:107). The researcher therefore wants to link the concepts of teaching and learning to emphasise that teaching should never happen without active learning being the result as compelled in the new curriculum for South African schools. In the researcher's experience of South African schools, learners are memorising facts for examination purposes for which they achieve good grades, but within a week or two they have forgotten what they have learned. This is only rote learning or surface learning and not deep learning which is real and genuine (DBE, CAPS Economics, 2011:4). The researcher is therefore on a mission for a constant, intentional search for more effective ways of connecting with the learning process.

To achieve this, the researcher commenced by researching some of the writers that wrote about progressivism.

2.2 THE THEORIES OF PROGRESSIVISM THAT UNDERPIN THIS STUDY

The researcher is very interested in the historical figures and events that questioned the educational milieu of their times. This interest led the educator to search for and present theories of education with a progressive intent for the purpose of this study.

2.2.1 Paternal Forerunners

The paternal forerunners to progressive education are Locke and Rousseau whose work would be demonstrated by theorists such as Dewey. Rousseau wrote the novel *Emile* which was a treatise on the education of the whole person for citizenship. He took a stand against students being subordinate to teachers and that memorisation of facts would not lead to an education. Locke first speculated, "truth and knowledge ... are out of observation and experience rather than manipulation of accepted or given ideas"

(Hayes, 2007:2). He discussed the need for children to have concrete experiences in order to learn.

Another forerunner to the progressive education movement was Pestalozzi (1746-1827) in Hayes (2007:3). His research and theories are close to those outlined by Rousseau in *Emile*. His psychological theories emphasised that individuals best learn through experiences and through a direct manipulation and experience of objects. He further speculated that children learn through their own internal motivation rather than through compulsion. A teacher's task would be to help guide their learners through their learning as individuals and allow it to unfold naturally (Butts & Cremin, 1953:37). The Progressive Education Movement started in the 1880s and was led by Dewey who viewed the education process as having two sides, the psychological and the sociological, with the psychological forming the basis (Dewey, 1957:76).

Kilpatrick (1871-1965) was a pupil of Dewey's and one of the most effective practitioners of the concept, as well as the more adept at proliferating the progressive education movement and spreading the word about the works of Dewey. Through his 'project method of teaching' (Hayes, 2007:24), Kilpatrick developed the progressive education notion that learners were to be engaged and taught so that their knowledge may be directed to society for a socially useful need. He agreed with Dewey that learners should be actively engaged in their learning rather than actively disengaged with the simple reading and regurgitation of material.

2.2.2 Historical background of progressive education

The phrase 'progressive education' evokes a broad landscape of education ideas and ideals usually used to distinguish an education reform from practices regarded as conservative or traditional.

Since Babbitt's critique of education theories more than one hundred years ago, education reform has run through various movements (Davis, 2006:50). This includes, but it is not limited to, the industrial education movement, the mental testing movement, differentiated curriculum, the efficiency movement, constructivism and education for life adjustment - all reform movements under the rubric of progressive education.

Cremin established the study of progressivism in education (Reese, 2013:320). He claimed that progressivism existed but was as slippery as an eel. He thus warned readers not to seek a 'capsule definition of progressivism,' since the movement was marked from the very beginning by a pluralistic, frequently contradictory character (Reece, 2013:321).

Although the movements mentioned by Babbitt above have been numerous and diverse, and the warning from Cremin about not looking for a 'capsule definition' for progressivism, they have all shared three fundamental principles:

Firstly all the movements de-emphasised the academic curriculum. Secondly, all of them had the desire to make learning more 'natural' by treating every learner as a unique individual within the context of his/her own biological, social and intellectual development. Finally, progressivism was viewed as the desire to make knowledge practical and more relevant to the child's immediate social situation (Davis, 2006:51).

This is further elaborated upon by Labaree (quoted by Reese, 2013:323) who succinctly describes the driving principles of progressive education as follows, "Today progressivism means pedagogical progressivism. It means basing instruction on the needs, interests and development stage of the child and it means teaching learners the skills they need to learn any subject instead of transmitting a particular subject." In the shorthand of education jargon, this adds up to 'child-centred instruction', discovery learning and 'learning how to learn'.

In South Africa the new curriculum (CAPS) has returned to teachers playing a leading role in implementing and completing the content-driven curriculum. The curriculum has been so standardised that teachers across South Africa who teach a particular subject should be at the same stage in covering the curriculum content at a particular moment in time. This is spelt out by every CAPS document that aligns subject topics and assessments with available time per subject allocation (DBE, Curriculum News, 2011:7). Furthermore, CAPS aimed to promote structured and improved co-ordination and seeks to achieve coherence across the system for the support of the curriculum across the system (DBE, Questions and Answers, 2012:5). The role of textbooks in teaching the curriculum plays a prominent role in implementing that curriculum. In a developing country such as South Africa this is especially important as some teachers have limited academic and professional training. The appropriate textbooks can thus play a defining role to a structured curriculum in terms of what is taught and when it is taught (DBE, Curriculum News, 2011:18). The role of the teacher and the use of textbooks are keenly supported by civil society. Non-Governmental Organisations such as the Right to Know Campaign has even taken the government to court for non-delivery of textbooks in certain provinces (Chauke, 2012). Teacher unions and school principals are put under pressure to ensure that teachers deliver; in other words, they must teach to the content, from the textbook and especially prepare learners for examinations (DBE, Curriculum News, 2011:18).

This would seem to go against the grain of progressivism. As Dewey explained in *My Pedagogical Creed* (Reese, 2013:326), schools were social institutions and learners social individuals. He argued that schools should do more than transmit knowledge, the world's inherited wisdom. At a time when rural and family life were replaced by cities and factories, Dewey reasoned that schools were crucial in helping learners understand the values and knowledge necessary to adapt to a new society. The same argument may apply today for schools to guide learners to the new globalised society of the twenty-first century. Like earlier critics of teacher-dominated schools such as Babbit and Cremin, Dewey believed that learners should engage more actively in their learning; he

called for new ways to imagine classrooms which meant realigning the relationship between teachers and learners. He wanted reform-minded educators to fight against mindless memorisation and learner passivity in order to promote children's intellectual and social growth.

What Dewey said more than a century ago is still relevant today. Although he advocated child-centred education, Dewey highly valued the role played by the educator (Reese, 2013:328). Because of the continuous expansion of knowledge in the modern world that cannot always be included in any curriculum, educators should be at the forefront when it comes to knowledge accumulation, more so than their predecessors. Educators then, as now, have to help learners develop their intellectual powers and learn how to think clearly and critically (DBE, CAPS Economics, 2011:5). Learners should be guided to become members of the global society as citizens, family members and workers. Educators should resemble a guide, not a mere orator of lessons or marker of exams. Although the majority of educators are still practising the memorisation of textbook knowledge for examination purposes, the researcher finds this an untenable and anachronistic way to prepare young people for the future (Reese, 2013:330). The researcher will therefore attempt to use progressive methods to function within the given education system.

This will be a massive challenge to the researcher because as an educator he finds himself among teachers who rely on the textbook as the primary means of instruction and testing as the main check on learners' progress. A report to a school visited in Cincinnati in 1850 concluded that "teachers to a greater or lesser extent, teach as they themselves were taught" and they spent much of the school day standing in front of a class with a textbook in hand, asking questions and checking in the book to confirm answers (Reese, 2013:324). This might just as well be a South African school in 2013. The researcher is of the opinion that "many teachers view learners' minds as a receptacle, a bag to be filled with other people's ideas, a piece of paper on which another may write, a cake of wax under a seal" (quoted by Reese, 2013:324). These

teachers would drone on for dull hours, leaving students bored and happy to bunk classes, be absent and even leave school. In the 1970s Freire would refer to this as the banking concept of education where educators aim to impart knowledge in learners through direct instruction (Freire, 1970:77).

Since the literature shows that progressivism cannot be put into a single definition, it is necessary to investigate some of the constituents of this approach. The researcher therefore discusses the different pedagogies of progressivism next.

2.2.3 Different progressive pedagogies

The researcher quickly realised that a progressive pedagogy cannot be explained via a single definition. Constructivism, authentic learning, critical pedagogy and the philosophy of *ubuntu* would be examined as contributing components to the progressive pedagogy.

2.2.3.1 Constructivism

2.2.3.1.1 Introduction

Constructivism is a theoretical perspective based on observation and scientific study about how people learn (Donald, Lazarus & Lolwana, 2002:99). It states that people construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences. When human beings encounter something new, they have to reconcile it with their previous ideas and experience, perhaps changing what they believe, or discarding the new information as irrelevant. In any case, human beings are active creators of their own knowledge. To do this, they must ask questions, explore and assess what they know.

Constructivism has implications for the theory of instruction. It can point to a number of different teaching practices. In the most general sense, it usually means encouraging learners to use active techniques such as discovery, hands-on, experiential, collaborative, project-based and task-based learning to create more knowledge (Hartle, Baviskar & Smith, 2012:31). They should then reflect on and talk about what they are doing and how their understanding is changing. The educator must make sure that he or she understands the learners' pre-existing conceptions and guide the activity to address and build on it.

2.2.3.1.2 *History of constructivism*

The concept of constructivism has roots in classical antiquity, going back to Socrates' dialogues with his followers, in which he asked directed questions that led his students to realise for themselves the weaknesses in their thinking. The Socratic dialogue is still an important tool in the way constructivist educators assess their learners' learning and plan new learning experiences.

In the previous century Jean Piaget and John Dewey developed theories of childhood development and education that we now call Progressive Education, which led to the evolution of constructivism.

Piaget believed that human beings learn through the construction of one logical structure after another. He also concluded that the logic of children and their modes of thinking are initially entirely different from those of adults. Related to this logical structure and equally dominant to constructivism is the idea that knowledge is not passively received; it is actively constructed. Piaget and Bruner (quoted by Donald, Lolwana & Lazarus, 2002:100) have shown that knowledge is not simply 'taken in' by people. It is actively built up (constructed) and progressively developed to higher levels in every learner. Piaget is therefore regarded as the most influential theorist on 'active agency' in the construction of knowledge (Donald, Lazarus & Lolwana, 2002:102). He used this term to describe how people are continuously involved in building or

constructing more effective ways of knowing and acting on the world as they experience it. In schools, when learners continuously reflect on their experiences, they find their ideas gaining in complexity and power, and they develop increasingly strong abilities to integrate new information. One of the teacher's main roles becomes the encouragement of this learning and reflection process.

The learning theories of Dewey, Montessori and Kolb serve as the foundation of constructivist learning theory (Lombardi, 2007:139). Constructivism has many varieties of which active learning, discovery learning and knowledge building are but three which promote a learner's free exploration within a given framework or structure. The teacher acts as a facilitator who encourages learners to discover principles for themselves and to construct knowledge by working to solve realistic problems.

Dewey called for education to be grounded in real experience. He wrote, "If you have doubts about how learning happens, engage in sustained inquiry: study, ponder, consider alternative possibilities and arrive at your belief grounded in evidence" (Reece, 2001:13). Inquiry is a key part of constructivist learning.

Among the other educators, philosophers, psychologists and sociologists who have added new perspectives to constructivist learning theory and practice are Vygotsky and Bruner.

Vygotsky introduced the social aspect of learning into constructivism. He defined the "zone of proximal learning," according to which learners solve problems beyond their actual developmental level (but within their level of potential development) under adult guidance or in collaboration with more capable peers (quoted by Donald, Lolwana & Lazarus, 2002:70).

Bruner initiated curriculum change based on the notion that learning is an active, social process in which learners construct new ideas or concepts based on their current knowledge (quoted by Donald, Lolwana & Lazarus, 2002:64). Bruner wanted to know

why learners do not learn deeply by listening to a teacher or reading from a textbook. He concluded that to design effective teaching environments, the teacher needs to have a good understanding of what the learner already knows and construct new knowledge based on it. Educators should start with complex problems and teach basic skills while solving these problems. This requires an understanding of learners' cognitive development on whose psychological studies constructivism heavily relies.

From the above elaboration, the researcher can assess the learner-centeredness of this approach advocated by all theorists. Learner-centeredness does not imply that the learners must be the only active participants in class. The teacher should guide the learners to achieve this as described in the next paragraph. Progressive teachers should skill themselves in the psychological theories of cognitive development and learner-centred classroom methods if they are lacking it. Constructivism has become one of the most important learning theories in modern education (Hartle, Baviskar & Smith, 2012:32). It forms the basis of inquiry teaching methods and consequently it is the prime learning theory for progressives.

2.2.3.1.3 *What is constructivism?*

Constructivist teachers encourage learners to constantly assess how the activity is helping them gain understanding. By questioning themselves and their strategies, learners in the constructivist classroom ideally become "expert learners." This gives them ever-broadening tools to keep learning. With a well-planned classroom environment, learners learn how to learn. This will be a main consideration of this study: to help learners understand that rote learning is not actually learning as they forget what they have learned within a few weeks.

One of the teacher's main roles is to encourage this learning and reflection process by assisting learners to become "expert learners" perhaps in the following way. For example, groups of learners in Grade 10 discuss a contemporary problem in the

Economics classroom. Though the teacher knows the "answer" to the problem, she focuses on helping learners restate their questions in useful ways. She prompts every learner to reflect on and examine his or her current knowledge. When one of the learners comes up with a relevant concept, the teacher grasps it, and indicates to the group that this might be a fruitful avenue for them to explore. Depending on every learner's level of knowledge, they can further build on the concept and move to promote their level of knowledge. They design and perform relevant experiments. Afterwards the learners and teacher talk about what they have learned, and how their observations and experiments helped (or did not help) them to better understand the concept. Under constructivism this reflection on learning is referred to as metacognition (Hartle, Baviskar & Smith, 2012:33).

Contrary to criticisms by some (conservative/traditional) educators, constructivism does not dismiss the active role of the teacher or the value of expert knowledge. Constructivism modifies the role of teachers, so that they help learners to construct knowledge rather than to reproduce a series of facts. The constructivist teacher provides tools such as problem-solving and inquiry-based learning activities through which learners formulate and test their ideas, draw conclusions and inferences, and pool and convey their knowledge in a collaborative learning environment. This is corroborated by Reeves, Herrington and Oliver (2002:1) who list it as one of the characteristics of constructivism. Constructivism transforms learners from passive recipients of information to active participants in the learning process. Always guided by the teacher, learners construct their knowledge actively rather than merely mechanically digesting knowledge from the teacher or the textbook.

Another very central concept in constructivist thinking is that knowledge is not fixed and given. It is shaped, constructed and re-constructed in different social contexts and at different times. Piaget and Bruner have borne this out in the third paragraph under the History of Progressive Education in this paper. This must be emphasised with the Grade 10 Economics learners. How the Americans dealt with the challenges of the great

Depression, for example, cannot necessarily be a solution to deal with the recent 'meltdown' experienced in their economy since contexts change constantly. In the constructivist classroom therefore both teacher and learners think of knowledge not as inert factoids to be memorised, but as a dynamic, ever-changing view of the world we live in and the ability to successfully expand and explore that view.

To conclude, in the constructivist classroom, the focus tends to shift from the teacher to the learners. The classroom is no longer a place where the teacher ("expert") pours knowledge into passive learners, who wait like empty vessels to be filled. Gregory alluded to this by referring to the learner being a 'receptacle' in a previous paragraph. Freire speaks against this 'empty vessels to be filled' later in this paper. In the constructivist model, learners are urged to be actively involved in their own process of learning with the assistance of the educator. The teacher functions more as a facilitator who coaches, mediates, prompts and helps learners to develop and assess their understanding, and thereby their learning (Lombardi, 2007:3). One of the teacher's greatest tasks becomes asking effective questions.

At this stage it is important to know whether or not educators and learners find themselves in a constructivist classroom. It is useful to bear in mind that constructivists acknowledge that learners are constructing knowledge in traditional classrooms too. It is really a matter of the emphasis being on the learner, not on the teacher in the constructivist classroom. The characteristics below are typical to the constructivist classroom which the researcher views as essential for the progressive Economics classroom (Donald, Lazarus & Lolwana, 2002:100).

2.2.3.1.4 *Characteristics of constructivist teachers/classrooms*

2.2.3.1.4.1 *Pursuit of student questions and interests is valued*

Constructivism encourages questioning by learners to assess their understanding and knowledge of the world and therefore a particular topic at that moment in time (Donald et al., 2002:100). If learners ask questions, constructivist educators would be

appreciative of it and their interest in a particular topic. Educators can also direct their learners' thinking and make them realise the weakness in their thinking patterns. Inquiry is central to constructivist learning. By pursuing the interests of learners on a specific topic in economics, the progressive educator could instil a thirst for further knowledge about the subject.

2.2.3.1.4.2 Learning is interactive, building on what the learner already knows

As previously mentioned under the History of Constructivism, Piaget (quoted by Donald, Lazarus & Lolwana, 2002:102), among others, contends that knowledge is actively built up or constructed. It is then progressively developed to higher levels in every learner. This construction of knowledge is also referred to as 'scaffolding' in the discussion on constructivist principles and is dependent on the learner being active in the classroom. From this interactivity between learner and educator as a facilitator, it can be established what learners already know in order to broaden their knowledge.

2.2.3.1.4.3 Teacher's role is interactive, rooted in negotiation

The educator is a facilitator for learning and involves the learners in their own learning. Constructivist teachers are not the only ones transmitting knowledge in their classrooms. They become involved with learners by encouraging them to reflect on their current knowledge and negotiate with the teacher on how to broaden it. The outcome of this negotiation might be collaborative and co-operative learning projects.

2.2.3.1.4.4 Strong emphasis on problem solving and critical thinking

The researcher does not want his learners to be rote learners; instead he wants them to become critical thinkers and problem solvers. The constructivist educator should work on strategies to guide learners towards problem solving and critical thinking. Learners should, for example, eventually come up with their own solutions to unemployment because those described in standard textbooks do not seem to address the issue. Critical thinking would mean that learners would follow the Freire path and not accept

everything they are taught uncritically. Education for social responsibility and democracy would be emphasised as part of critical thinking.

The educator's pursuit of student questions and interests is valued during the application of this characteristic.

2.2.3.1.4.5 *De-emphasis on textbooks in favour of varied learning resources*

This will be a great challenge with the CAPS curriculum that is so content-driven. For this content to be transmitted to learners, the Department of Basic Education prescribes learner training support material in the form of textbooks to be used by schools. There was much public outcry in 2012 when textbooks were not delivered to schools in the Limpopo Province on time (Chauke, 2012). The researcher thought that the outcry was exaggerated because it implied that educators cannot teach without textbooks. To de-emphasise textbooks in such an environment, however, would be futile in the researcher's opinion.

Progressive educators should, however, be bold and not rely only on textbooks in teaching Economics. They should use newspaper articles, invite expert speakers on specific topics, use cartoons, show contemporary videos and have topical discussions with learners to add variety to classroom practice. Educators could also emphasise learning by doing hands-on projects, expeditionary learning and experimental learning (Rule, 2006:2).

2.2.3.1.4.6 *Other sundry characteristics*

A progressive educator views knowledge as dynamic, ever changing with learners' experiences. Learners work primarily in co-operative learning groups which is highly collaborative. The progressive teacher will encourage the integration of community service and service learning projects into the daily curriculum. The integration of entrepreneurship into education and emphasis on lifelong learning and social skills conclude this sub-section on the characteristics of the progressive educator.

The researcher next discusses the constructivist principles that educators must follow to remain true to the progressive tradition. The researcher believes that these principles will contribute to a genuine learning environment in which a progressive teaching design will prosper.

2.2.3.1.5 *Constructivist principles of practice applicable to teaching/learning*

2.2.3.1.5.1 *Promoting content as well as process*

In constructivism it is important for teachers to balance the ‘what’ (content) of learning with its ‘how’ (process). Bruner (quoted by Donald, Lazarus & Lolwana, 2002:108) asserts that learning is not only about facts and information but that the structure underlying a piece of learning in terms of concepts and relationships are just as significant.

In terms of process, learners should be helped to develop more effective and powerful strategies to learning (Donald, Lazarus & Lolwana, 2002:108). A Grade 10 Economics learner can use the knowledge of the difference between needs and wants as a basis for discussing the use of scarce resources to solve the economic problem (DBE, CAPS: Economics, 2012:).

2.2.3.1.5.2 *Creating opportunities for action*

Educators need to create opportunities for ‘active engagement’ on the part of their learners (Donald, Lazarus & Lolwana, 2002:108). The whole purpose of learning is for teachers to seek for action to turn the ‘unfamiliar into the familiar’.

Learning and cognitive development are active and not passive processes; inferring that passive time is wasted time. The researcher’s contention is that Economics educators should circumvent this passivity with thorough lesson planning where learners are involved in either whole-group instruction and interaction, group or pair activities and some individual activities.

2.2.3.1.5.3 Connecting

Of critical importance here is connecting teaching with where learners are in their understanding. This means more than ‘reviewing where we were last week’. Connecting also has to be a more immediate and individualised process. Vygotsky’s ‘zone of proximal development’ (ZPD) captures this idea. Truly productive learning occurs in “that critical space in a person’s present understanding where through proximal interactions, s/he can be helped to construct a new level of understanding” (Donald, Lazarus & Lolwana 2002:109).

According to Craig (quoted by Donald, Lazarus Lolwana, 2002:109), teachers can assist this critical connection by presenting familiar content while challenging learners to advance in their unfamiliar form of thinking about this content. This process may be seen as helping to connect in learners’ ZPD. Constructivist teachers can use their learners’ prior knowledge to fine-tune their lesson to build on new work (Hartle, Baviskar & Smith, 2012:33).

Learners can be led to understand the triple challenge of poverty, unemployment and inequality in South Africa by using this connecting principle. Grade 10 Economics learners should know that people in poverty cannot afford the basics to exist. Through the use of the ZPD, learners should be guided by making the connection of enquiring why people are poor (unemployment) and its consequence (inequality).

Sometimes educators are concerned when it seems that learners are unable to make the connection. It is then useful to apply Piaget’s concept of ‘cognitive conflict’ which means that new information does not fit with a person’s present understanding (Donald, Lazarus & Lolwana, 2000:64). Teachers should not be unduly concerned because of this disequilibrium, for this is a necessary condition before the person is motivated to adapt and re-establish equilibrium. It is, however, important to know the person’s level of understanding. If in our example learners do not understand poverty in the first place;

they are not ready to make the connection. If they are guided to understand poverty (a new level of understanding) this can be a great stimulus to advance their learning.

2.2.3.1.5.4 Promoting guided discovery

Bruner (cited in Donald, Lazarus & Lolwana, 2000:111) has been a key figure in promoting the notion of discovery learning. It is erroneous to assume that learners should discover everything for themselves. This would be far too random and inefficient. A theorist by the name of Gagne (quoted by Donald, Lazarus & Lolwana, 2000:111) conveyed that there is a very active teacher's role in guiding learners to key areas of discovery. This has been mentioned earlier, but its significance comes to the fore as it is regarded as a principle. The latter principle can be compromised by learners' realisation that their current constructs do not match their needs. This is called the criteria of creating cognitive dissonance which is one of the central criteria of constructivist teaching principles. To identify cognitive dissonance, look for wrinkled brows. When learners are presented with information or puzzles that their current constructs cannot account for, they often look confused. Misconceptions are another sign that students' constructs are inappropriate for the problem at hand (Hartle, Baviskar & Smith, 2012:33). They then need serious guidance on their road to discovery learning.

To address cognitive dissonance guided discovery learning has to be very carefully planned and it must connect with learners' previous understandings. To be most effective, it needs to challenge learners to discover key elements in the structure and form of a topic. It also needs to be used to help learners understand their own thinking, "i.e. their strategies for discovering and drawing conclusions about the topic" (Donald, Lazarus & Lolwana, 2002:72).

Discovery used effectively with appropriate guidance can be a truly meaningful learning experience. For Economics learners to explore and discover, educators should be more progressive in their teaching strategies. These learners need to be able to move and search to try things out and always discuss, reflect and argue about issues with their

peers. Provided the educator pulls all together at an appropriate point, tolerating what may look like disorder is a really essential part of promoting discovery learning (Donald, Lazarus & Lolwana, 2002:111).

It is only through learning to handle this sort of freedom productively that learners will in turn become more confident about their own capacity for self-directed learning.

2.2.3.1.5.5 Scaffolding

This term is most appropriate for this highly useful teaching/learning process. A scaffold is normally a temporary structure that is erected around a building to support the building process until it is complete. Metaphorically, this is exactly what happens when teachers scaffold key knowledge structures and learning strategies for their learners, appropriate to the latter's level of development. Through scaffolding, learners are challenged at whatever level they are to develop their understanding to a more powerful level. Teachers should know how to scaffold key structural understandings and strategies. If these are accurately identified in the first instance, the ripple effects of such scaffolding will have far-reaching benefits on learners' capacities to learn (Donald, Lazarus & Lolwana, 2000:113).

In the process of scaffolding the educator provides help and suggestions, but gradually withdraws as learners reach a level of constructing their own internalised understanding.

2.2.3.1.5.6 Promote co-operative learning

Co-operative learning may assume many forms. It can relate to interactions between pairs of learners or among a larger group of learners. The learning requirement can be specific such as solving a particular problem or it might relate to a larger task such as putting together a presentation to the class. It is now well established that under the right conditions, learners solving problems in pairs or in small groups can promote one

another's cognitive development according to Doise and Mugney (quoted by Donald, Lazarus & Lolwana, 2000:114).

According to Piaget, (quoted by Donald, Lazarus & Lolwana, 2000:114), co-operative learning can be understood as involving active exploration and equilibration on the part of every learner. This is stimulated by the 'cognitive conflict' or challenge to adapt, which learners present to one another when their understanding differs (Donald, Lazarus & Lolwana, 2000:73). The educator's role is to ensure that learners engage in activities which have some clear goal or purpose and that through interaction, sharing and joint problem solving they are challenged to achieve. The progress of the learning experience should be closely monitored by the educator and intervention should take place when necessary.

Quoting Adams and Hamm, Van Wyk (2007:7) states that co-operative learning as a learning strategy is one the success stories of transformation in the past decade. Adams and Hamm's research focused on the application of co-operative learning activities in the classroom where learners jointly and creatively identify problems and generate practicable solutions (Van Wyk, 2007:8): In the CAPS document for Economics (DBE, CAPS: Economics, 2011:4), its second stated aim is to produce learners that can work effectively as members of a team. This aim can therefore be addressed through the learning strategy of co-operative learning by the Economics educator.

Van Wyk (2007) further describes the rationale for applying this strategy in Economics. He firstly states that it evokes learner interest in the subject. Secondly, it promotes the process of establishing links between prior and new knowledge in effective and efficient ways. Thirdly, it encourages a critical attitude among learners regarding the subject matter (Van Wyk, 2007). It promotes a process of expanding learners' understanding of their social environment and their active participation in it. Finally, it develops and promotes thoroughness, tidiness and precision within the Economics environment.

Co-operative learning, however, entails more than simply placing students into groups and having them work together on a problem. Poorly structured group exercises are likely to promote free-rider behaviour, allow for participation of under-prepared learners and result in disgruntled participants (McGoldrick et al., 2012:2).

Some of the strategies of co-operative learning are dealt with later in this review in the paragraph under practical suggestions in the Grade 10 Economics classroom.

2.2.3.1.5.7 Developing language and language interaction

In all dimensions of teaching and learning learners should be helped to develop and refine their language at all times. Apart from the formal teaching of language, learners should be encouraged to interact verbally with their subject educator and peers with appropriate language usage. They should refine their language and language interaction further through reading and writing in a variety of learning contexts and activities. To develop their use of language as a tool for learning, learners need to engage in constant discussion, reflection, debate and interactional problem solving. The other six principles discussed above actually depend on such language interaction. Constructivist principles demand that classrooms should not be quiet places or where only the educators' voices are heard; learners' voices should enliven the classroom (Donald et al., 2002:115).

Learners who are not fluent in the use of language will tend not to interact. Another critical dimension of language development is therefore to bolster learners' confidence. If learners do not interact, they lose more confidence and their language development is retarded (Donald, Lazarus & Lolwana, 2002:116).

Learners whose confidence in their use of the language is low are normally afraid to speak in front of the whole class. The educator can overcome this challenge through group work and co-operative learning activities. Interactions through these contexts are less threatening and learners use language in ways that they might not normally do,

such as through debating, putting a view across and defending a position. Bernstein (quoted by Donald, 2000:116) alluded to the significance of this form of language interaction which is beyond everyday use if learners are to progress at school.

In South African schools educators should be very conscious of the difficulties that learners experience when learning through a second language. The researcher hopes to encourage and help learners to interact and develop confidence in the language of learning as far as possible, in the ways suggested above.

2.2.3.1.6 *Assessment within the constructivist paradigm*

Meaningful teaching and learning cannot take place without some form of assessment or evaluation of how effective it has been. Assessment is an integrated part of the process of how teaching and learning is taking place (Beets & Le Grange, 2005:1199).

A crucial part of assessment is its purpose (why you are doing it) and its effects (how it influences further learning). In the researcher's experience, assessment in South African schools occurs automatically without taking this purpose into account. It should be remembered that assessment is the central process in effective instruction. It is only through assessment that it can be determined whether a particular sequence of instructional activities has resulted in the intended learning outcomes (William, 2011:3).

At all levels of schooling in South Africa, tests are commonly given that only require recall of facts or information. If educators should be asked about the purpose of such an assessment, the response would probably be that it gives an indication of performance or that they need marks for every student. The answer sounds fine but one needs to ask whether actual performance has really been measured: did the learners show what they can or cannot do? Does the performance relate to the aims of the curriculum and to the outcomes of the lessons that the educator prepared? Do the marks obtained by learners tell educators anything about what learners need to do to move forward at their

particular point of understanding (their ZPD)? (Donald, Lazarus & Lolwana, 2002:119). In answering these questions, teachers will gain insight into better purposes for assessment and into other forms of assessment which might be used to meet these purposes.

The effects of the current system of assessment in South African schools are that learners learn from early in their school career that assessment and marks really matter. They know that this will be the ultimate basis on which they will be judged as competent or as passing or failing. This approach has several negative effects. One is that no matter what creative, discovery-orientated or co-operative activities educators have included in their lessons, because assessment is generally based on recall of information, learners will not willingly venture into exciting learning spaces they are offered. Learners know that what ultimately matters is a 'mark' and if marks are based on facts, it is facts that they will collect (Abott, 2014:1).

These negative effects unfortunately extend to the whole schooling system and crucially to the important Senior Certificate examination. Even the researcher as an exponent of constructivist principles has to sell his principles because assessment determines the nature of learning. Because assessment causes the majority of South African teachers to teach facts in a straightforward manner for examinations rather than through creative means, it means the 'tail ends up wagging the dog' (Sergiovanni & Starratt, 2007:127).

Most aspiring constructivist teachers find it difficult to create a truly constructivist activity for their learners, although it might greatly increase a learner's involvement in the topic. Those educators that implement constructivist assessment practices appreciate the pure enjoyment and experience a sense of pride and accomplishment that result from it (Alesandrini & Larson, 2011:121).

If educators apply assessment constructively and it is applied as such throughout the education system, it can certainly make a difference to teaching and learning. In the next three paragraphs, three very important assessment principles are explained.

Assessment of learning

Assessment of learning assists teachers in using evidence of learner learning to assess achievement against outcomes and standards (Stiggings, 2006). Sometimes referred to as 'summative assessment', it usually occurs at defined key points during a unit of work or at the end of a unit, term or semester, and may be used to rank or grade learners. The effectiveness of assessment of learning for grading or ranking depends on the validity and reliability of activities. Its effectiveness as an opportunity for learning depends on the nature and quality of the feedback. Assessment of learning is used to plan future learning goals and pathways for learners. It provides evidence of achievement to the wider community, including parents, educators, the learners themselves and outside groups.

Assessment for learning

Assessment for learning involves teachers using evidence about learners' knowledge, understanding and skills to inform their teaching (Stiggings, 2006; Black & William, 2009). This process is sometimes referred to as 'formative assessment'. It usually occurs throughout the teaching and learning process to clarify learner learning and understanding. Furthermore, assessment for learning reflects a view of learning in which assessment helps learners learn better, rather than just achieve a better mark (William, 2011:10). The teacher provides and creates learning opportunities to learners that involves formal and informal assessment activities as part of learning and to inform the planning of future learning. Clear learning objectives are formulated which includes clear goals to be achieved for the learning activity. After each learning activity, the teacher provides effective and constructive feedback that motivates the learner and can lead to improvement in learning situations. Through this, assessment reflects a belief that all learners can improve and regulate their own learning process. It enhances and encourages self-assessment and peer assessment as part of the regular classroom routines by including all learners.

Assessment as learning

Assessment as learning occurs when learners are their own assessors. They monitor their own learning, ask questions and use a range of strategies to decide what they know and can do, and how to use assessment for new learning. Assessment as learning encourages learners to take responsibility for their own learning. Learners can ask more questions about their learning by supporting their learning goals to encourage growth and development. The teacher can encourage learners by using peer assessment, self-assessment and reflection during each learning activity in the classroom (Stiggings, 2006). Assessment as learning thus puts learners into an active role as learners by using assessment information to self-assess, regulate and monitor their learning progress (Goode et al., 2010:21). These views are supported by Dann (2004:142) who indicates that the learner is central to learning and that the processes of self-regulation and understanding are fundamental to learning.

The study of these three assessment principles led the researcher to probe as to when authentic learning occurs. The researcher thought it would be proper to next investigate the main tenets of what constitutes authentic learning which is at the centre of this study.

2.2.3.1 *Authentic learning*

2.2.3.2.1 *Defining the concept of authentic learning*

In education, the term 'authentic learning' refers to a wide variety of education and instructional techniques focused on connecting what learners are taught in schools to real-world issues, problems and applications (Abbott, 2014). According to Lombardi (2007), authentic learning typically focuses on real-world, complex problems and their solutions, using role-playing exercises, problem-based activities, case studies and participation in virtual communities of practice. Authentic learning is real-life learning. It

is a style of learning that encourages learners to create a tangible, useful product to be shared with their world.

However, there is no single definition of authentic learning. Theorists such as Abott, Lombardi and Rule argue that it is a vital part of education in the 21st century. Rule (2006:1) portrays it as a relatively new term that describes learning through applying knowledge in real-life contexts and situations. Other authors such as Reeves, Herrington and Oliver (2002), in writing about the same topic, feel that schools around the world deliver content that is abstract, disconnected and decontextualised. Part of the challenge is that content is delivered with little opportunity for learners to make personal sense of that content. Another challenge is that learners are then expected to replicate that content or knowledge in a form that is recognisable as the original. Learners, instead of exploring new knowledge and gaining fresh insight into the world, are learning what is already known. They are then tested on their recall of what they have 'learnt' and graded as successes or failures. Therefore, Reeves, Herrington and Oliver question whether any authentic or real learning actually occurred.

2.2.3.2.2 *Principles of authentic learning*

The ability to solve problems and think critically is more important than ever, making critical thinking a crucial skill for 21st century students (Abbott, 2014).

The fundamental principles of authentic learning are:

- **Enhance critical thinking.** Critical thinking is about defining a problem, asking questions, examining evidence, analysing assumptions and biases and avoiding emotional reasoning. It also involves avoiding oversimplification, considering other interpretations, considers ambiguity and meta-cognition (understanding how we process information) (Peterson, 2007). According to Rule (2006), learners must exercise higher levels of thinking for authentic learning to happen. These should

include skills such as analysing, synthesising, designing, manipulating and evaluating information. Critical thinking implies engaging learners so that they do not accept unconditionally what they are taught.

- **Empowering learners with problem-solving skills.** Critical thinking requires the development of problem-solving skills. Current research supports the notion that discovery-oriented learning environments are essential for the development and effective transfer of higher order skills applied in problem-solving skills. Learners pose and solve complex problems (Hilt, 2011). The educator uses the word 'provocations' to engage learners in problem solving. In this study the learners will seek to find solutions to the challenge of unemployment.
- **Peer learning and sharing.** Success is not achievable by an individual learner working alone, but it can be achieved by a group of learners working together to unravel a problem. Learners talk to the teacher and to one another by engaging in real and substantive conversations (Hilt, 2011). The authentic learning environment nurtures the open sharing of ideas.
- **Learners collaborate and co-operate as members of a group.** We live in a social world and often the only way to prepare learners for this world is to engage them in collaborative, co-operative and sometimes competitive activities (Wheeler, 2014). Learners prioritise, plan and manage their learning to accomplish the goals of the group. The role of the educator in this authentic environment is to guide, facilitate and support. Authentic activities make collaboration integral to the task both within the course and in the real world (Lombardi, 2007).
- **Other principles of authentic learning are that it mirrors the complexities and ambiguities of real life.** It is therefore designed around open-ended questions without clear right or wrong answers, or around complex problems with many possible solutions that could be investigated using a wide variety of methods

(Abbott, 2014). In real life there is no clear 'yes' or 'no' answers; no 'right' or 'wrong' answers.

- Authentic learning is also more **likely to be 'interdisciplinary'** given that life, understanding and knowledge are rarely compartmentalised into subject areas (Windham, 2007:5). As adults, learners will have to apply multiple skills or domains of knowledge in any given educational, career, civic or life situation. In general the purpose of authentic learning is to encourage learners to think more deeply, ask tough questions, consider multiple forms of evidence or deal with difficult challenges and situations.

2.2.3.2.3 *Characteristics of authentic learning*

In investigating what authentic learning actually is, Rule (2006) states that three components are repeatedly found after having done a content analysis of 45 journal articles on this topic at the State University of New York. Admitting that the term authentic learning is broad and has not been applied to a specific instructional model, she found that the three components are found repeatedly and therefore suggests that it should form an integral part of the authentic learning experience.

The first of these three themes that support authentic learning is an activity that involves real-world problems and that mimics the work of professionals (Abbott, 2014:2). In Economics, for example, this may be accomplished when the effects of unemployment are discussed with an unemployed person. This engagement holds the possibility of having an impact outside the classroom. The second theme is the use of open-ended inquiry, thinking skills and metacognition. For authentic learning to take place learners must exercise higher levels of thinking. These should include skills such as analysing, synthesising, designing, manipulating and evaluating information as mentioned under the principle of critical thinking above. Learning in Economics could occur through discovery, inquiry and deduction. Learners thirdly direct their own learning in project

work. The latter refers to learner-directed learning; they are actively engaged in exploration and inquiry; they are assisted in their learning by peers, teachers, parents and outside experts who are all assisting and coaching in the learning process.

Reeves, Herrington and Oliver (2002) support these components of authentic learning as alluded to by Rule (2006) and further substantiate it with six additional characteristics. Among these are that authentic learning should consist of complex and sustained tasks. These tasks are to be completed in days, weeks and months rather than minutes or hours. This implies significant investment of time and intellectual resources. Authentic learning further provides an opportunity for learners to examine tasks from different perspectives (multiple perspectives) using a variety of resources and separating relevant from irrelevant information.

Collaboration is another characteristic that is integral and is required for task completion. It further encourages activities from interdisciplinary perspectives, enabling learners to play diverse roles and to build expertise that is applicable beyond a single well-defined field or domain (Lombardi, 2007).

Authentic learning is authentically assessed which means that assessment is seamlessly integrated with learning in a manner that reflects how quality is judged in the real world (Reeves, Herrington & Oliver, 2002). This is in contrast to traditional learning assessments in which an examination is given after the knowledge or skills have hopefully been acquired. The last characteristic of Reeves, Herrington and Oliver (2002) makes provision for multiple possible outcomes to an activity or challenge rather than a single correct response obtained by the application of predefined rules and procedures. Literature also suggests that authentic learning is closely connected to the world beyond the walls of the classroom.

2.2.3.2.4 Benefits of authentic learning

Some of the benefits of authentic learning are that learners are more motivated and more likely to be interested in what they are learning when it is relevant and applicable to their lives beyond school. Learners are better prepared to succeed at university, in careers and in adulthood. Learners learn to assimilate and connect knowledge that is unfamiliar. Application of theoretical knowledge to the world outside the classroom is enhanced. Learners are exposed to different settings, activities and perspectives (Curtin University, 2014).

Learners have opportunities to collaborate, produce products and to practise problem-solving and professional skills. They have opportunities to exercise professional judgements in a safe environment; they develop patience to follow longer arguments; they develop flexibility to work across disciplinary and cultural boundaries (Curtin University, 2014).

Other benefits are that authentic learning flows from authentic teaching or instruction. The intention of the latter is to give learners the opportunity to apply their minds well and to provide learners with teaching or instruction that has meaning or value beyond achieving good grades at school (Newman & Wehlage, 1993:10). Because it is difficult to define authentic learning in a single manner, it is important to develop an awareness of the identifiable qualities of authenticity in stimulating learning environments which are also beneficial to learners.

The first quality is depth of knowledge. Knowledge is considered to be deep when learners can “make clear distinctions, develop arguments, solve problems, construct explanations and otherwise work with relatively complex understandings” (Newman & Wehlage, 1993:10). Teachers cover fewer content topics in a systematic and connected way which leads to deeper understanding. The second quality is evidence of higher order thinking where learners move beyond the simple recall of facts. They pose and

solve complex problems; they investigate subject matter by using critical thinking; they question everything and when they find answers, they pose additional questions. The thirst for learning is insatiable (Hilt, 2011). The third quality is about learners having real and substantive conversations with one another and the educator. The learning environment encourages and nurtures the open sharing of ideas. Learners converse through a variety of media as part of the reflective process; they form generalisations, make distinctions and engage in dialogue with elaboration. Connectedness to the world is the fourth identifiable quality of authenticity in stimulating learning environments. This is exhibited when learners address real-world public problems or when they use personal experiences as a context for applying knowledge.

2.2.3.2.5 *Concluding remarks about authentic learning*

Before finally concluding the discussion on authentic learning, the researcher must affirm that he is in agreement with those who perceive that the public education system pays inadequate attention to the development of intellectual abilities, practical skills, work habits and character traits that are required for success in adult life. In advancing authentic learning as a way to address these issues, it intersects with larger social debates about what public schools should be teaching and what the purpose of public education should be. Advocates of authentic learning may argue that the purpose of public education is to look beyond test scores or pass rate success in school to the knowledge, skills and character traits learners actually need to succeed in adult life - success outside school (Abbott, 2014).

Finally, developmental psychologist Bruner reminds us that there is a great difference between learning about economics and learning to be an economist. Isolated facts and formulae do not take on meaning and relevance until learners discover what these tools can do for them (Lombardi, 2007). Through authentic learning tools learners can make this discovery of relevance and meaning.

After a thorough discussion on authentic learning, the researcher thought it appropriate to determine next whether the critical pedagogy of Freire would fit into the realm of progressivism. The emphasis by Freire on critical thinking seems to align with progressivism.

2.2.3.3 *Critical pedagogy and its fit into progressivism*

Freire was born in Brazil and grew up during the Depression when poverty and hunger severely affected his ability to learn. This would shape his concerns for the poor and would help construct his particular educational viewpoint. “I didn’t understand anything because of my hunger. I wasn’t dumb. It wasn’t lack of interest. My social condition did not allow me to have an education. Experience once again showed me the relationship between class and knowledge” (Stevens, 2002:2).

In the early 1970s Freire’s ‘Pedagogy of the Oppressed’ and ‘Education for Critical Consciousness’ swept the globe. Since it was anti-traditional and even anti-establishment, it might be regarded as another form of progressive pedagogy in terms of the ‘broad landscape of educational ideas’ mentioned earlier.

In terms of actual pedagogy, Freire is best known for his attack on what he called the ‘banking’ concept of education because it treated learners as empty vessels to be filled like a piggy bank with knowledge by the educator. Freire rejected the ‘banking approach’ claiming it results in the dehumanisation of both the learners and educators. He notes that this approach “transforms learners into receiving objects. It attempts to control thinking and action, leads men and women to adjust to the world, and inhibits their creative power” (Freire, 1970:77).

Dewey’s writings may have influenced Freire because the former was highly critical of the transmission of mere facts as part of the goals of education. Dewey then, and Freire later, often described education as a mechanism for social change, explaining that “education is a regulation of the process of coming to share in the social consciousness

and that the adjustment of individual activity on the basis of this social consciousness is the only sure method of social reconstruction” (Reese, 2013:326). Freire’s work, however, expounded on Dewey’s views and placed them in the context the contemporary theories and practices of education of his time and laid the foundation for what is now called ‘critical pedagogy’.

Freire, arguably the most celebrated critical educator, heavily endorses learners’ ability to think critically about their education system: this way of thinking allows learners to “recognise connections between their individual problems and experiences and the social contexts in which they are embedded”. Learners should not allow themselves to be silenced by the culturally dominant grouping in society but respond critically to them.

One can also compare Freire’s analysis to that of Egan (quoted by Davis, 2006:62) who wrote, “What seems to be central to becoming educated... is not being bound by conventional ideas and beliefs which people commonly grow up to accept. Education, to put it tendentiously, is a process that awakens individuals to a kind of thought that enables them to imagine conditions other than those that exist or that have existed.”

In the case of Economics learners, this would mean that they should, for example, challenge the current system of capitalism as a given. They should debate on why the world has a few rich people and masses of poor people. How are the resources of the world managed to sustain the current uneven situation? Poor and rich learners should engage each other as to why their material conditions differ within the same country (Freire, 2005:103). They should debate as to whether the education they are gaining at that moment in time will improve the situation of those who are worse off.

This approach also seems to be in line with Vygotsky’s insight into the social construction of knowledge (quoted by Donald, Lazarus & Lolwana, 2002:63). Knowledge, in his words, is not given or unchanging: it varies across different social

contexts and historical times. It is always in a process of construction, socially and individually, by educators and learners.

Young teachers who entered the teaching profession during the 1970s and 1980s, like those who studied at the University of the Western Cape (UWC), started to encourage their learners to think critically about the policies of apartheid and its impact on education and society as a whole. Studying Philosophy of Education under the guidance of Prof Wally Morrow, students rejected the Philosophy of Fundamental Pedagogics and became influenced by the neo-Marxist analysis of South African education (Parker, 2003). A critical consciousness developed and the term 'People's Education' emerged and could be regarded as South Africa's first internal attempt at providing an alternative to traditional education and could thus be defined as progressive or at least a variant of it.

Freire's Critical Pedagogy is still very relevant in South Africa today where critical consciousness is required in and outside the classroom (Freire, 2005:110). A significant number of parents, for example, cannot afford to pay school fees for their children. The school is not only applying pressure on the parents but indirectly on the learners who have to take outstanding invoices home. Parents cannot pay because they are either unemployed or if employed, lowly paid. Unemployment and low wages lead to poverty because people's standards of living are dropping. These are societal issues and recognised by the government of South Africa as a huge challenge: the triple challenge of unemployment, poverty and inequality. This issue is addressed in the National Curriculum Statement Grades R-12 CAPS document under general aims where its intention is made clear that educators and learners should be sensitive to issues of poverty, inequality, race, gender, disability and other factors (DBE, CAPS: Economics, 2011:11).

In the Economics classroom learners must be guided to think critically why South Africa has this large challenge of unemployment, poverty and inequality. In South Africa the

gap between rich and poor is of the worst on the globe. South Africa's poor are the worst in relation to the rich. Learners should be critical about the levels of poverty throughout the world. It was reported many times at the United Nations that there are enough resources in the world to feed everybody, but that the use of the world's resources is not well managed. Learners, in the Freire tradition, should ask why this is the case and in whose interest it is that we have the current situation in the world.

To achieve this line of reasoning is not easy. Freire suggests that the role of the teacher is critical to the process. Teachers must help learners to separate themselves from the unconditional acceptance of their own existence (Freire, 1970:90). Once this separation is achieved, learners may be prepared for critical re-entry into an examination of everyday life. In a classroom environment that achieves such liberating intent, one of the potential outcomes is that learners themselves assume more responsibility for their class participation. This is what the progressives refer to as the child-centred learning environment.

As a follow-up to critical pedagogy, the researcher now examines the Afro-centrist approach of *ubuntu* as part of the progressive agenda. Since the researcher is from the African continent and the research is done in a South African context, the researcher wants to assess whether an essentially Western approach such as progressivism can accommodate African tendencies such as *ubuntu*.

2.2.3.4 *The philosophy of ubuntu in relation to progressivism*

2.2.3.4.1 *Background*

The term *ubuntu* has gained prominence in post-apartheid South Africa which may be understood as an attempt to (re)discover African cultural values eroded by both colonialism and apartheid. The word *ubuntu* is a component or one of the core elements of being a human being in African terms. The humanness referred to here finds

expression in a communal context rather than the individualism prevalent in many Western societies. However, *ubuntu* does not discount the importance of the individual.

Battle (quoted by Beets & Le Grange, 2005:1200) presents the concept of *ubuntu* as one that originates from the Xhosa expression: *umuntu, ngumuntu, ngabanye Bantu*. He writes “each individual’s humanity is ideally expressed in relationship with others and, in turn, individuality is truly expressed. Or a person depends on other persons to be a person”. Mbigi (2000:6) explains that *ubuntu* literally means, ‘I am because you are - I can only be a person through others’. *Ubuntu* then, is to be aware of one’s own being, but also of one’s duties towards one’s neighbours. According to Venter (2004:156), *ubuntu* is a concrete manifestation of the interconnectedness of human beings – it is the embodiment of (South) African culture and lifestyle. Broodryk (2006) states that the *ubuntu* worldview contains the basic values of humanness, caring, sharing, respect and compassion. He also points out that these core values are associated with other positive values such as warmth, empathy, giving, commitment and love.

The whole education process that centres about *ubuntu* as a philosophy or a set of ethical principles, captures the belief system of most (South) Africans according to which people take responsibility for other people, but also accept the authority and guidance of those who have reached a higher level of knowledge and understanding in order to progress (Msila, 2008; Guthrie, 2013). The last section of this paragraph indicates why academic formalism is so prevalent in South African classrooms.

Ubuntu in a classroom situation fosters and reinforces co-operation rather than competition, collaboration rather than individualism and sharing rather than acquisition. It would expect teachers to encourage learners to work together rather than on their own to solve problems. Stronger academic learners would be encouraged to assist their fellow learners rather than working alone and standing out above their peers. The sharing of ideas rather than accumulation for self would also be one of the hallmarks of a classroom where *ubuntu* is practised. Values such as creative co-operation,

empathetic communication and teamwork could be implemented here. An *ubuntu* classroom would also encourage preservation rather than exploitation, compassion more than advantage, abundance more than scarcity.

Emphasis would be placed on similarities between learners rather than differences. In the South African scenario where classrooms consist of learners from different cultural groups, the acceptance of differences should be encouraged but the discovery of similarities should be the ultimate objective. This is a very important aspect especially in multi-cultural schools. In the researcher's experience, teachers that used to teach one specific cultural group only, tend to place emphasis on the differences between learners. This would not be in the spirit of *ubuntu*. For example, on Heritage Day that celebrates cultural diversity, the programme at school would consist of activities from the different cultural groups, but there would be no item emphasising the new South African identity (similarities). Learners would bring these separate identities to class and would argue along those lines. In a classroom that practises *ubuntu* the value of belonging rather than status, and love more than fear, would be emphasised. The researcher found that when an issue of social transformation such as employment equity is discussed, there is much fear from learners born into the previously advantaged group. These lessons should thus be conducted in the *ubuntu* spirit of compassion and empathy. Learners should be guided to accept that one individual or group cannot prosper at the expense of other individuals or groups. In the words of Mgibi mentioned earlier, "I am because you are - I can only be a person through others".

2.2.3.4.2 *The use of ubuntu principles in assessment practices*

Pendlebury (1998:334) explored the use of African cultural values to play a more central position in assessment practices. The aim was not to get rid of, for example, constructivist principles in assessment, but to determine how *ubuntu* might add to transformations that have already occurred within Western assessment theory and practice.

Assessment practices are embedded in theories of teaching and learning and therefore linked to shifts in understandings of teaching and learning. *Ubuntu* opens up possibilities for more nuanced understandings of assessment theory and practice and more importantly, to enable the transformations of assessment so that it more strongly reflects African culture.

Western countries have made efforts to ensure that assessment practices are more authentic and humane (Beets & Le Grange, 2005:1201). There is now a better understanding that assessment is not only about making a judgement (in an aloof manner), but rather about being with the learner every step of the way and being prepared to recognise learning difficulties in a respectful and dignified way. These efforts are commendable, but dominant values such as competitiveness and individualism could militate against it. It is here that *ubuntu* could add value to deepen such efforts at ensuring greater authenticity and humaneness in assessment practices.

The first two values of *ubuntu* namely humanness (warmth, tolerance, understanding, peace, humanity) and caring (empathy, sympathy, helpfulness and friendliness) capture the spirit in which assessment might be conducted. Fundamental to effective teaching and learning are humanness towards and caring unconditionally for learners. Learners are likely to experience assessment as positive only when they are sure that the educator who guides the learning process is a humane and caring person who is fully aware of their fears and challenges.

The core value of respect (dignity, integrity and order) is demanded of both educator and learner in the assessment process in that there is clarity about what is to be assessed and what is expected of the learner to demonstrate achievement. If it is assumed that all learners have the ability to learn but that they learn at different rates in different spaces, then it is important that the process of preparing the learner is characterised by inclusiveness and respectful adherence by the educator to feedback from the learner and *vice versa*. Reported research in schools has identified feedback

and feed forward (which is the informing of the next steps to be taken in learning) as the variables that have the greatest impact on learner achievement – more than any other aspect of teacher behaviour or curriculum design (Beets & Le Grange, 2005:1202).

Two further values, sharing (giving unconditionally, redistribution) and compassion (love, cohesion, informality, forgiving, spontaneity) are seen from an African worldview as the characteristic of the ideal person (Beets & Le Grange, 2005:1203). A case could be made that these are qualities that all teachers should have and that are necessary to ensure quality teaching and learning through assessment. Possessing these characteristics reflects the social commitment of educators to share with others what they have gained through the efforts of others. Educators by the nature of their profession are in a special relationship with their learners and the community they serve. Through assessment which is derived from a Latin verb for ‘to sit beside’ it indicates a much deeper involvement of a teacher in the development and progress of a learner (Beets & Le Grange, 2005:1203). This includes the guidance, recognition of the learner’s context (physical, emotional, intellectual, cultural and economic), reflection on own practice and continued support as they walk besides learners on the road to achieving the expected outcomes. Through ‘sitting beside the learner’ the educator also ‘sits beside’ the community. Sincerity and level of commitment expresses the individual educator’s humanity in relationship to all those s/he serves. This element of *ubuntu*, i.e. humanness which refers to communally accepted and desirable ethical (educational) standards, is acquired by the educator throughout his life.

The researcher is firmly of the opinion that the *ubuntu* principles of sharing, compassion and respect could better assist us in dealing with issues of competition, intolerance, arrogance and self-claimed superiority which characterise so much of modern social life and the education practices embedded in them. Regarding assessment, the researcher should not encourage unhealthy competition among learners where they would, for example, do anything to attain the highest grades. Learners should be guided to be tolerant of those that are learning at a slower rate. Those who attain good grades

should remain humble and assist those with lower grades. They should be made aware by their progressive educators that good grades do not make you a superior human being and that the whole issue of grading is a contested terrain in spite of societal acceptance of it.

After finding that constructivism, critical pedagogy and *ubuntu* are compatible within the progressive teaching design framework, the researcher set out to investigate the socio-economic and politico-educational challenges faced by it. The researcher is intrigued that this approach never really settled in a firm position in the field of education.

2.3 THE CHALLENGES FACED IN IMPLEMENTING PROGRESSIVE TEACHING METHODS

2.3.1 The nature of the challenge

The researcher is concerned by the question whether progressive teaching methods can be implemented by one or two teachers at a school in a standardised curriculum environment rooted in traditional educational practices. These practices include uniform curriculum, passive or drill-like learner response and whole group instruction. Tyack and Cuban (1995) use the term 'grammar of schooling' to refer to these deeply entrenched practices and note that the public sees such schools that embrace such principles as 'real schools'. In South Africa these practices are referred to as academic formalism and seem to be acceptable within the cultural context of its users as will be alluded to later in this review.

2.3.2 The challenge to progressivism in a Western context

As stated earlier, the groundwork for the progressive education movement in the United States of America (USA) was helped to be launched by Dewey at the beginning of the 20th century. His progressive vision included the recognition of the uniqueness of every child, the importance of personal relevancy in the learning process, the requirement for

an active engaged quality in learning environments and an image of the school as a microcosm and preparation for life in a democratic society (Schubert, 1986; Semel, 1999).

According to Semel (1999), there was a strong presence of progressive practice in schools until the mid 1940s. It was subsequently criticised and calls made for a more 'academic curriculum' and rigorous science and mathematics standards especially after the launching of Sputnik into space by the Soviet Union.

There were scattered pockets of robust progressive practice taking place in the USA from the 1960s to the 1980s. In 1990 the Network for Progressive Educators made an attempt to reintroduce progressive ideals through the drafting of a statement of progressive principles. This was done against a background of classroom practices that resembled those of the early part of the 20th century (Cuban, 1993:203). "The elementary school classroom of the 1990s was decidedly more informal than that of the 1900s... (but) the core of classroom practice in all grades, anchored in the teacher's authority to determine what content to teach and what methods to use, endured as it had since the turn of the century."

The lack of staying power of progressive education may be due to a number of factors, including the social, economic and political climate. Teacher education programmes at universities in South Africa may contain tenets of progressivism but Education students are totally discouraged when they do their compulsory teaching practice in schools. Through observing how the current crop of teachers are teaching in the traditional method, and obtaining 'good academic results through the grades of their learners', student teachers might just be discouraged. This factor together with the demands for strong standardised test results that meet the requirements of the Department of Basic Education (DBE) creates a formidable challenge to teacher education students (DBE: National Protocol on Assessments, 2012:1-5).

The demise of OBE in South Africa severely dented its progressive intentions. There was not so much wrong with the policies of OBE as with the contexts in which it was expected to be implemented. In a country where the majority of schools were under-resourced and without proper training of the country's educators, OBE was doomed to failure from its inception. The majority of teachers tried to implement it within the traditional education paradigm although as the offspring of progressivism it should have been done differently. The issue of context is vitally important and will be shown as a major constraint in changing to progressivism especially in South Africa farther along in this review.

2.3.3 The impact of Western societal changes on progressivism

In contemplating the role of progressive education today, one is left with the impression that while it has a vitally important role to play, it is challenging to fit it into the public education arena. Although children remain in need of much progressive education has to offer, the method itself is less sufficient than it was in the past to meet the learners' needs (Zimiles, 2008:167). At a socio-economic level, more children in the public schools of today come from homes that are so economically impoverished and socially disorganised that they cannot be supportive of their children's education; more of the children come from homes jarred by family break-ups that leave them struggling to maintain their equilibrium (Zimiles, 2008:167). More children experience neglect, coming from families where for diverse reasons the home life is in disarray and schools are required to compensate (Zimiles, 2008:168). In all of these circumstances schools are not so much working in concert with the family to complement and amplify its work as was once envisaged, they are called upon to function instead of the family (Zimiles, 2008:167). Schools might therefore struggle to reach their intended progressive intent of learner-centeredness to the curriculum under these circumstances.

Children have become worldlier and less inhibited. Information abounds from sources other than the school; schools are no longer the main source of knowledge about the

world around learners (Zimiles, 2008:169). They seem to know more about many things often in diffuse and disconnected ways. They are more independent and are seen as more difficult to motivate. Feeling less sheltered, they have become more pragmatic and more cynical (Zimiles, 2008:169). There is less structure to learners' lives. Parents function less authoritatively; they are too busy and distracted to offer their children guidelines (Zimiles, 2008:169). It has become fashionable and more acceptable for learners to question and challenge authority.

Under these conditions it is a challenge to implement progressive education. During its successful early stages, progressive education was implemented in settings where it was used to liberate and expand children who were otherwise secure and cared for (Zimiles, 2008:170). They were children whose parents could be counted on to fill in the educational and disciplinary gaps of an education system that refused to be stifled by a plodding preoccupation with unimportant details and ruthless suppression of learners' vitality and spiritedness (Zimiles, 2008:170).

Nor do the conditions for achieving the goals of progressive education hold in today's public schools. The problems in the lives of many learners – the turmoil, lack of economic insecurity, the instability of family life and the inevitable feelings of resentment of having been mistreated – render them less able to function well in schools (Zimiles, 2008:171). These are problems that are difficult for educators to sidestep but, more importantly, for educators to remediate. Blame for the education failure of learners under these conditions is passed around depending on who speaks about it. In the experience of the researcher, learners would blame teachers; teachers would blame learners and parents; parents would blame teachers. The school counsellor and school psychologist would make teachers aware of societal changes but it would be futile to teachers who have a mandate to fulfil from the Department of Education in terms of completing a curriculum.

2.3.4. Confusion between theory and practice regarding progressive assessment

Learners in supposedly progressive schools are confused (Weber, 2009:26) when their promise for self-directed learning is taken care of by an arbitrary external feedback system. Although the educator tells them to take responsibility for their own learning, their progress is still determined by the prevailing assessment system. Laura Weber refers to the cause of this confusion in learners' minds as the "pedagogy of the bamboozled". That is the essence of the researcher's struggle as a want-to-be progressive educator.

According to Dewey, arbitrarily constructed frameworks for learner feedback do nothing to teach learners how their lives interact with the life of the planet. Grades and ranking supplant the natural consequences of learners' efforts (Labaree, 2005:141). External evaluations, be they positive or negative, have the power to strip learning from its larger context. The experiences may be especially confusing for progressive educators who promise learners an opportunity for authentic learning, but who later swindle them through a system based on final marks and averages as if the learning ceases when these are submitted.

For progressive educators, the struggle to maintain authentic learning and avoid the confusion about grading is profound (Weber, 2009). Unfortunately many of today's mainstream schools are so far removed from reality that hermetic systems of incentives and punishments seem absolutely necessary to provide learners with any kind of feedback (Weber, 2009). An overwhelming number of teachers are taking the allocation of grades for granted as are the learners who receive them. It is difficult for these educators to see how and why curricula should relate to the world.

The feedback that a progressive Economics educator would provide, such as an A symbol for an assignment on inflation, is not the same type of feedback that society would provide (Weber, 2009:27). The Economics educator does not need a learner to do research on what causes inflation to earn A symbols. The educator would rather want the learner to find solutions to how inflation's impact on the poor can be diminished, for instance. A progressive educator should encourage his learners to work for the joy of benefiting and inspiring humanity and not only for marks.

Can the researcher as a progressive agent claim authentic learning when he is compelled to keep a record of marks obtained by learners? This record keeping authenticates learning within the current educational system.

Peter Elbow (Weber, 2009) concurs with Dewey that authentic learning is provided by society and not by traditional teachers and the grades they give. The world's organic circumstances are the best teacher, not the rote 'skill-and-drill' pedagogics employed by the majority of educators. The latter approach divide learner learning from its benefit to the world and instead focus learners' attention on 'getting the right answer' which progressives know 'is the answer that the teacher is thinking of'. Progressive educators therefore guard against the separation of the classroom from the world's realities.

What should the progressive educator and researcher do in the face of the challenges against the larger institution of education in this country that is still obsessed with grading, ranking and inauthentic accountability? To abdicate the traditional authoritative role of the teacher and its concomitant assessment practices is to risk unemployment; to accept it as given is to give up hope.

The researcher believes that for education to progress, it must become truly progressive which is child-centred (Zimler, 2008:164). This type of education only thrives with sustenance from the system as a whole. Progressive educators cannot profess a doctrine of authentic, learner-directed learning while continuing to wield the power of

mark books and arbitrary assessment rubrics. To nurture the development of progressive education, adherents of this method need to take courageous action. They need to push for reforms that allow students to 'show what they know' through more authentic assessment and not through more meaningless testing (Weber, 2008:28). Even more significantly, progressive educators need to show learners that their learning means something to the world and that society needs their contributions and not their high academic ratings. Progressivism needs to nurture learners who respond to the world's needs and not to arbitrary coercion.

After looking at the challenges to the progressive design approach in a Western context, the researcher now wants to address challenges closer to home by intending to juxtapose progressivism with the approach design practised in most African countries, i.e. the formalistic paradigm. The reason for this is to establish whether these two approaches can be complimentary to each other or whether they are mutually exclusive.

2.4 THE FORMALISTIC PARADIGM AND PROGRESSIVISM

Closer to home, the researcher found that in South Africa progressivism was up against the formalistic paradigm in schools. The last 50 years have seen widespread failure to generate a paradigm shift in 'developing' local classrooms from formalism to progressivism in primary and secondary schools (Guthrie, 2011). Formalism and progressivism have opposing assumptions about the social world, the nature of reality and the learner. These paradigms therefore have distinct views on what constitutes knowledge, how that knowledge should be transmitted and how it is assessed. Africa's many formalistic, teacher-centred traditions require learners to learn revealed knowledge. The information to this knowledge comes from deities and the ancestors rather than human inquiry. In contexts where scientific epistemologies prevail, the progressive view is that learners rather than the teacher is at the centre of the classroom and that knowledge is to be discovered and not transmitted (Guthrie, 2011:122). According to Guthrie (2011), educational debate has failed to recognise that

teacher- and learner-centred methods are informed by distinctive and incompatible epistemologies which were attempted to be solved by a technicist approach to achieve classroom change. In South Africa to propose that teachers and learners shift from a teacher-centred to a learner-centred paradigm is not just a matter of their learning new skills but “is necessarily a proposal that they fundamentally change their views on the nature of knowledge, of the learner and his/her role and of classroom organisation in general” (Tabulawa, 1997:191).

Guthrie (2011) identifies what he calls a ‘fundamental flaw’ as one of the reasons for the failure to generate a progressive paradigm shift in Africa. He refers to this flaw as the ‘Progressive Education Fallacy’ which proposes that progressive enquiry teaching methods are necessary in primary and secondary schools in developing countries to develop enquiry intellectual skills (Guthrie, 2011:2). Thus, “there is no necessary indication that enquiry intellectual skills must be introduced in primary and secondary schools in revelatory cultures where knowledge is there to be revealed rather than created”; nor that changing teaching styles is a necessary precondition (Guthrie, 2011:2).

In promoting a progressive paradigm in South African schools, one of the contextual matters that is commonly underestimated is the impact of differing social values on the role of schooling. The values of individualism (found in Anglophone countries), community (widespread in Africa) and collectivism found in Confucian cultures are the three pervasive international value sets (Alexander, 2000:151). One can rightly ask the question whether a progressive curriculum based on individualism can be appropriate in African communal contexts.

In many parts of Africa, progressive national educational policies have attracted internationally-funded teacher education and curriculum projects aiming to replace formalistic school teaching with discovery-orientated teaching styles. (Guthrie, 2011:124). Research from several Sub-Saharan Anglophone countries has however

consistently found progressive reforms to be culturally inappropriate and/or to have major implementation difficulties. This was borne out by studies from Botswana, Ghana, Lesotho, Namibia and Uganda (Guthrie, 2011:125). To the researcher the best known case of attempting to introduce progressive reforms into schools in Africa was South Africa where it turned out to be a fiasco. It was introduced more as a political response as an alternative to apartheid education. Outcomes-based education was introduced into schools as part of Curriculum 2005 in 1998. It never took educational realities at ground level into account and saw South African schools' ratings in Mathematics and English plummeting in comparison with its Southern African neighbours (Guthrie, 2011:125). Various changes have been made to Curriculum 2005 since 2002 in order to produce a more credible progressive instrument. This was to no avail as criticism against the curriculum worsened with claims that it was inappropriate for the majority of South African schools.

One of the conclusions drawn from studies done by Fuller and Snyder, and Tabulawa and Tawana in Botswana was that formalism remained consistently resistant to change across some two decades (Guthrie, 2011:129). Botswana's prevalent didactic teacher-centred method of teaching was underpinned by a philosophy of knowledge embedded in the wider culture that provided value systems for both educators and learners, contributing to the failure of attempts to change didactic classroom practice (Guthrie, 2011:129). Children grew up in a society where they were dominated by and subordinated to adults. As learners, they brought this culture to the classroom and in this way educators and learners shared the same education philosophy.

The following characteristics of formalistic teaching emerged from this study conducted by Tabulawa (1997:194) where the teachers were expected to use progressive teaching methods. Teacher-learner relationships were paternalistic and formal. Educators expected traditional deference and maintained a social distance. Considerable emphasis was placed on students demonstrating the 'right answers' to closed questions, part of central control maintaining teacher control. Teachers demanded that

learners pay attention, be formal and orderly in class. Knowledge was a utilitarian commodity, the educators' job being to impart it and the learners' job to acquire it. The educators all regarded schooling as a vocational route to employment made possible by the public examination system and the possibility of higher education. Educators perceived the 'imparting and delivery' of curriculum knowledge and keeping order in class as their main responsibilities that learners needed to pass the exams. The learners' role was perceived as 'receiving' the teacher's knowledge. Thus, if the role of learners was to be a receptacle of knowledge, then their role is to 'learn' by way of assimilating the teacher's knowledge. If the role of educators was to be purveyors of knowledge, then their role is to 'teach' (Guthrie, 2011:127). The distinction between teaching and learning is simplified and defines the classroom roles for both educators and learners.

The resulting deductive, product-orientated classrooms Tabulawa (Guthrie, 2011:129) found were antithetical to official policy of generating a more inductive, learner-centred approach where teachers would be facilitators of learners' learning processes. Learning-centred teaching was incongruent with the deep-seated assumptions of educators and learners about the goal of schooling as imparting knowledge as a vocational commodity.

A common failing in the introduction of progressive reforms, apart from the cultural issues, is underestimation of the logistics that make implementation difficult. Progressive reforms require practicalities such as smaller classes and more inputs such as books, equipment and materials. This overlaps with the more fundamental cultural issues associated with retraining of teachers. An example is provided by South Africa where educational reforms focused strongly on introducing progressive elements and included extensive teacher development programmes in reaction to the formalistic teaching found under apartheid. Studies, however, found that although educators were familiar with the reform policy and claimed to be using the learner-centred methods, they still predominantly used rote teaching (Guthrie, 2011:133).

The requirements for learner-centred constructivist education have been largely underestimated because of basic elements of epistemology that have been overlooked. O' Sullivan (Guthrie, 2011:144-145) found that this approach needed highly qualified and experienced staff, specific assumptions and great skill which were absent in schools where they conducted case studies. A central requirement was to recognise learners as cognate individuals. This approach could only be successfully applied if learners' contribution to the development of knowledge was recognised and if the teacher acknowledged learners as social beings reliant on interaction with others to generate meaning. The recognition and acknowledgement of learners to generate knowledge would hardly be recognised by teachers in a formalistic environment. In fact, O' Sullivan found that learner-centred schools were in direct contrast to the local cultural context and teachers' expectation that their role was to teach and the learners' role was solely to learn.

The researcher is therefore up against a cultural context that he never considered being so powerful. Amid the myriad of international studies of school effectiveness, findings about classrooms are often based on a curricular progressive assumption which assumes that classroom quality requires learners to participate actively and prejudices teacher-dominated formalistic negatively, thereby failing to thoroughly consider alternatives to progressivism (Guthrie, 2011:77-101).

The researcher continues to be biased in favour of the progressive approach design. In the next section the nature and scope of Economics as a school subject is investigated.

2.5 THE NATURE AND SCOPE OF ECONOMICS AS A SCHOOL SUBJECT

Economics is the study of how individuals, business, governments and other organisations within our society choose to use scarce resources to satisfy their numerous needs and wants in a manner that is efficient, equitable and sustainable.

In delivering his inaugural lecture on the advancement of Economics education at UNISA, Professor Van Wyk (2013) stated that never before were participants in the financial marketplace so bombarded with information as in this part of the 21st century. He then made the crucial assessment that more information available to Economics teachers does not mean that they have the knowledge to teach learners the basics of economics. In responding to Van Wyk's inaugural lecture, Prof van Niekerk agreed, among others, that "it is also important for students to understand why they are studying Economics. This requires a sound and in-depth knowledge of the subject by the teacher. The teacher has to be an expert in his/her subject."

Van Wyk further argued that South Africa has gone through several education reforms in the last decade in order to prepare more learners for challenges and success in the 21st century and beyond. The researcher highlights the following aspects from the General Aims section of the National Curriculum Statement Grades R-12 which is the latest reform document in use by the Department of Basic Education:

- It serves the purpose of equipping all South African learners of all races, genders and socio-economic background with the knowledge, skills and values necessary for self-fulfilment and meaningful participation in society.
- One of its principles is to encourage an active and critical approach to learning, rather than rote and uncritical learning of given truths.
- Infusing the principles and practices of social and environmental justice and human rights as defined in the Constitution of South Africa. The National Curriculum Statement Grades R-12 is thus sensitive to issues of poverty,

inequality, race, gender, disability and other factors (DBE, CAPS: Economics, 2011:4).

- It aims to produce learners who are able to:
 - ✓ Identify and solve problems and make decisions through critical thinking
 - ✓ Work effectively as individuals and members of a team
 - ✓ Organise and manage themselves and their activities responsibly and effectively
 - ✓ Collect, analyse and organise and critically evaluate information
 - ✓ Communicate effectively using visual, symbolic and/or language skills in various modes
 - ✓ Use science and technology effectively and critically showing responsibility towards the environment and the health of others
 - ✓ Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation (DBE, CAPS: Economics, 2011:5).

The second and third bullets above are clear progressive principles to be explained further in the literature that follows. The second sub-bullet of the third bullet makes reference to the use 'critical thinking' that can be attributed to Paulo Freire's writings which are also covered in this review. This is a central tenet of this mini-dissertation.

The purpose or specific aim of Economics is for learners to be able to:

- Use resources efficiently to satisfy the competing needs and wants of individuals and society.
- Understand the concept of monetary and real flows in an open economy within the confines of production, consumption and exchange.
- Develop skills to apply demand and supply, and cost and revenue analyses to explain prices and production levels.

- Understand reconstruction, growth and development, as well as a critical approach to a fair distribution of income and wealth, human rights and responsibilities.
- Acquire an advanced Economics vocabulary that will allow learners to debate and communicate the essentials of the subject.
- Explore a variety of strategies and methods to analyse and explain the dynamics of markets.
- Collect, analyse and interpret production, consumption and exchange data as well as other information in order to solve problems and make informed decisions.
- Understand human rights concerns, reflect on the wealth creation process and engage in poverty alleviation.
- Analyse and assess the impact of local and global institutions on the South African economy and
- Explain economic events and forecast their consequences or predict likely future outcomes (DBE, CAPS: Economics, 2011:9)

Some of the general and specific aims of the Economics curriculum seem to have progressive intent. The question to be answered is how it can be used to attain authentic learning environments among other goals. Van Wyk (2013) quoted Walstad and Rebeck who believe that a viable education system with committed, competent and confident teachers is a primary condition for achieving quality education for all, especially within the Curriculum and Assessment Policy Statement (CAPS) for South Africa (2013).

Van Wyk (2013) also contends that Economics education is extremely important for the future health of South Africa's national economy. Economics education is needed because it lays a foundation for economic and financial literacy; it will inspire entrepreneurship and innovation, and will prepare learners to successfully adapt to a dynamic marketplace. Van Wyk is of the opinion that Economics is such an important

subject in the 21st century that it should be made compulsory from grades 7-12. The reason for this is *inter alia* for learners to recognise they are their own best resource as education and building of skills are important ways for learners to invest in themselves, their future and their community.

The researcher is concerned that after three years of studying Economics at Senior Phase Level (as part of Economic and Management Sciences) and another three years at Further Education and Training level, learners may have mastered book knowledge but cannot solve practical problems independently, nor do they have the basic life skills to survive. Learners may have studied that a budget assists a person to ensure that expenses do not exceed income; yet in real life the majority of South Africans are debt ridden.

The school system, of which the researcher is part, focuses on the attainment of good grades by learners and that applies to Economics too. The researcher is concerned that this is done even at the cost of ignoring learners' mental development which will inadvertently lead to their incompetence in society in spite of high grades at school (Chun, 2011:4). Van Wyk (2013:1) addresses the above issues by referring to the Training-of-Trainers initiative which was a driver for teacher empowerment to deliver and employ effective teaching strategies to advance economics education in Free State schools. To achieve this purpose, it was vital to skill, educate and empower teachers in subject and pedagogical content knowledge in order to create enabling learning environments for learners. To achieve this objective, economics education as a catalyst for economic empowerment was conceptualised and the importance of a sound economic literacy as an imperative to eradicate poverty and decrease unemployment as an economic challenge was explained.

The researcher thus hopes that progressive education methods can assist in turning the situation around. If the knowledge learners have acquired is only useful for passing examinations but useless when it comes to solving practical problems in their later life; if they realise upon entrance to society that the world is totally beyond them, we have to admit that our education has failed to fulfil its fundamental mission (Chun, 2011:11).

Van Wyk (2013) therefore reasons that the success of the new curriculum will depend on the quality of teachers, teacher competencies, teaching methods and assessment strategies which will lead to optimal learning opportunities.

The researcher now proceeds to address practical strategies in the Economics classroom that might contribute to real and genuine learning environments via a progressive teaching design.

2.6. PRACTICAL STRATEGIES IN ECONOMICS CLASSROOM

2.6.1 Co-operative learning as an effective strategy in teaching Economics

The rationale for applying co-operative learning as a learning strategy was dealt with in paragraph 2.2.3.1.5.6. Flowing from the rationale, Van Wyk (2007) postulated that co-operative learning could be a highly effective teaching strategy in Economics if it could achieve the following aims. Firstly, it should develop the culture of lifelong learning. Secondly, it should promote learner involvement. It should thirdly also apply, analyse and interpret financial and management information. Fourthly, it should develop and apply calculation skills. If it could create, investigate and activate participatory learning activity among learners, a highly effective teaching strategy could be achieved. The latter can also be attained by promoting accuracy, orderliness and thoroughness.

2.6.2 Didactical principles of co-operative learning

To be able to make a responsible choice in terms of teaching methods and strategies, the education media and assessment strategies, the teacher must have a sound knowledge of the didactical principles that apply to the teaching of Economics. Duminy et al. describe didactical principles as “general universally-valid fundamentals underlying the most basic and essential thoughts and considerations about learning and teaching” (Van Wyk 2013:102). Van Wyk conducted a study at Free State secondary schools to determine which factors influence the selection of didactic principles for

teaching purposes in the Economics classroom. He found that to be able to make a responsible choice in respect of the teaching strategies, the teacher should have a sound knowledge of the didactic principles that apply to the teaching of a school subject. Van Wyk (2010) concluded that it would appear that teaching Economics must take place purposefully and in totality in an illustrative manner. When deciding on didactical principles, the mutual differences between learners and their social nature should be considered by the Economics teacher. Learners should be guided by self-activity and motivation to achieve the general and specific aims of the curriculum.

Four important factors emerged from the study which the researcher should take cognisance of when considering didactical principles for the progressive classroom. Learner-centeredness was the first important factor to emerge from the Van Wyk study. Because learners are important in the didactical situation, this will always be a valuable component for the Economics teacher to consider. The issue of learner-centeredness lies at the heart of progressivism which is consistently referred to in this review.

Assessment was the second most important factor that emerged from the study. McGoldrick et al. (2012:26) agree with the importance that is attached to assessment for co-operative learning exercises. They suggest that, whether it is the individual in the group or the group that is assessed, the marks earned by him/her is earned by all. For the teaching of Economics to be credible, the teacher must acknowledge that the didactical principles of learner progression, motivation, integration and relevance underpin the assessment factor as per Van Wyk's study.

The principle of learner progression means that the Economics teacher must compile the learning programme in such a way that progress from one class, phase or learning aim to the next will occur logically and subsequent programmes of learning will continue to build on learners' existing knowledge (Van Wyk, 2013:125). This principle relates to the practice of scaffolding discussed under par. 2.2.3.1.5.5.

The principle of motivation relates to 'wanting to learn'. The teacher's role is to create opportunities to stimulate learners (i.e. motivate) to learn (Van Wyk, 2013:110). To motivate learners to contribute to group work, bonuses can be provided to all members of the group if they individually meet a standard (McGoldrick et al., 2011:26).

The principle of integration for the Economics teacher means that subject matter must be integrated so that specific components of the subject matter are not merely approached in a subject typical way, but are also studied across subject boundaries (Accounting, Business Studies, Financial Literacy, etc.).

The principle of relevance means that the curriculum must be relevant and applicable in terms of current and future needs of the individual and the community, as well as trade and industry. Learners must be taken along to develop their technological capabilities and to become environmentally aware. Learners must be taught how to transform their multi-cultural environment into a viable unique South African product to be marketed to the advantage of the country.

The progressive teacher should, however, remember that assessment should not determine learning as this will lead to learning becoming a restrictive experience. Assessment should function as an integrated and integral component of teaching and learning and should not be seen as separate from this process. Economics teachers should have a clear image of what they wish to determine by means of assessment. Assessment is more than mere proof that the learner can repeat memorised facts. Rote learning should be discouraged by progressive educators. For progressives, learners should demonstrate during assessment that they have mastered the Economics subject matter and can use it in new situations with the necessary skill.

The third factor to emerge from the study and with which progressive educators can identify is problem solving. This was made up of the principles of critical thinking and creativity, differentiation, individuality and activity (Van Wyk, 2010:117). The analytical

skills of learners should be developed by means of problem setting, where learners should think of creative solutions to relieve aspects such as poverty and unemployment. According to Van Wyk (2013:111), the didactical principle of individualisation is based on the idea that all learners should be assisted to reach their own potential.

The principle of differentiated education demands the adaptation of the learning-teaching situation in such a way that it leads to the optimal deployment of every learner's potential in order to prepare the learner as independently and responsibly as possible for life (Van Wyk 2013:111). Different learning and teaching strategies must be utilised to make provision for differences in rate and style of learning.

Classroom management practice was the final factor to emerge from the study to ensure effective teaching. Careful planning, organising and monitoring of the teacher's activities form an important component of the progressive strategy. Cooperative learning exercises' planning entail more than simply placing students into groups and having them work together on a problem. Poorly structured group exercises are likely to promote free-rider behaviour, allow for participation of under-prepared students and result in disgruntled students. Co-operative learning is effective when there is equal participation by group members. Also when both the group and individuals are held accountable. Paying careful attention to these logistical details, in addition to key structures that underlie cooperative learning exercises, will help ensure that the economic exercises developed by the instructor are more effective in meeting identified objectives (McGoldrick et al., 2011: 26)

These four didactical factors and their corresponding principles are critical for the progressive Economics educator to keep in mind when devising strategies for the teaching-learning situation. Within the CAPS and the context of Economics education, it is of critical importance that learners learn how to obtain relevant information and transform it into knowledge, skills and values.

In conclusion, the researcher wishes to achieve authentic learning through the following additional progressive design principles:

The facilitation of holistic learning: The world we live in is integrated and colourful. Knowledge comes from the efforts of humans to learn about the world. This means knowledge is a projection of the real world and is related to the world. In traditional education, learners' experiences are fragmented as education is categorised into different subjects. It is important for the progressive teacher to systematise and deepen knowledge of every discipline, integrate knowledge of different disciplines and combine theory with practice. Learners should be provided with opportunities to use different knowledge to learn about the whole world and help them understand connections across different disciplines to thoroughly master the link between knowledge and the actual world, thereby gaining the ability to change the world (Chun, 2011:51).

Progressive teachers should provide learners with learning methods to develop their abilities, mould their character and build up their spirit so that they have the ability to survive in the globalised and highly technological environment.

Lastly, progressive educators should make learners aware of the need for social development, environmental protection and contribute to sustainable development of both the materials and resources on the earth and human beings.

Other didactical principles that are not discussed here include suitability, totality, socialisation, clarity, equity, credibility, adaptability, remedial, mother-tongue instruction, human resource development, clear focus, nation building and non-discrimination.

2.6.3 Different learner-centeredness teaching strategies

2.6.3.1 *The use of cartoons as a teaching tool*

The progressive Economics teacher should consider the use of cartoons as a teaching instrument for excellent and effective teaching. Van Wyk (2011a) and Bahrani and Soltani (2011:19) suggest that cartoons have a potentially valuable contribution to make as stimuli to encourage creating interest and developing critical thinking and reflective skills in Economics. The term cartoon includes stand-alone illustrations, captioned or non-captioned and short comic strip formats. According to Van Wyk (2011a), the visual impact of cartoons is immediate and all learners, irrespective of age or background, are able to respond to the educational point being made in some way. By nature, cartoons usually exaggerate a particular aspect or situation that can help focus on a suitable teaching/learning situation (Bahrani & Soltani, 2011:20).

Van Wyk (2011a) quotes Parrot in identifying the value of humour as a teaching-learning strategy that includes the promotion of understanding, increased attention and interest, motivation toward learning, improved attitudes, productivity, creativity and divergent thinking. This is supported by Powell and Anderson in the same article (Van Wyk, 2011a:117) and Bahrani and Soltani (2011:19). They list further benefits as decreased boredom, anxiety, academic stress and disruptive behaviour. Cartoons are generally fun for everyone to utilise and tend to be experiential in their application. They are used to give a lesson for impact (Bahrani & Soltani, 2011:20). Teachers should, however, use humour carefully and be aware of its unintended consequences such as being perceived as ridicule, sarcasm, racist or sexist.

It is for these reasons that cartoons offer a better option. Ziegler (quoted by Van Wyk, 2011a:118). describes it as a humorous drawing which is most prevalent in newspapers as a means of political or social comment as best understood by the artist. Without detracting from the teaching situation, an element of humour can be introduced through

the careful selection and use of appropriate and relevant cartoons. When a teacher uses cartoons and it brings out laughter or a smile from learners, the teacher knows from this response that the learners have at least been engaged.

Cartoons by their very nature usually exaggerate a particular aspect that assists to focus on a suitable teaching-learning point. Being a neutral resource, learners are able to respond, joke about possible interpretations and react to exaggerations individually, in pairs, small groups and even in the bigger classroom situation. It can also enhance the relationship between the educator and the learner because cartoons create a light playful mood (Bahrani & Soltani, 2011:21). Through their interaction with the cartoon, learners are refining their own learning and understanding while at the same time being encouraged to develop critical higher order critical skills.

It is necessary for the progressive teacher to build up a collection of cartoons over time. Once learners are aware that the teacher uses cartoons, they often assist by locating pertinent examples or some skilled learners may even draw their own examples to illustrate a point. The teacher can also be creative and use available software packages to create individual cartoons. The researcher contends that cartoons can be used as an effective teaching instrument to create a more interesting classroom atmosphere and develop a critical discussion in the Economics classroom. In this context, the term 'critical thinking' refers to the processes by which individuals use reflective thinking to gather, interpret and evaluate information in order to formulate an informed opinion or judgement (Van Wyk, 2010:127).

Van Wyk (2011a) proposes the following steps for the introduction of cartoons in any subject:

1. Plan your specific outcomes for using cartoons; identify what the objectives are for the lesson and the use of the specific cartoon. The objective for using the cartoon to a specific topic could either be to promote critical thinking or illicit class discussions on contemporary economic issues.

2. Analyse the specific cartoon by applying different formats or structures such as linear or circle of flowchart diagrams or mind maps to accommodate student learning styles.
3. Integrate other 'subjects' to the cartoon or use the cartoon to segue into something else.
4. Use a transparency quadrant overlay as a visual guide in analysing the cartoon.
5. Use graphic organisers to help students analyse the context and/or message conveyed in the cartoon.
6. Ask learners to create their own drawings and interpretations of an economic event such as a budget (helps to inform context and evolve understanding).
7. Ask learners to visit one another's cartoons and see if they can decipher meaning.
8. Be prepared to facilitate discussions that may lend themselves well to debate. Teachers should try not to convey their own position and try to be neutral.
9. Teachers should implement their assessment strategy or tool to see whether the learners achieve the aims of the lesson.
10. Debrief the cartoon.

Bahrani and Soltani (2011:23) further suggest that cartoons that are interesting should be used. Various segments of different cartoons to keep the variety should be included. Cartoons should not be overused as their effect will be diminished or lost.

Teachers should be mindful that cartoons are an excellent starter and as a means to an end, but like any use of humour in teaching, it is a resource, not a product.

2.6.3.2 *The use of Teams-Games-Tournaments (TGT) as a co-operative learning strategy*

The current teaching strategies that are implemented by Economics teachers at high school level are outdated and do not pertain to the ways in which students best

comprehend economic content (Van Wyk, 2011b). In the same article he refers to Goodlad who reported that most classroom time is spent on 'teacher talk' with only 10% of the students' classroom time being used for reasoning about or expressing an opinion. It is therefore crucial for new and existing Economics teachers to be exposed to effective teaching strategies such as TGT co-operative learning techniques.

Teams-Games-Tournaments was originally developed by David de Vries and Keith Edwards at the John Hopkins University as a co-operative learning method (Van Wyk, 2011b:185). It uses teacher presentations and team work in which students play academic games with members of other teams to contribute points to their team scores. Students play the games at three-to-five people 'tournament tables' with others with similar past records in the different subjects and grades. The different groups are each heterogeneous in respect of abilities, gender and academic performance in the grade group. Poorer performers compete against poorer performers and better performers against better performers. Everyone has an equal chance of success. Team-mates help one another to prepare for the usually weekly TGT, but may not help one another during the games. According to Gardner, examples of TGT techniques that can be used are quiz competitions and tests for individual learners (Van Wyk, 2011b:186).

Co-operative learning techniques such as TGT provide opportunities for learners to develop skills in group interactions and in working with others that are needed in today's world; it also promotes more positive attitudes than competitive or individualistic methodologies. McKeachie and van Wyk also postulate that learners are more likely to acquire critical thinking skills and metacognitive learning strategies, such as learning how to learn, working in small group co-operative settings as opposed to listening to teachers (Van Wyk, 2011b:184).

This postulation is supported by the following findings from a study done at the University of the Free State on the TGT by Van Wyk (2011b:191):

Firstly, the TGT technique is more effective than the lecture method (teacher-textbook-chalk) with regard to Economics student achievement and student retention of economics content. Lastly, the TGT technique is more effective than the lecture method with regard to Economics students' attitudes toward the method of instruction.

Other co-operative learning techniques which can be used to good effect are Student Team Achievement Divisions (STAD), economic games and simulations (Van Wyk, 2011b:184).

The researcher's use of cartoons to introduce a new lesson is envisaged. The researcher intends to use TGTs and STAD. With the latter the researcher will focus on individual improvement scores, class presentations and quizzes.

2.7 CONCLUSION

The theories of progressivism that underpin this study made the researcher more determined to proceed. The constructivist approach evolved out of progressivism. Active learning, discovery learning and knowledge building are some of the most salient features of constructivism that the researcher wishes to apply in this study.

These features are closely linked to authentic learning which typically focuses on real-world, complex problems and their solutions by using role-playing exercises, problem-based activities and case studies. Two competencies arising out of authentic learning is critical thinking and problem solving. Freire claimed that traditional education prevented learners from becoming critical thinkers which is a requirement for the progressive approach design. He rejected the acceptance of knowledge as given and insists that learners question the origin of knowledge.

Moving closer to home, the researcher found that the concept of *ubuntu* has gained much ground in South Africa, including education. With values such sharing,

brotherhood, dignity and trust the researcher contends that *ubuntu* values can fit into the progressive education framework which is a Western orientation.

By researching the challenges to the progressive approach, the researcher expects the dichotomy between progressive classroom practice and traditional assessment practices to be one of his main concerns.

By contrasting the progressive approach with the formalistic approach design, the researcher found that ignoring the cultural contexts within which schools operate was at the root of why learner-centred reforms failed and not so much because of the lack of resources and training.

The researcher points to the importance of financial literacy to the population, good decision making about scarce resources, the need to save and the acquisition of skills, among others, as part of the nature and scope of teaching Economics to prepare learners for daily economic life. These aspects will be dealt with by implementing practical strategies in the Economics classroom that are progressive in terms of their didactical principles and learner-centred teaching strategies.

With the knowledge from this literature review at his disposal, the researcher looks forward to commencing with the research methodology of this mini-dissertation. It will be most exciting for the researcher to try to implement progressive teaching principles, values, techniques and strategies in the traditional or formalistic environment in which he finds himself.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In this chapter the researcher discusses the research paradigm of classroom research by teachers. Attention is also given as to why this research paradigm is preferred above traditional research. To provide a complete picture of the intentions of this study, the researcher explains why the case study design is used to determine how authentic learning can take place in his Grade 10 Economics class.

This is followed by a discussion of the data collection methods for this case study research design. The systematic observation by a senior educator of the teaching methods of the teacher and the eventual focused group interviews conducted with learners by a fellow educator is then interrogated in detail. Both these methods are based on the digital video recordings of the researcher's lessons conducted with the Grade 10 Economics learners. Reference is made to the use of a reflective journal by the researcher, the sampling procedure and the process of ethical clearance as well as the ethical issues that had to be considered.

The chapter concludes with a discussion of how and to what extent the reliability of the data and the validity of findings could be achieved.

3.2 RESEARCH PARADIGM

3.2.1 Introduction

The researcher who, like Jeff Northfield (cited in Loughram, 1999:2), returned to high school teaching after an absence from the classroom for a considerable amount of time, felt that policy and curriculum ideas were generally produced by others outside the classroom and that teachers' personal opinions had little place in the introduction of most educational change. While external knowledge is perceived by the average educator as having higher status than their own knowledge, both the researcher and Northfield point out that educational theories and ideas are often irrelevant in assisting them to address day-to-day teaching concerns (Loughram, 1999:2). This view is supported by Hopkins (2003:34) who regards the most unfortunate aspect of traditional research to be the extreme difficulty to apply its findings to classroom practice. Traditional researchers and educators live in different intellectual worlds and they therefore conceptualise teaching in different ways.

The researcher was influenced by Stenhouse (quoted by Hopkins, 2002:36) who argued that the traditional education research is inappropriate for teachers to effect classroom change. Stenhouse advocated a research approach by what is under the control of teachers. This approach is based on the premise that teaching can be improved by self-monitoring on the part of the teacher (Loughron, 1999:4).

In South African schools, research, as already mentioned, is not typically something that educators think about as part of their regular planning regimen. Almost all teachers are so focused on getting through the curriculum that the mere thought of trying to incorporate research into their professional practice every day may seem daunting and unrealistic.

The researcher was drawn to this research tradition as part of teaching by advocates such as Lytle and Cochran-Smith (quoted by Loughron, Mitchell & Mitchell, 2002:4). They advocated strongly for teacher research as a way of knowing. This 'way of knowing' can be drawn from the educator's experiences in the classroom whose setting they regarded as the primary source of knowledge. These advocates also insisted that the inherent value of the knowledge base of teachers must include the educator's perspective. The research topic of the educator will therefore be engaged and interrogated through teacher research by using his Grade 10 Economics class as a case study.

This research paradigm of teacher research is premised on the need for research to be both responsive to and developed in a practical setting (Loughron et al., 2002:8). This is exactly what the researcher intends in wanting to respond to the effects of change from the traditional teaching approach design to a more progressive design to develop a greater authentic learning environment in the Grade 10 Economics classroom. This will all be done in the practical setting of the school where the researcher is an educator.

The researcher built the grounding of the paradigm in the *Project for the Enhancement of Effective Learning* (PEEL) that started out in Australia and served as a catalyst for the *Perspective and Voice of the Teacher* (PAVOT) that was launched in 1992. Both these research projects were to be led and controlled by teachers. PAVOT was specifically set up to develop their individual voices and to document and portray their research findings, thus sharing their pedagogical knowledge with other educationalists (Loughron, et al., 2002:9).

The *Self-study in Teacher Education Practice* (S-Step) and *Special Interest Group* (SIG) research into the teaching practice of educators with the main intent that such research will inform practice. Mary Lynn Hamilton in her book *Reconceptualising Teaching Practice: Self-study in Teacher Education* also illustrates a variety of approaches to researching teacher education practice. All these projects and the book mentioned

provided the researcher with the theoretical background to teacher research in the classroom (Loughron, et al., 2002:4).

3.2.2 The criteria for classroom research by teachers

Hopkins (2002:52) suggests the following principles for classroom research by educators.

The first criterion is that any research method should not interfere with educators' primary commitment to teach. This commitment should serve to quiet immediate concerns and also address other ethical concerns. Some might ask whether it is ethical for an educator to introduce a method not used before rather than use one that was perfectly adequate within the current system. For the researcher, in this instance, it would mean that the traditional teaching approach served South African learners and their parents relatively well in the recent past and can be seen as reckless to tamper with it. The researcher, however, supports the position taken by Hopkins (2002:55) to support educators who set out to improve the teaching and learning experience of their learners by breaking the traditional mould and are experimenting with new models. Educators should be trusted as professionals in their expanding role as teacher-researchers. As a professional it would be inconceivable that the educator would ignore the primacy of the teaching-learning act. By using a progressive teaching approach, the educator actually wants to enhance the learners' teaching experience to attain real and genuine understanding in the learning process.

The second criterion is that the method of data collection must not take up too much of the teachers' time. In South African schools teachers are already considering themselves as overworked because of the Department of Basic Education's continuing demands for increased preparation and development time. It will be naive to assume that the adoption of a research role would not reduce teachers' private time. The method to be used must be carefully selected for its educational value and financial

value. For example, a tape recorder that is regarded as a useful tool for the classroom researcher is extremely expensive both in terms of time and money. It takes on average 50% longer to listen to a tape than to make it. Moreover, transcription (which is necessary if full use is to be made of this method) is both time consuming and expensive. Given this, it is advisable to use another method for broad spectrum diagnosis and reserve such intensive techniques for specific and finely focused enquiries. The researcher understood the importance of these criteria as he battled to find someone to videotape his lessons, find corresponding periods for the observer and himself and for learners to remain behind after school for the interviewing sessions although they committed themselves to it. It would be very difficult not to use 'too much' of the educator's private time. The commitment to this study, however, overrides this principle as the researcher had to make peace with the fact that he would have to spend a significant percentage of his private time on it.

The third criterion is perhaps the most disputed. The methodology employed must be reliable enough to allow teachers to formulate hypotheses confidently and develop strategies relevant to their classroom situation. Although a disputed methodology, it is supported by Merriam (2002:5) who argues that qualitative researchers undertake a qualitative study because there is a lack of theory or an existing theory fails to adequately explain a methodology. This is an inductive process where researchers gather data to build hypothesis, among others. It is right and befitting to expect all researchers, including those who do teacher research, to be rigorous about their methodology. The educator's research must be conducted with great enthusiasm even if the research is small scale, practitioner-oriented or used solely to improve individual practice.

The teacher should fourthly be committed to the research problem undertaken. Although this might be regarded as a given, it is sometimes challenging to maintain the commitment to the research given all the pressures on a teacher's time. The researcher might not always have the energy, even though the research is intrinsically interesting

and important to the teachers' professional activities. As a natural consequence, the problem must be capable of a solution. If a teacher chooses a topic that is too complex or broad then frustration and disillusionment will soon set in.

The fifth criterion refers to the need for teacher-researchers to pay close attention to the ethical procedures surrounding their work. This would include the right to privacy and voluntary participation by participants. The latter's anonymity and confidentiality must also be respected (Bless & Higson-Smith, 2000:101). The UNISA is very clear about its expectations in this regard and this is communicated clearly to students (UNISA, 2007:5). In the researcher's own opinion, this should be the first principle that the educator should be aware of as the requirements for the ethical procedures are quite onerous. Adequate allowance should be made for time to complete this aspect of the research cycle. It is important to be aware that the researcher cannot start the actual research without fulfilling the ethical obligations beforehand.

3.2.3 Implications of the research paradigm

John Loughran (1999:3) highlights the importance of researching teaching for educators but, importantly, does so by making a direct link between the research and teachers' practice. PEEL educators have been involved in examining their teaching and its impact on learners' learning as they work towards answering the question, "How can we help our students become active (rather than remain passive) learners?" (Loughran, 1999:3). Gravett (2004:259) conducted similar research for higher education teachers to change the perspectives and practices from a teacher-centred to a learning-centred dialogic approach. This research question has been the subject of numerous research projects and it forms one of the elements of this research project. The progressive teaching approach emphasises the involvement or active participation by learners in their own learning. The researcher must find the necessary teaching procedures and strategies to achieve active learning in this specific case. Strategies would include group work, project work, asking questions rather than giving answers (Da Costa, Julie &

Meerkotter, 1994:265). The knowledge base that is available from all the studies conducted before on this particular aspect can be utilised.

The approach and report findings of teacher research which is done through a teacher-researcher lens, is different to that of traditional educational research because it is largely driven by a personal imperative – wanting to make a difference for their learners (Loughran et al., 1993:10). The researcher is of the opinion that by doing teacher research he is following in the footsteps of John Dewey who may be regarded as one of the founding fathers of progressive education, who wrote many years ago that education practices themselves must be the source of the ultimate problems to be investigated if a science of education is to be constructed. A focus on teacher research is of high importance as it is teachers who work in the crucible of educational practice from which ‘problems’ are derived (Loughran, 1993:11). The results of the teacher research investigations is to inform the practice setting and its practitioners and therefore begin to address the theory-practice gap that is so often cited as a barrier to progression in teaching and learning (Loughran et al., 1993:11). Da Costa, Julie and Meerkotter (1994:265) attempts to provide a solution to the aforementioned theory-practice gap by suggesting that it can be addressed if teachers are provided with the ‘skills’, the discipline of being able to reflect critically, of learning how to observe with a sharpened perception so that it becomes a part of their daily teaching experience. The ‘problem’ for this research project is the achievement of authentic learning in a Grade 10 Economics classroom. In the literature review the researcher discussed the tenets of progressivism in detail and what its theorists are saying about achieving authentic learning. By researching his classroom practice, the researcher will be able to link theory and practice, determine whether there is a link and what can be done to extend the link if necessary and if possible.

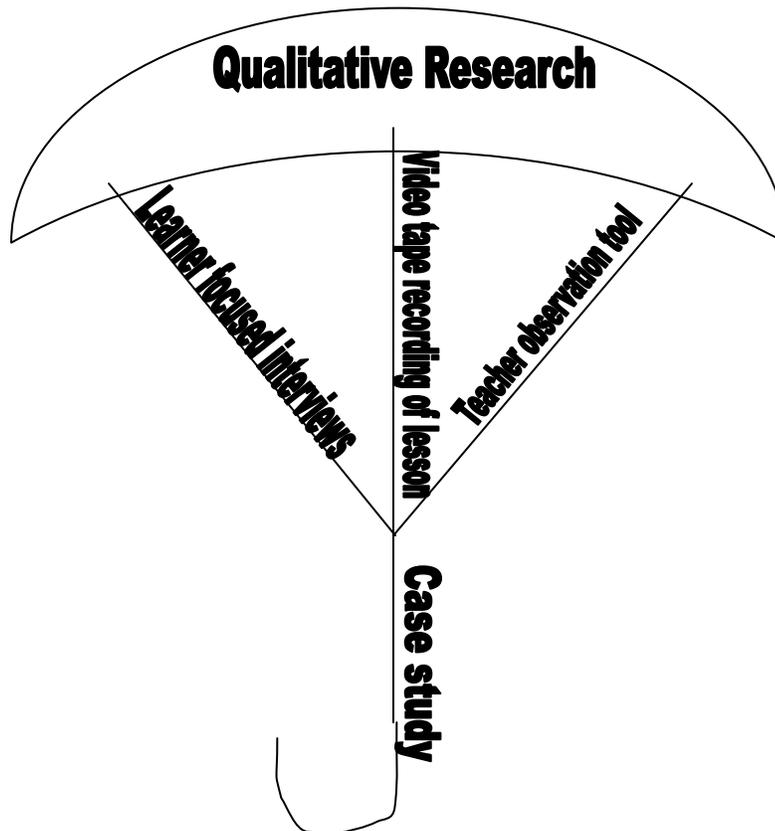
The next paragraph addresses how the researcher would conduct the intended research.

3.3 RESEARCH DESIGN

3.3.1 Introduction

According to Blanche and Durrheim (2002:115), research design is the science (and art) of planning for conducting studies to obtain the most valid findings. The design to be used in this study will be qualitative research of which the case study will form the backbone. The case study will be the researcher's Grade 10 Economics class where the researcher will attempt to create a more authentic learning environment via a progressive teaching design. The case study will be activated via teacher research.

The research design may be illustrated in the shape of an umbrella as follows:



The hood of the umbrella is qualitative research. Its handle is the case study and its spikes are the data collection methods to be used. The hood and the handle of the

umbrella will be discussed in this section and the spikes in the paragraph under research methods.

3.3.2 Defining qualitative research

Qualitative research is an accepted methodology for many important questions, with significant contributions to both theory and practice (McMillan & Schumacher, 2010:320). Qualitative designs can vary substantially, depending on factors such as the theoretical framework, philosophy, assumptions about the nature of knowledge and the field of study, such as education. The aforementioned factors result in different definitions of what qualitative research is. It is important to mention that there are different terms for qualitative research such as field, naturalistic, constructivist and case study research of which each one has its own traditions, assumptions and common characteristics. Education researchers are likely to use the term qualitative in a generic sense as an approach that comprises certain key characteristics. An excellent description of qualitative research is provided by Creswell (quoted by McMillan & Schumacher, 2010:320) as follows:

“Qualitative research begins with assumptions, a worldview, the possible use of a theoretical lens, and the study of research problems inquiring into the meaning individuals or groups ascribe to a social or human problem. To study this problem, qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting sensitive to the people and places under study, and data analysis that is inductive and establishes patterns or themes. The final written report or presentation includes the voices of participants, the reflectivity of the researcher, and a complex description and interpretation of the problem.”

3.3.3 Some of the key characteristics of qualitative research

Some of the key characteristics of qualitative research are firstly that the researcher collects data directly from the source; the researcher should be the primary instrument for data collection (Merriman, 2002:5). The source for this study is the school and more specifically the Grade 10 Economics classroom. Qualitative researchers obtain information directly from the source by spending a good amount of time in direct interaction with the participants and the interrogation of documents they are supposed to complete (McMillan & Schumacher, 2010:321). According to Merriman (2002:5) the researcher is ideally suited to collect data from the source because s/he understands the goal of the research and can easily respond or adapt to the data collected. In this research study, the researcher will collect the information for the learner interviews from the educator who conducted the interviews. The information would have been transcribed verbatim from a tape recorder.

Secondly, the qualitative researcher makes use of rich narrative descriptions of his research situation (McMillan & Schumacher, 2010:322). This means that in the situation nothing is trivial or unimportant to the researcher. These are likely to be descriptions of the context and the participants involved. Data in the form of quotes from interviews and observations should be included in support of the findings of the study (Merriman, 2002:5). The researcher in this study will, for example, expect the teacher-observer to capture in detail what the latter observed from the teaching situation on the video tape. He will expect the same detail from his colleague that will be interviewing the learners.

A third characteristic of qualitative research is that researchers have a plan or design in mind for conducting the research (McMillan & Schumacher, 2010:322). This characteristic can be linked to the first one of the researcher's role as the primary instrument for data collection and analysis (Merriman, 2002:5). They, however, start their investigation as if they know very little about the situation that they will be investigating or study. The researcher for this particular study does not want to have

any preconceptions about the practicalities of using the progressive teaching approach to attain authentic learning. That is why the qualitative design is referred to as an emergent design because it evolves during the study. This means that the researcher will begin the study with a fair idea of what data is to be collected and what procedures to employ, but a full account of the methods is done retrospectively after all data has been collected (McMillan & Schumacher, 2010:322).

Finally, central to qualitative research is the belief that the world is complex and that human behaviour cannot be explained in simple terms (McMillan & Schumacher, 2010:323). This characteristic is shared by Merriman (2002:4) who opines that researchers must strive to understand the meaning participants have constructed about their world and their experiences. The Grade 10 Economics class at the researcher's school is a complex site because of its mix of races, nationalities, gender, academic capabilities, etc. Learners come from different socio-economic backgrounds and enter the school with different expectations. Every individual learner is different because of his or her biological and psychological make-up.

These learners are exposed to different educators with different teaching approaches and a different belief system about what they want learners to achieve. Some of these educators question the necessity of the researcher's study as they accept the *status quo* as normal. These educators have no problem "to equate schools to factories which operate on a rational input-output basis with pupils as raw material, teachers as mechanics, the curriculum as the productive process and the school leaders as factory managers" (Hopkins, 2002:32). Schools are thus viewed as a production line through which learners must pass with prescribed grades.

The above image of schooling is in direct contrast to the aspirations of the teacher research movement which the researcher espouses. The researcher questions whether these learners produced by the 'production line' actually learned anything worthwhile even though they might have obtained the necessary grades. It is thus a complex

scenario of educators with different ideologies and perspectives on teaching practice; it is the formalists versus the progressives. Into this mix enters the learners that have no idea about the grapples of the educator-researcher. These are the matters that interest the qualitative researcher who realises the need to examine multiple perspectives. The researcher realises at the same time that it is not possible to account for all the complexities present in such a situation.

The teacher-researcher now examines the handle of the umbrella, i.e. the case study that will form the backbone of this study.

3.3.4 The Case Study

3.3.4.1 *Definitions and introduction*

A case study is a choice of what to investigate, identified as a single case according to Stake in McMillan and Schumacher (2010: 344). Cresswell (quoted by McMillan & Schumacher, 2010:344) refers to a case study as “an in-depth exploration of a bounded system (e.g. an activity, event, process or individuals) based on extensive data collection”. The bounded system for this study is the researcher’s Grade 10 Economics classroom which is unique because it is situated within a particular school and not anywhere else. The time of the study (2014) and the characteristics of participants (teacher, observer and learners) further contribute to the uniqueness of this ‘bounded system’.

There are several types of cases. A case may be an individual, group, activity or a process such as how Grade 10 Economics learners can learn authentically. Stake distinguishes between intrinsic and instrumental cases (McMillan & Schumacher, 2010:345). This study undertaken by the researcher is an example of the latter as it provides insight into a specific issue, i.e. whether a different approach to teaching (the progressive approach) can contribute to real and genuine learning taking place in a

Grade 10 Economics classroom. Can this progressive teaching approach that is learner-centred, circumvent rote learning and deliver learners that truly understand the topics of the Economics curriculum? The researcher chose the case study as a research method to develop a holistic understanding of the progressive teaching approach in a classroom situation and its impact on learner understanding. This definition is supported by Patton (2002:447) who regards well constructed case studies as holistic and context sensitive, two of the primary strategic themes of qualitative inquiry.

Maldonado, Rhoads and Buenavista describe case study research as a flexible form of inquiry best suited for studying a particular phenomenon within its natural context (quoted by Yin, 2014:87). “Such studies ... through the use of interviews and observations, seek to develop ‘thick descriptions’ of the setting or phenomenon in question... Accordingly, we relied on formal structured interviews, informal interviews (with key informants), observations and key documents”, Maldonado, Rhoads and Buenavista continue (quoted by Yin, 2014:88). The researcher of this study will also show reliance on interviews and observations.

3.3.4.2 *Why the researcher should use the case study method*

According to literature, there is no prescribed formula but the researcher’s choice depends largely on the research question (Yin, 2014:4). The more that the research question seeks to explain some present circumstance (e.g. ‘how’ to create authentic learning environments via a progressive teaching design), the more relevant the case study will be. The method is also relevant the more one’s questions require an extensive and ‘in-depth’ description of some social phenomenon. An example of such a question would be the researcher’s second research question, “What is authentic learning and how can it be used in empowering Grade 10 learners to develop critical thinking and problem-solving skills in the Economics class?”

The distinctive need for case study research arises out of the need to understand complex social phenomena such as authentic learning in this study. In brief, a case study allows investigators to focus on a 'case' such as the Grade 10 Economics class of the researcher and retain a holistic and real-world perspective.

The research situation in which the case study has a distinctive advantage is therefore when a 'how' or 'why' question is asked about a contemporary set of events over which the researcher has little control. The research topic of the researcher qualifies for both these conditions.

3.3.4.3 *Preparation for the case study*

The demands of a case study on the researcher's intellect, ego and emotions are far greater than those of any other research method (Yin, 2014:72). This is because a case study is expected to capture the complexities of a single case (Stake quoted by Patton, 2006:297). The researcher must firstly possess appropriate skills and values to do case study research. A well-trained and experienced researcher is needed to conduct a high quality case study because of the continuous interaction between the theoretical issues being studied and the data being collected (Yin, 2014:72). Stake (quoted by Patton, 2006:296) regards experience as one of the principal qualifications to conduct case studies. It is, however, difficult to measure which researcher possesses the necessary skills for case study research as there are no skills tests or professional requisites for the job. A basic list of desired attributes might be the ability to ask good questions and interpret the answers fairly. Other attributes include being a good listener and not being trapped by existing ideologies or preconceptions. A sound case study researcher is not flustered by newly encountered situations and adapts by adapting to threats and turns them into opportunities. Such researchers have a firm grip of issues being studied. Finally, competent case study researchers avoid bias by being sensitive to contrary evidence and also know how to conduct research ethically (Yin, 2014:73). Ethical considerations to be taken into account regarding participants are the right to privacy

and voluntarily participation, anonymity and confidentiality (Bless & Higgens-Smith, 2000:100).

The second requirement in preparing well for a case study is for the researcher to be trained to conduct it. The key to training for the case study is for the researcher is to understand the need to operate as the 'senior' researcher. Once the data collection process has started, the case study researcher must operate independently and be able to make intelligent decisions throughout and not be guided by a rigid formula to conduct the study (Yin, 2014:73).

Thirdly, a case study protocol must be established as a way of increasing the reliability of case study research. Reliability is concerned with the consistency of measures (Bless & Higgens-Smith, 2000:126). A case study protocol should have four sections, i.e. an overview of the case study, data collection procedures, data collection questions and a guide for the case study report (Yin, 2014:85). The protocol is important because it keeps the case study researcher focused on the topic of the case study. In preparing the protocol, it compels the researcher to anticipate impending challenges to avoid mismatches in the long run. The existence of such a protocol should at the same time not imply rigid adherence to such a pre-designed protocol (Yin, 2014:94). In fact, case study plans can change owing to initial data collection and the case study researcher is encouraged to adapt to changing circumstances.

The final preparatory step is the selection of the case to be the centrepiece of the case study. For this study, the identity of the case was made known from the outset of the study. It is the Grade 10 Economics class that will form the core of the case of using a progressive teaching design to attain authentic learning. The goal of the screening procedure is for the researcher to be sure to have identified the cases properly prior to data collection (Yin, 2014:95). This is supported by Babbie and Mouton (2003:283) who judge it important for the researcher to provide enough information about subjects, setting and data collection and analysis to permit readers to make judgements about the

adequacy of this method. The case study researcher would not want a situation where, after starting the formal data collection, the case turned out to be something other than s/he wanted to study.

The researcher now has an understanding of proper preparation for the case study and can start with data collection procedures.

3.4 SAMPLE

The site selected will be the researcher's entire Grade 10 Economics class at the school where he is employed. The sample will be all learners whose parents granted permission for them to take part in the study. There are 12 boys and 14 girls in this sample, totalling 26 learners (cf. Appendices 7.1 and 7.2).

The use of all the learners in the study can be described as comprehensive sampling where every participant forms part of the sampling strategy (McMillan & Schumacher, 2010:327). This sampling strategy for the learners is used for practical purposes. Since learners will be divided into three groups, it will make sense to have the entire population as a sample to get a more varied input from learners. It also overcomes the issue of what to do with the learners that do not form part of the sample during the recording sessions.

3.5 DATA COLLECTION

3.5.1 Introduction

Educator-researchers do not have abundant time to conduct their case study research. The use of the disposable time of the educator-researcher can be reduced by good use of specific data collection techniques and the utilisation of easily analysed diagnostic

methods. The educator needs to be certain about the data collection technique before using it for the research.

Case study evidence may come from six sources: documents, archival records, interviews, direct observation, participant observation and physical artefacts (Yin, 2014:103). For this specific case study research observation of the researcher's lessons from video recorded tapes as well as focused group interviews with learners will be used as data collection methods and it will be discussed individually.

3.5.2 The use of the digital video recorder and the tape recorder

3.5.2.1 Introduction

In this study the video recording will be used by the teacher-observer to observe how the researcher applies the progressive teaching design approach. This allows for a distinctive opportunity to perceive reality from the viewpoint of someone 'outside' a case rather than internal to it. Many have argued that such a perspective is invaluable in producing an accurate portrayal of a case study phenomenon (Yin, 2014:117). Challenges of biases may be reduced in this manner. The teacher-observer may have more time to take notes or to raise questions about events from different perspectives as is expected from an efficient observer (Yin, 2014:117).

If the researcher uses a person (videotape recorder operator) to operate the videotape recorder, then more attention can be paid by the former to concentrate on conducting the teaching practice or how students respond to the educator (Hopkins, 2000:115).

The cost of using a video recorder, finding someone to operate it and the disruptive influence it might have because of setting it up and the movement of the operator are some of the concerns that the researcher must take into account. The concern of cost

can be overcome because the researcher's school might have a video recorder at its disposal. The researcher knows that there is no proper asset control at his school and expects to battle to find it. With no asset register available for the videotape recorder, the researcher therefore decided to hire a former learner who now works in this industry to do the recordings for him.

Since modern learners are accustomed to the presence and the workings of the videotape recorder, the threat of its disrupting the classroom atmosphere is minimised. The presence of the operator who would be new to the learners might be a concerning factor. The researcher would be well served by preparing the learners properly for the videotape recording sessions to minimise any negative impact.

Three uses of the video recorder in the classroom are firstly to obtain visual material of the total teaching situation. It also acts as an aid to diagnosis and serves as a means of examining a specific teaching episode in detail (Hopkins, 2000:115).

The use of photographs and more current, digital cameras are useful ways of recording critical incidents in classrooms or of illustrating specific teaching episodes. It can also be used to support other forms of data gathering (such as information through interviews). It can furthermore serve as a means for providing reference points for the focused group interviews (Hopkins, 2002:116).

The advantages of the use of the videotape recorder is that it enables all situations to be constantly reviewed; the origins of problems can be diagnosed; the behavioural patterns of teacher and learners can be observed and patterns of progress over long periods can be clearly charted (Hopkins, 2002:116). Another advantage for this study may be that the teacher-observer can view the material on the video tape at his/her own time. Situations of which the observer wants a clearer view can be replayed and slowed down as the observer wishes. The videotape may serve as evidence for the researcher and may also become a resource tool for other educators or the research institution.

Its disadvantages are that it is expensive to obtain. It can also be very conspicuous and distracting. A further disadvantage is that if a camera is directed by an operator it will only record what s/he deems to be important, where the operator acts as editor (Hopkins, 2002:116). It also requires some effort to obtain the services of a good videotape operator and for a number of sessions it requires an even greater effort. It takes up much time to analyse the videotape recording sessions. Both the educator and learners might 'act up' because they are in front of the 'camera'!

3.5.2.1 *The observation and analysis of the videotaped lesson*

It is advisable for educators to devise their own observation schedules and to design them for a specific purpose. Before devising the observation checklist, it is often useful to ask some organising questions in order to clarify the purpose of the observation. The following questions illustrate the point for this specific investigation:

The first question is what the purpose of the investigation is (Hopkins, 2002:82). The answer to this question is to determine whether the progressive teaching approach is successful in creating an authentic learning environment in the researcher's Grade 10 Economics classroom. The second question (Hopkins, 2002:82) is about the focus of the investigation. The focus is on how the educator goes about in his Economics classroom to create this authentic learning environment where real learning is supposed to be occurring. The second focus is how the learners respond to the educator's efforts.

The third question is which educator/learner behaviours are important to observe (Hopkins, 2002:82). Is the educator fulfilling a facilitating role in his class, i.e. is he the 'guide on the side' (facilitator) or the 'sage on the stage', teaching in the traditional way where he is the main actor in the class? Is the educator trying to involve the learners in his teaching practice? Can the educator gauge whether real learning occurs? Regarding learner behaviour it is important to observe how actively learners are participating in the

lessons. Do they participate by asking questions or by making other inputs such as making their own contributions?

The final question is what data-gathering methods will best serve the purpose? (Hopkins, 2002:82). The researcher decided to seek the assistance of the Economics Head of Department to observe his lessons from videotape recordings and analyse them by observing the videotape and recording her observations on observational sheets devised by the researcher. Focused group interviews will also be conducted with learners by another educator to ascertain their views and gather data. The assistance of colleagues is for the purposes of objectivity, reliability, credibility and validity of this study. The final determination to be made is to assess how recorded data will be used.

3.5.2.2 *The systematic observation method specifically*

The above and similar questions should help the researcher clarify how easy it is to use a chosen approach. The researcher then had to decide on an observation method and finally settled on the systematic observation. This type of observation using coding scales would be appropriate to record the on-task and off-task behaviour of learners, along with their causes and the categorisation of teaching strategies used in a range of lessons.

The research approach that relies entirely on the use of observation scales is known as “systematic classroom observation” (Hopkins, 2002:95). This approach had its origin in both North American and British research traditions where emphasis was placed on the ‘scientific’ and ‘systematic classroom observation’ respectively.

The researcher was aware of potential problems in the use of coding or interaction scales. The first problem was that most scales were not devised for use by teachers, but as research tools for analysing classrooms. The researcher, however, remains

convinced that these are tools educators can use to enhance their practice since the orientation of the educator-researcher is always action (Hopkins, 2002:95).

The second challenge of which the researcher was aware, is that every scale represents the author's concept of a situation. To avoid getting trapped in the intentions of the researcher who designed the scale, it is important for the educator-researcher to match his/her needs closely to the intent and focus of the scale (Hopkins, 2002:95).

The third problem is that, because of the heavy emphasis on quantitative methods in systematic observation, it frequently results in a conflict between statistical rigour and analytical richness. This inevitably leads to abstraction rather than reflection on action (Hopkins, 2002:95).

From a literary point of view most coding scales available are American in origin because of their 'scientific bias'. In a research study of some 200 observation studies by Simon and Boyer (Hopkins, 2002:95), they found observation instruments to be classified under the following main headings:

- The subject of observation (teacher and learner). Both will be subjects in this study.
- The setting under which the instrument is used. The attainment of authentic learning in the Economics classroom via the progressive teaching approach is the subject setting in this instance.
- The number of targets observed, will be three groups constituting 26 learners and the researcher himself.
- The coding unit to be used is 0 to 5 as explained in Appendix 8.
- The collecting method employed was already mentioned as the digital video recorded observations and learner focused group interviews.
- The number of observers required was only the researcher's Head of Department.

The major focuses of British observation instruments according to Galton (Hopkins, 2002:95) are classroom climate, organisational learning, the management and control of routine activities and knowledge content. One of the most interesting features of the British research is its use of observation in informal settings.

One of the earliest coding systems was the Flanders Interaction Analysis Categories (FIAC) (Hopkins, 2002:96). It is probably the best known system although it may not necessarily be the most effective of systems available. The FIAC is used widely and has influenced the design of many other category systems.

The researcher set about devising the systematic observational tool for the study which appears in Appendix 8. The researcher's Head of Department would complete this tool after observing the three videotaped lessons. The teacher-observer will use two sessions of observation for every lesson the educator taught. The tool focuses on actions that progressive educators would implement in their practice.

Specifically, the researcher would be interested to hear from the teacher-observer whether these actions lead to a better understanding of Economics topics by learners, problem solving, critical thinking and real-life learning, among others. The observations by the teacher-observer are important for the researcher as it gives credibility to the researcher's study as he or she acts as an outside party to the study.

3.5.3 The use of interviews by the researcher

One of the most important sources of case study evidence is the interview (Yin, 2014:110) which should resemble guided conversations rather than structured queries. For this case study, a colleague of the researcher will act as the teacher-interviewer for the project. The latter will conduct interviews or see to it that, as part of the case study protocol, it is conducted in such a manner that the flow of questions is fluid rather than rigid. This does not imply that the interview will not pursue a consistent line of inquiry.

This study is an example of a prolonged case study interview. This is because the interviews may take place over no fewer than twelve hours, over an extended period of time covering multiple sittings (Yin, 2014:110). This is made up of 60 minutes each for the three groups over two sessions for each of the three lesson topics. The transcribing of the lessons takes double the number of hours.

Interviewing in case studies will be conducted via classroom research and can take four forms: it can occur between teacher-learner, observer-learner, learner-learner and occasionally teacher-observer (Hopkins, 2002:109).

Because teacher-learner interviews are very time consuming, it may make more sense to devote that time to focused group interviews between an interviewer and learners in groups, and only talk individually with learners (for research purposes) when a specific instance warrants it. The researcher intends to ask a colleague to conduct these interviews. This manner of conducting the interview contributes to increasing the validity of the study. The interviews will be recorded and later transcribed by the researcher.

The researcher intends to make his colleague (teacher-interviewer) aware of a number of techniques about effective interviewing as espoused by Walker and Adelman in Hopkins (2002:109). The teacher-interviewer will be referred to as the interviewer from here on.

The first point is that the interviewer must be a sympathetic, interested and attentive listener, without taking an active talking role (Hopkins, 2002:110). This is a way of conveying that the interviewer values and appreciates the learners' opinion. Secondly, interviewers should be neutral with respect to the subject matter (Hopkins, 2002:110). This view is supported by Yin (2014:110) who declares that conversational questions in an interview should be asked in an unbiased manner. An interviewer should also not express opinions either on the subjects being discussed by the learners or on the

learners' ideas about these subjects. Interviewers should be especially careful not to betray feelings of surprise or disapproval at what the learner knows or does not know (Hopkins, 2002:110). It is further noteworthy that the interviewer should have an own sense of ease. If he or she feels hesitant or hurried, the learners will sense this feeling and behave accordingly. Fourthly, learners may also be fearful that they will expose an attitude or idea that the interviewer does not think is correct (Hopkins, 2002:110). Reassure learners along the line that "your opinions are important to me. All I want to know is what you think – this isn't a test and there isn't any one answer to the questions I want to ask" (Hopkins, 2002:110). Lastly, it is specifically suggested that the interviewer phrases questions similarly every time and should keep an outline of questions before him/her. The interviewer should be prepared to reword a question if it is not understood or if the answer is vague and too general.

The advantage of the interviewer-learner interview is firstly that it frees the educator as the interviewer to discover initial information from the learner. Secondly, learners are more candid with the outsider (interviewer) than with the subject educator. The interviewer is likely to be more objective (Hopkins, 2002:110).

Disadvantages may be that, because learners are unfamiliar with the interviewer, they may be reluctant to divulge relevant information. There might be mutual uncertainty among learners and interviewers. If the educator is the primary agent in the research, s/he will get information second-hand and subject to the biases of the interviewer. The whole setup is time consuming as information goes from learner to interviewer to educator. It can finally be difficult to obtain a skilled outsider (Hopkins, 2002:110).

The uses of the interview in classroom research are to focus on specific aspects of teaching or classroom life in detail and to improve classroom climate. In this particular case the focus will be on how learners experience teaching strategies, assessment and teaching methods, among other objectives.

Group focused interviews are conducted in this study owing to time constraints. Some learners may also feel more comfortable to make contributions in a group where they feel safe because of their familiarity with the group. A major disadvantage of the group interview is social loafing where intransigent learners might hide behind the backs and/or opinions of others. The interviewer should deal with this in a non-threatening manner. Ultimately it is important for the researcher to discover the opinions of learners about the teacher using a progressive teaching approach. The learners might not even know what progressive means but they know that the educator is conducting his class differently than before or differently from other educators. They need to express whether they understand Economics issues better and whether they can critically engage on Economic issues after experiencing the progressive method.

In closing, one should remember the importance of interviews as an essential source of case study evidence because most case studies are about human affairs or actions (Yin, 2014:113). The educator using an alternative teaching approach is an example of such a human action.

3.6 VALIDITY, TRUSTWORTHINESS AND TRIANGULATION

Validity refers to the extent to which a specific measurement provides data that relate to commonly accepted meanings of a particular concept (Babbie & Mouton, 2003:125). It can be applied to the measurement of research designs or data collection procedures and instruments which will give it a somewhat different meaning (Bless & Higson-Smith, 2000:130). To ensure validity in respect of research design for this study, the case study was viewed by the researcher to measure what it is supposed to measure. The case study aims to achieve high internal validity such as the extent to which it can control extraneous variables such as the exclusion of Grades 11 and 12 and only focusing on the Grade 10 Economics class. Problems such as non-attendance of interviewing sessions should also be dealt with to achieve high internal validity. External validity examines the extent to which the results of the study can be generalised by asking

‘whether the results obtained from this particular sample of participants apply to all subjects in the population being studied’ of the study (Bless & Higson-Smith, 2000:80). This should be achieved as all 30 learners were invited to participate in the focused group interview. The study also simulated reality as closely as possible. The teacher-observer will be watching a video of a real class situation where the Economics teacher interacts with learners. The focused group interviews of learners will be based on the interaction they had with the researcher. It is very seldom in studies that a design achieves high levels of both internal and external validity (Bless & Higson-Smith, 2000:81). Levels of validity will be measured in the next chapter.

Trustworthiness is linked to the notion of objectivity as it is manifested in qualitative research (Babbie & Mouton, 2003:276). To ensure the neutrality of its findings to its audience the researcher must test it against the qualitative norms of credibility, transferability, dependability and conformability. The use of triangulation will enhance the credibility of the study and is discussed in the dedicated paragraph below. The researcher trusts that that both the norms of dependability and confirmability will enhance the trustworthiness of the study. The researcher is confident that the research design and data collection methods of the study will contribute to the findings of the study and not to the biases of the researcher. If this can be the case, the study will be regarded with high esteem for its trustworthiness.

The best way to elicit the various and divergent constructions of reality that exist within the context of a study is through triangulation. This means information about different events and relationships is collected from different points of view; it means asking different questions, seeking different sources and using different methods (Babbie & Mouton, 2003:277). Four kinds of triangulation can contribute to verification and validation of qualitative analysis (Patton, 2002:556). For this study the triangulation of sources and analyst triangulation were to be used. The sources are the videotape recorder, teacher observations and the focused group interviews with learners. The analysts to be used are the teacher-observer who will analyse the lessons of the researcher and the teacher-interviewer who will conduct interviews with the learners. A

common misconception about triangulation involves thinking that the purpose is to demonstrate that different data sources or inquiry approaches yield essentially the same result. The point is to test for such consistency (Patton, 2002:556). The use of triangulation in the study might bring about areas of convergence and divergence since triangulation is in essence a form of comparative analysis.

3.7 ETHICAL CLEARANCE

Qualitative research is normally more personally intrusive than quantitative research. Thus, ethical guidelines include policies regarding informed consent, deception, confidentiality, anonymity, privacy and caring (McMillan & Schumacher, 2004:338). A credible research design is not only about selecting participants and effective research strategies but also adhering to research ethics.

The research ethics review system at the UNISA aims to protect potential human participants and to contribute to the highest attainable quality of scientific and ethical research. This is founded on the policy of Research Ethics which clearly states that “UNISA is committed to being guided by integrity, accountability and rigour in research and aims to ensure that the rights and interests of human participants and institutions are protected”.

The researcher therefore first had to obtain permission from the school principal (cf. Appendix 2.1) and the School Governing Body (SGB) (cf. Appendix 2.1) to conduct the research at the school. Separate letters were written to both parties and a common letter of approval was received from the principal and the chairperson of the SGB (cf. Appendix 6.1).

Individual letters of request were also sent to learners’ parents to obtain their approval for these learners to participate in the action research project. Out of 32 letters that were sent to parents, a total of 26 granted permission for their charges to participate in the study (cf. Appendix 3). The researcher then requested the assent of the 26 learners (cf.

Appendix 7.1) whose parents granted their approval to also sign on a class list to indicate that they are willing to participate in the study (cf. Appendix 7.2).

Permission was also requested from a colleague of the researcher to conduct focused group interviews with learners to lend more validity to the research process. The school principal gave approval in writing for one of the researcher's colleagues to be used as an interviewer for the focused groups (cf. Appendix 6.2). The Head of Department for Economics also agreed to act as a teacher-observer to observe the lessons of the researcher from digital video recordings. The completion of the systematic teacher observation sheet (cf. Appendix 8) formed part of her agreement.

Hereafter permission was sought from the Gauteng Department of Education (GDE) (cf. Appendix 1). Their application form together with the research instruments were submitted and approved by the Research Section within the GDE (cf. Appendix 5).

An application for ethical clearance to the Research Ethics Committee at the College of Education (CEDU) of the University of South Africa was lastly made (cf. Appendix 11). The College of Education at UNISA required the researcher to apply for ethical clearance via an exhaustive and clearly designed process. The researcher was guided by clear guidelines during this application process. The researcher hoped that permission would be granted by the CEDU after his first submission so that he could start his research at the school sooner, rather than later. This proved to be a cumbersome exercise.

This researcher would advise the CEDU at UNISA to make students aware of the implication of the completion of the ethical procedures immediately after registration as it impacts on the starting dates of the actual project (chapter 4). The researcher only realised the time it takes to complete the ethical procedures and how it impacts on the starting date of the actual project when he was approaching the completion of chapter 3 and planning to start the actual research. Since the research cannot commence before

receiving the ethical clearance certificate, it is vitally important for the researcher to have the necessary supporting documentation in place when working on chapters 1 and 2. The readiness of the supporting documentation should imply that the documentation that must go to the UNISA Ethics Clearance Committee should then be ready within the timeframes that the researcher set for him/her to complete his/her studies. The Ethical Clearance Certificate (cf. Appendix 12) was only granted to the researcher after a challenging administrative process.

As the researcher was using interviews as a method of data collection (cf. Appendix 9), it was necessary for him to establish a sufficient level of trust to ensure a high level of participant disclosure (Cresswell, 2012:231). Therefore the participating school, parents and learners were assured and ensured of their anonymity by assigning pseudonyms or numbers to them during the reporting phase. Participants were also afforded the opportunity to verify the transcripts of the interviews.

All the participants were also assured that they would not be discredited with the researcher who is also their Economics educator and that the data would be used for research purposes only. They were reminded that they may withdraw from participation at any time. Furthermore, should it be necessary for any part of the report to be published, the permission of the participants would be sought.

In order for the data collection process not to distract from the day-to-day activities at the school (Busher & James, 2012:93), additional interviews and other follow-up visits would be arranged at a suitable venue and time as chosen by the participants.

3.8 CONCLUSION

The researcher was excited at the prospect of starting with the practical aspect of the study once his research methodology was in place. The fact that the research would be conducted in the classroom and observed by the educator himself with input from the

Grade 10 Economics learners via an observer makes the researcher an active participant in the teacher research method. The researcher firmly believes that the work done by the teacher in his classroom is worthy of research and that it can contribute to broaden knowledge in the field of authentic learning and progressive teaching in the Grade 10 Economics classroom.

Qualitative research takes up much time and is intimate and intense. The researcher would need to find his research questions interesting if he wanted to be sane during the entire process and still be sane at the end!

The researcher decided on comprehensive sampling through the involvement of almost his entire Grade 10 Economics class. They would be interviewed in groups and varied input was expected.

The data collection methods of the videotape recorder, the focused learner interview and the systematic teacher observation sheet used by the researcher were carefully chosen as they are regarded as the most effective for diagnostic purposes. Although these methods were separately discussed, it is important to remember that they can and are most often used eclectically and in combination.

The researcher as a teacher-researcher must pay attention to the ethical principles guiding his work. The principles of procedure for teacher research go beyond the usual concerns for confidentiality and respect for the participants in the study and are elucidated in the paragraph dealing with this aspect.

The next chapter presents the data and a discussion of the results.

CHAPTER 4

PRESENTATION, ANALYSIS AND INTERPRETATION

OF RESULTS

4.1 INTRODUCTION

The aim of this Master of Education study is to create an authentic learning environment in a Grade 10 Economics classroom via a progressive teaching design in one of Gauteng's secondary schools.

To achieve the overall aim of the study, information was gathered through an empirical study on the following research questions (cf. chapter 1):

- What constitutes a progressive teaching approach and what enabling theories can be identified which will foreground the literature study for this investigation?
- What is authentic learning and how can this strategy be used in empowering Grade 10 learners to develop problem-solving skills and critical thinking in the Economics class?
- In which way will the role of the educator influence the process that authentic learning could take place, and how?
- How do learners react to attempts to apply authentic learning from a progressive perspective?
- What strategies can be formulated to strengthen the teaching of Economics through a progressive teaching approach?

4.2 DATA COLLECTION AND ANALYSIS PROCESS

The collection and analysis of the research results are done by means of data collection instruments at the disposal of the researcher (*cf.* Appendices 8-9). Focused group interviews with learners and the systematic observation sheet for observation of the educator's lessons were conducted, recorded and transcribed verbatim. As indicated in the ethical clearance application (*cf.* Appendix 11), the focused group interviews were conducted by a colleague to ensure trustworthiness, reliability, validity and objectivity. Validity relates to the accuracy or credibility of the findings (Cresswell, 2012:259) and is used to determine whether the research accurately describes the phenomenon that it is intended to describe. Validity had to be considered throughout the design, methodology and conclusion stages of the research process (Bush, 2012:81). Objectivity as a procedure refers to data collection and analysis procedures from which a single reasonable interpretation can be made. As a characteristic, objectivity refers to the quality of the data produced by procedures that either control for bias or take subjectivity into account (McMillan & Schumacher, 2006:8). In order for the systematic observation sheet (*cf.* Appendix 8) to be completed by the researcher's Economics Head of Department, the lessons of the latter had to be video recorded. The researcher thus had to make the necessary logistical arrangements for the data collection process.

The researcher hired a professional video recorder for the video recordings who would set up the necessary video recording equipment ten minutes prior to conducting a lesson topic. Upon the arrival of the Grade 10 Economics learners in class and awaiting the researcher to greet the learners, the video recording would start. A recording session would be the length of a period which was between forty and forty-five minutes. With three lessons to be conducted it meant that the entire recording session would be for about two hours and twenty minutes.

The second instrument that the researcher used was interviews with learners within focus groups (*cf.* Appendix 9). A colleague of the researcher conducted interviews with three focus groups consisting of no more than four learners per group. Only 12 of the

initial 26 learners who assented to be part of the interviews eventually took part in the study. Interviews were conducted after school a day after a lesson on a specific topic had been taught. A second interview session on the same lesson topic would be conducted a week later. This meant each lesson topic required two interview sessions. These interviews were recorded on an audiotape recorder by the researcher's colleague and were forty minutes of duration for every group. It thus took the interviewer four hours per lesson topic (80 min x 3 groups = 240 minutes) to conduct the interview. For three lessons it would take the interviewer a total of twelve hours (240 min x 3 lessons = 720 minutes) to conduct the interviews. The researcher then had to do verbatim transcripts of the focused group interviews. This took about double the time of the twelve hours that were used for interviews, i.e. 24 hours. No less than thirty six (12+24) hours in total were used for the interviewing part.

The other instrument used was the completion of a systematic observation sheet for teachers. The systematic observation sheet for teachers was completed by the researcher's Economics Head of Department after watching the video recording of the teacher conducting a lesson (*cf.* Appendix 13). The teacher-observer took 40 minutes to watch the video recordings and another 30 minutes to complete the systematic observation sheet for each lesson, which meant 70 minutes per lesson. In total it would take three hours and 30 minutes (70 min x 3 recordings = 210 minutes) for the completion of the systematic observation sheet for teachers. The verbatim transcripts took the researcher another 140 minutes per observation. This amounted to seven hours in total for transcribing (140 min x 3 = 420 minutes). The teacher observations thus took up another 10 hours and 30 minutes in total (350 min plus 250 min = 600 minutes).

After the data collection process, the researcher had to listen to audiotapes and read and re-read the verbatim transcripts to have a broad understanding of the interviews and to familiarise himself with the data. Thereafter, the researcher started analysing the verbatim transcript of all focused group interviews and classroom observations, until the entire transcript had been analysed and similar ideas or topics had been coded. To

ensure trustworthiness, reliability, validity and objectivity of data collected, two of the colleagues were provided with the interview audiotapes and video recordings to listen, read and re-read the verbatim transcripts to get a broad understanding of the interviews and to familiarise themselves with the data. Their role was to cross-check whether information transcribed verbatim was correct. After coding, similar topics were grouped together into themes and sub-themes. From every theme a number of sub-themes also emerged. The data analysis reported in the results is deductive and inductive in nature.

Table 4.1 Summary of dates for data collection

Lesson number	Lesson topic	Date of video recording	Date of focused group interviews	Date of systematic teacher observation
1	Unemployment statistics in the RSA. The triple challenges of unemployment, poverty and inequality.	30 July 14	31 July 14	04 Aug 14
			07 Aug 14	11 Aug 14
2	Causes of unemployment	13 Aug 14	14 Aug 14	18 Aug 14
			21 Aug 14	25 Aug 14
3	Effects of unemployment	27 Aug 14	28 Aug 14	01 Sep 14
			06 Sep 14	08 Sep 14

4.3 PRESENTATION OF RESEARCH RESULTS

The three main themes that emerged from the data analysis process were assessment, learning strategies and the teacher's method of teaching. Under each of these themes, several sub-themes further emerged.

4.3.1 Assessment

The following seven sub-themes evolved from the interviews with learners and the completion of the systematic observation sheet in respect of assessment:

- Using tests and examinations to solve practical problems in life.

- Assessment should cover more than the content prescribed by the curriculum.
- Experiencing unemployment at an individual and community level will help to ensure that learners form a clearer picture of it for assessment purposes.
- The educator worked from the concrete to the abstract in transmitting new knowledge and in preparing learners for eventual assessment.
- How the use of the principle of integration will assist with the assessment of Economics.
- Learners were motivated to learn as they are assessed throughout.
- Assessment as an integrated and integral component of teaching and learning.

These sub-themes will now be discussed individually.

4.3.1.1 *Using tests and examinations to solve practical problems in life*

After the interviews had been conducted after the first lesson (cf. Appendices 9.1.1-9.1.3), learners from all groups could not see the value of tests and examinations. The following extract is evident from the focus group: *I want to be taught what is going to be in the tests and exams was more or less the answer.*

For the interviews after the second and third lessons (cf. Appendix 9.2.1-9.2.3) the answers were somewhat more positive but still no acknowledgement that assessment can be used to solve life's practical problems. An extract from a focus group: *Assessments only help you to understand unemployment better but it will not help to solve it (L). Assessments cannot solve practical problems. It can help you to understand something like unemployment better (L).*

These observations should be understood against the background of South African education where learners learn from an early age that assessment is for marks and that it will determine whether one will progress to the following grade (Donald et al., 2002:117). The researcher, in following the comments of learners, thinks that learners cannot see at Grade 10 level how tests and exams would assist in solving the practical problems of life. If upon entering the real world, learners realise that they cannot solve

practical economics problems, such as proper budgeting, it would mean that they have been correct in their assessment of the value of tests and examinations in Grade 10. As Chun (2011:11) notes, if learners make this discovery, it would mean that the education system would have failed to fulfil its fundamental mission to prepare learners for life, which is one of the fundamental principles of authentic learning.

This sub-theme would form part of action 9 in the teacher observation sheet which is concerned with developing problem-solving skills in his learners. The teacher observer which is the Head of Department of the educator observes that the educator set interpretive questions based on real life in both test and examination questions. The educator is awarded a score of 4 for this action which indicates that he performed well for this sub-theme in all three lessons (cf. Appendices 8.1 and 8.2).

4.3.1.2 *Assessment should cover more than the content prescribed by the curriculum*

An interesting phenomenon emerged from the learner-focused interviews. In the first lesson (cf. Appendices 9.1.1-9.1.3) there was no group work and 5 out of 12 learners did not feel comfortable about covering more than the prescribed curriculum. Some comments were as follows: *I feel that we should only be assessed about topics that are prescribed by the CAPS document (L). The teacher is teaching more than what is in the textbook and although it is interesting, I do not know whether it will help me to pass (L). It is a pity we will not be assessed about it because it uses up a lot of teaching time (L).*

In the interviews after the second and third lessons (cf. Appendices 9.2.1-9.2.3) where the causes and effects of unemployment were discussed in groups, the response was quite different. It seems that the learners do not mind going beyond the prescribed curriculum. Their sentiments are expressed as follows: *The teacher involved us in group work on the causes and effects of unemployment and I therefore feel that I can do any assessment on this work (L). This is better than the first lesson because we are all involved and I will therefore answer any assessment (L). I enjoy how we researched the*

causes and effects of unemployment and the teacher does not mind if we give facts outside of the textbooks (L).

Responses in the interviews following the second and third lessons contradict those of the first which supported the opinion that assessment often determined the nature of learning rather than the other way round. This contradiction is further confirmed in the question on discussing topical economic issues of the day that is not assessed. Learners had the following to say about this, *I found it useful because it broadened my understanding of everyday issues (L). I like it because it shows me how Economics works in daily life (L). On my way to school, I now try to listen to the news on the radio so that I can at least have something to say in the Economics class (L). I do not watch the news or read newspapers and the teacher makes me guilty by always asking about it (L).*

In the systematic observation sheets after lessons 1 to 3 (cf. Appendices 8.1 & 8.2), the educator is regarded as performing at the optimum level with a score between 90-100% (code 5) for teacher action no. 8 in that he explains and discusses the topics beyond the prescribed curriculum. The observer comments that the researcher is encouraging deeper examination from learners of the issue being discussed. By going beyond the formal lesson scope, the educator also succeeds in intrinsically motivating learners (teacher action no. 6). The observer notices an eagerness in learners to want to know more. The educator receives a rating of code 3 which means he is performing adequately.

4.3.1.3 *Experiencing unemployment at an individual and community level will help to ensure that learners form a clearer picture of it for assessment purposes*

The interviews conducted on this aspect clearly show that all learners have a clear understanding of what real unemployment is. They do not have to rely on textbooks, research or what the teacher says to form an opinion on what unemployment is.

According to Davis (2006:51), learners would do well in any assessment of a general interpretive nature on the topic because it requires practical knowledge and it is relevant to the learner's immediate social situation.

Progressive educators would be thrilled by the following responses of learners which are based on their reality (cf. Appendices 9.1.1-9.1.3): *My father lost his job through affirmative action. He says he was paid off to make way for a Black person that he taught how to do the job. He is bitter and depressed most of the time (L). Unemployment is a relevant topic to me because my father was retrenched last year when the company that he was working for closed down. He only found employment in April this year (L). I know some of my sister's friends that are unemployed although they have degrees (L). Our neighbours are always borrowing food like sugar, coffee, etc. from us because they are 10 people staying in one house where only the granny receives a pension (L).*

Labaree (quoted by Reese, 213:323) describes the use of the statements above as the 'integration of socially relevant themes' which is one of the driving forces of progressive education.

In the teacher observation sheet, this sub-theme is accommodated under teacher action 4 (cf. Appendices 8.1 and 8.2) where this subject matter of a social nature is presented in an integrated manner. For both lessons the educator is awarded a score of 4. The educator shows clearly the impact of unemployment on a practical level backed up with numbers in Lesson 1. The causes and effects of unemployment are addressed at both a theoretical and practical level in Lessons 2 and 3.

4.3.1.4 *The educator worked from the concrete to the abstract in transmitting new knowledge and in preparing learners for eventual assessment*

Piaget (1953) and Bruner (1966) concur that knowledge is actively and progressively built up to higher levels in every learner by the educator. If the educator guides learners

to understand the causes of unemployment, for example, they can build on their understanding and try and to move on to understand the effects of unemployment.

Learners commented during the interviews that the educator guides them in moving from the concrete to the abstract from the first lesson (cf. Appendix 9.1.1-9.1.3): *I liked the way in which he then explained the triple challenges that face South Africa. Starting with unemployment, he then explained how it makes people poor. I could follow this explanation as it was logical and I could link it to my close friend's circumstances as I explained earlier (L). The educator started with what we were familiar with, which is unemployment, and then moved on to issues such as poverty and inequality (L). I found it interesting how the educator linked unemployment to poverty after he was sure we understood unemployment (L).*

From the interviews after the second lesson (cf. Appendices 9.2.1-9.2.3), learners made the following observations to what Donald et al. (2002:100) metaphorically refer to as scaffolding. *I found it interesting how the educator ensured that we do not confuse the causes with the effects of unemployment. He made sure that we understand the difference between a cause and an effect. He stressed that a cause leads to an effect and not the other way round (L). The concrete was what caused unemployment. He then allowed us to guide ourselves to new knowledge, i.e. the effects of unemployment such as poverty which leads to crime, etc. (L).*

The practice of scaffolding is linked to the principle of progression where learning will occur logically and sequentially building on learners' existing knowledge. From the responses of the learners, it is clear that it is happening and will help learners when it comes to assessments.

The above is expected of an educator that practises constructivism. Van Wyk (2010:111) quotes Copley who, when referring to a constructivist facilitator, writes that "his/her main function is to help learners become active participants in their learning and make meaningful connections between prior knowledge, new knowledge, and the processes involved in learning".

From the systematic observation sheet (cf. Appendices 8.1 & 8.2) it is also clear that the teacher assists in achieving this sub-theme through teacher actions numbers 5 and 11. According to the observer, the researcher is performing well (80% success rate through code 4) for both lessons by guiding learners to learn by moving from the known to the unknown through discovery techniques. The educator does this by being aware that existing learners' knowledge needs to be established and continuously assessed to build new knowledge.

4.3.1.5 *How the use of the principle of integration will assist in the assessment of Economics*

One of the driving forces of pedagogical progressivism is to teach learners the skills they need to learn any subject instead of transmitting a particular subject (quoted by Reese, 2013:323). The educator crosses subject boundaries by using a number of subjects which learners can eventually use in doing any assessment on Economics. This is confirmed by the following statements of learners from the interview after the first lesson (cf. Appendix 9.1.1):

The way the educator explained to us how to work out a quarter of the year, reminded me of Mathematical Literacy (L). The use of calculations reminded me of Mathematics and made the understanding of an economic calculation a little bit easier (L). We all thought a quarter is 4 months because $\frac{1}{4}$ contains a 4. The educator patiently explained to us that $12 \text{ months} \div 4 = 3 \text{ months}$ which is a quarter. I wish the educator can teach us Mathematical Literacy (L). The educator warned us about presentations we will have to do in the next lesson. We do presentations in English. We can then use it in Economics (L).

From interviews following on lessons 2 and 3 (cf. Appendices 9.2.1-9.2.3) the researcher found the following additional observations: *Unemployment has a negative effect on businesses. This is a macro environment issue over which the business has no control. We learn about this in Business Studies. It was interesting to notice that this issue of unemployment starts with Economics (L). We also do unemployment in*

Business Studies. In Business Studies the effect of unemployment on the individual business is discussed. In Economics the effect of unemployment on the entire economy is discussed (L). The educator uses proper English in his explanations and expects us to give full answers in proper English as well (L). The educator's use of English in teaching is very good compared to those of other teachers. Through the proper use of English while teaching Economics, the educator is improving my vocabulary as well. The effects of unemployment are also discussed in Life Orientation (L). The teacher showed us how the retrenchment of workers can improve the accounting profits of a business because the salaries and wages are lower (L).

It is useful to remember that language development can take place because of this integration and that it can bolster the confidence of learners in general (Donald et al., 2002:109).

The systematic observation sheet for lesson 1 (cf. Appendix 8.1) indicates that the researcher presents the subject matter in an integrated way. Code 4 from the systematic observation sheet which describes the educator's action as well (80% successful) is allocated by the observer for this lesson. There is much integration with Mathematical Literacy, Mathematics, Life Orientation and English. For lessons 2 and 3 (cf. Appendix 8.2) the score remains at code 4 for the researcher's action. The integration is now with Business Studies, Life Orientation and English. Since it deals with the causes and effects of unemployment there are not as many mathematical calculations involved as was the case with unemployment statistics. That information is used however to give an overall picture of what the cause unemployment and its resultant effects. The scores on the systematic observation sheet show that the educator presented the subject matter well in an integrated manner.

4.3.1.6 *Learners were motivated to learn as they are assessed throughout*

The progressive educator is aware that learners must be assessed for learning throughout the year to determine whether or not they understand the work (Sheppard, 2005:137). The educator in his capacity as a researcher in this study is aware of this

fact and he was doing as much as possible to stimulate the learning environment for the learners. Constant constructive feedback on activities was provided to learners. This is a form of assessment which is known as formative assessment and is considered part of the developmental learning process, as well as practice for learners to improve their knowledge, skills and attitude toward the subject. These formative assessments checks for understanding along the way and guides the teacher's decision making about future teaching activities. It must be distinguished from assessment of learning which is graded or summative assessment.

From the interviews after lesson 1 (*cf.* Appendices 4.1.1-4.1.3) the learners commented as follows on the educator's attempts to motivate them: *The educator asks a lot of questions to determine whether we understand the work.* The researcher realised that even the learners understand the importance of understanding for learning to happen. The learners therefore appreciate the educator's efforts to stimulate their interest in the subject and consequently resulting motivation as can be read from the following comment: *The educator took some time to look up unemployment statistics. You could see he was giving us up to date information on unemployment.* The issue of understanding, which is motivation to learn, is further addressed by another learner who says that *"the educator always asked questions to involve us in the lesson and to see whether we understand"*. The comments of the learners are in line with what Sheppard (2005:112) says about the purpose of formative assessment, namely "to improve learners' meta-cognitive awareness of how they learn".

The biggest accolade for the researcher comes from a learner who comments that *"the educator motivated me to find out more about the next lesson topic because of his enthusiasm in this lesson"*. This is an indication that the educator's inner being in terms of his passion for his work can also assist in motivating learners.

From the interviews following lessons 2 and 3 (*cf.* Appendices 4.2.1-4.2.3), one of the learner's comments on the passion shown by the teacher, *The educator is passionate about the topic and motivates us in this way.* Other learners also commented on how the use of the educator's learning strategies (to be discussed below) motivated them.

He used cartoons and group games and read an article on the effects of unemployment from the newspaper. This is supported by the use of cartoons and group games motivated me to show interest in the subject.

The teacher-observer linked the sub-theme to teacher action 6 on the sheet. A score with a code 4 for intrinsically motivating learners is awarded (*cf.* Appendices 3.1 & 3.2). This score in excess of 80% may be attributed to the passion displayed by the educator, his constant questioning to assess understanding and the use of cartoons and group games which was different to the norm. The recognition given by the teacher-observer to the researcher for intrinsically motivating the learners is “for moving the focus away from achieving symbols and onto learning processes in order to increase self-efficacy and reduce the negative impact of extrinsic motivation” (Sheppard, 2005:138). In other words, this is a vote for formative assessment.

4.3.1.7 Assessment as an integrated and integral component of teaching and learning

Meaningful teaching or learning cannot take place without some form of assessment or evaluation of how effective it has been (Donald et al., 2002:117). The progressive approach to teaching requires that assessment takes place throughout the teaching process and not only at the end. Traditionally assessments have been used to measure how much learners have learned up to a particular point in time. These are summative assessments and are the standards set by education departments. Summative assessments are also used to allocate grades to learners and provide for accountability through assessment of learning.

The observer-teacher awarded the researcher a Code 4 on the systematic observation sheet for teachers (*cf.* Appendices 8.1 & 8.2) which means that the educator fulfilled this action well for lessons 1 to 3. The teacher-observer who is the researcher’s Head of Department observes that the educator applies formative assessment throughout with his technique of questioning, cartoons and team games. The reminder by the educator

to learners about examinations that will count 75% of the overall mark for Economics at the end of the year is a reference of summative assessment that will take place then.

Assessment is, however, not only kept for the end of the year examinations, but assessment activities form an intrinsic part of teaching. It also happens during teaching and this is referred to as formative assessment (assessment for learning).

The observer-teacher therefore has no qualms in awarding the researcher an 80-90% success rate for this particular action number 7 (*cf.* Appendix 8.1 & 8.2).

4.3.2 Learning strategies

The following six sub-themes evolved from the interviews in respect of learning strategies and the completion of the systematic observation sheet on assessment:

- Co-operative learning as a learning strategy.
- Involvement of learners in a co-operative learning strategy.
- The effectiveness of peers in the group work strategy.
- The development and application of calculation skills within the group work strategy.
- The use of cartoons as a learning strategy.
- The use of games as a strategy to make learning more exciting.

These sub-themes will now be discussed individually.

4.3.2.1 Co-operative learning as a learning strategy

For the first lesson the researcher did not use the co-operative learning strategy. This is illustrated by the following comments from learners during the interviews (*cf.* Appendices 9.1.1-9.1.3): *The teacher was teaching for most of the lesson (L). This was an individual learning strategy (L). This lesson was a teacher-led strategy (L). The learners took part in the lessons as individuals (L). The teacher said he wants us to sit*

individually like we do in most classes so that in the next lesson we can clearly notice the difference when we do group work (L). The teacher did, however, ask numerous questions to involve the learners in the lessons.

In the second and third lessons learners were divided into groups because progressive principles demand that not only the voice of the teacher should be heard in classrooms, but should be made lively by the voice of learners. This is echoed by learners who observed the following during the interviews that followed the lessons (cf. Appendices 9.2.1-9.2.3): *The teacher said he wants us to sit in groups unlike in the first lesson so that we could clearly notice the difference with individual work (L). The teacher expected us to work in co-operation (L). We were teaching each other in the groups and then as a group to the class (L). This was a learning strategy of working together as peers (L). We had to do research individually before the time and then discuss it afterwards in groups (L).*

According to Van der Horst and McDonald in Van Wyk (2007:161) it is the teacher's job and responsibility to teach, develop and empower learners in life skills as a prerequisite for a co-operative learning situation. According to Hanekom, Nel and Taylor, life skills include developing research skills as alluded to by the learners (Van Wyk, 2007:162).

The researcher was bothered at first by the noise levels coming from the groups as he was not used to group work. However, his sense was that the learners enjoyed the group work.

One of the general aims of the Economics curriculum is that learners should work effectively as members of a team. Learners felt this was achieved if one looks at the following comments (cf. Appendices 9.2.1-9.2.3): *Learners felt free to share their thoughts and opinions (L). They easily confronted a group member rather than the teacher about an opinion (L). Group work is fine if the teacher summarises the lesson topics at the end (L). Members of the group are expected to do research and contribute to the group. It makes you feel part of something bigger than you (L). I learnt to know*

some learners better because of group work as people speak more freely in small group situations (L).

The comments by learners are in line with Van Wyk (2007:153) who quotes Johnson and Johnson who define co-operative learning as “a relationship in a group of students that requires positive interdependence (a sense of we sink or swim), individual accountability (each of us has to contribute and learn), interpersonal skills (communication, trust, leadership, decision making and conflict resolution), and face-to-face promotive interaction and processing (reflecting on how well the team is functioning and how to function even better)”.

The researcher felt that the majority of learners enjoyed the group work. Further comments from the interviewees were as follows: *Group work made the atmosphere in the class to be relaxed (L). Someone in the group did do research on the topic so our group was never entirely quiet. (L). The format of the lessons in the form of group work was refreshingly different (L).*

In the systematic observation sheet for lesson 1, the educator is given a score of 3 for teacher action 3 because he did not do any group work (*cf.* Appendix 8.1) although questioning and contributions by the learners took place. Learners were sitting individually and were also taught in the traditional manner where the teacher did most of the talking. The researcher (educator), however, requests learners to prepare to work together for lessons 2 and 3 (*cf.* Appendix 8.2) by first doing research on the causes and effects of unemployment. They would then have to bring their research into groups for lessons 2 and 3. They discussed the mentioned topics in groups before presenting it to the class. The educator thus introduced co-operative learning where learners are divided into groups and work co-operatively before presenting the group work to the entire class. The observer of the lesson was impressed by how the educator succeeded in getting the learners to work together in the groups. Most learners are very active during the group work and contribute to the discussion by making inputs or asking questions of clarity. A score of code 4 (80% successful action) was therefore awarded

to the educator. This is a high score indicating that the educator promotes co-operative learning.

4.3.2.2 *Involvement of learners in co-operative learning strategy*

One of the prime characteristics of the progressive educator's work is for learners to work primarily in co-operative learning groups which are highly collaborative. This is substantiated by the following comments from the group members after lesson 2 (cf. Appendix 4.2.1): *The teacher tried to involve everyone in the class as much as possible by asking us to do research beforehand and report back to our peers (L). The teacher requested other group members to make additional contributions after the group leader presented (L).*

The researcher put us into groups and made us discuss the lesson, as well as asking for our thoughts and opinions (L). By making learners do research on the causes and effects of unemployment and discussing it in groups allowed us to learn from our peers (L).

Van Wyk (2007:13) supports these views by stating that the co-operative learning strategy evokes interest in the subject. It also promotes the process of establishing links between prior knowledge and new subject matter in efficient and effective ways. The co-operative strategy importantly encourages a critical attitude toward the subject matter among learners. It promotes a process of expanding learners' understanding of their social environment and their active engagement therein.

The teacher asked members from other groups whether they would like to make input into our report back. (L). The research done by learners before the time makes them better prepared for the lesson (L). The learners are involved in their own learning as they teach one another in the group and in the report backs (L).

For co-operative learning to be successful, the educator should closely monitor the learning experience and should intervene if the situation demands it. This was done if one studies the observations of learners: *The teacher moved around our groups and*

asked questions to group members that were contributing at the time (L). The teacher asked frequent questions to the groups and during the presentations (L). The teacher wanted to see whether we know our facts by asking questions in the groups (L). The teacher asked for clarity when presentations were done (L).

The teacher-observer seems to share the opinion of the learners about how the educator makes provision for an active role for them in his classroom practice. On the systematic observation sheet, a code 3 is awarded for lesson 1 (Appendix 8.1) which indicates an adequate performance. A code 5 is allocated to the researcher for this action (*cf.* Appendix 8.2) for lessons 2 and 3. This means that the educator is performing optimally with a success rate in excess of 90% for this specific action. The observer noticed that one or two learners per group were not engaged as they should be by relying on the output of other group members. This incidence of social loafing was noticed by the observer in notes scribbled on the observation sheet. Overall the researcher succeeded in getting learners actively involved in his classroom practice. The researcher even shared with the observer that he felt uncomfortable about the noise levels coming from the groups as he was not used to group work and its concomitant noisy effects. It was, however, worthwhile if one watches how the lesson was enjoyed by learners and the educator. This is one of the hallmarks of progressive education - the active involvement of learners.

4.3.2.3 *The effectiveness of peers in the group work strategy*

From the focused group interviews (*cf.* Appendices 4.2.1-4.2.3) it became clear that learners enjoyed working with their peers. They therefore appreciated the efforts of the educator that made it possible. Some of the comments were, *Looking forward to working with peers (L). Sometimes peers explain better than the teacher (L).* This is supported by: *Sometimes you learn better from the peers in the group (L). Learners are more productive when they work in a group (L).*

In terms of social relations among peers, one learner commented: *Learners that are normally quiet will not be afraid to speak out in a smaller group (L).* An interesting

observation was made by another learner about how peers would do something to satisfy their commitments to their peers rather than to the educator: *Peer members of the group will normally have more loyalty to the group and do research to feel part of the group (L)*. This means that peers would contribute indirectly to the effectiveness of the group through the research done because of loyalty to their peers.

Another interesting phenomenon to come out of the effectiveness of using peers in group work relates to the different voices that come out of group work: *It is nice to hear the voices of your fellow peers rather than only that of the teacher. A number of voices lift the dullness of one voice (L)*.

Peers are also effective in that *“it can improve the presentation skills of all that must report back at the end of a group session” (L)*. The researcher assumed this meant that because everybody is contributing to the group, anybody can be expected to do the presentation. By participating in the discussion, peers should be able to present what was discussed among the peers as well.

One learner does pick up on the fact that not all peers contribute to the group: *Be aware of those learners that do not contribute to the group but are relying on their peers to do everything (L)*. *These free riders misuse the group*. Another learner cautions: *Peer participation in groups is fine but the teacher must still summarise the lesson topic at the end (L)*.

Although the last assessment puts a damper on the effectiveness of peers in groups, the overall impression gained by the researcher is that peers were effective in groups for this particular research.

According to the teacher observation sheet, the above sub-theme is a continuation of action 3. The educator is awarded a zero score for lesson 1 as there was no group work and therefore no peers working together (cf. Appendix 8.1). For lessons 2 and 3 learners worked well together in groups (cf. Appendix 8.2). The teacher observer feels that a code score of 4 would be appropriate for the educator (cf. Appendix 8.2).

4.3.2.4 *The development and application of calculation skills within the group work strategy*

Co-operative learning would be regarded as highly effective if the above sub-theme could be achieved, according to Van Wyk (2007:8).

It seemed as if the learners did not battle with calculation skills if one looks at the comments during the interviews after the first lesson (cf. Appendices 9.1.1-9.1.3): *If the unemployment statistics were given on a monthly basis, you just have to add to get the year's figures. If it is needed for a quarter you need to take three months statistics etc. The teacher explained it well (L). The teacher just had to explain it once for me to understand. This means that the teacher explained it very well (L). These calculations were simple to do and I am good with figures. The teacher's explanation made it even easier to understand (L). After understanding how to interpret the information given, I could do the calculations (L).*

The calculations from lessons 2 and 3 were even better understood because group members could explain to their peers. The effects of unemployment on the economy in terms of rand value was described as follows by learners during the interviews on this aspect (cf. Appendices 9.2.1-9.2.3): *The impact of a lower output on the economy because of less income tax and less VAT (value added tax) was explained nicely to us by one of the experts on numbers in our group (L). Less people were working and therefore less income tax (L). Businesses and people were buying less and therefore less VAT for SARS (South African Revenue Services) (L). As the teacher was walking along the groups he also explained why the government had less money because of a lower output (L). One of our group members explained nicely how a contradiction develops because of a lower output. There is less money but the government has to spend more on policing petty crimes; because of unemployed people steal food.*

From the comments of learners it seems that, with the assistance of the educator, they succeeded in mastering the relevant calculation skills.

4.3.2.5 The use of cartoons as a learning strategy

Van Wyk (2011a) suggests that Economics teachers should consider the use of cartoons to stimulate interest in the topic. The researcher made use of cartoons in lessons 2 and 3 dealing with the causes and effects of unemployment.

The teacher-interviewer asked learners whether the cartoon immediately attracted their attention (*cf.* Appendices 9.2.1-9.2.3). They responded as follows: *It did attract my attention immediately because it was the first time we used it in this class (L). Every cartoon showed a different aspect of unemployment which attracted my attention. It made me to wonder about what the next cartoon would show (L). The cartoons captured my attention every time it was shown and discussed. This was because it was a new strategy used by the teacher. It created a lot of discussion (L). I did not know immediately what each cartoon meant but was interested to hear what my fellow learners would say. It had an element of mystery to it (L). The cartoons about the politicians saying to each other that the government cannot create jobs but when they meet the President they demand that the government must create jobs attracted my attention the most. It reminded me about our teacher who always tell us that the government cannot create jobs (L). I thought that cartoons are all funny and was looking forward to read and determine what it means. The cartoons were mostly funny and definitely captured my attention (L).* These comments confirm what the literature conveys about the use of cartoons in the classroom. Van Wyk (2011:117) is of the opinion that humour, both in pictorial and verbal forms, is useful as a device for gaining and maintaining attention and interest. In quoting from Powell and Andresen, Van Wyk suggests that humour serves to illustrate, reinforce and make the material being taught more comprehensible.

The researcher next wanted to explore whether cartoons improved learners' understanding of the lesson topic. All of the learners responded in the affirmative as follows: *Yes. The cartoons showed different unemployment situations. It assisted my understanding of it (L). The impact of unemployment was even felt in the collection of money at church. I never thought about it in this way. It certainly helped me to*

understand unemployment in a different light (L). I would say it helped me to understand unemployment better. It was so creative. One cartoon showed how even a soldier became unemployed when the army started to use technology for fighting (drones) (L). My cousin who is over 30 years old and unemployed is still staying with his parents. One cartoon reminded me about him. It definitely helped me to understand the effects of unemployment (L). Yes the cartoons confirmed what we discussed in our groups. The cartoon about Santa flying over your head when you do not have money to buy your children presents made me sad. I understand it because people do not want anything to do with you when you are unemployed (L). Van Wyk (2011:117) regards the promotion of understanding as one of the benefits of cartoons as a learning strategy.

On the question of whether the cartoons used offended them, the learners said the following: *I was not offended by the cartoons. It was a brilliant idea by the teacher to use it. Cartoons make you to laugh when you see it for the first time and then you have to think (L). The cartoons about the 33-year old staying with his parents is humorous until you think deeper about it. Then you realise that it is actually a serious situation. I did not feel offended by any cartoon (L). The cartoons can make you laugh. It can also make you sad. The main thing is that it makes you think (L).* Although none of the learners were offended by the cartoons it was important for the researcher to establish whether any of the cartoons were perceived as a source of ridicule, sarcasm or as being racist or sexist (Van Wyk, 2011a:118). A laugh, a smile or a grin from learners when the teacher uses a cartoon indicates that the learners have at least been engaged by it (Van Wyk, 2011a:118).

For lesson 1, the educator did not use cartoons and was thus awarded the Code 0 on the systematic observation sheet (cf. Appendix 8.1) which means that nothing was achieved by the specific action. In this instance the specific action was absent. For the second and third lessons (cf. Appendix 8.2) the educator made generous use of cartoons. The teacher-observer awarded the researcher a code 5 in both instances. This means that the educator was performing at the optimum level by using cartoons for the causes and effects of unemployment. The observer notes how creative the cartoons

were; how it elicited humour that set the conversation in class going and set learners thinking. In the opinion of the observer, the educator used the cartoons most effectively as a teaching strategy or tool and awards the educator with a code 5 score which means that the latter performed optimally.

4.3.2.6 The use of games as a strategy to make learning more exciting

The researcher responded to the Goodlad article mentioned by Van Wyk (2011b) stating that 'teacher talk' takes up 90% of classroom time; the researcher must devise his own activity to replace the talk time. He gave the learners an assessment task in the form of a game on the causes of unemployment that they had to answer as a team. Learners were divided into five groups and a chocolate was promised to each one in the highest scoring team.

The learners responded as follows during the interview about this team game (*cf. Appendices 9.2.1-9.2.3*): *The teacher gave us an activity which he said was a team game. He called it a team game because groups were competing to see who scored the most points to questions on the causes of unemployment (L). He gave us a picture list of people in unemployment situations. We then had to determine the cause of unemployment, i.e. frictional, seasonal, structural, etc. (L). The teacher added extra fun to the game by promising a chocolate to each group member of the winning team (L). The team game created excitement for learning as group members learnt from each other within the group. They then used their combined knowledge to compete against other groups (L). The learning was very exciting when we heard that we must do a test in the form of a team game. The team game introduced by the teacher was fun. To me it was a game within a game. We were first looking for answers within the group which was a game within itself. Then we decided on the group answer. It was really enjoyable (L). The team-game was an extension of team work. It was real fun (L). He made us play a team game. It created a relaxed atmosphere in class (L).*

From learners' comments, it seems that they really enjoyed this activity. Two groups finished with the same marks which meant that the researcher had to buy 15

chocolates. The researcher noticed that learners did not experience the same strain that normally accompanies individual tasks of this nature. They seem to have found comfort in one another within the group.

In terms of the systematic observation sheet for teachers (*cf.* Appendix 8), the use of team-games would resort under teacher action number 10. This is a different strategy that learners are not used to and it certainly excited them as noticed by the teacher-observer. It assisted the educator to help learners reach their potential in a different way. The observer thus awarded the researcher a code 4 for this action which means that the educator performed well for lessons 2 and 3 (*cf.* Appendix 8.2). It was not used in lesson 1 and a code score of zero was awarded to the educator (*cf.* Appendix 8.1).

The teacher-observer's assessment and the comments of learners are in sync with regard to the successful use of cartoons and team games as different learning and teaching strategies to accommodate all learners.

4.3.3 Teaching strategies

The following five sub-themes evolved out of the interviews on teaching strategies and the completion of the systematic observation sheet on assessment:

- The educator prepared for the WHAT, HOW and WHY of his lessons in a logical way.
- The development of analytical and problem-solving skills.
- Emphasising the importance of critical thinking skills in Economics.
- Rote learning and memorisation of facts was countered by this teaching method.
- The educator guides the Economics educational experience.

These sub-themes will now be discussed individually.

4.3.3.1 *The educator prepared for the WHAT, HOW and WHY of his lessons in a logical way*

Bruner cited in Donald et al. (2002:108) believes that teachers are often so concerned about getting the content - the 'what' of learning - across to their learners that they neglect the process - the 'how' of learning. He emphasises that both are important and both require action from both educator and learners. In this study the researcher did his utmost to bring both across.

The WHAT of lesson 1 included unemployment statistics. The learners had the following to say during the interviews (cf. Appendices 9.1.1-9.1.3): *The teacher's information on unemployment was more up to date than ours. He had the Business Day newspaper from the day before to prove his statistics (L). He was correcting our information on statistics on unemployment (L). The teacher researched statistical information on unemployment which means that he was prepared for the lesson (L).*

The HOW of the first lesson was supported by the following comments during the interviews (cf. Appendix 9.1.1-9.1.3). *The lesson was flowing. The teacher had slides prepared. He had statistical information on hand (L). The lesson was well organised as the teacher was just waiting for us to enter the class and then he started working (L). The teacher finished his lesson in the allocated time. His first slide had all the topics that he was going to cover during the lesson and he did it (L).*

Learners spoke of the WHY of the lesson as follows during the same interviews: *The teacher asked a lot of questions for this lesson. He wanted to determine whether we understand (L). Although the teacher had the most up to date information, we as learners were very much involved through the questioning of the teacher (L). The teacher really tried his best for us to understand on how to read unemployment figures. Through questioning he also tried us to guide us to link unemployment, poverty and inequality (L).*

During the interviews on the second and third lessons (cf. Appendices 9.2.1-9.2.3), learners commented as follows: *The WHAT taught by the teacher was about the causes*

and effects of unemployment (L). The teacher taught the WHAT of the lesson by stating that he wanted the causes and the effects of unemployment to be covered by us as learners through research done on it and reporting back on it (L). The HOW was through the use of PowerPoint slides, cartoons and group work (L). With slides he showed the main points about these issues. He then showed us cartoons about unemployment, did a team-game and then divided us to do group work (L).

The WHY of the lesson is addressed by the following comments: *I think the teacher taught in this way to make the learning more exciting where we learn from each other (L). The teacher said he was looking to teach us in a different way so that we understand and learn our work better (L). The teacher was well prepared and the lessons were taught in a way where the teaching method made sense (L). Our teacher explained to us that he wanted us to really understand what a lesson topic was about at the end of a lesson. He said we should not only remember what he taught us but that we should also learn from one another. That is why we did group work, for example (L).*

Under this sub-theme the educator changed the focus from himself to the learners, attempting to change the learners from passive recipients of knowledge to active participants. The educator attempts to function more like a facilitator who questions, prompts and helps learners develop and assess their understanding and thereby their learning.

In the systematic observation sheet for teachers, the teacher-observer allocated a code 4 to the educator for teacher action number 12 for all three lessons (*cf.* Appendices 8.1 & 8.2). This means that the researcher obtained a success rate in excess of 80% for carefully planning, organising and monitoring his teaching strategy.

In lesson 1 (*cf.* Appendix 8.1) the educator planned his research on unemployment statistics, organising the information in slides and monitoring whether learners understood through constant questioning. The educator was awarded a code 4 score by the teacher observer meaning that he has done good job for teacher action no. 12. In preparation for lessons 2 and 3 (*cf.* Appendix 8.2) the educator planned the lessons by

requesting the learners at the end of lesson 1 to do research on the causes and effects of unemployment. He organised this lesson in the form of group work to be undertaken by learners. The educator monitored the lesson by listening, questioning and commenting while the learners were in groups. He also did the same when the groups reported back to the class. The teacher-observer regards the educator to be performing optimally in planning, organising and monitoring his teaching strategy.

4.3.3.2 *The development of analytical and problem-solving skills*

Van Wyk (2010:117) is convinced that the analytical skills of learners should be developed by means of problem setting, where learners should think of creative solutions to relieve aspects such as poverty and unemployment.

Learners responded as follows to the question of analytical skills in interviews after Lesson 1 (cf. Appendices 9.1.1-9.1.3): *The calculations regarding unemployment figures can be regarded as analytical (L). The making of calculations about unemployment can be seen as analytical because you must think what you are doing (L). I think analytical skills are required to think how these unemployment figures can be reduced (L).*

Further comments were: *To understand the link between unemployment, poverty and inequality requires an analytical mind (L). You need analytical skills to understand why somebody would give up looking for work when his family does not have food or clothes (L). Because the teacher is always asking questions, he makes us think analytically about issues. He not only asks questions about the lesson topic. He brings in other issues which make you to think (L).*

These learners are of the opinion that their analytical and problem-solving skills were developed. This opinion is further entrenched after the interviews for lessons 2 and 3 (cf. Appendices 9.2.1-9.2.3) where learners made the following comments: *To understand the difference between the causes and the effects of unemployment requires a truly analytical mind (L). The teacher wanted us to explain concepts so that he could determine whether we would be able to think analytically in a case study, for*

example (L). The educator told us that he wants us to come up with solutions to minimise the causes of unemployment and also to reduce the impact of the effects of unemployment. This requires analytical thinking (L). The searching of solutions to unemployment can be seen as analytical because you must think as to what can be done about it (L). The analytical skills of my peers were developed because they gave input to the educator as to what the government and the private sector can do to solve unemployment (L). He encouraged the groups to come up with creative solutions to unemployment. He said knowing the causes and effects of unemployment was only a starting point to the issue of unemployment (L).

Learners felt that the educator attempted to address the above issues in the three lessons he conducted. The teacher-observer (cf. Appendices 8.1 & 8.2) allocated the educator a Code 4 for performing action number 9 well as per the systematic teacher observation sheet. A success rate of between 80 to 90% for the three lessons observed is an indication that the educator is attentive to develop problem-solving skills in his learners. The teacher-observer appreciates the request by the educator for his learners to do some research on the issues under discussion. The enthusiasm of the learners to buy into the researcher's idea to become problem solvers is of great encouragement to the teacher-observer who wanted the researcher to share these skills with the other educators in the Business Management and Commerce Department.

4.3.3.3 *Emphasising the importance of critical thinking skills in Economics*

Paulo Freire (1970:77) was the major proponent of learners thinking critically about their education system. Critical thinking in the Freire mould would mean that learners should question and not accept everything they are taught uncritically. The educator expects the same critical thinking of his learners with regard to Economics. He constantly urges them to question what the textbooks are saying because they do not provide sustainable solutions to the issues of unemployment, for example.

From interviews after lesson 1 (cf. Appendices 9.1.1-9.1.3) the learners commented as follows on critical thinking: *This teaching method where the educator questions us all*

the time as he teaches the lesson is an example of critical thinking (L). The teacher keeps us on our toes through always asking questions which means we must think all the time (L). The teacher always says we must think critically. We must not just accept what we are taught (L). The teacher says we must question what he says or what the textbook says (L).

On a subject specific level they commented as follows: *The teacher says we must question why unemployment is so high. He says we must ask why in periods of economic growth we still have high unemployment rates (L). The teacher is emphasising critical thinking by getting us to talk about other economic issues than the lesson topic (L). He wants to know what our opinions are about the unemployment figures. Do we believe it? Why is it so high? I think this is critical thinking (L).*

The comments are more or less the same for interviews after lessons 2 and 3 (cf. Appendices 9.2.1-9.2.3). Some additional comments are: *The teacher always questions what we present as a group and he encourages us to do the same (L). The educator wants us to have our own independent views on topics especially on those affecting the economy. He says if we can defend our opinions, we can think critically (L). The teacher wanted to know whether the economic system of capitalism can solve unemployment. He asked if it is not because capitalism cannot produce jobs that the EFF (Economic Freedom Front) is advocating nationalisation of the mines, banks, etc. He said we must be objective and not take the side of the newspapers and television stations that do not like what the EFF are saying (L). The causes of frictional and especially structural unemployment really require critical thinking. How can graduates with supposed skills and knowledge be unemployed? (L). The teacher appreciated it when I shared that my mother who is working in HR said so many engineers are unemployed but people are told to study engineering for that is what the economy needs. He said that is what he wants to hear in his Economics class. He said Economics is full of contradictions and critical thinkers must address these (L).*

The researcher has done enough to emphasise critical thinking and to indicate its importance for Economics according to the learners' views.

From the teacher observation sheets, the observer notes that the educator has been trying to develop the skill of critical thinking in all three lessons. The observer comments that critical thinking is a significant component of authentic learning and commends the teaching for insisting on this teacher action 13 (cf. Appendices 8.1 & 8.2). The teacher observer values the opinion of the educator in respect of critical thinking and the teacher is allocated a code 4 score for lesson 1 and a code 5 for lessons 2 and 3.

The observer-teacher remarked jokingly that she could feel the alternative educational tendencies of the educator in the zealously with which he wants to impart the ideas of critical thinking and problem solving. The teacher-observer says that Paulo Freire would have been proud of the researcher's efforts, but she has empathy for the learners who do not really understand the passion of the teacher about these two issues. The educator is acutely aware of the value of critical thinking and problem solving for authentic learning by the progressive educator.

4.3.3.4 *Rote learning and memorisation of facts were countered by this teaching method*

Reece (2013:326) quotes the father of progressivism, John Dewey, who wanted reform-minded educators to fight the memorisation of facts and learner passivity in order to promote the intellectual and social growth of learners. According to Reece, rote learning and the memorisation of facts are still used to this day by the majority of educators. They are not advocated for use by progressive educators.

The researcher tried his best to steer learners away from rote learning and the memorisation of facts. He is vindicated in his attempts by the following comments of learners after interviews for lesson 1 (cf. Appendices 9.1.1-9.1.3): *The teacher tries his best for us to understand the work and not learn facts like parrots (L). The teacher says we must become real economists and that means we must be able to argue and convince others of our opinions. He says we must know more than book facts (L). The educator always says that he wants learners that can argue their point and he is not impressed with those that get the highest marks but cannot debate issues (L). The*

teacher does his best for us to understand the definition of unemployment and not only know the definition from the top of our heads (L).

With regard to using questioning to develop thinking as opposed to rote learning, learners had the following to say: *The teacher wants to know the WHY for every answer we give him. He is not only interested in the fact but the why about it (L). The way the teacher questions us is to determine whether we can reason about the lesson topic (L). He questions us all along as he gives his lesson. This means we have to think and not only recall facts (L).*

During interviews after lessons 2 and 3 (cf. Appendices 9.2.1-9.2.3), the educator is even more aware of the need to counter memorisation and the recall of facts. Learners' comments are as follows: *The teacher tells us that he is not interested in us knowing the causes of unemployment like a parrot. He wants us to understand and to explain to others what structural unemployment means (L). The teacher wants us to explain the social effects of unemployment as experienced by our communities. He knows what the textbook says but he needs to hear about the actual effects from us (L). The teacher wants to know from us if the current system of capitalism will ever eradicate unemployment. He asks if it does not worsens unemployment and if we do not need planned economic systems to fight unemployment (L).*

In the teacher observation sheet the observer comments that the educator discourages learners from rote learning and memorisation of facts. The educator keeps on emphasising that he does not think that facts that come straight from the textbook are authentic. Learners are encouraged to critique and to come up with their own solutions to issues being discussed. The educator is allocated a code 4 score for all three lessons (cf. Appendices 8.1 & 8.2).

Since this action of critical thinking is impacted by two sub-themes (par. 4.3.3.3 and 4.3.3.4), the score allocation to the educator remains on average at code 4 which means well done.

From these comments it is clear that the teacher encourages debate about issues and is not mainly concerned about the retention of facts. The development of problem-solving and critical thinking skills also defies the retention of facts.

4.3.3.5 *The educator guides the Economics educational experience*

In progressive education circles the educator is regarded as a facilitator or guide to learners' obtaining knowledge, skills and values. The educator should not be seen only as the transmitter of knowledge, skills and values.

The teacher-observer scored the researcher with a code 4 for this particular action on the systematic observation sheet (*cf.* Appendices 8.1 & 8.2). The researcher is regarded as performing well in obtaining a success score of between 80 and 90% for acting as a guide to the Economics educational experience.

The teacher-observer commented on how the researcher guides the learners through questioning and prompting for solutions to address issues. Especially with regard to group work, the researcher has been a real guide in assisting learners on how to work in their groups. The researcher also guides the learners in how to use the information gathered by group members to present a group opinion.

By discussing issues beyond the prescribed curriculum, the educator opens up a world of education not often before experienced by learners. They are guided to make their Economics education relevant; they are guided to make links to their theoretical knowledge and the practical part of Economics that occurs on a daily basis. The teacher guides learners to understand that unemployment is real and makes them aware that it is within their realm to search for solutions, not to rely on experts only, as their solutions seem to have failed the world.

The teacher observer is thus scoring the educator with a code 4 for this particular action on the systematic observation sheet for both lessons 1 and 2 (*cf.* Appendices 8.1 & 8.2). The researcher is seen to be performing well in order to obtain a success score of

between 80 to 90 % for acting as a guide to the Economics educational experience, which is a code 4 score.

The teacher-observer is proud that one of the educators in her department is taking a leading role in guiding learners to achieving the full Economics learning experience.

4.4 SUMMARY OF THE RESEARCH RESULTS

The results of the sub-themes within the main theme of assessments indicate overall that the progressive intents of the researcher have been achieved. The learning strategies used by the researcher also give an indication that authentic learning and teaching has taken place. The teaching methods used by the researcher within the main and sub-themes of the research project points towards how progressive teaching methods can contribute to authentic learning taking place.

4.5 CONCLUSION

In this chapter, there is reflection on the three themes and eighteen sub-themes that have been developed during the data collection phase. This was based on the participants' responses during the focus group interviews with learners and the teacher-observers' responses in completing the systematic observation sheet for learners. This was preceded by the video recording of the teachers' lessons focusing on certain aspects of unemployment.

The implication is that the development of these themes and sub-themes has been influenced by the need to answer the research questions outlined in the introduction to this chapter. In the preceding sections, the researcher has reported on the data collected through the qualitative mode of data collection. This mode of data collection focuses on providing data in order to try to answer the research questions.

The information in the themes and sub-themes exceeded in some instances what was required from the research objectives. It was a huge task to sift through the themes and sub-themes and to find the data that link specifically to the research objectives.

In the following chapter, a discussion of the findings from this qualitative study is presented and this will be accompanied by a reflection on possible strategies and recommendations related to the research question.

CHAPTER 5

SUMMARY, DISCUSSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This study aimed to determine what “authentic learning” is and how the progressive teaching approach can be used to empower learners in a Grade 10 Economics class to develop critical thinking and problem-solving skills. Furthermore, the study also investigated how the Economics educator can influence the process for authentic learning to take place via the formulation of progressive strategies or design. Finally, research was conducted to determine learners’ reactions to attempts to apply authentic learning from a progressive approach.

Using these research questions from chapter 1 as a point of reference, this chapter provides a summary of the chapters. Secondly, is the discussion of findings of the research with regard to the aims of the study and in relation to literature review reflected in chapter 2. Emanating from the critical literature review and main findings of the empirical research reported in chapter 3, recommendations are made on the use of a progressive teaching approach for teaching Economics as a school subject. In conclusion, areas for further research are outlined in relation to this current research.

5.2 SUMMARY OF CHAPTERS

Chapter 1 provides background information on the research study, describes the problem and outlines the purpose of the study as well as the research design.

Chapter 2 engages in a critical literature review about the progressive approach to teaching and learning. It investigates progressive pedagogies such as constructivism, authentic learning and critical pedagogy. The chapter focused on how authentic learning

for a Grade 10 Economics class can be achieved within the progressive paradigm. It also contrasts the progressive approach of education with the predominant African formalistic approach. Lastly, the chapter looks at the nature and scope of Economics as a school subject and practical strategies to improve its teaching and learning in the classroom.

Chapter 3 reports on the research design in preparation for a case study through teacher research using the qualitative approach. This section provides information on the research paradigm followed in this study as well as reasons for the use of the case study and the preparations for its use. The use of the digital video recorder to record the lessons conducted by the researcher, the systematic observation of these lessons and focused group interviews conducted with learners are also discussed as data collection methods. Finally, the chapter addresses the issues of sampling and ethical clearance.

Chapter 4 presents the data collected through the focused group interviews with learners and the systematic observation sheet for the observation of the educator. In the quantitative mode, data collected through the case study of the Grade 10 Economics classroom of the researcher is presented. The data covers aspects such as assessments, learning strategies and teaching methods used by the researcher to achieve authentic learning via the progressive teaching approach. These aspects are regarded as main themes and elaborated on by means of sub-themes.

The findings of this study are now discussed in respect of the research rationale and research questions put forward in chapter 1.

5.3 DISCUSSION OF SUMMARY OF FINDINGS

Findings with regard to the first research question and the aim of the study:

What constitutes a progressive teaching approach and what enabling theories could be identified which will foreground the literature study for this investigation?

Jean-Jacques Rousseau may be regarded as one of the paternal forerunners of progressive education because his novel *Emile* was a treatise on the education of the whole person for citizenship. Building on the work of Rousseau, John Dewey's student, William Kilpatrick, advocated that learners should be actively engaged in their learning to become useful members of society; they should not only be engaged in simple reading and regurgitation of memorised material (*cf.* 2.2.1).

The researcher attempted and apparently succeeded in discouraging learners from rote learning and the memorisation of facts if one studies the comments from the focused group interviews (*cf.* 4.3.3.4).

There is however no 'capsule definition' of what constitutes a progressive teaching approach in the words of Cremin (*cf.* 2.2.2). Various movements that opposed the traditional approach posed themselves as progressive often contradicting one another. However, according to Davis (2006:51), they all shared one fundamental principle which was to make knowledge practical and more relevant to learners' immediate social situation. The learners' experience of unemployment at an individual and community level thus assists them to form a clearer perspective of this practical socio-economic phenomenon (*cf.* 4.3.1.3). Labaree (quoted by Reese, 2013:323) describes the comments of learners from the focused group interviews as the 'integration of socially relevant themes' which is one of the driving forces of progressive education (*cf.* 4.3.1.3).

One of the first theories to emerge from the progressivism perspective was constructivism. The learning theories of John Dewey, Marie Montessori and David Kolb serve as the foundation of constructivist learning theory. Judging by the literature review of several scholarly articles and books, the educator acts as a facilitator who encourages students to discover learning principles for themselves and to construct knowledge by working to solve realistic problems and challenges (*cf.* 2.2.3.1.2). With reference to this study, the researcher is regarded as a guide or facilitator to the Economics educational experience by both the learners interviewed in the focus group and by the teacher-observer. Because the researcher discusses issues beyond the formal curriculum, an entire new world is opened up for the learners which they did not experience before because of the progressive teaching approach applied during this study. It emerged that the Grade 10 learners' experience of Economics as a subject becomes more relevant and applicable to their own understanding thereof (*cf.* 4.3.3.5).

Jean Piaget developed theories of childhood development and progressive education which led to the evolution of constructivism (*cf.* 2.2.3.1.2) Piaget is known for his construction of knowledge theory, also referred to as 'scaffolding' (*cf.* 2.2.3.1.4.2). This theory requires learners to be active in the classroom. It emerged from this study that the educator, acting as a facilitator, established what learners know in order to broaden their existing knowledge with new knowledge, skills and attitude toward the subject. Emanating from the focus group interviews and classroom observations, learners confirm that the educator as a facilitator guides them from the concrete to the abstract in building their knowledge as well their skills (*cf.* 4.3.1.4). Moreover, the teacher-observer confirms this by acknowledging that the educator builds on learners' existing knowledge to introduce new content knowledge and skills as required by the CAPS curriculum (*cf.* 4.3.1.4).

The next finding deals with what authentic learning is about and its fit into the overall progressive teaching approach.

Findings with regard to the second research question and the aim of the study

What is authentic learning and how can this strategy be used in empowering Grade 10 learners to develop critical thinking and problem-solving skills in the Economics class?

In education, the term ‘authentic learning’ refers to a wide variety of educational and instructional techniques focusing on connecting what learners are taught in schools to real-world issues, problems and applications. Authentic learning is also described as real-life learning. It is a style of learning that encourages students to create a tangible, useful product to be shared with their world (*cf.* 2.2.3.2.1). Two of its fundamental principles are to enhance critical thinking and to empower learners with problem-solving skills (*cf.* 2.2.3.2.2).

Critical thinking is about defining a problem, asking questions, examining evidence, analysing assumptions and biases and avoiding emotional reasoning. According to Rule (2006), learners must exercise higher levels of thinking for authentic learning to occur. These higher levels of thinking include skills such as analysing, synthesising, designing, manipulating and evaluating information (*cf.* 2.2.3.2.3). The notion of critical thinking is highlighted by Paulo Freire who rejects learners being passive recipients of information from teachers. It requests learners to question what is said by teachers and to come up with their own assessments of topics under discussion after critically thinking about it (*cf.* 2.2.3.3). The focused group interviews responses indicate that the educator succeeds in getting learners to think critically about why unemployment is so high. They think beyond the reasons given in the textbook (*cf.* 4.3.3.3).

Critical thinking requires the development of problem-solving skills. Van Wyk (2010:117) states that the analytical skills of learners should be developed by means of problem setting, where learners should think of creative solutions to relieve aspects such as poverty and unemployment (*cf.* 4.3.3.2). The learners in the focused group interviews and the teacher-observer indicate that the educator was indeed developing problem-

solving skills by assisting the learners to dissect the problem of unemployment in the search for helping to solve it.

Scholars of authentic learning concur that the constructivist teacher employs specific pedagogical tools such as problem-solving and inquiry-based learning activities through which learners formulate and test their ideas, draw conclusions and inferences, and critically convey their acquired knowledge in a collaborative learning environment (*cf.* 2.2.3.1.2).

Findings with regard to the third research question and the aim of the study

In which way will the role of the educator influence the process that authentic learning could take place, and how?

Although the progressive approach is learner-centred, the educator still has a valuable role to play in the educational process (*cf.* 2.2.3.1.2). Contrary to criticisms from some traditional educators, the active role of the teacher and the value of expert knowledge are not diminished under the progressive educational approach (*cf.* 2.2.3.1.3).

In the modern world knowledge expands daily and should therefore ideally be included in any curriculum. The contemporary educator should thus be at the forefront of knowledge accumulation. This continuously unfolding knowledge must then be shared with the learners. In this way educators help learners to develop their intellectual powers and teach learners how to think clearly and critically (*cf.* 2.2.2).

The progressive educator functions more as a facilitator who coaches, mediates, prompts and helps learners develop and assess their understanding and thereby their learning. One of the educator's major tasks becomes asking good questions (*cf.* 2.2.3.1.3). The researcher in this study does this through formative assessments where many questions are asked to determine whether learners understand the work (*cf.* 4.3.1.6).

The educator acting as a facilitator encourages learners to reflect on their current knowledge and negotiate with them on how to broaden it. The outcome of this negotiation might be collaborative and co-operative learning projects which bear the prime characteristics of authentic learning (cf. 2.2.3.1.4.3). How the researcher has been successful with the collaborative and co-operative learning strategies is described by the learners in one of the focused group interview sessions (cf. 4.3.2.2).

The progressive educator also needs to create opportunities to actively engage learners. This implies the circumvention of passivity by learners which can be achieved through thorough lesson planning that engages the learners at all times (cf. 2.3.3.1.5.2). The researcher in this study planned extensively for the lessons by bringing the 'what, how and why' of the lessons across in a logical fashion and thus ensuring that authentic learning occurs. The progressive element comes out in the HOW where group work is conducted. It was evident from the learner interviews that learners became active participants in their own learning through group work. Secondly, it was recorded and observed that the WHY of the lesson emerged through the researcher acting as a facilitator by questioning, prompting, supporting and providing constructive feedback to specific activities and helping learners develop and critically assess their understanding and thereby their learning (cf. 4.3.3.1).

Findings with regard to the fourth research question and the aim of the study

How do learners react to attempts to apply authentic learning from a progressive perspective?

In the progressive classroom, learners are expected to construct their knowledge actively rather than mechanically digesting knowledge from the teacher or the textbook (cf. 2.2.3.1.3). It was evident that during most of the lesson presented by the researcher, learners reacted differently to the activities. The focus thus tends to shift from the educator to the learners.

Learners reacted well to the authentic characteristic of collaborative learning. Co-operative learning can be understood as involving active exploration and equilibration on the part of each learner. This strategy is regarded as one of the success stories in the recent evolution of education. It is implemented in the classroom where learners jointly and creatively identify problems and generate practicable solutions (*cf.* 2.2.3.1.5.6). The learners successfully applied the strategy of co-operative learning in the study (*cf.* 4.3.2.1). Van Wyk regards co-operative learning as effective if the development and application of calculation skills can be achieved (*cf.* 4.3.2.4). If learners can thus do economic calculations, it may then be argued that they learned authentically. From the learners' comments in the focus group interviews it was evident that they definitely enjoyed the lessons. This was confirmed by the teacher-observer as well.

Scholars are of the view that learners develop and refine their language within the authentic learning paradigm. Constant discussion, debate and interactional problem-solving develop the use of language as a tool for learning. Another critical dimension is the bolstering of learners' confidence through the use of language (*cf.* 2.2.3.1.5.7). This social dimension and the other benefits of language used within the co-operative learning strategy are discussed in the study (*cf.* 4.3.2.3). Learners enjoyed learning with and from their peers. It was evident that a specific group cohesion and collaboration (*camaraderie*) emerged where learners assisted one another collectively when making their specific group presentations to the rest of the class.

Findings with regard to the fifth research question and the aim of the study

What strategies could be formulated to strengthen teaching Economics through a progressive teaching approach?

The first strategy is the use of co-operative learning for effectively teaching Economics (*cf.* 2.2.3.1.5.6).

The second strategy is to promote critical thinking and problem-solving skills for learners to think authentically about the subject. Critical thinking and problem solving is at the heart of authentic learning which the progressive approach requires. This means the rejection of the uncritical acceptance of facts as taught by experts (*cf.* 2.2.3.2.2).

Two learner-centred strategies that the progressive teacher can use are cartoons and the use of teams-games-tournaments. Cartoons create interest and develop critical and thinking skills in Economics (*cf.* 2.6.3.1). Learners responded positively to the use of cartoons by the researcher during the study (*cf.* 4.3.2.5).

In line with the spirit of the progressive teaching approach, the researcher devised a team game as a strategy to reduce educator talk in the classroom and to introduce more variety into the classroom (*cf.* 2.6.3.2). Learners were excited by this activity as noticed by the teacher-observer. It created a more relaxed classroom atmosphere (*cf.* 4.3.2.6).

Through the insistence of the researcher that learners must aspire to think analytically and critically, learners are discouraged from rote learning. By employing the progressive teaching approach in teaching Economics, the researcher created and provided powerful learning opportunities by encouraging learners to critically reflect on their learning. To do this, the researcher exposed Grade 10 learners to problem-solving and critical thinking activities during the study. It emerged from the findings of this study that learners lessen their dependence on rote learning to accumulate knowledge by creating learning opportunities to promote critical thinking and problem solving skills (*cf.* 4.3.3.3).

5.4 LIMITATIONS OF THE STUDY

5.4.1 The challenge of obtaining ethical clearance

The greatest limitation to the researcher was to actually start his study. It was a real struggle to obtain ethical clearance and therefore reduced the time for the actual research. The researcher obtained consent from learners' parents to participate in the

study and also attained assent from those learners as part of his application for ethical clearance. He did not, however, start with the research as his supervisor was adamant that he could not start with the research process without this ethical clearance. The documentation for the application process was also forthright that no research can commence before an ethical clearance certificate has been issued. The College of Education's Ethical Clearance Committee regarded obtaining consent from parents and assent from learners as being retrospective to the study. They regarded it as if the researcher had already started with the research and therefore rejected his application for ethical clearance. The Committee explained that they only wanted to see the *pro forma* letters that would be written to the parents and learners as part of the application process. The researcher and his supervisor had to write letters to the Committee in which both explained and swore that the research had not yet commenced although consent and assent had been obtained from the mentioned parties. This issue of when retrospectivity applies to a study needs to be made much clearer to both students and supervisors. Both this researcher and his supervisor thought they were on the right track as long as the actual research in terms of data collection did not commence. This thinking nearly derailed this study. After a two month delay in which the researcher could only wait, the certificate was eventually issued.

5.4.2 Lack of assistance from fellow educators

The researcher wishes to mention that it was very difficult to get assistance from colleagues for a research project of this nature. It was a struggle to get a colleague to conduct the focused group interviews with learners. Most educators do not understand the need to investigate an alternative teaching approach. They cannot understand where the researcher finds the time to study with the workload teachers have. The workloads that these educators have to carry at secondary schools made the researcher understand his colleagues' intransigence to give assistance elsewhere. To get the teacher-observer to participate was, however, less strenuous. As the Head of the Economics Department of which the researcher formed a part, she encouraged him in his research.

5.4.3 The withdrawal of learners at the commencement of the study

The withdrawal of learners after ethical clearance had been obtained became a challenge. Not all learners who indicated that they would participate in the focused group interviews eventually participated in the study after the ethical clearance certificate had been issued. From 26 learners that agreed to participate, only 12 eventually participated, decreasing the size of the sample significantly. The feedback of the participating learners was not as exhaustive as it might have been if all those that agreed to participate eventually did.

5.4.4 Limited time frame and resources to conduct the study

Owing to this being a case study of scope with a limited time frame for conducting it, only focused group interviews and the completion of a systematic teacher observation sheet were used as data collection tools. Although only two instruments were used to collect data, it was still time consuming, in the nature of qualitative research. Apart from the time it took to conduct the interviews and the completion of the systematic teacher observation sheet, the transcription of these activities also required much time.

The feedback for the teacher observation should perhaps have been done by more than one observer. With only one observer, the feedback may be seen as arbitrary and subjective.

5.4.5 The objectivity of the researcher

The prominent role played by the researcher during the video recording phase may have had an influence on the remainder of the research process and the instruments to be used afterward. It is not good research practice for the researcher to be the player and referee at the same time. It was therefore important for the researcher to isolate himself from the focused group interviews and the systematic observation of the teacher processes. It is for the reader to judge to what extent the researcher was successful.

5.4.6 Lack of literacy sources in respect of Economics education and the study topic

The last inhibiting factor for this study that the researcher wishes to mention is the scarcity of literacy resources on Economics education, specifically in relation to progressivism.

5.5 RECOMMENDATIONS

Based on the aim of this research, the data collected and the findings, the following recommendations are made:

5.5.1 Recommendations regarding what constitutes a progressive teaching approach and how these theories could support Economics educators to advance their praxis to promote problem solving, communication and critical thinking skills in their respective classrooms

The following specific recommendations are formulated on the theories that foreground the progressive teaching approach and that should be kept in mind to achieve specific objectives in the subject:

- Progressive educators should never lose sight of the teachings of a theorist such as Johan Pestalozzi who emphasised that an individual best learns through experiences. Emanating from this stance, it is recommended that the Economics educator's planning and implementing of the task is to help, guide and challenge learners through their learning experiences and allow them to unfold naturally in the classroom.
 - The second recommendation is that the progressive educator must create and motivate learners who to want to learn authentically. Educators in the progressive educational realm should further remember that Pestalozzi speculated that
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children learn through their own internal motivation rather than through compulsion.

- It is recommended that the researcher proposes workshops on the progressive teaching approach within the Economics Department at his current school by inviting other Economics educators in the educational circuit in Gauteng to allow his colleagues to understand that pedagogical progressivism means basing instruction on the needs, interests and development stage of the learner.
- It is recommended that other Heads of Departments for Economics within the researcher's school and surrounding schools are invited to these workshops to ascertain whether they are interested in buying into the progressive idea of authentic learning. Depending on the success of such a workshop, the researcher and invited colleagues can then make a decision on whether to take it off site to perhaps at district level.
- It is also recommended that teaching Economics is conducted using the principle of integration. This implies teaching learners the skills they need to learn any subject instead of teaching a particular subject (*cf.* 2.2.2).
- It is recommended that training provided by the provincial department of education to Economics educators should include the progressive methodology as an agenda item for educators to employ the progressive teaching approach in their respective classrooms. Progressive teachers themselves should upgrade their knowledge and skills on the psychological theories and classroom methods in which they may be lacking (*cf.* 2.2.3.1.2).

5.5.2 Recommendation regarding what authentic learning is and how this strategy can be used to empower Grade 10 learners to develop critical thinking and problem-solving skills in the Economics class

The following recommendations are made on authentic learning and how learners can be empowered to develop critical thinking and problem-solving skills:

- It is recommended that Economics educators design and present their lessons with interesting situations or with which learners are familiar on particular contemporary economic issues such as poverty and unemployment in a South Africa context.
- It is further recommended that Economics educators use authentic assessment tools to continuously assess what takes place to establish whether learners have learned.
- It is further recommended that the Economics educators employ the following authentic assessment tools such (1) written assessments, including selected response types such as multiple choice and constructed responses types such as essay items or writing samples; (2) performance-based tasks; (3) research projects including research papers, performance projects and oral presentations; and (4) portfolios.
- It is recommended that authentic assessment tools be implemented to assess learning, assess for learning and assess about learning with the purpose of achieving specific objectives in the subject.
- It is recommended that there should be strong emphasis on empowering Economics learners on analytical, problem solving, communication, group cohesion, collaborative and critical thinking skills as the progressive educator guides learners toward authentic learning. This is in line with the type of learner which the National Curriculum Statement Grades R-12 aims to produce for the South African and global labour market.
- It is further recommended that as higher order thinking skills that are paramount for authentic learning, such as collecting, analysing, organising and critically evaluating information are imparted to learners to be equipped for the challenges of the market economy.
- The researcher recommends that Grade 10 Economics learners should adopt an active and critical approach to learning. Future Economics learners should not accept the uncritical learning of given truths. Learners should actively and

critically discuss, for example, why the market system cannot provide employment opportunities even in a period of economic growth. This attitude will assist learners to solve problems and make informed decisions as economic citizens in all spheres of life.

- It is also recommended that learners should share ideas and learn from one another to attain authentic learning. Collaboration by learners and co-operation as members of a group are hallmarks of authentic learning (*cf.* 2.2.3.2.2). Employers in the market place need workers who, in a group context, can address all the socio-economic and environmental challenges that businesses face.
- The researcher further recommends that since authentic learning mirrors the complexities and ambiguities of real life, it should exclude 'right' and 'wrong' answers determined by the teacher as a test developer. In real life there are no straightforward positive or negative answers (*cf.* 2.2.3.2.2). The current system provides for prescribed assessments in the form of assignments, projects, case studies, tests and examinations. The tests and examinations are based on content from a prescribed textbook. Much of our current education system of tests and examinations is significantly mute about rote memorisation. It can therefore be counterproductive for learners to argue robustly in an essay if the assessors have a predetermined answer in mind.
- It is recommended that Economics educators should form district teams to discuss issues beyond the formal curriculum and textbooks because authentic learning is not only about obtaining grades but also about acquiring the foundational skills, knowledge and understanding to address real-world issues, problems and applications.

5.3.3 Recommendation regarding the role of the educator and how it will influence the process of authentic learning taking place

The following recommendations are made regarding the role of the educator in authentic learning:

- It is recommended that the Economics educator as the subject content knowledge and pedagogical content knowledge expert furthermore be empowered in this progressive teaching approach. The reason for this is to play an active role as a progressive teacher to become an effective change agent in creating authentic learning environments. The educator as a subject and knowledge expert should be well prepared for an active role during his/her lessons. Although the focus is on the learner under the progressive approach it does not discount the role of the educator.
- The researcher recommends that the educator must especially be familiar with current subject knowledge that is not covered by the official CAPS Economics curriculum. This is particularly required in the context of authentic learning which focuses on real-world issues as prescribed and required in CAPS.
- It is recommended that when using the progressive approach, the educator should build on what learners already know. The educator in pursuance of Piaget should work from the concrete to the abstract in building up or transmitting new knowledge (*cf.* 4.3.1.4). This process of 'scaffolding' ensures that a proper foundation has been laid before adding new to existing knowledge. One of the principles of the National Curriculum Statement Grades R-12 is that content and context should progress from the simple to the complex.
- Another recommendation is that the educator should actively discourage rote learning and memorisation in teaching Economics, but should promote problem-based learning as stipulated in the CAPS curriculum. Problem-based learning strategies can be developed to enhance learners' higher order thinking skills, in particular in teaching Economics as a school subject as an integral component of

authentic learning. John Dewey, regarded as the father of progressivism, reinforced the issue of authentic learning to be applied in progressive classrooms to promote learners' intellectual and social growth.

- It is further recommended that the progressive educator must use co-operative learning as a strategy since collaborative work and individual accountability as principles of co-operative learning is a requirement of authentic learning. One of the aims of the National Curriculum Statement Grades R-12 is to produce learners who are able to work effectively with others as members of a team.
- It is finally recommended that the progressive teacher plans and organises a conducive learning environment for effective teaching and learning which is a prerequisite for the implementation of an effective classroom management practice in an authentic learning approach. It is imperative that careful planning, organising and monitoring of the educator's activities form an important component of the progressive teaching strategy. Moreover, educators can make applicable and effective use of visual, symbolic and language communication to support this authentic learning intended by the National Curriculum and Assessment Policy Statement Grades R-12.

5.5.4 Recommendation regarding the way learners react to attempts to apply authentic learning from a progressive perspective

The following recommendations are made for the way learners react to authentic learning:

- It is recommended that learners should primarily work in co-operative learning groups such as Jigsaw, Group investigation, Student Teams Achievement Divisions (STAD) and Teams-Games-Tournaments which are highly collaborative. This collaborative aspect is a prime ingredient of authentic learning. Although the researcher was initially perturbed by the noise levels

emanating from the groups, the researcher adapted to it because of the enjoyment that learners gained (*cf.* 4.3.2.1).

- It is also recommended that learners develop and apply calculation skills within a group context. If this can be achieved, co-operative learning which is a strategy within the realm of authentic learning can be regarded as highly effective.
- It is further recommended that progressive educators must actively empower learners to develop and maintain their analytical and problem-solving skills and apply them to other subjects as well to promote authentic learning.
- It is also recommended that learners should debate economic issues and ask questions to get clarity on topics under discussion in order to achieve authentic learning. The acquisition of an advanced Economics vocabulary will assist to debate and communicate the essentials of the subject.
- The researcher recommends working in groups by learners to enhance the understanding of the social dynamics of groups when working with their peers. In some instances peers understand and can explain a situation better than the educator. Learners also show more commitment to the group than they normally do in class. Some group members, however, do not do their share during the case study and hide behind others (*cf.* 4.3.2.3). These are true authentic observations as the same types of behaviour manifest themselves in the real workplace (*cf.* 2.2.3.2.4).
- Finally, it is recommended that Economic educators empower and guide learners to understand why it is important that the progressive approach is learner-centred for their active involvement to succeed as an individual or group.

5.5.5 Recommendations regarding strategies that could be formulated to strengthen the teaching of Economics through a progressive teaching approach

The following strategies are suggested to strengthen the teaching of Economics through a progressive teaching approach:

- It is recommended that the progressive educator be empowered to design and implement strategies to guide learners toward problem solving and critical thinking in the Economics classroom. This can be achieved by using case studies and computer simulations, for example.
- Another practical recommendation would be for the researcher to encourage learners to question Economics textbooks and contemporary Economic commentators as they do not provide viable solutions to unemployment, for example. A strategy should be developed where learners investigate the question, find answers and ask additional questions for the quest for learning to become cyclical.
- Other practical strategies recommended would be for the progressive Economics educator to develop the culture of lifelong learning, learner involvement, the interpretation of financial and management information and the application of calculation skills. Learners should be taught that their learning never ends even after the completion of secondary and tertiary education; it should be a lifelong endeavour. Financial and management information and the application of calculation skills should help learners with their own budget planning now and especially as adults.
- The researcher recommends that the progressive Economics teacher must have a sound knowledge of the didactical principles of co-operative learning in order to make responsible choices in terms of teaching methods and strategies. The teacher should understand the core of learner-centeredness, the principle of integration, and relevance in teaching Economics. In the South African economic scenario it is highly recommended that the Economics educator devise a strategy for learners to understand reconstruction, growth and development. Economics learners must understand where the National Development Plan (NDP) is rooted, its role to create and/or distribute wealth and its engagement in poverty alleviation.

- To stimulate interest in the subject it is finally recommended that the progressive educator employs cartoons and team games as alluded to in the case study.

5.6 SUGGESTIONS FOR FURTHER RESEARCH

The most obvious area in need of further research is related to the research question for this study. As this was a case study that only focused on a small number of participants, a much larger number of participants is needed to be able to generate findings that may be generalised.

This study focused only on how the progressive teaching approach can be used to enhance authentic learning in a Grade 10 Economics classroom at a specific school. More research still needs to be conducted across grades or in the same grade at a few other schools to gain a fuller understanding on the response of learners to the efforts of progressive educators for the learners to think authentically.

The researcher wants to investigate this topic further through a doctoral research study. By doing an action research study that works in cycles, the researcher would wish to investigate the impact of the progressive approach and how to achieve real authentic learning with a group of Economics learners from Grades 10 to 12, thus over a three-year cycle.

A very significant question that could also be further researched is whether it is possible to apply the progressive teaching approach within the formalistic teaching design where the teacher is seen as the ultimate participant when it comes to knowledge dispensation. Can the formalistic design be balanced with the progressive design so that the benefit of progressivism is not lost owing to a historical usage of one approach above the other?

5.7 CONCLUSION

The researcher set about to question his own traditional teaching approach of transmitting facts to a depository of uncritical, unthinking learners. The researcher hoped to replace the traditional with a progressive approach where learners would be thinking more for themselves on being exposed to it.

This study gave the researcher the opportunity to get learners involved in classroom discussions through group work. This co-operative learning strategy is one of the fundamental pillars of the progressive approach. Lively discussions ensued where the educator only acted as the facilitator; learners conducted research in preparation for group work and eventual presentation to class.

An unintended consequence of the researcher's study was that it provided an opportunity for learners to watch or read about news events with economic consequences. They were really enthusiastic and would even ask the researcher about daily economic occurrences when they met him in the corridors.

This study has been a revolutionary exercise for the researcher because the teaching approach used in the Grade 10 Economics class was something he has never done before and neither have the learners been exposed to it before. From the interview transcripts the researcher could gauge that those learners who agreed to assist him with the focus group interviews appreciated and enjoyed this approach. The researcher still has a good feeling when he thinks of the lively group discussions and report backs from the group. He feels that both the convenor of the group interviews and the teacher-observer were enlightened about his progressive intents through their participation.

In conclusion, the researcher is of the opinion that although this study was time consuming, it was a worthwhile exercise. The researcher feels that he has certainly attempted to guide learners to problem solving, critical thinking, understanding and therefore more authentic learning. Real-life learning was also brought to the fray. This is confirmed by the feedback from the research instruments.

Based on the findings and recommendations which are made, suggestions are put forward for further research relating to how a progressive research design can create truly authentic learning environments.

BIBLIOGRAPHY

Abbott, S. Hidden Curriculum Ed. 2014. The Glossary of Education Reform. [Online]. Available < <http://edglossary.org/hidden-curriculum> > [Accessed 26 August 2014]

Alesandrini, K., & Larson, L. 2002. Teachers Bridge to Constructivism. The Clearing House Journal, 75 (3); 118-121.

Alexander, R. 2000. Culture and Pedagogy: International Comparisons in Primary Education. Oxford: Blackwell.

Babbie, E. & Mouton, J. 2003. The practice of social research. Oxford University Press Southern Africa: Cape Town.

Battle, M. 1996. The ubuntu theology of Desmond Tutu. In Archbishop Tutu: Prophetic witness in South Africa, eds. L. Huley et al. Human & Rousseau: Cape Town.

Bothma, T., Cosjin, E., Fourie, I & Penzhorn, C. 2009. Navigating Information Literacy. Maskew Miller Longman (Pty) Ltd: Cape Town.

Beets, L. & le Grange, L. 2005. 'Africanising' assessment practices: Does the notion of ubuntu hold any promise? South African Journal of Higher Education, Special Issue 19: 1197-1207.

Black, P & Wiliam, D. 2009. Assessment and Classroom Learning: Assessment in Education. March 2009: 7-74.

Blanche, M.T. & Durrheim, K (2002). Research in Practice: Applied Methods for the Social Science. University of Cape Town Press: Cape Town:

Bless, C & Higson-Smith, C. 2000. Fundamentals of Social Research Methods: An African Perspective. Juta Education (Pty) Ltd: Cape Town

Broodryk, J. 2006. Ubuntu: life coping skills from Africa. Knowres Publishing Randburg.

Busher, H & James, N. 2012. The Ethical Framework of Research Practice. In: Briggs, A.R.J., Coleman, M. & Morrison, M (eds.) Research methods in educational leadership and management. London: Sage Publications: Los Angeles.

Butts, F & Cremin, L. 2007. A history of education in American culture. Henry Hold and Co: New York.

Chauke, A.2012. Angie's woes mount. The Times, 27 July 2012.

Chun, L .2011. Love and Creativity: The Education Manifesto of Beijing New Talent Academy. East China Normal University Press: Beijing.

Cresswell, J.W. 2012. Educational research: planning, conducting, and evaluating quantitative and qualitative research (4th Edition). Pearson, Edwards Brothers Malloy:

Cuban, L.1993. How teachers taught: Constancy and change in American classrooms, 1890-1990 (Second Edition). Teachers College Press: New York.

Curtin University.2014.Benefits of authentic learning.[Online].Available: <https://otl.otl.curtin.edu.au/teaching_learning_practice/student_centred/authentic.cfm>[Accessed 5 March 2014].

Da Costa, Y, Julie, C. & Meerkotter, D 1994. Let the voices be heard-Process and Practice in Education. Wyvern Publications: Cape Town.

Dann, R. 2002. Promoting assessment as learning: Improving the learning process. Routledge/Falmer: London

Davis, G.A. 2006. Irving Babbitt, the Moral Imagination and Progressive Education. Humanitas, XIX: 1-2.

Department of National Education. 2009. Report of the Task Team for the Review of the Implementation of the National Curriculum Statement. Presented to the Minister of Education, Ms. Angela Motshekga. Pretoria.

Department of Basic Education. 2011. Curriculum and Assessment Policy Statement, Economics: RSA

Department of Basic Education. 2011. Curriculum News: RSA.

Department of Basic Education. 2012. National Protocol for Assessment for Grades R-12: RSA

Department of Basic Education. 2012. Question and Answers booklet: RSA.

Dewey, J.1956. The Child and the Curriculum and the School and Society. Phoenix Book published by University of Chicago Press: Chicago.

Donald, D, Lazarus, S & Lolwana, P. 2002. Educational Psychology in Social Context. Oxford University Press: Cape Town, South Africa.

Evers, W.M. 1997. What's Gone Wrong in America's Classrooms, Introduction. Hoover Institution Press: Stanford.

Freire, P. 1970. Pedagogy of the Oppressed. Continuum: New York.

Freire, P. 2005. Education for Critical Consciousness. Continuum International Publishing Group: New York.

Goode,K.,Kingston, T.,Millar Grant,J. & Munson,L.2011. Assessment for Learning. Learning Together: Successfull teaching in combined grades.EFTO Voice.March ed.

Gravett,S.2004. Action Research and Transformative Learning in Teaching Development. University of Johannesburg. Educational Action Research, 12 (2): :259-272.

Gutthrie, G. 2013. Prevalance of the formalistic paradigm in African Schools. South African Review of Education Journal, 19 (1):121-138.

Hartle,RT., Baviskar,S. & Smith, R.2012.A Field Guide to Constructivism in the College Science Classroom: Four Essential Criteria and a Guide to their Usage. Journal of Bioscene Perspectives, 38 (2):31-35.

Hayes, W. 2007. The Progressive Education Movement: Is it still a Factor in Today's Schools?: Rowman and Littlefield: New York.

Hilt, L (2011). Less Teacher, More Students. The How of 21st Century Teaching, Voices.

Hopkins DA. 2002. Teacher's Guide to Classroom Research (3rd Edition).: Open University Press: Stony Stratford, England.

Hopkins,RL.1994. Narrative Schooling: Experiential Learning and the Transformation of American Education. Teacher's College Press: New York.

Kohn, A. 2010. Progressive Education: Why it's hard to beat, but also hard to find. INDEPENDENTSCHOOL.[Online].Available:www.newfoundations.com/GALLERY/Kohn.html. [Accessed > 20 November 2013].

Labaree, D 2005. Progressivism, Schools and Schools of Education: An American Romance. Paedagogica Historica, 41(1 & 2): 276-278.

Lombardi, M 2007. Authentic learning for the 21st Century: An Overview. Educause Learning Initiative (ELI). ELI Paper 1: May 2007: 1-12.

Loughran, J. 1999. *Researching Teaching: Methodologies and Practices for understanding Pedagogy*. Farmer Press: London.

Mbigi, L (2000). *In search of the African business renaissance: An African Cultural Perspective*. Knowledge Resources: Randburg.

McGoldrick, M., Rebelein, R., Rhoads, J.K., Stockly, S. 2010. *Making Co-operative Learning Effective for Economics*.

McMillan, J.H. & Schumacher, S. 2010. *Research in Education: Evidence- Based Inquiry (7th edition)*. Pearson Publications: New Jersey.

Merriam, S.B. 2002. *Qualitative research in practice*. Josey Bass Publishers: San Francisco.

Msila, V. 2008. Ubuntu and school leadership. *Journal of Education*, 44:67-84 [Online]. Available: www.unisa.ac.za [Accessed 17 October 2013].

Newmann, F & Wehlage, G. 1993. Five standards of authentic instruction. *Journal of Educational Leadership*, 50 (7): 8-12.

Parker, B. 2003. Back on the chain gang: some difficulties in developing a (South) African philosophy of education. *Journal of Education*, 30:23-40.

Patton, M.Q. 2002. *Qualitative research and evaluation methods*. Sage Publications Inc: California.

Pendlebury, S. 1998. Transforming teacher education in South Africa: A space-time perspective. *Cambridge Journal of Education*, 28(3):333-349.

Prinsloo, E. 1998. Ubuntu culture and participatory management. In Coetzee, P.H. and Roux, A.P.J. (Eds). *The African philosophy reader*. London: Routledge: 41-51.

Reeves, T.C., Herrington, J. & Oliver, R. 2002. Authentic activity as a model for web-based learning. *Annual Meeting of the American Educational Research Association*: New Orleans.

Reese WJ. 2013. In search of American progressives and teachers, *History of Education: Journal of the History of Education Society*, 42(3): 320-334

Rule, A. 2006. The Components of Authentic Learning, *Journal of Authentic Learning*, 3(1):1-10.

Schubert, W. 1986. Curriculum: Perspective, paradigm and possibility. New York: Macmillan.

Semel, S., Sadovnik, A. 1999. Schools of tomorrow, schools of today..Closing the doors on an open education, 1-20. Peter Lang: New York.

Sergiovanni, T and Starratt, R. 2007. Supervision: A Redefinition. McGraw Hill :New York.

Shepard, L.A. 2005. Formative Assessment: Caveat emptor. Online: http://www.cpre.org/ccii/images/stories/ccii_pdfs/shepard%20formative%20assessment%20caveat%20emptor.pdf . ETS Invitational Conference The future of assessment: Shaping Teaching and Learning, New York, October 10-11, 2005. Retrieved 27 April 2014.

Stevens, C. 2002. Critical Pedagogy on the Web (<http://mingo.info-science.uiowa.edu/~stevens/critped/page1.htm>). Retrieved October 7, 2013.

Stiggins, R. 2006. Assessment *for* Learning: A Key to Student Motivation and Achievement, *EDge*, November/December 2006: 3-19.

Tabulawa, R. 1997. Pedagogical classroom practice and the social context. The case of Botswana. *International Journal of Educational Development*, 17(2):189-194.

Tyack, D & Cuban, L. 1995. Tinkering toward Utopia. Harvard University Press: Cambridge.

University of South Africa. 2007. Policy on Research Ethics Pretoria. University of South Africa Press: Pretoria.

Van Wyk, MM. 2007. The use of cooperative learning in Economics in the Further Education Training Phase in the Free State Province. Doctorate of Philosophy Thesis, Department of Curriculum Studies, University of the Free State: Bloemfontein, South Africa. [Online]. Available: <https://scholar.google.co.za> [Accessed 16 February 2014].

Van Wyk, MM. 2009. Students' reflections regarding the use of cartoons as a teaching technique in the Economics classroom. Paper presented at EASA International conference on 13-16 January, Illovo Beach, Durban, South Africa. [Online]. Available: <https://scholar.google.co.za> [Accessed 01 March 2014].

Van Wyk, MM. 2010. The selection of Didactic Principles by Teachers in the Field of Economics: An Exploratory Factor Analysis. *Journal of Social Science*, 24(2):111-119. [Online]. Available: <https://scholar.google.co.za> [Accessed 20 February 2014].

Van Wyk, MM. 2011a. The Use of Cartoons as a Teaching Tool to Enhance Student Learning in Economics Education. *Journal of Social Science*, 26(2):117-130. [Online]. Available: <https://scholar.google.co.za> [Accessed 28 February 2014].

Van Wyk, MM .2011b. The Effects of Teams-Games Tournaments on Achievement, Retention and Attitudes of Economics Education Students, *Journal of Social Sciences*, 26(3): 183-191. [Online]. Available: <https://scholar.google.co.za> [Accessed 02 March 2014].

Van Wyk, MM. 2013. Inaugural lecture on the advancement of economics education. Paper presented on 19 July in UNISA Senate Hall, Pretoria, South Africa. [Online]. Available: <http://www.unisa.ac.za> [Accessed 23 February 2014]

Venter, E. 2004. The notion of ubuntu and communication in African educational discourse. *Studies in Philosophy and Education*, 23:149-160.

Weber, L .2009. The Bamboozled: Reflections on Progressive Education. *Paths of Learning*, 22: 26-28.

Wheeler, S (2012). 10 characteristics of authentic learning. [Online]. Available: <<http://steve-wheeler.blogspot.com>> [Accessed 21 July 2014].

William, D. 2011. What is assessment for learning? *Journal for Studies in Educational Evaluation*, 37: 3-14.

Yin R.K. (2014). *Case Study Research: Design and Methods*. 5th ed. Sage Publications Incorporation: California.

Zimiles, H. 2008. A Bittersweet Appraisal of Progressive Education. *Sociological Journal of Education*, 45:164-169.

PART 2: APPLICATION FOR ETHICS REVIEW AND CLEARANCE

[To be submitted to the CEDU REC Chairperson, Dr M Claassens
(mcdtc@netactive.co.za) and the REC Secretary (Ms Tumelo Motaung)
motaut@unisa.ac.za]

A TYPE OF RESEARCH AND RESEARCHER'S DETAILS

A1 APPLICATION STATUS

New submission	Revised submission	Date of previous submission[s] to REC
X	09 JUNE 2014	13 MAY 2014

A2 TYPE OF APPLICATION (more than one option might apply)

Masters' student	Doctoral student	Staff member ¹	Class approval	Use of secondary data from class approval	Unisa data, students, staff
X					

A3 FULL NAME OF RESEARCHER SUBMITTING THE APPLICATION

Wayne Gary Theo Flanagan

A4 STUDENT or STAFF NUMBER

STUDENTS: attach the letter of registration confirmation from Unisa

0755-273-4 and see Appendix 10

A5 ADDRESS

Postnet Suite 147
Private Bag 25723
Monument Park
0105

A6 CONTACT DETAILS

Telephone	0123477350
Cell phone	0735714049
Email address	wflanagan@willowridge.co.za

A7 ACADEMIC AND PROFESSIONAL QUALIFICATIONS (PLEASE DISTINGUISH)

Academic	B. Comm. & B. Ed
Professional	Higher Diploma in Education

¹ For example, applications for staff projects, articles and conference papers (where data is collected from individuals or through literature review), community research projects and R&D leave applications.

B DETAILS OF PROPOSED RESEARCH**B1 TITLE OF DISSERTATION/THESIS/PROJECT/MODULE FOR CLASS APPROVAL**

Creating authentic learning environments in a grade 10 Economics classroom via a progressive teaching design.

B2 PROGRAMME DETAILS

Degree/project/module	M. Ed
Area of specialisation (if applicable)	Curriculum Studies
Programme code	98433

B3 NAME OF SUPERVISOR/ PROMOTOR/STAFF MEMBER AND CONTACT DETAILS

Title, initials, surname	Prof. M. Van Wyk
Department	Curriculum Studies
Telephone	0515445217
Email	vwykmm@unisa.ac.za

B4 NAME OF CO-SUPERVISOR/CO-PRESENTERS OF MODULE (if applicable)

Title, initials, surname	N/A
Department	
Institution	
Telephone	
Email	

B5 ORGANISATIONS OR INSTITUTIONS INVOLVED IN THE STUDY

Name	Willowridge High School (GDE)
Address	518 Verkenner Street, Wilgers, Pretoria
Contact details	01288073423

B6 SPONSORS OR FUNDERS (IF APPLICABLE)

Name	Masters by Coursework Bursary
Address	UNISA
Contact details	Leonie van der Linde (021)4445626/5502 vdlinl@unisa.ac.za

B7 OTHER PERTINENT INFORMATION SUCH AS CONFLICT OF INTERESTS AND HOW THIS WILL BE DEALT WITH

Although I will be using my own learners, I will not unduly influence them as it will impinge on my integrity, credibility and legitimacy as a researcher. I teach Ethics as a part unit in Business Studies and I would be in contravention of my own ethical practice if I should influence my learners in any way. I will also address conflict of interest by using one of my colleague's from the Social Sciences Department Mr.Dzimbo, to conduct the learner focused interviews.

C PROPOSAL/PROJECT SUMMARY

C1 LIST OF KEY TERMS, ACRONYMS AND ABBREVIATIONS

Provide the acronym/abbreviation, write it out and provide a concise definition if it is a subject specific concept

CAPS: Curriculum and Assessment Policy Statement

Traditional approach to teaching: The educator acts as a distributor of knowledge and the role of the learner is passive.

Progressive teaching: The educator is guiding the educational experience and the learner plays an active role.

Formalistic method of teaching: The educator is perceived as the expert bearer of knowledge and is expected to reveal this knowledge to learners.

Authentic learning: Real and genuine learning that lead to thorough understanding and can be applied in the world outside of the classroom.

C2 PROPOSAL ABSTRACT

1. Students/staff research projects/use of secondary data/research involving Unisa resources and individuals

Please ensure that all the following aspects are covered.

- a) Introduction, background and purpose (include at least 3 references to recent literature)
- b) Problem statement and anticipated outcomes
- c) Population; sample & sampling technique; inclusion or exclusion criteria (if applicable); withdrawal or discontinuation criteria
- d) Research design, activity timeline, research instrument (self/adapted/existing); data collection processes; data analysis method; ethical concerns with reference to respondents, institution as legal person, researcher, specific to study field. Procedures followed to protect participants from physical and/or emotional harm (if applicable)
- e) The proposal abstract must not exceed 4 pages. Applicants must ensure that only the core issues are presented. This section should not be a 'cut and paste' from the research proposal or from chapter 1.

2. Class approval [it is suggested that the class approval and use of secondary data applications should be submitted simultaneously]

- a) Provide an introduction that provides the context for the research for which class approval is sought and give a concise description of the project the students need to undertake and in which module and field.
- b) If each student chooses their own project, indicate this and explain how the sample will be chosen, what the research design is, what data collection method and which instruments will be used. Indicate what guidance is provided to assist the student to conduct the research in an ethical way.
- c) Outline how students will be informed of the ethics requirements of conducting research and what is expected of them in this regard.
- d) If students all do the same research project and use the same data collection method eg use a standard questionnaire provided by the lecturer, state this and provide a copy of the instrument as an appendix.
- e) Mention that / whether the research is a compulsory assignment in the module.
- f) Insert the assignment brief (as stated in TL 101) as an appendix.
- g) Indicate how the assignment will be marked and/or provide the assessment rubric or guide that has been provided to students as an appendix.
- h) Indicate whether the students' research will be used in further research by the lecturers and indicate what types of output are envisaged (use of secondary data).
- i) In the above case, provide evidence that students have been informed of this eg in the TL 101 in the assignment brief or any other appropriate way. Ensure that students provide their permission in a consent form that they permit the lecturer to use the data for further research.
- j) Once ethical clearance has been provided by the CEDU REC, it is the researcher's responsibility to seek permission to conduct the research from SENRIC.

Guidelines that generally apply to student applications.

1. It is essential to ensure that the research abstract and the rest of the application are aligned.
2. Please do not confuse this abstract with your research proposal abstract. Prepare this abstract anew.
3. Indicate in the abstract
 - i. From whom you seek permission to conduct the study,
 - ii. Who the research participants are.
 - iii. From whom letters of assent or consent must be obtained.
 - iv. Also include a confidentiality agreement for participants in the event of focus groups.
 - v. Indicate the data collection instruments and attach examples of the instruments such as interview schedules, observation schedules, focus group questions, questionnaires, etc.
4. Please note that each of these items – letters of consent for each group of participants; informed consent letters from each group of participants (assent letters in the case of minor children), data collection instruments must be attached as consecutively numbered appendixes.

Note that ***all*** letters requesting participation in the study – regardless to whom they are directed – must provide

- The title and purpose of the study
- Details of how the participant will contribute to the study (through interview, observation, questionnaire etc) how much time will be required for participating in the interview/required to complete the questionnaire
- Assurance that participation is voluntary, that the participant may withdraw from the study at any time without reprisal and that confidentiality and anonymity will be upheld
- The researcher's contact details

Informed consent letters should provide reassurance of the above and that the participant understands how he or she will participate in the study and signs and dates the informed consent letter. **The informed consent letter can be included at the bottom of the letter requesting participation in the study.** In this case, the example of separate informed consent letters will not be necessary. Please use your discretion.

Sample/ participants	Process to obtain consent	Letter requesting participation	Informed consent letter	Data collection instruments	Appendix
Principals	DoE/Circuit office, principal	<u>Letter</u> requesting consent to DoE – include title of thesis; who will participate in the study; how each group of individuals will be involved (interview, observation); ensure anonymity and confidentiality; that participation is voluntary and withdrawal without reprisal is accepted	DoE will <u>provide a consent letter</u> to the researcher on a DoE letterhead. If the letter has already been received, attach as <u>Appendix 6</u>	If the principal is requested to participate in the study, through completing a questionnaire for example.	<u>Appendix 11 – questionnaire</u>

Sample/ participants	Process to obtain consent	Letter requesting participation	Informed consent letter	Data collection instruments	Appendix
		<i>Attach letter as Appendix 1</i>			
Teachers	Principal, teachers	<i>Letter</i> to principal outlining purpose of research, requesting participation of teachers/learners – specify which teachers /learners and how they will be involved in the research; ensure that confidentiality and anonymity will be upheld; participation is voluntary and withdrawal without reprisal is accepted <i>Attach letter as Appendix 2</i>	Principal will generally provide a letter to the researcher providing consent to undertake the study. <i>If already received,</i> attach as <i>Appendix 7</i>	Teachers are asked to participate in a <i>focus group interview</i> and to allow <i>observations</i> of their lessons	<i>Appendix 12 – focus group interview schedule</i> <i>Appendix 13 – observation schedule</i>
Learners	Underage – consent from parents/guardians; assent from learners	<i>Letter</i> to parents to request their consent for their child to participate in the study <i>Attach draft letter as Appendix 3</i> <i>Letter</i> to child (in age appropriate language) requesting consent to participate in the study. <i>Attach draft letter as Appendix 4</i>	Draft informed consent letter from parent – <i>attach as Appendix 8</i> Draft informed assent letter from child – <i>attach as Appendix 9</i>	<i>Learners</i> will be asked to complete a <i>questionnaire</i>	<i>Appendix 14 – questionnaire</i>
Parents	Consent	Letter to parent to request their consent to participate in the study. <i>Attach draft letter as Appendix 5</i>	Draft informed consent letter from parents – <i>attach as Appendix 10</i>	A sample of <i>parents</i> will be individually <i>interviewed</i>	<i>Appendix 15 – semi-structured interview schedule</i>

Research abstract

Introduction and background

It is the researcher's fourth year back in teaching after an absence of thirteen years. The researcher taught for twelve years before he left teaching. Just after the new political dispensation came into being but before any curriculum changes were brought about, the researcher left teaching.

The researcher was always of the opinion that he taught according to the traditional method before leaving the classroom because he was compelled to do so by the apartheid curriculum. As an educator, he always detested the uncritical acceptance by teachers as to how they are supposed to teach by the racially based Department of Education. Two curriculum changes were brought into being by the democratically elected government after the researcher resigned and a third (CAPS) came into effect upon his return. The researcher was utterly amazed to find his colleagues still teaching in the traditional manner despite all the curriculum changes and a more democratic and free political atmosphere.

The approach to teaching for the majority of teachers is still the same under a democratic dispensation then it was under apartheid. Upon speaking to his colleagues and other educators the researcher realised that the latter use an approach that they are comfortable with. These educators feel that they have a curriculum to complete within a limited amount of time and the formalistic or traditional approach allows them the space and time to do this. They inform the researcher that they used this approach at the height of Outcomes-Based Education (OBE) which had tenants of progressivism such as being learner-centred.

Currently, educators teach and learners listen. Educators teach towards assessment. The input by learners is minimal. Learners assimilate what the educators are teaching and rarely give their own impressions about the lesson topics. The researcher contends that although it is not explicitly stated under the traditional approach to teaching, learners are expected to 'regurgitate' (termed by Freire) what was taught by the teacher during assessments. The consequence is rote learning where learners achieve high marks during assessments without for example, making any input into classroom discussions. The researcher is of the opinion that although these learners achieve high marks for assessments they do not have a thorough understanding of the subject as they rarely engage in discussing lesson topics. Because of these inadequacies, the researcher is sure that society in general and the economy in particular cannot be well served by such docile learners,

The researcher embarks on this study in the full knowledge that the learning and teaching process in South African schools essentially revolves around the educator. In the South African dispensation, the educator is regarded as the bearer of knowledge that s/he transfers as per the prescribed curriculum. This transfer of knowledge is described by a writer such as Guthrie as "revelatory" because the educator reveals knowledge to the learner. Although academic literature confirms its acceptability in African educational surroundings, the researcher questions its holistic value to education. This is opposed to the progressive approach which wants knowledge to be 'created' by both the educator and learners.

Purpose

The researcher wants to create a learning environment where learners are much more involved in their own learning. This approach of learning is learner-centred and is progressive in nature. According to O'Sullivan the progressive teaching design can be successfully applied if the contribution of the learners to the development of knowledge is recognised and if the teacher acknowledged the learner as a social being reliant on interaction with others to generate meaning. The researcher wants to expel the 'myth' that the role of the educator was to teach and that of the learner to learn.

The researcher is seeking to create an authentic learning environment where real and genuine learning is taking place. He believes in a progressive teaching approach as the vehicle to get him to the creation of these authentic learning environments.

The reason the researcher does believe in the progressive approach is informed by the characteristics thereof. The researcher believes for example that by teaching Economics in an integrated subject-manner he can make learners critically aware of why certain things occur in the way they do in society. This is done by linking Economics to other subjects and everyday life. The topic of 'unemployment' for example will not be taught in a piecemeal way by looking at the definition, types and causes only. With the progressive approach educators will guide learners to looking at the consequences of an unequal education system under apartheid that still hampers skills development opportunities for the previously disadvantaged today and thereby their ability to find work. The progressive educator will also ask learners to think how why periods of economic growth in South Africa (2002-2006) were not accompanied by job creation opportunities? Learners should critically ask whether capitalism or the market system is the panacea to unemployment. Economic growth figures during the mentioned period did not accompany decreasing unemployment figures. Learners should discuss this phenomenon of jobless growth and its non-impact on unemployment in groups [and attempt to find solutions to these issues in groups to limit competition among them but rather to enhance cooperation].

The progressive educator should teach learners to question the relevancy of a specific topic before engaging in discussing it. The reason is that the progressive approach wants a active role for learners which might be stifled by irrelevant, impractical and unnecessary subject matter that make learners passive and less challenging of the status quo. Some of the most recent literature on this topic can be found written by the following scholars:

Reese WJ (2013), In search of American progressives and teachers, History of Education.

Hayes, W (2007). The Progressive Education Movement: Is it still a Factor in Today's Schools?

Van Wyk, MM (2013). Inaugural lecture on the advancement of economics education.

Problem Statement

Will a progressive teaching approach enhance authentic learning in a grade 10 Economics class in a selected school via a participatory action research design?

The rationale for the problem statement is firstly that despite the implementation of three new curriculums since the advent of democracy, teachers are still teaching according to the traditional or formalistic method of teaching and that the outcome remains parrot learning.

The researcher observed secondly that the top academic achievers were those learners that were passive in class and never actively participated in classroom discussions or activities.

Can one regard the achievement of top grades without active participation in the lesson as true or genuine learning? The researcher contests this assertion. Thirdly, there seems to be a lack of applying acquired knowledge to everyday life situations. Learners are for example taught about the collective bargaining processes but fail to understand how employers disregarded it during the mining strikes in 2013 and through its disregardence used it as a divide and rule tactic among the workers. Yet these same learners would get full marks in describing the collective bargaining process theoretically but cannot show the same insight regarding its implementation. Is this authentic learning? The final rationale that underpins the study is that the majority of educators are implementing the prescribed curriculum in a formalistic way with minimal or no learner input at all.

Anticipated outcomes

The anticipated outcome is to have a clearer understanding of what constitutes authentic learning and how this strategy can be used to develop critical thinking and problem solving skills in the grade 10 Economics class. The second outcome would be to understand which

educational/school environment or settings enhance authentic learning. The third outcome would be to assess the role of the teacher in influencing the process that authentic learning could take place. Fourthly, the study wants to gauge how learners react to efforts to achieve authentic learning via the progressive teaching approach. Lastly the study wants to come up with strategies, frameworks, designs or models to strengthen the teaching of Economics through a progressive teaching approach.

Population

The grade 10 class that the researcher is teaching Economics to at a High School would be the population for the study.

Sample and sampling technique

The sample of the study would be the grade 10 learners of the researcher's Economics class who assented to take part in the study. Although the learners assented to the study, the study has not yet commenced as I wait for ethical clearance from UNISA. My understanding of 'assent' is that the learners agreed to take part in this study. My supervisor and the guidelines for ethical clearance are clear that the study cannot start before ethical clearance is granted by the responsible Committee. Twelve boys and fourteen girls make up this sample of 26 learners out of a class of 32 learners.

This nearly full sample of the population can be described as comprehensive sampling where every participant forms part of the sampling strategy. The sample would be divided into groups to get their input. To have the near entire population as the sample would allow for varied input.

Research design

The design to be used in this study will be qualitative research which will be based on a case study. The researcher's grade 10 Economics class where an attempt will be made to create a more authentic learning environment via a progressive teaching design will form the case to be studied. Academic literature refers to a case study as an in-depth exploration of an activity, event, process or individual based on extensive data collection. The approach to explore the case study will be teacher research which is based on the premise that change is necessary to improve teaching and learning. This is a process of using research principles to provide information that educational professionals use to improve aspects of day-to-day practice, i.e. teaching and learning.

Activity timeline

Dates	Lesson topic for observation and learner focused interviews	Data collection	Analysis & recording
Depending on CEDU clearance	1.Nature of unemployment and characteristics of RSA unemployment	Depending on CEDU clearance	Depending on CEDU clearance
As above	2.The causes of unemployment	As above	As above
As above	3.The effects of unemployment	As above	As above
As above	As above		
As above	As above		
As above	As above		
30 November	Final submission of mini-dissertation		

Research instrument

The research instruments to be used are the videotaped systematic observational tool (Appendix 8) from which the researcher's lessons will be observed and recorded. The second research instrument will be learner focused interviews (Appendix 9). The researcher and his fellow observer (a colleague) will conduct interviews with learners after the conclusion of a videotaped lesson to get their input on the progressive approach used by the educator. The last instrument will be the reflective journal kept by the researcher.

Data collection processes

The researcher will acquire the services of a former pupil who is working in the creative industry to video tape a maximum of five of his lessons. These videotape lessons will be one of the main data collection methods,

After recording the lesson on videotape, the researcher will assist the observer when he conducts focused group interviews with the learners.

The reflective journal to be used by the educator will keep record on an on-going basis throughout the study.

Data analysis method

The use of the tape recorder will allow the researcher to observe his teaching accurately and provide accurate information for diagnosis. The researcher and the observer will then sit down with the systematic observational tool to analyse the video recording of the teacher using a progressive teaching approach to achieve authentic learning.

Focused group interviews would happen in pre-arranged sessions in the afternoons. The researcher would be taking notes and possibly use a tape recorder to record the observations of the learners. The observer would be guided by the interviewing questions on the appended sheet 9.

The reflective journal can be used to report observations and reactions to classroom challenges. The researcher must be aware of the subjective bias of the journal when analysing data.

Ethical concerns with reference to respondents

Educational research focuses primarily on human beings. It is the researcher's duty to look after the respondents of his study and not infringe on their rights or welfare. Ethical clearances have been obtained to conduct this study from the Gauteng Department of Education (GDE), the school principal, parents of the underage learners and the learners themselves. All parties were comfortable that their concerns especially regarding anonymity and confidentiality have been addressed.

Institution as legal person

The school where the study will be conducted, privacy and anonymity will be respected. The research question seems to have found favour with those that governs the school on a day to day basis. Acceptance of this was expressed in the permission granted by the chairperson of the School Governing Body.

Researcher

The researcher is ethically responsible for protecting the rights and welfare of the subjects who participated in the study. The researcher commits himself to adhere to all ethical considerations expected from a person in this position.

Specific to study field

This action research study does not require any additional ethical considerations. The participants are under no peculiar danger. The only concern might be the availing of the learners in the afternoons after school although they committed themselves to it.

D PROPOSAL RELATED INFORMATION AND DOCUMENTS

Attach all documents relevant to the application. Refer to these documents as Appendix A, Appendix B etc in the space provided below the item on the application form.

Summary of Appendixes

Appendix Number	Document content
1	GDE request form
2.1	Letter to principal requesting permission to conduct research at school
2.2	Letter to SGB requesting permission to conduct research at school
2.3	Addendum to principal requesting permission to use fellow educator as observer
3	Letter to parents requesting consent for child's participation in study
4	Letter to learners requesting consent to participate in study
5	GDE approval letter
6.1	Permission letter from principal and SGB responding to Appendixes 2.1 and 2.2
6.2	Permission letter from principal responding to Appendix 2.3
7.1	Informed assent letter from learners responding to Appendix 4
7.2	Learners' signatories to letter of assent
8	Observation schedule
9	Focused group interviews with learners
10	REC application form



GAUTENG PROVINCE
REPUBLIC OF SOUTH AFRICA

For admin. use

Ref. no.:

GDE RESEARCH REQUEST FORM

REQUEST TO CONDUCT RESEARCH IN INSTITUTIONS AND/OR OFFICES OF THE GAUTENG DEPARTMENT OF EDUCATION

1. PARTICULARS OF THE RESEARCHER

1.1 Details of the Researcher	
Surname and Initials:	Flanagan WGT
First Name/s:	Wayne Gary Theo
Title (Prof / Dr / Mr / Mrs / Ms):	Mr.
Student Number (if relevant):	0155-213-4
ID Number:	6207 21 5096 087

1.2 Private Contact Details	
Home Address	Postal Address (if different)
133 Louis Street Waterkloof Ridge	Postnet suite 147 Private Bag X159 23 Monument Park
Postal Code: 0101	Postal Code: 0105
Tel: 012 3477350	
Cell: 073 571 4049	
Fax:	
E-mail: wflanagan@willowridge.co.za	

Appendix 2.1

133 Louis Street
Waterkloof Ridge
0105
11 February 2014

The Principal
Willowridge High School
518 Verkenner Street
Wilgers
0040

Dear Sir

Application to conduct teacher research at school through the use of my grade 10 Economics class as a case study

I am busy with my mini-dissertation in order to complete my Masters in Education degree in Curriculum Studies. The title of my dissertation is "Creating authentic learning environments in a grade 10 Economics classroom via a progressive teaching design". My research methodology would be participatory action research. I will therefore be conducting my research while I am busy teaching my grade 10 Economics class.

In South African schools the majority of teachers use the traditional method of teaching where the teachers teach and learners are expected to assimilate what is taught and give the assimilated information back for assessment purposes. In my opinion no authentic learning really transpires because learners that participates the least in class might obtain the highest marks. Through rote learning a learner might obtain good marks but is not necessarily a more effective consumer because of the economic knowledge attained.

My research will consist of a learner-centred approach where I involve the learners more in their own learning. My classes will start off with a discussion of the economic issues of the day. Where possible I would link the current issue to the lesson of the day. Groupwork would be one of my main strategies to get learners involved to participate in their own learning. I hope to have learners that can argue and debate about issues because they understand what they learn. The textbook and the teacher's knowledge would not be the only resource. My role would be more of a facilitator than that of the bearer and transmitter of all knowledge, i.e. the "guide on the side rather than the main actor on the stage".

I will video record some of my lessons and request the H.O.D. of Economics to observe and analyse it to determine whether I am making headway with this progressive approach. I will request a fellow colleague to do focus group interviews with learners at certain stages to assess how they interpret this approach. I am therefore seeking your permission to start this and conduct the research between March to August 2014. I am also seeking the permission of the G.D.E. to conduct the study.

I commit to keep the name of the school anonymous throughout the study. I will also respect the privacy and confidentiality of all the mentioned participants in the research project. Your office has the right to withdraw consent for the study if you feel the need to.

I hope that the school will eventually benefit from the study through more active participatory learners in class and an alternative teaching approach that other educators may find useful.

The University of South Africa (UNISA) requires me to get a formal response to this letter from your for ethical clearance purposes.

I commit myself to donate a copy of my dissertation to the school should I be successful with my studies. To complete my studies however, I first need to get your permission to conduct the research as explained above.

Also feel free to contact my supervisor at UNISA, Professor van Wyk, with any enquiries you might have. He can be reached telephonically at 0835445217 or 0515252598. His e-mail address is: wvykmm@unisa.ac.za.

Thanking you in advance
Yours sincerely



W. Flanagan
BCM Teacher

Appendix 2.2

133 Louis Street
Waterkloof Ridge
0105
11 February 2014

The Chairperson of the SGB: Mr.S.Bruni
Willowridge High School
518 Verkenner Street
Wilgers
0040

Dear Sir

Application to conduct teacher research at school through the use of my grade 10 Economics class as a case study

I am busy with my mini-dissertation in order to complete my Masters in Education degree in Curriculum Studies. The title of my dissertation is "Creating authentic learning environments in a grade 10 Economics classroom via a progressive teaching design". My research methodology would be participatory action research. I will therefore be conducting my research while I am busy teaching my grade 10 Economics class.

In South African schools the majority of teachers use the traditional method of teaching where the teachers teach and learners are expected to assimilate what is taught and give the assimilated information back for assessment purposes. In my opinion no authentic learning really transpires because learners that participates the least in class might obtain the highest marks. Through rote learning a learner might obtain good marks but is not necessarily a more effective consumer because of the economic knowledge attained.

My research will consist of a learner-centred approach where I involve the learners more in their own learning. My classes will start off with a discussion of the economic issues of the day. Where possible I would link the current issue to the lesson of the day. Groupwork would be one of my main strategies to get learners involved to participate in their own learning. I hope to have learners that can argue and debate about issues because they understand what they learn. The textbook and the teacher's knowledge would not be the only resource. My role would be more of a facilitator than that of the bearer and transmitter of all knowledge, i.e. the "guide on the side rather than the main actor on the stage".

I will video record some of my lessons and request the H.O.D. of Economics to observe and analyse it to determine whether I am making headway with this progressive approach. I will request a fellow colleague to do focus group interviews with learners at certain stages to assess how they interpret this approach

I am therefore seeking your permission to start this and conduct the research between March to August 2014.

I commit to keep the name of the school anonymous throughout the study. I will also respect the privacy and confidentiality of all the mentioned participants in the research project. Your office has the right to withdraw consent for the study if you

feel the need to. I also informed the learners to their right of withdrawal at any stage they feel too.

I hope that the school will eventually benefit from the study through more active participatory learners in class and an alternative teaching approach that other educators may find useful. I trust to use my professional knowledge to serve the school for many years to come.

The University of South Africa (UNISA) requires me to get a formal response to this letter from the SGB of Willowridge High School for ethical clearance purposes.

I commit myself to donate a copy of my dissertation to the school should I be successful with my studies. To complete my studies however, I first need to get your permission to conduct the research as explained above.

Also feel free to contact my supervisor at UNISA, Professor van Wyk, with any enquiries you might have. He can be reached telephonically at 0835445217 or 0515252598. His e-mail address is: vwykmm@unisa.ac.za.

Thanking you in advance
Yours sincerely



W. Flanagan
BCM Teacher

Appendix 2.3

133 Louis Street
Waterkloof Ridge
0105
18 March 2014

The Principal
Willowridge High School
518 Verkenner Street
Wilgers
0040

Dear Sir

Addendum to application to conduct research at school: Enlisting the help of a fellow educator to observe lessons and conduct learner focused interviews

This is in reference to the letter I wrote to you on 11 February 2014.

I am in the process of seeking consent from the parents of the mentioned learners to take part in the study and this will determine the number of learners to be involved in the study. My supervisor suggested that I should request the use of an educator to assist me to conduct focused groups interviews with learners and another in observing my lessons to minimise bias and lend credibility to the study, in writing.

Mr. Dzvimbo agreed to assist me with the above processes if I can obtain the necessary consent from your office.

I therefore need your permission to use the mentioned educator for this purpose. I will ensure that my research do not disrupt the educator's teaching time. I guarantee the educator's anonymity and confidentiality during the research process. The educator will not be under obligation to continue if s/he feels to discontinue with the process.

Also feel free to conduct my supervisor at UNISA, Professor van Wyk, with any enquiries you might have. He can be reached telephonically at 0835445217 or 0515252598. His e-mail address is: vwykmm@unisa.ac.za.

Thanking you in advance

Yours sincerely



W. Flanagan
BCM Teacher

Appendix 3

Willowridge High School
518 Verkenner Street
Wilgers
0040
19 February 2014

Dear Parent

Seeking consent for your child to participate in research study

I am busy with my mini-dissertation in order to complete my Masters in Education degree in Curriculum Studies. The title of my dissertation is "Creating authentic learning environments in a grade 10 Economics classroom via a progressive teaching design". My research methodology will be participatory action research based on my grade 10 Economics class which will form the case in of my study which I will conduct while I am busy teaching.

The supervisor of my study is Professor M.M. van Wyk. You can contact him at vwykmm@unisa.ac.za or 083 544 5217 with any questions you might have.

I will video record some of my lessons (maximum of 5) and analyse it to determine whether I am making headway with this progressive approach. With the assistance of a fellow educator Mr.Dzvimbo, I will do group interviews with the learners at the conclusion of videotaped lessons to assess how they interpret this approach. These focused group interviews will be conducted in the afternoons for not less than 40 minutes per session. Two interview sessions per lesson topic will be conducted to cover all aspects of the interview schedule. Six interview sessions for the three lesson topics will thus be conducted. I will inform you in good time via your child as to the afternoons it will take place.

I hope to find an approach to teaching where learners will do more than mere rote learning where they accept and transmit everything that the educator is teaching. I would want learners to contribute themselves to classroom discussions and to acquire a deeper understanding of Economics that extends beyond the confines of the classroom. At the end of my study I hope that learners will not only study for examination purposes but become effective consumers and participate in economics discussions from a well informed base. The benefit to your child will be that s/he will be introduced to become an independent thinker and also learn how to work in groups with other learners which is a requirement of the modern workplace. S/he will also learn that their opinions are valued.

The participation of your child is voluntary and s/he may withdraw at any time they feel to do so. There will be no repercussions for not participating or withdrawing at any stage.

I will ask the participating learners to sign a confidentiality letter whereby they agree to respect the privacy, anonymity and confidentiality of each other that forms part of the research project. Personally, I will ensure that the names of the learners are kept confidential and will never be mentioned at any time in my report findings.

The number of learners participating in the study will depend on how many parents give permission to their children. Since I value varied opinions, I do not place a limit on the number of participants.

I am therefore seeking your permission to allow your children to be participants in this study from when I receive permission from the University of South Africa (UNISA) to commence with the study.

Also feel free to contact my supervisor at UNISA, Professor van Wyk, with any enquiries you might have. He can be reached telephonically at 0835445217 or 0515252598. His e-mail address is: vwykmm@unisa.ac.za.

Thanking you in advance

Yours sincerely



W. Flanagan
Grade 10 Economics Teacher
Email: wflanagan @willowridge.co.za
Cell: 0735714049

Appendix 4

133 Louis Street
Waterkloof Ridge
0105
11 March 2014

The grade 10 Economics Learner
Willowridge High School
518 Verkenner Street
Wilgers
0040

Dear Learners

Assent requested from you to participate in research study

I am in the final year of my Masters in Education degree studies through the University of South Africa (UNISA). As a final year student, I am required to do a research project for which I will need your assistance. I intend to use the grade 10 Economics class that I am teaching as my case study to show that real and genuine learning can happen if I use a different approach to teaching. I will conduct the research whilst I am teaching which is known as action research.

By using an alternative approach to teaching, I will involve you the learners more in your own learning. Groupwork would be one of my main strategies to get you to participate in your own learning. I hope that you would argue and debate about lesson topics because you understand what you are learning.

I will video tape some of my lessons and analyse it to assess whether this progressive approach is working or not. With the assistance of Mr. Dzvimbo who is an educator at our school, your input will be gathered by interviewing you in groups after the lessons have taken place, preferably in a maximum of six designated afternoon sessions of no longer than 40 minutes each. These interviews will help me to determine how you as learners feel about this alternative approach of teaching and whether you think it helps you to have a better understanding of the Economics topics that was covered.

It is not compulsory for you to participate in this research and there will be no repercussions if you decide not to. If you do participate and you do not feel to continue, you can withdraw at any time. Your identity will never be revealed at any time during the study or when the study findings are published when I draw up my final report.

Please feel free to ask me questions if you do not understand the content of this letter or what I have explained to you about the study.

The study will commence as soon as I receive final permission known as ethical clearance, from UNISA.

Also feel free to contact my supervisor at UNISA, Professor van Wyk, with any enquiries you might have. He can be reached telephonically at 0835445217 or 0515252598. His e-mail address is: vwykmm@unisa.ac.za.

Thanking you in advance
Yours sincerely

A handwritten signature in black ink that reads "W. Flanagan". The signature is written in a cursive style with a period at the end. Below the signature is a horizontal dotted line.

W. Flanagan
BCM Teacher



GAUTENG PROVINCE

Department of Education
REPUBLIC OF SOUTH AFRICA

For administrative use:
Reference no: D2014 / 380

GDE RESEARCH APPROVAL LETTER

Date:	10 March 2014
Validity of Research Approval:	10 March to 3 October 2014
Name of Researcher:	Flanagan W.G.T.
Address of Researcher:	Postnet Suite 147 Private Bag X 25723 Monument Park 0150
Telephone Number:	012 347 7350 / 073 671 4049
Email address:	wflanagan@willowridge.co.za
Research Topic:	Creating authentic learning environments in a Grade 10 Economics class via a Progressive teaching approach design
Number and type of schools:	ONE Secondary School
Districts/HO	Tshwane South

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

Handwritten signature and date: 2014/03/11



Office of the Director: Knowledge Management and Research
9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7720, Johannesburg, 2000 Tel: (011) 355 0606
Email: David.Makhado@gauteng.gov.za
Website: www.education.gov.za

WILLOWRIDGE HIGH SCHOOL

518 Verkenner Avenue • The Willows • Pretoria

Tel: (012) 807 3423
Fax: (012) 807 0109
e-mail: wrha@icon.co.za



P.O. Box 72262
LYNNWOOD RIDGE, 0010
www.willowridge.co.za

26 February 2014

TO WHOM IT MAY CONCERN

PERMISSION TO CONDUCT ACTION RESEARCH AT WILLOWRIDGE HIGH SCHOOL

Permission is hereby granted to Mr. Wayne Flanagan to conduct action research at Willowridge High School as part of his master's degree studies.

Mr. A. Du Plessis

HEADMASTER

Mr. S. Brunt

CHAIRMAN: SGB

"Your first choice in excellent, well-rounded education"

WILLOWRIDGE HIGH SCHOOL

518 Verkonkter Avenue • The Willows • Pretoria

Tel: (012) 807 5423
Fax: (012) 807 0109
e-mail: wrhs@ccpa.co.za



P.O. Box 72262
LYNNWOOD RIDGE, 0040
www.willowridge.co.za

27 March 2014

TO WHOM IT MAY CONCERN

Permission is hereby given to Mr. Wayne Flanagan to utilise another educator at Willowridge High School to assist him in the action research project he is undertaking at Willowridge High School. Utilising an additional educator will enable him to achieve a greater level of reliability and validity in the study.

Yours truly

Mr. A. Du Plessis

PRINCIPAL

Your first choice in excellent, well-rounded education

Appendix 7.1

Willowridge High School
518 Verkenner Street
Wilgers
0040
21 March 2014

Mr. W.Flanagan
Grade 10Key 1 Economics Teacher
Willowridge High School
518 Verkenner Street
Wilgers
0040

Dear Sir

Assent to conduct research

This is in reference to the letter requesting consent you wrote to your Economics learners on 19 March 2014.

The following learners whose signatures are appended to the accompanying mark sheet agree to participate in your research study as requested in your letter.

We expect that you as researcher will respect and commit to the framework for the research as stated in your letter.

The grade 10K1 class is glad to be of assistance to you and trust that your research will benefit those that it is intended for.

Yours sincerely

.....
Grade 10 Key 1 Learners

Appendix 10

Willowridge High School

Group: 10-18, Subject: of Economics, Teacher: FLANAGAN, W. (158)

#	Admission #	Pupil	Class	Signature for assent	Age of learner
1	6199	BROWN, MARCUS JOSHUA	10H	<i>M. Brown</i>	15
2	6576	CHLITTY, COLEEN	10D	<i>C. Chlitty</i>	15
3	6618	CHOMPA, KAGISO MOSELINE	10D	<i>K. Chompa</i>	16
4	6980	DLAMINI, NONJULANI LA	10A	<i>N. Dlamini</i>	15
5	6436	FREDRICKS, RIFZAAT LUKE	10C	<i>L. Fredricks</i>	15
6	6300	HASSAIN, ZIA AYTSHA	10C	<i>Z. Hassain</i>	15
7	6511	JEZILE, LWANDO	10E	<i>L. Jezile</i>	16
8	6400	KHABELE, NEO PEARL	10F	<i>N. Khabele</i>	15
9	7016	LAVISA, KHANYISILE	10D	<i>K. Lavisa</i>	16
10	6525	LITKGEU, KOPANO MHUDI	10B	<i>K. Litkgeu</i>	15
11	6543	MAKGOKA, QFENTSE MPHO	10B	<i>M. Makgoka</i>	15
12	6594	MAKUA, NTSHEPENG MAPHEKE	10E	<i>N. Makua</i>	15
13	6540	MANDLASE, MBUSO WILLIAM	10A	<i>W. Mandlase</i>	15
14	6666	MASH, CRESSWILL DE NIRO	10A	<i>C. Mash</i>	16
15	6956	MATHOBELA, MANQOBA BONGA LUNG	10S		
16	6464	MATIBE, NGONDENI SANDI LEMOND	10C		
17	6554	MMUSI, OAITSE MARJORIE	10C	<i>M. Mmusi</i>	15
18	6275	MOKOATEDI, PRECIOUS MMAPHUTI	10G	<i>P. Mokoatedi</i>	16
19	7047	MOLEBI, LESEGO KGOPHISO	10A		
20	6445	MOILO, OBAKENG NOTHEMBA	10E		
21	6506	MOODIYI, NICOLAN	10G	<i>N. Moodiyi</i>	16
22	6905	MOOTANE, CHARTRI AIN	10C	<i>C. Mootane</i>	16
23	6517	MOPYE, TEBOGO ROSE	10H	<i>R. Mopye</i>	14
24	7023	NKWE, LESLGO	10G	<i>L. Nkwe</i>	16
25	6964	NXU, KHAZIMLA	10H	<i>K. Nxu</i>	15
26	6454	OLIMER, GUAN	10G	<i>G. Oliner</i>	15
27	6231	PETERSEN, ZOE MISHA	10B		
28	7351	SIIHLIHLA, SIZWEKAZI NOMAJANA	10D	<i>S. Siihlhlala</i>	16
29	6699	TAZVINGA, ASHLEY	10C	<i>A. Tazvinga</i>	15
30	6666	THIFKO, ELELOANE MARGARET	10C	<i>M. Thifko</i>	15
31	6484	TSHAVHUNGWF, NDIMHO	10H	<i>N. Tshavhungwf</i>	15

Appendix 8

SYSTEMATIC OBSERVATION SHEET FOR TEACHERS

No	Teachers actions	0	1	2	3	4	5
1	The educator makes provision for an active role by learners during his classroom practice.						
2	The educator acts as a guide to the Economics educational experience.						
3	The educator promotes co-operative learning.						
4	The subject matter is presented in an integrated manner.						
5	The educator encourages learning by discovery techniques.						
6	The educator succeeds in intrinsically motivating learners.						
7	The educator uses assessment as an integrated and integral component of teaching and learning.						
8	The educator goes beyond the prescribed academic curriculum.						
9	The educator is concerned with developing problem solving skills in his learners.						
10	The educator makes use of different learning and teaching strategies to accommodate all learners.						
11	The educator builds on the existing knowledge of learners to introduce new content.						
12	The educator careful planned, organised and monitored his/her teaching strategy.						
13	The educator does his best to teach learners the skill of critical thinking.						
14	The educator used cartoons effectively as a teaching tool?						

Tally the actions of the teacher by using the following codes:

Code	Result of the educator's action in applying a progressive approach	Description of code
0	The educator DO NOT performs AT ALL at the level s/he hoped for.	0% success rate with specific action.
1	The educator performed at an ELEMENTARY level.	20% success rate with specific action.
2	The educator performed at a MODERATE level.	40% success rate with specific action.
3	The educator performed ADEQUATELY.	60% success rate with specific action.
4	The educator performed WELL.	80% success rate with specific action.
5	The educator perform at the OPTIMUM level	90-100% success rate with specific action.

The observer should use measure the percentage out of a score of 5. A tally of 2 would for example equate to moderate performance and a 40% success rate in achieving the progressive action.

Use the issues below in relation to the educator’s actions to complete the observational sheet: Teacher action no.1 is for example linked to issue no. 1.

1	Does learner centeredness lie at the heart of the educator’s approach?
2	Is the educator doing more than merely transmitting knowledge?
3	Is the educator countering individualistic competition among learners?
4	Is Economics taught without relating it to other subjects and everyday life?
5	Is the educator discouraging rote learning, memory and practice?
6	Is the educator succeeding in wanting/stimulating learners to learn so that they do not only show interest in external motivators like good grades?
7	Is assessment determining learning and is it more than just regular testing
8	Is the educator succeeding in making the curriculum relevant to the learners for current and future needs?
9	Does the educator encourage learners to think creatively and critically about solutions to poverty and unemployment?
10	Is the educator aware of the differentiated demands in his/her classroom?
11	Did the educator structure the learning programme so that progress can occur in a logical, phased manner, i.e. scaffolding?
12	How effective was the classroom management practice of the educator?
13	How does critical thinking contribute to authentic learning in studying Economics?
14	Did the cartoons succeeded in creating interest and developing critical thinking and reflective skills in economics teaching?

Comments below of teacher observer

Appendix 9
FOCUSED GROUP INTERVIEWS WITH LEARNERS
Focused group interviews

The following questions will be used as a point of departure to guide interviews:

1 Assessment

- Do you view assessment as useful for passing tests or exams but useless when it comes to solving practical problems in life and explain your point of view.
- Is assessment determining the learning and teaching that is happening in the Economics class; in other words, are you taught according to what is going to be examined or assessed or is the educator teaching beyond what is to be assessed?
- Describe how relevant the topics were during the study for you as an individual or for the community that you come from? (Remove)
- Explain whether the educator created opportunities to stimulate (i.e. motivate) you to learn?
- Share how the educator worked from the concrete to the abstract, i.e. from what you know at the start of a lesson towards new knowledge? Also share whether the educator approach his lessons from interesting situations or situations with which the learner is familiar?
- Describe how the educator used the principle of integration where the topics discussed crossed traditional subject boundaries? In other words did your knowledge of English, Mathematics/Mathematical Literacy, Business Studies, and Accounting etc. assisted you in any way to have a better understanding of Economics?
- Explain whether you found it useful to discuss topical Economics issues of the day if you were not going to be assessed about it?
- List your preference of activities in the Economics classroom that you enjoyed the most: **the lesson itself, school based assessments** (assignments, projects etc) or **group games**?

2. Learning strategies

- Describe how the educator made use of the co-operative learning strategy.
- How did the educator involved learners in this teaching strategy?
- What is your overall opinion of group work?
- Could you make calculations when it was required by the lesson topic and how did you find it?
- Do you feel that the use of cartoons promoted a better understanding of the topic under discussion?

- Did the cartoon attracted your attention immediately and why do you think it had the effect on you?
- Explain why you think the cartoon is a creative tool. Were you in any way offended by any cartoon?
- Did the educator made use of any game to make the learning more exciting like Teams-Games -Tournaments?

3. **Teaching methods**

- Explain why you think the educator was well prepared for his lessons?
- Describe the logic in the teaching method of the educator? Explain how the WHAT, HOW and WHY of the lesson topic was presented?
- Share if you thought the educator made provision in his teaching method for differences in the learner's pace and style of learning?
- Explain whether you think the analytical skills of learners were developed by the educator setting a problem and encouraged learners to think of a creative solution to aspects such as poverty and unemployment?
- Do you think the educator emphasised the importance of critical thinking through his teaching method; that is where he always searched for your thinking about particular topics and not making you reliant on what he said?
- Did the teacher go beyond rote learning and memorisation of facts and why do you say so?
- Was the learning and teaching in the Economics class different from those of other subjects and please elaborate on it.

D1 RESEARCH PARTICIPANT INFORMATION

Which categories/groups of individuals will be participating in the research? Principals, SMT's teachers, learners, parents etc. This section should be aligned with the sample as mentioned in C2.

It will be 26 of my grade 10 class of 32 learners.
One of my colleagues will assist me with the focused group interviews of the learners..

D2 WHAT IS THE AGE RANGE OF THE PARTICIPANTS IN THIS STUDY?

Align with D1

The learners are aged from 14 to 17 years of age.

D3 DOES THE RESEARCH INVOLVE VULNERABLE GROUPS OR INDIVIDUALS? Please elaborate on the nature of the 'vulnerability' and explain the protective measures that you will take to protect these individuals from harm.

See Part 2 section 3.11 of the Unisa Ethics Policy.

All the participants are younger than 18 years and according to the UNISA policy on research ethics they are seen as vulnerable as they are minors. The following protective measures will protect them from harm:

1. Their participation is voluntary and they can withdraw at any time from the study without any repercussions from the researcher.
2. They will be encouraged to report any unbecoming behaviour from any participant or the researchers and his assistant to their parents, register teacher, school counsellor, principal, school governing body, education council of learners (ECL) or any adult at any stage of the study.
3. The Office of the principal and parents will be informed on which afternoons the focused-group interviews will take place and invited to observe these deliberations at any time.

D4 HOW SHOULD THIS STUDY BE CHARACTERISED? (Please ***highlight*** all appropriate boxes.)

Personal and social information collected directly from participants	Yes	No
Participants to undergo psychometric testing*	Yes	No
Identifiable information to be collected about people from available records (e.g. medical records, staff records, student records, etc.)	Yes	No
Class approval	Yes	No
Use of secondary data	Yes	No
Research involving Unisa staff, students or data	Yes	No

***Please add details about standardised psychometric tests and/or projection media as well as registration at the HPCSA of the test administrator if test administration is in South Africa or of an equivalent board if administration is outside South Africa. Include proof of professional registration at such council or board.**

D5 DESCRIPTION OF THE PROCESS OF OBTAINING INFORMED CONSENT

Consult Part 2 section 3 of the Unisa Ethics Policy

- Ensure that this section covers the procedure followed from highest authority eg GDE, Circuit Office, gate keepers, to the individual participant.
- It is the researchers' responsibility to ensure that the correct procedure is followed in order to obtain consent to undertake the study. Refer to D7.

Consent was firstly obtained from the GDE. Thereafter consent was granted by the principal and SGB. Consent was also requested from the parents and assent from the learners which were granted. This last sentence does not mean that the study commenced. My understanding is that the study can only commence when ethical clearance is granted by the Ethical Clearance Committee at UNISA.

If the proposed participants are 18 years and older, is the informed consent form for participants attached?

Highlight the appropriate box.

Yes	No	Not applicable	Class approval – permission from student to use data if required
-----	----	----------------	--

If the proposed participants are younger than 18 years, are examples of the consent forms to be signed by the parents/guardians and assent forms to be signed by the underage children attached?

Highlight the appropriate box.

Yes	No	Not applicable	Class approval
-----	----	----------------	----------------

D6 INFORMED CONSENT FORM

a] M&D STUDENTS AND STAFF PROJECTS:

Informed consent form in English and the language in which the research will be conducted. Familiarise yourself with the whole of Part 2 section 3 AND section 4 of the Unisa Ethics Policy.

- Use the prompt sheet provided at the end of the application form to ensure that all the aspects are covered in the letter requesting the participant to be involved in the research.
- At the bottom of the covering letter, provide space for the participant to acknowledge the above and provide consent by signing the consent form section and providing the date. It is preferable that the researcher co-signs this section.
- Only an example of the letters outlining the study and requesting consent in the case of research participants is required, not an indication that the permission has been granted.
- The letter must be written in comprehensible language.
- Attach as an Appendix.

See Appendixes 3, 4, 7 and 8

b] CLASS APPROVAL

- Application is for class approval related to a compulsory assignment for [module code].
- If a template for informed consent has been prepared by the lecturer and included in the TL, attach as an Appendix.

N / A.

D7 RESEARCH INSTRUMENTS SUCH AS QUESTIONNAIRES, INTERVIEW GUIDES, OBSERVATIONS SCHEDULES AND SIMILAR DOCUMENTS

a] M&D STUDENTS AND STAFF PROJECTS:

- Ensure that copies of ALL the data collection instruments are attached as appendixes eg
 - Questionnaire – see Appendix ..
 - Interview guide – see Appendix
 - Observation schedule – see Appendix ...

Teacher observation schedule- see Appendix 8
Learner focused group interview- see Appendix 9

b] CLASS APPROVAL

- Mention that the application is for class approval.
- Provide details of what type of data collection tools or instruments students could use.
- If the assignment comprises a standard questionnaire that the student will use to collect data attach this as an appendix.

The application is for class approval.
The data collection tools will be the teacher observation schedule, learner focused group interviews and the reflective journal kept by the researcher.

D8 LETTERS OF PERMISSION TO RELEVANT BODIES

a] M&D STUDENTS AND STAFF PROJECTS:

- See D5 and ensure that letters requesting permission to conduct the study or participate in the study are provided for all the relevant bodies/individuals. This section should include examples of all letters requesting permission to conduct the study and letters of informed consent.
- If the study involves Unisa staff, students, data, indicate that permission will also be requested from SHDRIC.
- If research is going to be undertaken in an organisation – eg a bank, ICT organisation etc, a letter needs to be obtained from the CEO, or person in authority.
- If the research involves collaborative, multi-institutional or multi-country research this must be explained in detail.
- See Part 1 sections 6 & 7 of the Unisa Ethics Policy; Part 2 section 5 of the Unisa Ethics Policy

Letter requesting permission from GDE – see Appendix 1
Letter requesting permission from principal and SGB- see Appendix 2
Letter requesting consent from parents for learners to participate in study- see Appendix 3
Letter to learner requesting assent to participate in study- see Appendix 4

b] CLASS APPROVAL:

- **See 3.6.8 of the Unisa Ethics Policy**
- Provide evidence that permission has been or will be obtained from students to use the data they collected if the lecturer intends using the data for further research.

N / A

D9 LETTERS OF PERMISSION FROM RELEVANT BODIES (ATTACH AS AN APPENDIX IF APPLICABLE)

If letters granting permission to conduct the research have already been received, please attach them as appendices, eg Department of Education permission letters.

Letter granting permission from GDE- See Appendix 6
Letter granting permission from principal and SGB- see Appendix 7
Letter of assent from learners- see Appendix 8

D10 DESCRIPTION OF THE RISKS OF THE PROCEDURES WHICH PARTICIPANTS MAY OR WILL SUFFER AS WELL AS THE LEVEL OF RISK

Please indicate any participant discomfort, pain/physical or psychological problems/side-effects, persecution, stigmatisation or negative labelling that could arise during the course or as an outcome of the research undertaken. If no risk is anticipated, this could also be stated as 'NONE'.

This point is of particular importance to research involving vulnerable groups.

No risk anticipated.

D11 DESCRIPTION OF STEPS TO BE UNDERTAKEN IN CASE OF ADVERSE EVENT OR WHEN INJURY OR HARM IS EXPERIENCED BY THE PARTICIPANTS ATTRIBUTABLE TO THEIR PARTICIPATION IN THE STUDY (See D10)

No steps taken as no risk is anticipated.

D12 DESCRIPTION OF HOW PARTICIPANTS WILL BE INFORMED OF THE FINDINGS OR RESULTS AND CONSULTED ON POTENTIAL OR ACTUAL BENEFITS OF SUCH FINDINGS OR RESULTS TO THEM OR OTHERS (See Part 2 Section 2 of the Unisa Ethics Policy)

I made a commitment to give a copy of this mini-dissertation that will include the results of this study to the school in my letter seeking permission from the school principal to conduct the study, if I should be successful. I would request the school to keep such a copy in the media centre for the learner's perusal. I would make the learners aware of where they can obtain these results. I feel strongly that this study would also benefit other educators and the availability of these research results would benefit the broader school community.

**D13 DESCRIPTION AND/OR AMOUNTS OF COMPENSATION INCLUDING REIMBURSEMENTS, GIFTS OR SERVICES TO BE PROVIDED TO PARTICIPANTS (IF APPLICABLE)
(See Part 2 Section 2 of the Unisa Ethics Policy)**

N / A

**D14 DESCRIPTION FOR ARRANGEMENT FOR INDEMNITY (IF APPLICABLE)
(See Annexure A of the Unisa Ethics Policy section 10.4)**

N / A

**D15 DESCRIPTION OF ANY FINANCIAL COSTS TO PARTICIPANTS (IF APPLICABLE)
(See Annexure A of the Unisa Ethics Policy section 10.4)**

N / A

**D16 DESCRIPTION OF PROVISION OF INSURANCE TO PARTICIPANTS (IF APPLICABLE)
(See Annexure A of the Unisa Ethics Policy section 10.4)**

N / A

D17 DISCLOSURE OF PREVIOUS ETHICS REVIEW ACTION BY OTHER ETHICS REVIEW BODIES (IF APPLICABLE)

N / A

**D18 DESCRIPTION OF REPORTING TO ETHICS RESEARCH COMMITTEE
(See Annexure A of the Unisa Ethics Policy section 10.8)**

Should any changes be made to the research design or methods the CEDU REC chair should be informed via the supervisor.

Please note the following important information:

Please alert the committee if exceptions occur in terms of the Criminal Law (Sexual Offences and Related Matters) Amendment Act, 32 of 2007, the Childcare Act 38 of 2005, and the Child Justice Act

75 of 2008, or similar acts in which instance the researcher should also take note of the obligation to report such abuse to the relevant authorities.

D 19 CVs OF PRINCIPAL INVESTIGATORS

Only required from UNISA staff involved in project research, requesting class approval or the use of secondary data.

Please only provide information that directly relates to the study.

See Appendix ...

Letter requesting permission to conduct the study and Informed consent prompt sheet

Please ensure that the following aspects are included in the informed consent form:

Include information about the following in a reader friendly style	√
Name of the researcher and purpose of the research	
Indicate nature of the study (eg doctoral study) and provide the name of the supervisor and contact details and that the study is being undertaken at Unisa.	
Participants' role in the study – involved in an interview; complete questionnaires etc	
Expected duration of participation	
Approximate number of participants and which other groups will be participating eg teachers, learners etc. It is suggested that members of focus group interviews be asked to sign confidentiality agreements to ensure that information shared in the focus group will not be discussed with any individuals once the focus group disbands.	
Benefits to participation and to others, compensation, reimbursements	
Procedures of selection of participants	
Foreseeable risks or discomforts to participants	
Guarantee of privacy, anonymity and confidentiality	
Voluntary participation and invitation to ask questions	
Withdrawal without penalty	
Names of contact person for research related inquiries	
Summary of findings/debriefing	
Institution that guides/gave ethics approval	
Contact details of researcher	
Space for date, name and signature of the individual participating in the study.	
Space for co-signature of the researcher and date of signature. Both parties need to have a copy of the document attesting to the provision of informed consent.	

Child assent prompt sheet

Please ensure that the following aspects are included in the child assent form in age appropriate language.

Include information about the following on a level that the child will understand	√
A statement of the purpose of the research or study	
A description of the procedure to be applied to the minor	
A statement that the minor's identity will not be revealed	
A description of the potential risks or discomforts associated with the research	
A description of any direct benefits to the minor	
A description that the minor is not compelled to participate	
A statement that the minor is free to withdraw at any time	
A statement that the minor should discuss participation with the parents prior to signing the form	
A statement that the parent(s)/guardian(s) of the minor will be asked for permission on behalf of the minor	

A statement that the parent(s)/guardian(s) of the minor will receive a copy of the signed assent form	
Invitation to ask questions	
Contact details of researcher	
Note that only the minor and the researcher obtaining assent should sign the child assent form. A copy of the child assent form should be given to the parent or legal guardian.	