

Multigrade teachers' perceptions of the benefits and challenges of learning and teaching in multigrade settings: A case study of selected primary schools in East London district.

Submitted in fulfillment of the requirements for the degree of Masters in the Faculty of Education at the University of Fort Hare.

By

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January 2011

Declaration by the researcher

I, Ms Sindiswa Sybil Serity Matshoba solemnly declare that this research project is a product of my original work. I have conceptualized, designed, and chose the methods to be used in the study. I have collected the data using acceptable research techniques and analyzed the data following a scientific approach to data analysis.

In the conduct of this research, I adhered to the ethics of collecting information on human research participants and have acknowledged the works of others that I have used in this report.

Signature:

Date:

Dedication

This work is dedicated to the following:

To my late mother Grace Ntombase 'Darlie' Matshoba who passed away on 4 December 1998. As I am still your only child I shall never disappoint you; you taught me that I cannot automatically inherit your academic qualifications and that is why I am still pursuing my studies.

To my late grandmother Sarah- Ann Khulukazi Matshoba who passed away in 1976. Mhakhulu I will always remember how you brought me up to appreciate and value 'education' although you could not even write your name. I welcome and appreciate your words of wisdom.

Acknowledgements

I would like to express my appreciation of help, support and guidance from a number of people who made this work possible.

I wish to thank my supervisor Dr Mtose for her professional assistance, guidance, patience and commitment in this study to the extent that she could not even enjoy the festive season together with her family especially her children. I also express my gratitude to all the staff members for their efforts, their kindness and patience. My special thanks go to our programme course coordinator Dr Stunky Duku for motivating and supporting me throughout this study and for playing the part of a parent. I also wish to thank Nqobile Mpumlwana for her ongoing support.

I would also like to acknowledge my gratitude to all my colleagues in my class for their motivation and support throughout my difficulties.

I wish to express my sincere gratitude to all the respondents for granting me their permission to interview them. Without them my work would not be possible. Special thanks to the University of Fort Hare for financial assistance.

Finally thanks to God Almighty who made it possible through his unconditional love for me to complete my work.

Abstract

This study mainly focuses on the perceptions of multigrade teachers with regard to the benefits and challenges of learning and teaching in multigrade classes. In the light of literature reviewed, the reflections of the challenges from the empirical work were done and form the basis for tools to promote quality in teaching and learning in a multigrade setting. The study was conducted within the interpretive paradigm, where the researcher sought to understand the phenomena. The qualitative approach allowed the researcher to enter the participants' life-worlds and study their lived-experiences. This means that dynamic, holistic and individual aspects of the teachers' experiences were captured. This researcher was keen to capture this holistic aspect in its entirety, within the context of the teachers who experienced it. A multiple-case type of case- study design was preferred as more than one case was investigated. Through the use of phenomenological 'hierarchical' interviews and document analysis, the study revealed interesting data. It became evident in this empirical chapter that benefits were more inclined to learning as well the impact on learners' social and cognitive advancement. The same cannot be said about the challenges. Challenges were mostly focused on the struggles experienced by teaching multigrade classes. Challenges included teaching learners of different levels of understanding simultaneously, a lack of learner support material and the teacher's lack of skills and tools to teach these classes effectively. One step towards quality promotion in multigrade settings is to identify the challenges of the environment and develop a means to overcome the challenges. In this regard the literature supports the autonomy of the multigrade school when it addresses the problems.

List of Acronyms

AIDS: Acquired Immune Deficiency Syndrome

APEID: Asian Programme of Education Innovation

B.Ed: Bachelor of Education

DoE: Department of Education

EFA: Education For All

EMDC: Economically More Developed Country

EMIS: Education Management Information System

HIV: Human Immune Deficiency Syndrome

HRW: Human Rights Watch

ICT: Information and Communication Technology

LO: Life Orientation

MGI: Multigrade Rural Schools Intervention

MLC: Minimum Learning Competencies

MUSE: Multigrade School Education

NCS: National Curriculum Statement

NEMED: Network of Multigrade Education

NGO: Non-Governmental Organization

NWREL: North West Regional Educational Laboratory

OECD: Organization for Economic Corporation and Development

PASTEP: Primary and Secondary Teacher Education Project

RSA: Republic of South Africa

SAPA: South African Press Association

SASA: South African Schools Act

TCl: Technical Correspondence Institute

Technology for Communications International

UK: United Kingdom

UNESCO: United Nation Educational and Cultural Organization

US/USA: United States/ United States of America

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CHAPTER ONE: INTRODUCTION AND OVERVIEW OF THE THESIS

1.1 Introduction

This chapter presents the overview and rationale of the thesis. The chapter also outlines the statement of the research problem together with the main research questions, and research sub-questions and research objective of the study. The significance and rationale of the study are also explained. The key concept is defined to reflect the context in which it has been used in the study. The delimitations and assumptions of the study are explained. All the chapters that constitute the study have been outlined. The chapter ends with a summary.

1.2 Background of the Study

In South Africa, as in other parts of the world, the main structure for arranging classes in the formal school system is by grouping learners of the same narrow age band into the same grade; this arrangement is known as the single-grade structure (Kyne, 2005: 1). The single-grade arrangement is well established at all levels of mainstream schooling in South Africa and has had a profound influence on many aspects of schooling and school processes such as the way the curriculum is designed and the way learners are taught and assessed (Brown, 2007; Little, 2005). It is the most favoured arrangement among teachers (Little, 2005). But whilst the school system is predicated on 'gradedness', very large numbers of learners and teachers in mainly primary schools in rural areas such as in commercial farm and township schools in different provinces in South Africa, engage in teaching and learning in classes that are multigraded (Mathot, 1998; Joubert, 2007); that is, classes where two or more 'official' grade levels are combined (Little, 2005: 1). Learners learning in a multigrade class thus retain their grade designation and specific grade level curricula.

In the last eight years there has been a renewed and increased interest in the practice of multigrade teaching in the country (Brown, 2008; Brown, 2007; Joubert,

2007). This has mainly been triggered by concerns about teacher shortage due both to out-migration and lower entrants to teacher education programmes; irregular yearly enrolment of learners in some schools in mainly rural areas; and apathy among teachers to work in remote rural and sparsely populated villages (Brown, 2007; Department of Education, 2005b; Mathot, 1998). Of these reasons, teacher shortage has perhaps been the most influential (South African Press Association, 2006). To compensate either for the shortfall in teacher number or learners enrolled in schools, teachers have had to combine grades. But grade combination has not gone down well with many of these teachers because, as Mathot (1998: 12) and Joubert (2004) found, many feel that they are being overworked. These teachers have largely been left on their own without professional development support that focuses on multigrade; emphasis has been on teaching and learning in the single-grade context (Little, 2005). According to Brown (2008: 10; 2007: 54) as well as Joubert (2007: 6), many teachers in a multigrade context in South Africa would rather not work with in multigrades.

Multigrade teaching is unreported in school-statistics generated by Statistics South Africa (see Education Management Information System, 2005; 2006; 2007), and there has not been a national audit of the practice in schools (Brown, 2007a). But based on the 2005 Ministerial Task Team report on education in South Africa (DoE, 2005a), multigrade teaching is a feature of teachers' work life in primary schools in rural areas. The utilization of this pedagogical practice in these schools is supported by the Human Rights Watch's (HRW, 2004) report as well as Mathot's(1998) study. In farm schools, for instance, which constitute 13 percent of all state-funded schools (HRW, 2004: 12), multigrade is a common mode of teaching and learning practice (DoE, 2005a). At provincial level, Mathot (1998: 12) estimates that in 1998, one half of the primary schools in the Eastern Cape had one or more multigrade classes. Case studies by Brown (2007; 2008) and by Joubert (2007) confirm continued occurrence of the practice in different provinces in the country. But analysts of multigrade teaching suggest that the failure to acknowledge multigrade as a distinct practice in schools has been a major reason for the under-reporting of multigrade statistics (Joubert, 2007; Juvane, 2005;

Lingam, 2007; Little, 2005). One of the effects of this has been that analysis of the circumstances facing multigrade teachers and learners, nationwide and provincially, is more difficult to accomplish.

The National Department of Education has a national curriculum, prescribed for learners in schools at all levels of the education system (National Curriculum Statement, 2002). While these curriculum and related teaching materials are designed around the notion that learners progress through school on the basis of moving from one grade level to the next, teachers working in multigrade – as those in single-grade – are still expected to follow the curriculum in the manner in which it is outlined (Breidlid, 2003). However, the extent that curricula designed for single-grade can be delivered to learners learning in a multigrade context is being questioned (Kyne, 2005; Lingam, 2007; Little, 2005; Ninnes, 2006). Analysts (Kyne, 2005; Mathot, 1998; Ninnes, 2006) argue that multigrade teaching is unlike teaching in single-grade contexts and for this reason, monograded curricula cannot be delivered in a classroom context that is multigraded. They further claim that curricula, premised on a single-grade school structure, need to be adapted to suit multigrade requirements (Little, 2005; McEwan, 1998). Yet, some studies suggest the opposite, noting that there is no difference in teaching a curriculum - designed for single-grade - in a multigrade context (Suzuki, 2004; Veenman, 1995). While these two aspects of the debate are recognized, it seems that the changing and diverse contexts in which multigrade teachers work make it an imperative to understand their perceptions of this before one is able to lean towards a particular perspective.

At the same time, it remains controversial whether learners are better or worse off learning in multigrade classrooms (Little, 2005; McEwan, 1998; Mathot, 1998). Whilst literature on the cognitive and/or social effects of learning in multigrade classes in South Africa is underdeveloped (Joubert, 2006; Juvane, 2005), the few published studies conducted in developing countries – on the cognitive and socio-emotional effects of multigrade teaching – have yielded conclusions which are rather different from those advanced in policy documentation in developing and

developed countries (Little, 2005). Studies in developed countries, for instance, generally conclude that there is no general difference in learner achievement results (or usually, but not always, achievement differences in maths and reading), when compared to learning in single-grade (Corrigan, Hemmings, & Kay, 2006; Russell, Rowe, & Hill, 1998). Studies in developing countries generally show, in some instances, cognitive differences in favour of monograde schools, no differences or, inconclusive outcomes (Little, 2005; McEwan 1998; Rowley, 1992). While researchers in South Africa have not performed similar studies to allow the formation of a general understanding of this issue, it seems that teachers of multigrade classes might be able to estimate how learners fair in terms of learning effects (Mathot, 1998) and whether there are any benefits.

But although teachers and schools engage in multigrade practices, the Department of Education does not have a policy that governs or guides these practices such as which grades to combine, the maximum or minimum number of learners that should constitute a class, the qualification level of a multigrade teacher, and so on (Brown, 2007; Joubert, 2006). The absence of such a policy is ubiquitous in multigrade schools across the Eastern Cape, as in other provinces. In these school contexts, the teachers themselves decide on the grades to combine, and concerns about the number of learners, qualification of teachers, and so on, do not form part of the discourse (Mathot, 1998). The extent to which an absence of dialogue on these issues or larger policy related issues impacts on the circumstances in the classroom during teaching and learning has not been documented. An observation however is that in many primary schools in rural areas, in the Eastern Cape and other provinces, many teachers, whether teaching multigrade or single grade classes, are under-qualified or untrained professionally – when based on the National Qualification Framework, as indicated in the Norms and Standards for Educators (DoE, 2005b). But although mainstream literature says the higher a teacher qualification, the better the likelihood of the performance (see Darling-Hammond, 2005: 1-12), how multigrade teachers view this in relation to their work life in these local school contexts is still to be discovered.

1.3 Statement of the research problem

In South Africa where the average class size of a singlegrade primary school is estimated to be in the region of 40 learners – a figure which is much higher in some rural area schools – teaching two or more of these grades in one class can be a daunting experience. Yet a full understanding of how teachers, especially in different rural school locales in the Eastern Cape where multigrade teaching is known to exist, undertake teaching and learning in these kinds of classes and their difficulties or successes has not yet been developed. We do not know much or understand to any great extent the circumstances, situations, or factors that multigrade teachers regard as challenging and/or beneficial to learning (and/or teaching) in multigrades. Personal observation of teachers in multigrades in the schools under investigation indicates that these teachers would rather not teach multigrade classes. Although speculations can be made, the factors which prompt teachers to reach such decisions are unclear. At the same time, while evidence from multigrade research conducted in contexts outside South Africa disclose positive social, emotional and cognitive effects for learners, whether multigrade teachers in primary schools in the Eastern Cape share the same experiences of their learners learning in their classes is not known precisely. These concerns lead the researcher to pose the following main research question.

1.4 The main research question

What perceptions do multigrade teachers have regarding the benefits and challenges of learning/teaching in multigrade settings, and what tools can be recommended to improve the quality of teaching and learning in a multigrade classroom setting?

1.4.1 Sub-research questions

In order to fully explore the main question above, the following sub-questions are posed:

1. What aspects of teaching/learning in multigrade settings do multigrade teachers perceive as beneficial to teachers and learners, respectively?
2. What aspects of teaching/learning in multigrade settings do multigrade teachers perceive as challenging for teachers and learners, respectively?
3. What does the data on the benefits/challenges show in terms of multigrade teaching impact on learners socially and cognitively?
4. What tools are recommended for promoting quality teaching and learning in a multigrade classroom setting?

1.5 Research Objectives

Based on the broad statement of purpose, objectives of the study are:

1. To describe the aspects of teaching/learning in multigrade settings that teachers perceive as beneficial to learners and teachers, respectively;
2. To describe the aspects of teaching/learning in multigrade settings that teachers perceive as challenging to learners and to teachers, respectively;
3. To recommend tools that can be utilized to promote quality of teaching and learning in a multigrade classroom setting.

1.6 Delimitation of the study

The study was limited to three primary schools in which multigrade teaching is practised, in the East London rural area/farm area in the Eastern Cape Province. These multigrade teachers were preferred because the schools have a long history of arranging learners on a multigrade basis. Secondly, these school are within reasonable distance to a higher education institution located in East London which they may access to enhance, if required, their professional development needs. This was done by sampling three multigrade teachers from each school; therefore a total of nine teachers participated in the study.

1.7 Definition of concepts

The following concepts are defined below to reflect the context in which they have been used in the study

1.7.1 Multigrade teaching:

Multigrade teaching does not appear to be uniformly applied or understood (Kyne, 2005; Little, 1995; Russell, Rowe, & Hill, 1998). Precisely what is meant by multigrade teaching is still an open question among writers on the subject. One certainty however is that multigrade teaching is a deeply contested and slippery concept to define (Little, 1995). Little (1995: 63) asserts that multigrade teaching refers to the teaching of learners of different ages, grades, and abilities in the same class. Joubert (2007: 6) offers no clear definition of multigrade teaching but provides what amounts to a description of the setting presumed to reflect multigrade teaching, by contending that "...multigrade teaching refers to a setting where the teacher is responsible for teaching children of different grade levels at the same time." In this study, multigrade teaching refers to a situation whereby a teacher teaches two or more official grade levels of learners in one class.

1.7.2 Multigrade settings:

In this study, the concept multigrade setting is used synonymously and interchangeably with the term multigrade class/context. It refers to the space where multigrade teaching takes place.

1.7.3 Teacher Perception:

In the Republic of South Africa (RSA) the National Education Policy, Act 27 of 1996, (1996: 1) states that a teacher (educator) means any person who teaches, educates or trains other persons in an institution or assists in rendering education

services, or education auxiliary or support services provided by or in an education institution (South African Schools Act, 1996).

Lindsay and Norman (2008) define perception as an understanding or the meanings assigned to incidents experienced. Put another way, Schunk (2004: 138) asserts that perception involves equating a sensation with known information. In this study teacher perception refers to the meanings that multigrade teachers assign to incidents experienced in the multigrade setting.

1.7.4 Benefits

In this study, benefits refer to the positive attributes or advantages gained by teaching and, or, learning in the multigrade setting.

1.7.5 Challenges

In this study, challenges refer to the obstacles, difficulties, or demands encountered or experienced by teaching and, or, learning in the multigrade setting.

1.7.6 Teaching/Learning

There is a litany of definitions of teaching and learning in the literature (Bandura, 2001; Schunk, 2004). This study adopts the meaning of teaching and of learning that teaching refers to the act or practice of a teacher whilst learning refers to the act, process, or experience of gaining knowledge or skill, (see <http://education.yahoo.com/reference/dictionary/entry/teaching> <http://education.yahoo.com/reference/dictionary/entry/learning>).

1.7.7 Primary school:

This refers to an institution where children receive the first stage of compulsory education, known as primary or elementary education (Encyclopedia Britannica, 2007). In South Africa, a primary school encompasses the foundation and intermediate phase, as well as grade 7 (NCS, 2002).

1.8 Assumptions of the study

The researcher made the following assumptions:

- 1) All multigrade teachers that participated in this study simultaneously benefit and experience challenges of teaching in a multigrade setting.
- 2) That all multigrade teachers that participated in this study would be willing to expose the challenges they experience in teaching in a multigrade setting.
- 3) All multigrade teachers that participated in this study were aware of their strengths and weaknesses in teaching a multigrade class.

1.9 Rationale of the study

The researcher became interested in the topic of multigrade teaching challenges and benefits following conversations with friends in primary schools in which there were multigrade classes in the East London district. In these conversations, my friends often complained about the difficulties they have with learner discipline in multigrade classes. The researcher found that most teachers regard multigrade teaching as an unavoidable nuisance. At the same time, primary school teachers are being encouraged by subject advisors to teach multigrades. This became more evident in a conference on multigrade held at the Regent Hotel in March 2008 in East London where the Provincial Department of Education deliberated on, amongst others, ways to improve teachers teaching in multigrades. The distress regarding multigrade teaching shared by teachers and the keen interest by education officials in expanding multigrade teaching in primary schools led me to explore further; specifically about what is written about the challenges and benefits within the Eastern Cape.

From literature of previous research on multigrade teaching in South Africa, and more narrowly in the Eastern Cape, I realize that there is not much written on teachers' perceptions of the benefits. Far more is mentioned about the challenges (Mathot, 1998; Joubert, 2006; Mouton, 2003). But an understanding of the benefits is a vital leverage to motivate teachers to engage in multigrade or to encourage greater advocacy and recognition of multigrade teaching in curriculum development policies and mainstream school practice. By researching the benefits and challenges simultaneously, a distinct comparison can be made between them to see which of the two (benefits or challenges) outweighs the other in a particular context. On the basis of such evidence, education officials such as subject advisors can access empirical evidence on which to devise a school plan to improve teaching and teacher professional development programmes. Since teachers are the implementers of the multigrade strategy, one needs their perceptions of these benefits or challenges. Owing to the sparseness of literature available in this respect, it seems clear that a need exists in the Eastern Cape to develop a better understanding of this aspect.

1.10 Significance of the study

The findings of this study can make a significant contribution to a greater understanding of the problems, difficulties, and challenges as well as benefits to learners and teachers of multigrades. The Department of Education in the province can gain awareness of the needs of multigrade teachers and classes, data from which can inform policy decisions especially regarding training and development of teachers. The findings of this study could motivate policymakers and curriculum developers to implement a special policy catering for teachers in multigrade settings. The benefits of teaching in multigrade as well as the recommendations of tools to promote quality in teaching and learning in a multigrade setting could influence practices at school level. Related issues such as adjustment of school curriculum, material resources, and separate in-service courses could be justified on this basis.

1.11 Chapter overviews

The study comprises of five chapters which are outlined as follows:

Chapter one

Chapter one outlines the general overview of the study, the research questions, research objectives and significance and rationale of the study. The study also includes definitions of key concepts, assumptions, delimitation and a chapter summary.

Chapter two

Chapter two provides a literature review on factors perceived as both beneficial and challenging in a multigrade classroom. It also discusses the conceptual framework related to the literature. Related literature includes concepts of multigrade teaching, prevalence of multigrade teaching in South Africa, reasons for its establishment and factors influencing multigrade teachers' perceptions of benefit and challenges. The chapter also presents suggestions on promoting quality in teaching multigrade class, benefits that have a social impact on learners, and cognitive achievement and ends with a brief summary.

Chapter three

Chapter three discusses the research methodology. Research design and methods used have been discussed in detail. Data gathering and data processing including measures to ensure trustworthiness, ethical considerations, anonymity and confidentiality are discussed fully. The chapter ends with brief summary.

Chapter four

Chapter four presents a discussion of findings from the empirical investigation in accordance with the research questions. Data analysis and interpretation is done. The chapter ends with a summary of the main results.

Chapter five

Chapter five presents the tools to promote quality in teaching and learning in a multigrade setting. In so doing the reflections of the challenges from the empirical work are done in the light of the literature reviewed on multigrade learning and teaching. The discussion is guided by research question four of this study which states as follows: What tools do you recommend for promoting quality teaching and learning in a multigrade classroom setting? Also the limitations and recommendations of this study are highlighted.

1.12 Summary

This chapter commenced by introducing the thesis of the study which is about exploring the perceptions of the multigrade teachers and whether they are considered beneficial or challenging in multigrade settings. The background to the study is also an attempt to identify aspects related to the circumstances, situations and factors that are considered as benefits and challenges. The study also sought to explore the views of a district education subject advisor regarding the issues raised by multigrade teachers. This was followed by research questions already presented (c.f 1.4). The key concept used in this study has been defined and operationalised (c.f 1.8). The research method and the planned research programme have been outlined. Chapter two will present the conceptual framework and related literature with regard to the perceptions of multigrade teachers in multigrade settings.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature review on the issues of multigrade teaching. In developing the chapter; both local and international sources were consulted. The purpose of this review was to describe the aspects of teaching and learning in multigrade settings that teachers perceived as beneficial and challenging to learners and teachers, and to recommend tools that can be utilized to promote quality of teaching and learning in multigrade classroom settings.

The chapter provides a theoretical perspective on multigrade teaching, in which the interpretations, practices and benefits of multigrade teaching were reviewed. In developing the chapter, both local and international sources were consulted. A key argument in the chapter is to review which aspects of teaching and learning multigrade teachers perceive as beneficial and challenging in the multigrade settings. As the multigrade teachers are faced with some challenging factors which almost have a negative impact on multigrade teaching, what should be done to strengthen multigrade teaching in the schools internationally? What could be recommended to improve the challenges faced by multigrade teachers locally and internationally?

An overview of different theorizations regarding how multigrade teachers perceive the benefits and challenges of learning and teaching in multigrade settings is discussed. Conceptual frameworks that focus on different perspectives for understanding the perceptions of multigrade teachers are presented. The first conceptual framework is based on theories of perception as well as perceptual experiences. The latter term refers to the context of perception, that is, the interaction between the teacher and his or her, environment.

Both frameworks are of vital significance in understanding how and why multigrade teachers perceive some factors as beneficial and others as challenging. In concluding the chapter on literature review, possible gaps are exposed.

2.2 Conceptual framework

In this section concepts that emerged in the literature review are clearly discussed as they are relevant to this study. Additionally these also show how perceptions are formed as well as the limitations of perceptual experiences. It should be noted that various theoretical perspectives on perceptions of multigrade settings can be found in literature. The main concepts of this study have been operationalised in chapter one (c.f.1.7) under definition of concepts. In addition to these above mentioned concepts, this study will be conceptualized in terms of, and based on, the following theoretical lenses:

2.2.1 Gestalt theory

The researcher has indicated that the conceptual framework in this study is designed to illustrate how the multigrade teachers perceive benefits and challenges of learning and teaching in multigrade settings. Perception can be understood within a framework of the Gestalt theory. The Gestalt notion explains theories of perception, perceptual experience and measurement of perceptual experiences.

The Gestalt theorists were the first group of psychologists to systematically study perceptual organization around the 1920s in Germany. They were Johann Wolfgang van Goethe, Ernst Mach, and particularly Christian von Ehrenfels and the research of Max Wertheimer, Wolfgang Kohler, Kurt Koffka and Kurt Lewin (<http://www.users.totalise.co.uk/~kbroom/Lectures/gestalt.htm>). For Bowman and Brownell (2003) in their writings acknowledge that the Gestalt theorists' view is that all the people experience life in wholes not in isolated pieces. Early 20th

century theorists such as Kurt Koffka, Max Wertheimer and Wolfgang Kohler (students of Carl Stumpf) saw objects as perceived within an environment according to all their elements taken together as a global construct (Bowman and Brownell 2003). With regard to this study the environment is the multigrade setting and the multigrade teachers are the people who perceive the benefits and the challenges of learning and teaching in the multigrade settings.

As Gestalt is the theory of mind and brain, it proposes that the operational principle of the brain is holistic. This means that Gestalt has offered a holistic theory for understanding human process, which in this case is how multigrade teacher perception operates. Max Wertheimer's (1924) who is regarded as the founder of the Gestalt movement, unique contribution was to insist that Gestalt is perceptually primary, defining the parts of which it is composed, rather than being an additional element over and above the component parts.

The Gestalt effect refers to the form-forming capability of our senses, particularly with respect to visual recognition of figures and whole forms instead of just a collection of simple lines or curves. This 'gestalt' or 'whole form' approach sought to define principles of perception. In other words the Gestalt theorists define how human beings perceive objects. The environment in this case, is the multigrade setting in which teachers work. What is stressed here is that everything that teachers perceive in the multigrade setting is not perceived in isolated pieces – the process takes place in a holistic way.

Luchins and Luchins (1999) note that these Gestaltists who were interested in pattern perception studied how people organize perceptual experiences. Gestalt theorists were intrigued by the way our mind perceived wholes out of incomplete elements. Behrens (1984: 49) stresses that "To the Gestaltists, things are affected by where they are and by what surrounds them --- so that things are better described as more than sum of their parts." The theory clearly points out that as the teachers are working in multigrade settings they would be affected by

what surrounds them in the multigrade classroom or school. Whether favourable or unfavourable, this places them in a disadvantageous situation.

It is further stated that Gestaltists believed that context was very important in perception. This means that human perception cannot take place in a vacuum. As already been indicated earlier, in this study the context is the multigrade classroom. In other words if the teachers were not in the multigrade classroom full of learners with diverse characteristics such as different grades, different ages, different abilities, different personalities and different levels of maturity, they would be incapable of perceiving benefits or challenges. This is elaborated in an essay by Christian von Ehrenfels where he discussed this belief using a musical example. He suggests that it is the relationship between the notes that give us the tune, the whole, not which notes make up the tune. Gestalt means that parts identified individually have different characteristics to the whole. In other words Gestalt means organized whole. Max Wertheimer (1924:2) in his address before the Kant Society in Berlin expressed that the fundamental formula of Gestalt theory might be expressed in this way: “there are wholes, the behaviour of which is not determined by that of their individual elements, but where the part-processed are themselves determined by the intrinsic nature of the whole.” Thus Gestalt theory intends to determine the nature of such wholes, meaning that underlying conditions in the multigrade classroom are perceived as a whole by the teachers not as individual factors.

According to Wertheimer (1924) Gestalt theory has to do with concrete research; it is not only a theory about results but a means towards further discoveries. He further suggests that in this theory we must be guided by the concrete nature of the things or people we are studying. People who are being studied in this case are the teachers – their perceptions that is, how the process or experience of perception takes place. These Gestalt laws or Gestalt principles of perception take several forms such as: proximity, similarity, common fate, good continuation, closure, area and symmetry. The principle of symmetry describes the instance where the whole of a figure is perceived rather than the individual parts which

make up the figure (Wertheimer, 1938). The criticism leveled against this theory is that it is descriptive rather than explanatory in nature.

For this reason Gestalt theorists are viewed by some as redundant or informative. Bowman and Brownell (2003) note that Kurt Lewin who was famously known as field theorists in the social sciences was also part of these academics. Several studies on multigrade literature reveal factors that are regarded as benefits as well as those which are deemed challenging to the multigrade teachers. A handful of studies portray how multigrade teachers perceive their multigrade settings or classrooms. According to the Gestalt notion it has been shown how the elements involved in perception and perceptual experiences impact on teacher perceptions in their environments. It is quite interesting to know whether events, that is, the factors perceived as beneficial or challenging occur as 'wholes'. It has also been illustrated that the context (multigrade classrooms) is a very important perception; in other words it is impossible for the teachers to experience benefits and challenges in a vacuum.

2.2.2 Kurt Lewin's Field theory

Another approach for conceptualizing the perceptions of multigrade teachers falls within Kurt Lewin's field theory (Mwamwenda, 1996). Lewin's field theory can be understood within the framework of interaction between an individual and his/her environment. In the context of perception, Lewin's field theory is also important. Lewin is most renowned for his development of the 'Field Theory'. The field theory is the "proposition that human behaviour is the function of both the person and the environment: expressed in symbolic terms, $B = f(P, E)$ Deaux 9)" (<http://wilderdom.com/theory/FieldTheory.htm>). This means person's behaviour is related both to ones characteristics not forgetting the type of social situation in which one finds herself/himself. The social situation in this case is the multigrade setting in which the teacher finds himself/herself. In other words the person referred to is the multigrade teacher and the environment.

It should be noted that this is not to suggest that the wider school context is excluded. According to Van Wager (2008) in his documentation on biography of Kurt Lewin he regarded Kurt Lewin as the father of the social psychology. He attributed this to his pioneering work of various methods when Lewin look at the human behaviour. In this case a person's psychological state refers to the teachers engaged in multigrade classes or schools and the social field or milieu is the multigrade setting. Lewin was a 'field theorist' in the social sciences. Bowman and Bownell (2003) highlight that Lewin's concept of life space was acknowledged as noteworthy. They further emphasized that all the influences that act on a person in his environment are what have been described as Lewin's field theory. Lewin's theory proposes that behaviour is the result of the individual and the environment. The behaviour of a teacher who is engaged in a multigrade setting would differ from one engaged in a monograde setting owing to different environments. According to Van Wager (2008) this theory had a major impact on social psychology, supporting the notion that individual traits and the environment interact to cause behaviour. In other words this theory draws attention to the interaction between an individual and his/her environment. Jones (2008) maintains that Lewin believed that our behaviour is purposeful; Jones(2008) asserts that understanding explanation of Lewin's field theory is that everything we do and the way we act in our various environments are resultant of both one's environment and psychological traits. In other words Jones (2008) puts emphasis on the greatest part that is influenced by one's surroundings. For example perceptions held by the multigrade teachers whether positive or negative result from the conditions of their multigrade settings which are their surroundings. According to Lewin's approach, this means that if one wants to change the situation in a multigrade setting, all the problems faced by the teachers should be identified.

In this case the Department of Education officials, in order to bring a change, in effective multigrade teaching need to know each and every challenge that multigrade teachers are faced with in the multigrade classrooms. This perspective is firmly supported by Little (2005). Little maintains that officials should be aware of the existence of multigrade teachers including what is going on inside the

multigrade classrooms so that curriculum developers including the teachers can bring about change to strengthen the multigrade learning and teaching. According to Smith (2001 cited in Lewin 1951: pg 240) one's behaviour depends on the environmental situation. This highlights that teachers working in different multigrade settings are not expected to hold the same perceptions, as conditions may differ. Furthermore, perceptions of monograde teachers are likely to differ from those teaching in multigrade settings.

While Jones (2008) writing the biography of Kurt Lewin he also highlighted that Lewin's field theory has resultant to field research on human behaviour has extended an action research. One could argue that this is exactly in line with what was done by Vithanapathirana (2005). Vithanapathirana conducted action research with teachers in Sri Lanka to improve the quality of teaching in mathematics and found that teacher's attitudes to multigrade teaching became more positive once they realized that they had acquired strategies that could be used to improve student achievement outcomes. Consequently, the teacher's burden of intensive lesson planning for several grades was also reduced. Lewin was also known as the father of modern social psychology because of his pioneering work that utilized scientific methods and experimentation to look at social behaviour. He is also remembered for the equation "behaviour is a function of the person in the environment" (Hall and Lindzey 1978).

In consort with the above aspects emerging in Lewin's field theory, social behaviour is represented as a multigrade teacher's' perception and the environment as the multigrade classroom or setting. Lewin's equation that "behaviour is a function of the person in the environment" is quite true in the sense that the multigrade teachers' perceptions have been moulded by their environment, that is, the conditions that prevail in their multigrade settings (Jones 2008).

2.3 Theoretical perspectives on multigrade

The theoretical and conceptual frameworks discussed in this chapter will be of great assistance to the researcher in discussing the findings that will emerge from the research. In other words the findings regarding the multigrade teachers' perceptions will be related to the concepts raised in this chapter. This also suggests that these above mentioned factors that is, the nature of the environment and its influence on perceptions might help to explain the kind of perceptions that multigrade teachers hold and can help with the recommendations of tools that could be utilized to promote quality of teaching and learning in the multigrade settings. The next step is to outline and criticize different interpretations of the concept, multigrade teaching, and reflect on the views of this concept of various multigrade scholars.

2.3.1 The concept of multigrade

Multigrade literature shows that multigrade teaching has been interpreted in different ways but on one hand the practice of this model seems to be practiced internationally and locally. Multigrade proponents such as Little (1995, 2005) note that multigrade teaching is unlike monograde teaching, it involves teaching of students of different ages, grades and abilities in the same group. Russell, Rowe and Hill (1998) concur with Little (2005) by stating that the multigrade structure is one in which students of two or more adjacent grade levels are taught in one classroom by one teacher for most if not all the day. According to Little (2001:482) "in other words in multigrade teaching, the teachers are responsible, within a time-table period of instruction across two or more curriculum grades. This means that in "one teacher" schools the teacher is responsible for teaching across two or more curriculum grades". According to Little (2001) all this is in contrast to monograde teaching where teachers are responsible within a time-table period for instruction of a single curriculum grade.

Although Little's interpretation of multigrade teaching is widely accepted internationally, there are some context variations to its meaning. However, although Little's interpretation is not disputed in other contexts, nationwide, the

concept multigrade teaching is defined differently. But it should be noted that the definitions or interpretations have the same core.

The multigrade structure is known by various names in different countries, these include 'composite' or 'combination' classes, 'double' classes, 'split' classes, 'mixed-age' classes and 'vertically-grouped' classes (Veenman, 1995) The terms 'combination' classes, 'forced mixed age' classes and 'forced mixed grade' usually refer to settings arising through necessity and characteristics of enrolment. According to Joubert (2004:8) the terms such as 'vertical grouping' 'ungraded', 'non graded' and 'family grouping' normally used to describe multigrade settings that have been established as a result of pedagogic choice. Although the multigrade literature, based on the above illustrates many different terms that are used, it should be noted that the various names only arise from the reasons for adoption such as necessity and characteristics or either pedagogic choice.

The next section looks at the comparison of the two models of teaching, multigrade and monograde teaching.

2.3.2 Multigrade versus monograde teaching: a comparison

Little (1995) in distinguishing these two models of teaching that is, multigrade and monograde, she makes her point explicit. In her 2004:12 document Access and achievement in Commonwealth countries: support for learning and teaching in multigrade classrooms Little suggest that " multigrade may be contrasted with the more familiar monograde teaching, in which a single teacher teaches a single grade or class at any given time".

Little (2005: 1) differentiates the structure of multigrade teaching from single grade teaching. Little (2005) in a paper prepared for the UNITED NATION EDUCATIONAL AND CULTURAL ORGANIZATION (UNESCO) 2005 EFA Monitoring Report she highlights that " each monograde class is usually taught by a single teacher at any one time". She further indicate that in some system the

same teacher will move with his/her class group from one grade to the next but in other systems the teacher is identified with a particular grade (Little, 2005:1). This suggests that the practice is not universal. However in some instances the size of the class can be so small that the notion of grade is not used. United Nation Educational and Cultural Organization/Asian Programme of Education Innovation (1989) does not define this model of teaching 'multigrade, teaching', in the school situation where the number of pupils in different grades is so small that the pupils of several grades together add up to a normal or slightly larger than normal class.

In contrast to monograde, Berry (2001:1) in his Multigrade Teaching; A Discussion Document (2001:1) describes multigrade teaching as a model of teaching that "occurs within a graded system of education when a single class contains two or more student grade levels. For him multigrade teaching is contrasted with the usual pattern of classroom organization in graded systems, where according to him a single classroom contains students of only one grade level. Birch and Lally (1995) describe multigrade teaching as a term used to describe the teaching in primary education of children usually in one class. They also suggest that it is not necessarily the best term to use when translated into other languages and cultures. The concept multigrade teaching is capable of being defined differently in different countries as illustrated below:

Nepal: Multigrade teaching in Nepal has been described as the situation in which a teacher teaches more than one class at the same time.

Malaysia: In Malaysia, multigrade teaching involves the teaching of children from two or more grade levels in the classroom. The combination is usually of grades close to each other; for example, one and two, five and six. However, in Pakistan and Australia, as many as five or six grades may combine in the one class.

In their review of recent literature and projects on multigrade schools and classes in African primary school context, Brunswick and Valerien (2004: 9) took the easy route of discussing multigrade teaching without dealing with the question of the

definition of the concept. They offer clues as to what multigrade teaching looks like:

- “Where a single teacher is responsible for pupils of various ages, spread over several grades, and who study different curricula”. This interpretation shows that there is a fundamental emphasis among researchers and practitioners working within the multigrade paradigm, on the composite nature of the multigrade teaching dispensation.
- On the other hand Vithanapathirana (2006 cited in Brown 2007) views multigrade teaching as a situation whereby a single teacher is responsible for teaching across than one curriculum grade within a time-tabled period. For Vithanapathirana (2006) there is no difference between multigrade classes and multigrade schools. The contextual interpretation represents a more operational definition, which is consistent with the perspective offered by Little (1995) as well as Berry (2001).

Writing from the context of Papua New Guinea, Primary and Secondary Teacher Education Project (2000:7) provides a notion of multigrade teaching which highlights its distinguishing features, and what it is not. PASTEP (2000) suggests, multigrade teaching can be recognized because the curriculum for grades is combined and integrated, that is common elements from the different year curricula are combined into one curriculum for the class. This suggests that there is one curriculum for different grade levels. PASTEP (2000) views learning as being on the advantage side as they work according to their different levels of ability. The needs of the learner determine the teaching and learning which means that learning is learner driven.

The notion concerning multigrade teaching has also been supported by broader operational and technical definition and draws attention in resolving problems and issues that arise from multigrading. Following the issues raised above relating to the comparison of multigrade versus monograde models, it could be argued that attention is drawn mainly to the following aspects: structure, number of grade level

or levels, learners' ages, curriculum grade or integration of curriculum/curricula for different grades, nature of learning (whether it is student-centered) and the instruction taking place in one or in the same classroom.

The extent of multigrade education raises many questions to the multigrade analysts. It is generally not recognized that in almost every country there are many primary schools practising (UNESCO/APEID, 1989) and as many as one-third of classrooms worldwide are reported to be multigrade (UNESCO, 2004). The next section discusses the prevalence of multigrade settings.

2.4 Prevalence of multigrade teaching in South Africa

The extent of multigrade teaching in South Africa's schools is not known precisely. Multigrade teaching is unreported in school statistics generated by Statistics South Africa (EMIS, 2005; 2006; 2007), and there has not been a national audit of the practice in schools (Brown, 2007). But based on the 2005 Ministerial Task Team report on education in South Africa (DoE, 2005a), multigrade teaching is a feature of a teacher's work of life in primary schools in rural areas. The utilization of this pedagogical practice in these schools is supported by the Human Rights Watch's (HRW, 2004) report as well as Mathot's (1998) study. On the basis of the above evidence, it would appear that reasons for unreported statistics for multigraded teaching occurrence are not only unique to the South African context. It has been stated already that the reason could be attributed to little or no interest by policymakers and administrators in multigrade settings.

In farm schools, for instance, which constitute 13 percent of all state-funded schools (HRW, 2004:12) multigrade is a common mode of teaching and learning practice (DoE, 2005b). At provincial level, Mathot, (1998: 12) estimates that in 1998, one half of the primary schools in the Eastern Cape had one or more multigrade classes.

Case studies by Brown (2007; 2008) and Joubert (2007) confirm continued occurrence of the practice in different provinces in the South Africa context. But analysts of multigrade teaching suggest that a failure to acknowledge multigrade as a distinct practice in schools has been a major reason for under-reporting of multigrade statistics (Joubert, 2007; Juvane, 2005; Lingam, 2007; Little, 2005). It could also be argued that one of the effects of this has been that analysis of the circumstances facing multigrade teachers and learners, nationwide and by province, is more difficult to accomplish.

According to Brown (2007) these are the following figures of data gathered from five provinces: Mpumalanga – 494 farm schools, Limpopo – 317 farm schools, North West – 316 farm schools, Eastern Cape – 400 farm schools and the Free State – 1206 farm schools (HRW, 2004 cited in Brown, 2007). One would argue that the above figures of multigrade settings in farms in various South African provinces clearly indicate that multigrade teaching is a significant feature of rural areas in the true sense. Having noted the extent of multigrade teaching in South Africa it is worth noting the reasons for the establishment of this model of teaching.

2.5 Reasons for establishment of multigrade teaching

In their recent study, Brunswick and Valerien (2004) argue that in most cases multigrade classes were established as a result of necessity. They further argue that the motive could have been a deliberate choice made for political or educational reasons. Kyne (2005) notes that, in both developed and developing countries multigrade teaching has been adopted as a response to uneven student enrolment and to schooling in remote and sparsely populated areas, where schools are widely scattered and inaccessible. However, what is evident from the above explanations is that there is a link between the establishment of multigrade classes and the aspect of necessity. It is also interesting to note that the two key aspects are either related to political or educational reasons. - Juvane (2005:3-4) in a Ministerial Seminar hosted by the Government of Ethiopia in Addis Ababa on 7-9 September 2005 raised his concern that “ in Africa, as a consequence of

shortages of teachers, teacher absenteeism owing to Human Immune Virus/Acquired Immune Deficiency Syndrome related causes and to budget constraints facing many countries, multigrade classes (are) in evitable option". He further explains that "Minister of Education see multigrade teaching approaches to cope with teaching in these very difficult situations. It could also be argued that reasons for adoption of multigrade teaching are likely to differ from context to context; Juvane (2005) reveals that in the African context it is due to shortage of teachers as a result of the reasons he has cited above.

2.5.1 Reasons for establishment of Multigrade Teaching in South Africa

In the South African context the main structure for arranging classes is the single grade structure which is well established at all levels in main stream schooling. At the same time large numbers of learners and teachers in mainly primary schools in rural areas such as in commercial farm and township schools, are engaged in teaching and learning in classes that are multigrade (Mathot, 1998; Joubert, 2007).

Literature evidence has shown that in developed as well as in developing countries multigrade teaching has been adopted as a result of necessity or choice (Little, 2001; Kyne, 2005). In South Africa, as multigrade teaching is found mainly in rural areas, it has been adopted as a response to necessity:

- Teacher shortage due to out-mitigation and lower entrance to teacher education programmes.
- Irregular yearly enrolment of learners in some schools in mainly rural areas.
- Antipathy among teachers to work in remote rural and sparsely populated villages.
- Post apartheid surge in demand for education (Brown, 2007a; DoE, 2005b; Mathot, 1998, cited in Brown, 2008).

Of these reasons, teacher shortage has been the most influential. In rural schools where low numbers of learners or teachers exist, educators are forced to teach more than one grade in a single class, that is multigrade teaching. Education analysts argue that while the number of children seeking access to primary level education has quadrupled since the start of the democratic government, the number of teachers providing this education has shrunk (Brown 2007; Kassiem 2007 cited in Brown 2008) . As Little (2005) has noted, choice arises from decisions made by teachers and policymakers but necessity arises from student and teacher characteristics. The above evidence offered by multigrade scholars could be the reason why multigrade teaching is the most popular model practised in rural and farm schools. This aspect highlights the reason for the existence of a high number of multigrade settings in the Eastern Cape especially in farm schools which is the area of this study. This suggests that these conditions are not unique to South Africa. This has been supported by Juvane (2005). These conditions are not unique to South Africa- Juvane (2005) also notes that in many African contexts multigrade teaching is used to increase access to education in rural communities. The next step is to outline teaching practices in the multigrade settings that is pedagogical and instructional practices.

2.6 Teaching practices in multigrade and issues of teachers

2.6.1 Pedagogical Practices

According to Kyne (2005:298 citing Mason and Burns, 1996; 1997; Veenman and Raemakers, 1995) also suggest that the combined (multigrade) instructional environment is “difficult, complex and generally disadvantageous.” Research analysts (Russell, Rowe, and Hill, 1998) also suggest that the quality of teaching and the nature of teaching strategies employed in multigrade classes are critical issues. However, it is not clear how teachers cope in the multigrade classrooms and which practices they use.

2.6.1.1 Instructional practices

(a) Peer tutoring

In order to improve teaching practices in multigrade classes, Veenman (1995) established a study of the long term effects of staff development programs for teachers (Veenman and Raemakers 1995, cited in Russell et al. 1998) On the basis of the research he reviewed, Veenman (1995) concluded that there was little peer tutoring or ability-based group work conducted across grade levels to help meet individual needs. The evidence of little peer tutoring and ability-based group work is unsurprising; the reasons according to Mason and Burns 1997 b: 298(cited in Brown, 2007) may be that the instructional environment is more “difficult, complex and generally disadvantageous” for untrained teacher/teachers who lack instructional skills for handling a multigrade classroom context.

In multigrade classes children receive less direct instruction from their teacher, time- on-task is lower, and peer tutoring or across grade grouping by ability are not used to any significant degree (Veenman, 1995). Research on effective teaching has shown that pupils learn more effectively from active interaction with their teacher/peers on instructional content than from written materials during independent seatwork and that pupils have lower-time-on-task during independent seatwork than during direct teacher instruction. Kyne (2005) also conducted a study that focused on the grouping practices of teachers in multigrade classes (up to four grade levels in each class) in a two-teacher school in the Republic of Ireland. The study sets out to examine the grouping approaches used by teachers in multigrade approaches. She wanted to find out what subjects and aspects of subjects are used, in peer tutoring and/across age tutoring.

Kyne’s (2005) findings are reported to be consistent with some of the research findings reported by Veenman (1995). Research literature suggests that although the quality of teaching in multigrade classes is frequently far from ideal (Kyne 2007: 3) small schools with multigrade classes do not appear to maximize their advantages in terms of small size. Veenman suggests that opportunities provided

by the multigrade context (Veenman, 1995 cited in Kyne, 2007) are not used effectively. For example, teaching all grade levels together is common but there is little peer tutoring or across grade grouping associated with positive learning outcomes. Kyne (2007) further notes that this method of instruction is easier to implement and is used by most multigrade teachers. Miller (1991; 3) also identifies peer tutoring in his six instructional dimensions and he believes that classroom routings and student skills will affect successful multigrade teaching.

It could be argued that research conducted by Veenman (1995) has clearly demonstrated that his findings that are aspects such as less direct instruction from the teacher, lower time-on-task and peer tutoring or across grade by grouping could be also attributed to ill-equipped multigrade teachers with insufficient instructional skills to manage pedagogical practices. It would also appear that although there is always interaction between the teacher and the learners, the multigrade teacher does not know how to make this interaction effective. However, multigrade teachers cannot be blamed for not using the above mentioned opportunities effectively as several studies found that they are not even in-serviced, guided or supported.

(b) Separate grade teaching

On the basis of the research he reviewed, Veenman (1995) concluded that the most frequently used approach was to teach two grade groups separately, with one receiving instruction while the other one undertakes individual seatwork. This research shows that multigrade teachers teach each grade in their class separately, one group instructed while the other group works on individual seatwork tasks (Veenman, 1995). Mason and Burns (1997) concur with Veenman on the teaching practices of teachers in multi-age settings. In their examination of the findings of nine naturalistic studies, they suggest that most multigrade teachers teach separate grades for mathematics and reading and a single curriculum in science and social studies. Miguel and Basarga (1997 cited in Little 2001: 484) in their survey in the Philippines, among their three strategies they

stated that” in the first strategy skill subjects are taught separately in each grade level while art and music are taught to the whole class”.

Little (2005: 13) identifies four curriculum adaptation strategies. According to her “in quasi monograde the teacher teaches grade groups in turn, as if they were monograded. Learners follow the same or a different subject t the same time. Teachers may divide their time equally between the grade groups or they may deliberately divide their time unequally, choosing subjects tasks within subjects that require different levels of teacher contact’. Given the arguments outlined above by these multigrade analysts or experts regarding separate grade teaching, it is likely that untrained or rather unskilled multigrade teachers may not know which subjects or rather learning areas to teach to their grades separately and in turn which subjects should be taught within a single curriculum. It is noteworthy that their lack of knowledge or techniques should be attributed to their lack of skills in handling multigrade classes. Little’s (2005) curriculum adaptation strategies are regarded as classic by many multigrade scholars but it could be argued may not work well for unskilled multigrade teachers. Therefore this suggests that teachers should be guided through effective instructional practices in the multigrade classroom context.

Berry (cited in Little 2006) reports how teachers in the Turks and Caicos Islands used a ‘grade by grade’ approach in subjects like mathematics and language arts (and a whole class approach to social studies and science). In a ‘grade by grade’ approach, teachers would look at the same curriculum subject e.g. grades 1, 2 and 3 and plan two or three different lessons at different levels on the same subject.

Ames (cited in Little, 2006) reports that in her observation of multigrade teachers’ teaching literacy in the Peruvian Amazon, teachers adopted three patterns of organization. In Pattern1 the grade groups were taught the same subject (literacy) but separately with different inputs, different activities and different expected outcomes for the different grade groups.

(c) Combined grade teaching

Mason and Burns (1997) concur with Veenman (1995) in teaching practices of teachers in multigrade settings. In their examination of the findings of nine naturalistic studies, Mason and Burns (1997) found that teachers teaching in two-grade multigrade classes generally teach a single curriculum in science and social studies. In multigrade class settings teachers may use whole class teaching approaches and single textbooks as well as grade-specific (separately) instruction.

Lungwangwa (1989 cited in Little 2001) draws attention to the Zambian teacher education programme. He reports three approaches to the time-tabling curriculum. According to Lungwangwa's reported as cited by Little (2001:484) "in the subject grouping strategy subjects are presented to all grade groups together at the same time: music, art, religious knowledge and social studies". (Miguel and Basarga cited in (Little 2001) also suggest that art and music are taught to the whole class.

Miller's (1991: 3) view is that for successful multigrade teaching in self-directed learning where students combine with each other, students' skills and strategies are improved. Ames (in Little 2006) reports that in her observation of multigrade teachers teaching literacy in the Peruvian Amazon, teachers adopted three patterns of organization. Within the three patterns she identified, in pattern two teachers did not differentiate the students and taught them as one. Miller's (1993: 3) view is that for successful multigrade teaching in self-directed learning where students combine with each other, students' skills and strategies improve and this has been viewed as very important to multigrade teachers. He further states that while students' skills and strategies are improved, it should be borne in mind that that does not happen automatically. In other words he draws attention to the well-organised instructional practices of multigrade teachers in order to achieve these goals.

(d) Individual seatwork tasks

According to the study conducted by Veenman (1995) when a separate grade teaching approach is used other grade groups undertake individual seatwork. He reports that pupils in multigrade classes spend more time on individual seatwork than pupils in singlegrade classes and their levels of time-on-tasks are lower than during teacher instruction.

Kyne (2005) in her study which focused on the grouping practices of teachers in multigrade classes (up to four grade levels in each class) in a two-teacher school, she asked:

- What proportion of time do pupils in classes spend on seatwork?
- What do teachers perceive as the role of seatwork in multigrade classes?

Kyne (2005) found that pupils spend a significant proportion of class time on seatwork. Kyne's findings are consistent with some of the research findings reported by Veenman (1995). Berry (2001: 4) in his discussion document h cautions that "The teacher must be skilled in managing instruction to reduce the amount of 'dead time' during which children are not productively engaged on task". Berry goes further, he also raises concern that "this means that teachers must be aware of different ways of grouping children, the importance of independent study areas where students can go when they have finished their work. He further says that students should be taught the value of independence. Multigrade literature evidence indicates that in the South African context in all provinces even in the Eastern Cape which is the area of study, there are library corners in each class (although in some multigrade classrooms lack of space is a great problem), but the learners are uninformed about the value of independence; therefore sometimes these library spaces are not very useful. Although various instructional practices have been analysed by different multigrade analysts if the multigrade teachers lack adequate skills there will always be a gap that will show up in their instructional practices. Therefore this is a call to meet this challenge. The next section looks at classroom management practices.

2.6.1.2 Classroom management practices

Evidence in the research literature indicates that in some contexts (UNESCO, 2004) the success of multigrade teaching lies in the management of the model. United Nation Educational and Cultural Organization in (2004: 28 cited in Brown, 2007).

There are practices such as:

- In both rural and urban areas multigrade teaching is a priority; it receives preferential treatment in respect of teacher-pupil ratio, teaching resources and community support.
- The use of a school bus system reduces the need for multigrade teaching in many rural schools. Schools on wheels, supported by a bus system, bring children from dispersed villages together.
- To overcome isolation of small schools, which often leads to multigrade teaching, Organization for Economic Corporation and Development countries have developed innovative solutions.

The general aim is to provide linkages between schools, ending the isolation of teachers and students. Berry (2001) also confirms that school clustering may not be only seen as only way of sharing resources it is also an opportunity of sharing vital teaching practice as well as management techniques. In other contexts school clustering is viewed as an effective way of building capacity in remote schools and reducing the feeling of isolation from innovation. Berry (2001) goes further with his explanation of clusters. He believes that in other countries such as England, the implicating of this practice has been seen as a way of supporting small schools. On the other hand Berry (2001) cautions that this good practice could be hindered by obstacles such as high financial commitment. He also mentions that school clusters may not get the full support expected from their regional offices.

Berry (2001) raises concerns that, however, there may be difficulties associated with the development of school clusters; for instance financial commitment can be quite high and ministries may lack the regional capacity to give school clusters the

kind of support they need especially in their early stages. The above concern is also shared by Mathot (1998). Nevertheless, what should be kept in mind is that, in order for the multigrade teachers to achieve these goals, they should be guided and supported by education officials. If the multigrade teachers lack the pedagogical practices, a wide gap will show and in turn it will have a negative impact on both teaching and learning in their settings. The section below discusses benefits and challenges.

2.7 Benefits and challenges

The question of attitudes and perceptions held by multigrade teachers raises much concern in multigrade literature. In multigrade literature there is wide-spread agreement that negative attitudes prevail. In general, teachers are said to prefer single grades because multigrade classes mean more planning, preparation, organization and work, catering for a wider range of abilities and maturity, less time for meeting individual student needs and for remediation, less time for reflection on teaching, lack of relevant professional training and less satisfaction with their work (Veenman, 1995; 1996; Mason & Burns, 1995; 1996; cited in Russell et al., 1998).

Teachers regard the multigrade classroom as a poor relation to the better resourced single grade classrooms found in large urban schools and staffed by trained teachers (North West Regional Laboratory, 2001: 1). Effective teaching and learning cannot take place in a class context in which the teacher is negative towards his or her teaching (Lingam, 2007; Little, 2005; Mathot, 1998; Russell et al., 1998 cited in Brown, 2008) However according to literature research there are also many rewards for teaching in the multigrade classroom (Miller, 1991).

2.7.1 Evidence of benefits

Little (2005) has compiled a report of her review of the benefits and challenges of teaching and learning in multigrade settings.

- According to Little (2005) a UNESCO/ APEID STUDY (1989: 5 as cited by Little, 2005) compiled perceptions about the benefits of multigrade teaching from twelve countries in the Asia and Pacific Region. Little 2005: 10) reports that:-Learners develop self- study skills
- . Learners from different age group work together, as thus resulting in collective ethics, concern and responsibility.
- Learners help each other
- Little (2005: 10) reports that multigrade teaching was found to provide teachers with an opportunity for remediation and enrichment activities especially for learners with different levels of abilities.

Little (2005:10-11) also reported further evidence about benefits of multigrade teaching. This is how she reports “A recent study of 47 multigrade teachers and head teachers in an inner city area of London, England, reported a number of positive opportunities presented by the multigrade classroom (Berry and Little, 2008). The most commonly mentioned (24/47) was the opportunity for ‘cognitive stretching’ of the younger, less able and lower achieving learners, expressed variously by teachers as ‘stretching’, ‘modeling’, ‘moving on and developing’, ‘extending’, ‘looking up and emulating’. The second most commonly mentioned (13/47) was the opportunity for the use of peer tutoring learning strategies. While this strategy is not unique to multigrade classes, the strategy appears to work particularly well in the multigrade class.

Unlike cognitive stretching which was considered a benefit mainly for the less able, the lower achieving and the younger learner, peer tutoring was perceived to benefit all pupils, cognitively, socially and personally. Moreover, higher achieving and older learners ‘cement’ their learning through teaching and helping others. The less able, lower achieving and younger learners enjoy learning from others. A third commonly mentioned opportunity (12/47) was ‘behaviour stretching’, or the

opportunity for younger learners to learn appropriate social behaviours from the role models offered by older learners". In short, teachers perceived that the multigraded class presented learning benefits for both older and younger as well as high achieving and low achieving learners.

Little (2006) raises concerns t about whether these perceptions are all born out in practice, a matter for future research. Research shows that there are many benefits to having students learn in groups with older and younger peers. The benefits of having older students offering assistance to younger students are supported by research. Studies show that both the student being tutored and the student doing the tutoring improve academically (Berry 2001; Mathot 1998). According to Little (2006) Vygotsky's theory of language also purports that the construction of meaning takes place within the social context of the learner and that interaction with supportive, competent language users is integral to developing language skills.

Literature research on multigrade teaching shows that if a teacher, assigned to a multigrade classroom, uses approaches traditionally used in single grade classrooms and attempts to teach separate and discrete curricula to each grade-group, the benefits are lost. This suggests that whenever multigrade teachers lack adequate skills for handling the multigrade situation that is instructional as well as organizational strategies, the gap will always be evident. Therefore administrators are encouraged to maintain a combined classroom for at least two years so that students can benefit from the advantages that multilevel grouping provides, benefits are not as evident in the first year as in the subsequent years. Such classes minimize competition as the students recognize and accept that each student is at a different place in his or her learning. Students learn to set personal learning goals, assess themselves, and reflect on their own learning. Multilevel classrooms provide opportunities for students to gain self-knowledge as they interact with older and younger peers. Younger students learn from the wider knowledge base of older classmates and from their modeling skills and the behavior of older students likewise develops their capabilities as they assume

leadership roles and articulate with younger students. Little (2005) further argues that in a multilevel environment students do not need to spend time on concepts and skills they have already mastered. Students who have not attained specific learning outcomes by the end of the school year have the opportunity to achieve them the following year. Having discussed evidence of benefits, the next step is to outline challenges facing multigrade teachers.

2.7.2 Challenges to multigrade teaching

Evidence in multigrade literature supports the view that teachers engaged in multigrade settings are faced with many challenges they cannot solve on their own.

2.7.2.1 Pre-service training

Throughout the world, in both developed and developing countries many teachers are faced with the task of teaching multigrade classes without adequate training (Brown, 2008). Brown (2008) asserts that such teachers are ill – equipped to handle a multigrade classroom situation. Teacher training programmes rarely address the needs of multigrade classes nor focus on practical issues and techniques for handling multigrade teaching studies (Kyne, 2005; Mathot, 1998; UNESCO, 1989). Little (2001) suggests that ‘for children to learn effectively in multigrade environment, teachers need to be well-trained, well-supported, and well-resourced and hold positive attitudes to multigrade teaching. Lingam’s (2007) view is that if teachers are not adequately prepared to teach in multiclass environments it is likely that they will adversely affect the education of their learners.

Moreover, most countries have only ad hoc arrangements for preparing and supporting multigrade teachers. Juvane (2005) confirms that since multigrade teaching is likely to be a permanent feature of most education systems, it is important that efforts should be made to strengthen it through teacher training as

well as by winning support from the public and government. Kyne (2005) further argues that, during pre- service training there is no training package for multigrade teachers which includes aspects such as time management, improving teaching skills, preparation and organization of the teaching and learning materials and organization of art and cultural activities, make teaching multigrade very difficult. Seemingly this may be true because teachers are not well-prepared for multigrade settings. Evidence in the literature (Brown, 2008; Lingam, 2007) reveals that in different contexts there are qualified teachers trained for single grade teaching who are struggling to cope in multigrade classes. Lingam (2007) suggests that during their teacher training, teachers should acquire both theoretical and practical preparation for multigrade teaching. This will enable them to use appropriate skills to enhance classroom work. He further notes that theoretical preparation could cover areas such as organizing the classroom environment, teaching with small groups, and peer tutoring, creating standby activities and using community support.

Kyne (2007) emphasizes that by focusing on general teaching skills and competencies in the context of initial teacher education and supporting students in applying these skills and competencies to specific teaching contexts, including multigrade, teachers can be prepared to be 'adaptable' and 'flexible' as well as 'competent.' According to Kyne, however, teacher educators themselves admit to significant shortcomings in provisions for teacher educators. Multigrade analysts, Gore Griffiths and Ladwig, (2004) quoted by Kyne (2007) note that if teacher education programmes were improved, the quality of teaching would likely improve. Although Kyne (2007) has identified aspects expected during teacher education, she also believes that it is unlikely that any initial teacher education course can provide teachers with all the skills and competencies they will need to function effectively in more specialised contexts throughout their teaching life. Kyne (2007) maintains that ongoing teacher education and support is needed to enable teachers to deal with the challenges of the multigrade class (Kyne 2007: 507).

In supporting her claim, Kyne (2007) describes her ideal content of teacher education programmes to include preparation for multigrade teaching. She has done so by comparing similarities in the findings of some studies that were conducted to examine the needs of multigrade teachers. This is Kyne's (2007:508) ideal teacher education programme:

- Curriculum development and planning
- Classroom organization layout
- Selection and use of appropriate materials and resources
- Selection and use of a variety of appropriate teaching strategies
- Effective time management
- Classroom management and discipline
- Assessment and evaluation
- Parent and community relationships

Kyne suggests this categorization and corresponding goals as a starting point to be considered in the process of adapting teacher education programmes to provide for the needs of multigrade teachers. Kyne (2007) further recommends that it may also serve as a guide in the creation of new programmes at pre-service or in-career level. According to Kyne (2007:510) available literature evidence suggests that multigrade teachers need support in all these areas. Some of the programmes /categories suggested by Kyne (2007) are also documented by some multigrade analysts, (Berry, 2001: 4; Miller, 1991: 3).

Multigrade literature (Berry, 2001; Brown, 2007; Kyne, 2005; 2007; Little 2001; 2004; 2005; 2006; Mathot, 1998; Miller, 1991; UNESCO/APEID, 1989) shows that teachers teaching in multigrade settings lack pre-service training, however, it is very likely that if the above categories recommended by Kyne (2007) are included in teacher education programmes, multigrade teachers' problems in their multigrade classes could be minimized. UNESCO (1989) reports that practice teaching in multigrade situations is not generally prescribed or even advised for teacher trainees. Juvane (2005:8) also questioned the wrong idea of doing teaching practice during pre-service training in monograde schools instead of

doing it in multigrade classes. This is also supported by (UNESCO, 1989) by stating that it results in poor preparation for teaching multigrade classes. Kyne (2007) concurs by suggesting that there is a need for teacher education programmes to include practice in multigrade teaching for students. Kyne raises concerns about the problem of finding teacher trainers who themselves are familiar with or have experience in multigrade teaching. It should be noted that many multigrade schools especially in developing countries are poorly resourced and the attitudes of teachers themselves, administrators, parents and pupils towards multigrade are often negative. Kyne (2007: 511) strongly stresses that if multigrade teaching is to be taken seriously as a means of providing quality education, adequate resources need to be allocated to the development and delivery of quality teacher education programmes, at both initial and in- career level.

Although evidence from the literature evidence supports that many teachers in multigrade settings lack pre-service training, Little (2004) identifies a few examples of multigrade teaching being addressed within the pre-service teacher training course. Lungwangwa (1989 cited in Little, 2004) reports an attempt to introduce multigrade teaching into the pre-service teacher education course at Malcolm Moffat Teacher Training in Zambia. According to Little (2004), in Sri Lanka from 2003, Bachelor of Education students at the University of Colombo will be trained in the theory and practice of multigrade teaching. They will undertake surveys of the needs for multigrade schools and classes and will also undertake action research in multigrade classes.

The above explanations unanimously expressed by these multigrade analysts clearly show what should be considered as key aspects for effective multigrade teaching. In turn policymakers and educational officials need to take multigrade teaching seriously.

2.7.2.2 In-service training programmes

It has been highlighted that one of the problems faced by many teachers working in multigrade teaching situations is that they are not provided with the kind of intensive in-service teacher training they need (UNESCO, 1989). According to Little (2004) there are several examples of in-service training courses (both self-study and face-to-face) that address the needs of multigrade teachers. For example, the Commonwealth Secretariat has developed a set of training modules that can be used both for self-study and face-to-face training programmes. The District Primary Education Programmes in various states of India have, in recent years, organized in-service training for multigrade teachers. Furthermore, many Non-Governmental Organizations working in rural areas in India train teachers to work with combination grades in primary schools (e.g. CARE, India. In the context of Sri Lanka, various booklets have been produced by teacher educators for in-service training, most produced by the National Institute of Education. Furthermore, handbooks have been written for trainers in Bihar, India (Shabnam, 1989 quoted in Little, 2004).

In some contexts' teacher training programmes are offered through distance learning. There are several difficulties in regard to remote rural teachers' continuous professional development in contexts like Greece. For instance, offering in-service training seminars to teachers from remote small schools is perceived as a demanding task for educational authorities. Koulouris (2006) found that in some instances distance learning is costly for teachers teaching in remote schools and sometimes ended up to be impossible. Furthermore, there may not be a colleague available to replace them during their absence. Koulouris (2006) asserts that in order to meet this shortcoming, the use of different forms of technology-supported learning and distance education models are advocated for the enhancement of quality and accessibility of teacher training programmes in rural areas. In this project the content of training was delivered via different technologies that is, from conventional seminar-type lessons to classroom observation at a distance.

Constantinindi and Tsolakidis (2006) confirm the above account. According to these scholars one of the findings of a multigrade case study conducted by the University of Aegan in Greece, related to training issues; the study found that there was no special multigrade training. When teachers are first appointed in a multigrade teaching environment, there is not even a previous seminar training them in special multigrade teaching conditions. Teachers' advisors, that visit schools at regular interspaces, are not usually specialized in multigrade teaching. As a result, multigrade teachers need to solve their teaching problems on their own or from advice from other experienced multigrade teachers.

Constantinindi and Tsolakidis (2006) confirm that there are several training projects that aim to train multigrade teachers in situ, that is without their needing to leave school and attend training. The University of Aegan has participated in and completed the training of a number of distance multigrade teachers (MUSE, COMNIUS, DIAS, NEMED, and RURALWINGS). In that way multigrade teachers gain the training necessary to teach best practices in methodology and Information Communication Technology implementations. In the light of this account, education through satellite telecommunication can play a significant role in bridging the digital divide. It should be noted that in developed countries such as Finland in-service training for multigrade teachers is conducted through the use of satellite communications. In relation to the above in-service teacher programmes offered in various contexts in both developed and developing countries, it could be argued that all of them are likely to support both trained and untrained multigrade teachers. In turn these in-services or support programmes might lessen significantly the multigrade teachers' workload. Furthermore, it is speculated that the negative attitudes of the teachers towards multigrade teaching would change.

It is indicated that teachers in multigrade settings lack pre-service training. There are few manuals available specifically for multigrade teachers (Little, 2001) to assist in teacher developmental programmes. Berry (2001:3) in order to improve training programmes for multigrade teaching he has listed four other important

manuals as guidance for multigrade teachers. Berry has listed these below together with a brief annotation for the content of each. These are listed below by Berry (2001: 3) together with brief annotations:

- UNESCO/ APEID (1988) *Multiple class teaching in primary schools: a methodological guide*. This is a synthesis of material from guides produced separately in India, Japan, Malaysia and Nepal. Although it is full of practical advice on teaching in multigrade classes, it is probably not intended for use as a primary teachers' handbook as such, but rather as a resource for the production of such a book, or other teacher materials, in other countries. Principles and practical suggestions are presented on school and classroom organization, teaching strategies and techniques, materials production, and assessment and record-keeping.
- Miller (1989) *the multigrade classroom: a resource handbook for small rural schools*. This handbook was written to review current research on multigrade instruction, to identify key issues faced by a multigrade classroom and teachers, and to offer novice teachers a set of resource guides for improving instructional quality.
- Collingwood (1992) *Multiclass teaching in primary school: a handbook for teachers in the Pacific*. This book is full of practical suggestions for teacher's intention for use as a handbook in a five day in-service workshop for multigrade teachers.
- Birch and Lally (1995) *Multigrade teaching in primary school. A monograph providing a theoretical overview of multigrade teaching as well as practical guidance*. The document draws on Vietnam as its context, but has wider applications to Asia and the Pacific. In its overview it stresses the political nature of all education and promotes a paradigm shift in educational thinking, teacher education, the role of pupils, parents and on issues relating to quality and evaluation. The monograph also addresses practical issues such as organizing the curriculum, teaching-learning strategies, material development and teacher training.

Little (2001) also identifies a manual written by Shabnam (1998) and the Commonwealth Secretariat (1997).

In order to achieve positive results in the professional development of multigrade teachers, Pridmore (2004) points out that pre-service education needs to be expanded to help multigrade teachers to manage student diversity. Teachers who are provided with in-service training programmes in their contexts such as distance learning programmes will very likely see that their problems in handling multigrade classes will be reduced and their negative perceptions towards multigrade teaching will change.

It is also of the utmost significance for this study to find out what has been done in the context of South Africa to equip those teachers who are engaged in a multigrade setting.

Rural Multigrade School Intervention

Multigrade literature suggests that South African teachers have never been trained for multigrade teaching and they still teach classes as if learners are all in a single grade class (Jordaan and Joubert, 2007). Some multigrade scholars (Brown, 2007; Mathot, 1998) concur with the above assertion expressed by Jordaan and Joubert, (2007). The Western Cape Department established a strategy to improve multigrade teaching which was called Multigrade Rural Schools Intervention (MGI). The intervention focused on classroom management and instructional strategies in-service training programmes, ICT also concentrated in mental maths (Jordaan, 2006 cited in Jordaan and Joubert, 2007:6). The curriculum targets six areas which include:

- The configuration of learning spaces and classroom organisation.
- Classroom routines and disciplines
- Curriculum structuring and planning
- Teaching strategies
- Peer tutoring

What is of utmost interest in this intervention is that Economically More Developed Country (EMDC) officials are also trained to provide 'ongoing support' to teachers. Expected results are that quality of teaching in multigrade schools will improve as well as learner response and performance in reading, writing and mental maths.

Deducing from the above evidence, it could be argued that definitely, if such interventions or courses could be applied in other provinces in the South African context, similar or more significant outcomes could be achieved. Moreover, the negative attitudes of multigrade teachers would change owing to the support they receive.

2.7.2.3 Curriculum

Primary Curriculum documents according to the UNESCO report (1989) usually include or are supported by a list of minimum learning competencies (MLC), which are analyzed into objectives appropriate to each grade level, together with suggestions on a methodology to achieve these. Little (1995) and UNESCO (1989) argue that these have not been specifically designed for use by teachers in multigrade schools. This highlights that national curriculum developers and teacher educators give relatively little attention to the needs of teachers and students in multigrade settings (Little, 2004). Research evidence suggests that teachers in multigrade settings struggle to deliver a national curriculum that has been designed for monograde schools whilst teacher training rarely addresses the needs of multigrade classes (Berry in Little, 2001; Kyne, 2005; Little, 2004; Mathot 1998; Ninnes, 2006).

Multigrade analysts (Kyne, 2005; Mathot, 1998; Ninnes, 2006) argue that monograde curricula cannot be delivered in a classroom context that is multigrade. According to Little (2006) to meet these challenges education officials suggest that multigrade teachers should adapt curriculum materials to suit their circumstances. Little (2006) argues that in settings where resources are few, life is extremely hard

and teachers isolated, therefore effective curriculum adaptation is unlikely to occur and certainly not on a large scale. Little (2005) and McEwan (2008) strongly emphasize that curricula premised on a singlegrade school structure, needs to be adapted to suit multigrade requirements. Little (2005) strongly recommends that curriculum adaptation should not be only done by teachers, it should be undertaken jointly by both teachers and they should be supported by curriculum experts from National level. Little believes that four curriculum adaptation strategies have been shown to be effective in multigrade classrooms. Little (2006) cited the following curricula adaptations below:

Curriculum adaptation

Little (:13) (2005:13) identifies four curriculum adaption strategies:

- Multi-year curriculum spans. Units of curriculum content are spread across 2-3 grades rather than one. All learners work through common topics and activities.
- Differentiated curricula. The same general topic/theme in the same subject is covered with learners. Learners in each grade group engage in learning tasks appropriate to his/her level of learning.
- Quasi monograde. The teacher teaches grade groups, in turn, as if they were monograded. Learners follow the same or a different subject at the same time. Teachers may divide their time equally between grade groups. On the other hand they may deliberately divide their time unequally, choosing subjects or tasks within subjects that require different levels of teacher contact.
- Learner and material centered. This strategy depends more on the learner and learning materials than on teacher input. The curriculum is translated into self-study graded learning guides. Learners work through these at their own speed with support from the teacher and structured assessment tasks. Learning is constructed involving a relationship between learner, learning materials and teacher.

In relation to curriculum adaptation the Escuela Nueva Programme in Colombia is an example of a radical programme and is stipulated below:

The best known example of this strategy is the Escuela Nueva programme in Colombia where a more radical approach to curriculum adaptation has been implemented in rural primary schools for the past thirty years. The National Curriculum, which is monograded, has been reorganized to recognize the diversity of grade levels and also the diversity of learner ages, ability and temperament and the consequent need for teachers to deliver a differentiated curriculum to meet individual needs.

To provide this, the curriculum for each subject has been developed as a series of graded modules through which student's work individually using learner guides with built-in formative assessment to support their learning. Pridmore (2007) points out that in this way a student can be working at different grade levels in different subjects at the same time. In practice, students do not work on their own all day, but work in small groups and in twos and threes on the module activities. This programme is used extensively. Evidence in research literature shows that this programme has been evaluated as effective (Colbert, Chiappe and Arbodela cited in Pridmore, 2007). This model lends itself to adaptation and has been taken up in other countries (e.g. Brazil, Guatemala, Panama, Chile, Nicaragua, Guyana, Uganda and the Philippines).

2.7.2.4 Lack of learning materials

Research evidence in multigrade literature reveals that in both developed and developing countries a large number of teachers teaching multigrade classes lack appropriate resource materials. Multigrade researchers (Berry in Little 2006, Kyne, 2005, Little, 2005, Veenman, 1995) found that learning material used in multigrade classes has been designed for monograde classroom.

Kyne (2005) points out that multigrade teaching can be more or less difficult, depending on the context in which it occurs. For instance, Little (2001) found that rural schools in industrialized countries generally have adequate economic

resources. For instance teachers and learners in multigrade settings in industrialized countries such as Finland, the USA and Canada benefit well from well resourced classrooms, with access to the internet and multimedia resources compared to their counterparts in undeveloped countries. In contrast some teachers in isolated rural areas of Turkey spend part of their salary on basic needs like stationery-notebooks, pencils, crayons, storybooks and other materials (Aksoy, 2007). Sometimes a parent is unwilling or unable to provide textbooks and other stationery (UNESCO, 1989) resulting in low participation in instructional activities by some people in each grade.

This lack of teaching and learning materials suitable for multigrade classes is a challenge faced by many multigrades as they find it difficult to use teaching and learning materials designed for single grade classes. In turn this has an impact on how multigrade teachers perceive multigrade teaching. Most significantly their perceptions towards multigrade teaching tend to be negative.

Effective learning materials

Little (2005) has cited the need for effective learning materials for learners in multigrade settings. Little (2005:16) in her document gives the example of the Escuela Nueva programme whereby study guides have been provided for each learner for each of the core curriculum subjects. Little also draws attention to the fact that textbooks are not designed for catering learner –centered instructional strategy. Little (2006) suggests that successful strategies for multigrade teaching also depend on teacher beliefs about how learning occurs. Therefore the three-way nature of the relationship between learner, teacher (whether adult or peer) and materials needs to be at the forefront of teachers' minds as well as curriculum developers. On the basis of the useful learning materials suggested above, it is most likely that if all teachers engaged in multigrade settings could be provided with these suggested learning materials, their teaching and learning strategies would improve. This would also reduce the workload in the multigrade classroom.

2.7.2.5 Assessment

Literature research suggests that multigrade teaching is often regarded as the target of some complaints, the cause of some confusion and a source of some problems (UNESCO, 1989:5). In many developed as well as developing countries there is no specific policy or guidelines provided for multigrade teachers on how to assess their students in multigrade classes (UNESCO 1989). Evidence in multigrade research confirms that one of the challenges that multigrade teachers face, is the pressure to prepare one group of learners within the multigrade class for critical public assessment (Little, 2005). Existing tools and methods for pupil assessment need to be further improved and refined. Hargreaves (2001) claims that systems of assessment whose primary purpose is to promote, select or certify pupils, do not necessarily support students in their learning and they may not support teachers in finding out how each learner is learning and what helps the pupil learn, except to record how far the pupils have progressed through the prescribed learning materials. Hargreaves (2001) also argues that it may be assumed that all assessment indirectly supports pupil learning at least as a motivating agent, but he stresses that an individual's learning does not always receive emphasis; it may in fact suffer.

Hargreaves (2001) is of the view that the enhancement of learning is an aspect of formal education which should be given emphasis and should be reflected in assessment and practice. He found that in the multigrade classroom, the teacher's shortage of time to devote to any one grade within her/his class was a major difficulty. For this reason, in the multigrade classroom, the teacher has a more urgent reason to consider a variety of assessment possibilities, which enhance learning directly. According to Little (2005) assessment is used for many purposes such as selection of individuals for further education and jobs, the monitoring of performance of teachers, schools and systems usually for accountability to the promotion of learning and for the promotion of learning through formative assessment.

Hargreaves (2001) suggests that in the multigrade classroom where pupils are forced to take responsibility for their own learning and assessment because the teacher cannot attend to all grade levels at once, pupils have a prime opportunity to enhance their own learning processes and so improve their achievements. Furthermore, independent learning may improve motivation for achievement because pupils feel a sense of direction and ownership of their work. Little (2006) asserts that the main purpose for formative assessment is to promote learning in the classroom while on the other hand summative assessment is for monitoring as well as accountability of learners' performance.

Even if there is considerable learning diversity in monograde classes, teachers often treat learners as if they were the same level and move learners through the curriculum at the same pace, irrespective of whether some learners have not participated in school through absence or of lack previous mastery. Although multigrade settings lend themselves to, or are consistent with, regular and frequent formative assessment designed to improve differentiated paces of learning, they do not guarantee that formative assessment will be undertaken.

Literature shows that assessment of different grades for a multigrade teacher poses a great challenge as the teacher is faced with more than two or more grades. As a result teachers tend to give more attention to grades that are writing external examinations. As this is a burdensome exercise teachers perceptions towards multigrade teaching are likely to be negative.

- Suggested strategy of assessment

Little (2005) recommends the Escuela Nueva Program as a good example of assessment she claims that from its inception the curriculum designers of the Escuela Nueva programme worked hard to build assessment tasks into learning guides and to design levels of mastery required before the learner moves on. In this programme, learners are guided by their learning texts not by their teacher, towards assessment tasks, to record achievements and to determine progression

to the next learning unit. Should the learner not achieve mastery, the teacher decides on the remedial work required.

Little (2006) further draws attention to the example of the Rishi Valley programme. In this program, designers built evaluation and remedial activities deliberately into the range of learning activities at each and every milestone of learning achievement. Little also draws attention to the adaption of the curriculum for teaching health in Vietnam. Whilst adapting the health curriculum, developers built frequent and regular formative assessment tasks into the series of steps that underpinned the enquiry-based pedagogy.

Little points out that in none of these cases was the decision to use formative assessment left to the discretion of the multigrade teacher. Most importantly, assessment activity is built into the design of the learning materials. Results of using Escuela Nueva Programme as well as the example of the Rishi Valley Programme discussed by Little (2005) have proved to be effective and successful for learner assessment. The interesting part is that the teacher's work is lessened in guiding learners in their tasks and in recording learner achievement and progression. The importance of these assessment programmes is that the learner works at his/her own pace.

According to Little (2006), formative assessment is most valuable when it assists the teacher and the learner in the diagnosis of learning difficulties. But where the organization of learning is focused on the individual as in Escuela Nueva and Rishi Valley programmes, the likelihood that a teacher will guide a learner to remedial work increases. Where learners remain dependent on the teacher in the definition of the pace of learning within whole classes and groups as in the Vietnam case, then the likelihood of individual learners being guided to remedial learning activity may be less. But Little (2006) cautions that neither proposition has been explored in research literature; therefore both remain hypothetical.

Another advantage of formative assessment is that it has the potential to change the way in which learners repeat lessons and grades. In multigrade settings that adopt a learner-centered approach to curriculum progression, learners who fail a promotion or progression test may repeat some subjects but not at all and some parts of the curriculum material but not all (Little, 2006). Hargreaves (2001) suggests that training, guidance and exemplification are necessary if teachers are to be able to pursue the assessment possibilities whereby students would benefit in their learning.. Juvane (2005) writing in the context of Africa; also suggests that effective implementation of multigrade teaching requires support structures at regional / district / and teacher / classroom level as well as a definition of minimum standards and benchmarks against which pupils' learning achievements are assessed.

As mentioned earlier, there is no policy or guidelines that cater for assessment strategies in multigrade settings and this in turn increases the teacher workload. If effective formative assessment strategy for multigrade teaching could be implemented and practised by all multigrade teachers in their classrooms, there would be a change in their teaching practice and perceptions.

2.7.3 Evidence of challenges

Little (2005) has also studied challenges of multigrade teachers in London. According to Little's (2005:59) study interviewed London multigrade teachers included these challenges.

- The age-graded structure of the National Curriculum and the associated expectations of curriculum coverage and assessment/ achievement targets (24/47).
- The range of ability of pupils in those multigrade classes where learners have been assigned on criteria other than ability homogeneity (14/47).

- The pressure to prepare one group of learners within the multigrade class for critical assessments (11/47) (in this case, Key Stage Tests for Years 2 and 6).

Recent studies of teachers in developing countries highlight their generally negative perceptions of multigrade classes and multigrade teaching. In a study of teachers in the Nuwakot and Kavre districts of Nepal, 50/56 multigrade experienced teachers, believe that they are presented with more difficulties in comparison to monograde teaching (Suzuki, 2004 cited in Little 2005: 11).

Little (2005) was also keen to know the challenges facing multigrade teachers in the developing countries. This is Little's report as cited in Ames, (2004): In the Peruvian Amazon multigrade teachers perceive the monograde class as the desirable norm, and the multigrade as the 'second class' necessity. Teachers feel unprepared to work in a multigrade classroom, judge that children do not 'get the same 'as in a monograde classroom and report that they have insufficient educational materials to support learning in the multigrade classroom. The isolated and isolating conditions of work and the poverty of the communities served by multigrade schools reinforces teachers' negative attitudes to school

Little (2005) while studying the challenges of multigrade teachers in developing countries she found that in Sri Lanka, attitudes of multigrade teachers to multigrade teaching are also generally negative. Vithanapathirana (2005) carried out a study of multigrade teaching in remote schools and reported that a high level of teacher absenteeism was a problem in her country. She found that teachers' attitudes to multigrade teaching were frequently negative, because they considered themselves to be at disadvantaged in terms of their workload compared to teachers in monograde schools. Teachers had not received any multigrade training and, in the absence of strategies to manage multigrade classrooms, they resorted to giving direct teaching to one grade whilst the other students sat idly waiting for their turn.

Teachers in the study are reported to have very little supervision and time-tabling was very ad hoc with a highly flexible and 'fluid' daily routine. Vithanapathirana (2005) found that students had little motivation to learn. She concluded that education authorities were deliberately ignoring the multigrade situation. Pridmore (2004:5) in his keynote address reported that Vithanapathirana (2005) also conducted action research with teachers to improve the quality of teaching in mathematics and found that teachers' attitudes to multigrade teaching became more positive once they realized that there are strategies available to improve student achievement outcomes and lessen the teachers' burden of intensive lesson planning for several grades.

Little(2005) citing (Berry in Little,2006) also reports that in Turks and Caicos Islands multigrade teachers are faced with the burden of lesson planning for different grades. As a result they hold negative attitudes towards multigrade teaching. -Little(2005) citing earlier studies carried out by UNESCO/APEID(1989) Birch and Lally(1995) reports that a number of the challenges faced by multigrade teachers most of them were found to be related to the remoteness of the contexts in which multigrade schools are located. They are listed as follows:

- The non filling of vacancies in multigrade schools in the rural areas.
- The absence of teacher accountability in remote multigrade schools.
- The 'inattentiveness' of education officers to the needs of multigrade teachers and schools (UNESCO/APEID 1989: 9-11).
- Lack of financial incentives for teachers to teach in remote schools.
- Inadequate provision for housing, employment for spouses and children's education.
- Absence of promotion incentives.
- Restricted opportunities for in-service training.

Collingwood (1991) drew specific attention to the difficulties faced by multigrade teachers in small schools. Collingwood (1991: 2-3) found that most of the countries in the world had problems like:

- Reduced instructional time for teachers;

- Curriculum materials designed for one year group only;
- Lack of self-instructional material;
- Inadequate pre- and in-service teacher training in the specific skills that are required;
- Wide range of abilities and interest levels in one classroom;
- Exam pressure, forcing teachers to concentrate on exam classes only;
- General shortage of teaching and learning resources and,
- Too many learners in one classroom.

Evidence of various challenges faced by the multigrade teachers in both developed as well as in developing countries illustrate the paradox, (Pridmore, 2004) the gulf between what is needed for quality multigrade education and what is provided. Pridmore (2004) further argues that multigrade teaching, which has the potential to deliver 'education for all' is in practice delivering education (of sorts) only for some, hence the teachers' lack adequate professional training and their negative attitudes. In general, teachers are said to prefer to teach single grades because multigrade classes mean more planning, preparation, organization and work, catering for a wider range of abilities and maturity, less time for meeting individual student needs for remediation, less time for reflection on teaching, lack of relevant training, and less satisfaction with their work (Veenman, 1995; 1996; Mason and Burns 1995; 1996 cited in Russell et al., 1998). Furthermore it is not surprising that multigrade teachers often have low self-esteem and hold negative attitudes towards multigrade teaching, dismissing it as a poor substitute for the monograde teaching provided in larger, better-resourced classrooms in more urban areas (Little, 2004). Pridmore (2007) further asserts that these negative attitudes like frequently shared by education officials and even by the parents of learners.

Little (2005) recommends that multigrade teaching should be strengthened by the following: increased awareness, curriculum adaptation, and transformation of the philosophy of learning, learning materials, the social organization of learners, teacher preparation and assessment of learning.

2.8 Social and personal learning effects

Regardless of whether multiclass rooms are created for pedagogical reason; they can be seen as assets that promote quality learning. Reviewed literature according to Miller (1991) shows that in affective and social indicators, learners in monograde classes. Little (2005:9) cites the following examples of studies:

2.8.1 Social and personal learning effects in developed countries

Little (2005:9) reports that Pratt (1986) identified 15 studies that addressed, variously, children's friendships, self concepts, altruism and attitude to school. Overall he claims that the socio-emotional development of learners in multigrade groups is either accelerated or showed no difference when compared with learners in monograde groups. Little (2005) further reports that Pratt (1986) located 15 studies between 1983 and 1984 which studied the effects of multigrade and monograde grouping on socio-emotional variables, most commonly, self-concept and attitude towards school. Nine of the fifteen favoured the multigrade groupings while six of his studies were inconclusive. Miller's (1991) review of 21 studies confirmed Pratt's (1986) conclusion. Little (2005:9) also reports that Ford (1977) in her review of studies from the United States and United Kingdom lists a number of claims which have not been made for multigrade, among them:

- i) A greater sense of belonging and confidence
- ii) Relationships with a wider age range of children
- iii) Well-adjusted personality
- iv) Good work attitudes and high aspirations
- v) Better teacher-student rapport
- vi) Low stress
- vii) Stronger self-concept of older, slower students
- viii) Better personal and social development.

Mason and Burns (1994) found that the evidence in Miller's (1991) findings did not favour either arrangement in terms of affective qualities. Veenman (1995) also

reports no significant differences in affective measures between the two groups, that is, monograde and multigrade settings.

Additionally, a number of studies found job satisfaction to be an area of concern for teachers in multigrade placements. For this reason, Mason and Burns (1994) make the following suggestions for supporting teachers in multigrade classes:

- Provide sample staff development and philosophical orientation.
- Supply alternative curricula and supplemental materials.
- Encourage collaborative teaming approaches.
- Promote different scheduling and evaluation system.

2.8.2 Social and personal learning effects in developing countries

Little (2005) on comparing the number of studies on social and personal learning effect she found that studies performed in developed countries outnumber those performed in the developing countries. Little (2005:9 citing Colbert, Chiappe and Arboleda 1993) reports that in the Escuela Nueva programme credited the programme with positive effects on self-esteem and civic behaviour. Little (2005) further cites Psacharopoulos, Rojas and Velez (1993) and reports that a recent study which was undertaken confirmed civic behaviour only but not self-esteem. - The study was conducted by Colbert, Chiappe and Arboleda (1993).

A more recent evaluation compared proxy measures of peaceful student interaction across schools that implement the Escuela Nueva strategies (Little, 2006; McEwan, 1998). Peaceful social interaction is operationalised through questions designed to measure its four dimensions: active respect, universal solidarity, air play and equity.

Children in Escuela Nueva schools demonstrated higher levels of peaceful social interaction than children in conventional schools. McEwan (2008) reports that in the Escuela Nueva programme governments and committees involve students in the management and organization of the school, particularly in the Colombian and

Gaute Mala versions. According to McEwan the main idea is to equip students with cooperative and democratic attitudes towards their learning.

Comparisons between alumni of Escuela Nueva and conventional schools demonstrated differences in their attitudes to democracy. Escuela Nueva alumni were more inclined to be members of voluntary organizations (as stated above) and more inclined towards participatory democracy; on the other hand, alumni from conventional schools were more inclined towards representative democracy. Little (2006) raises concerns that these findings are most likely to be attributable to the active promotion of democratic behavior in Escuela Nueva classes rather than the multigraded composition of classes. Psacharopoulos et al., (1993) cited in McEwan, (2008) observed that the Escuela Nueva prevents student drop-outs in upper grades or induces some students to re-enter primary school.

Bray's (1987) cited in Little (1995) under non cognitive outcomes also undertook a study in Indonesia in Central Kalimantan. Bray's (1987) brief account of the Kalimantan small school's programme suggested that children in multigrade small schools working with self-instructional and programmed material were more self reliant than children in monograde schools.

On the basis of these claims, it appears that students in multigrade classes do as well as students placed in single grade classroom. Little (2005; 2006) argues that it is safe to say that the multigrade model has no negative effect on the affective domain for students. There are many rewards for teaching in a multigrade classroom, but there are challenges too. Miller (1991) notes that instruction; classroom organization and management are complex and demanding. Miller (1991) contends that a teacher cannot ignore developmental differences in students nor be ill prepared for a day's instruction. Demand on teacher time requires well developed organization skills. In learning that social interaction of learners in multigrade settings results into a number of social benefits, suggests that if multigrade teachers can be equipped with the necessary skills there could be more benefits.

2.9 Cognitive achievement outcomes

Research on multigrade literature shows that the most of multigrade classes have been established for pedagogical reasons (Bunswic and Valerien; 2004: Little; 2001; 2005) on the other hand Little (2005) notes that these multigrade classes can be seen as assets that promote learning and teaching. This fact has been supported by a number of cognitive achievement outcomes gained in multigrade settings in developed as well as developing countries. Little (2001:486; 2005:7-9; 2006:19-20) has listed cognitive outcomes below.

2.9.1 Studies in Developed Countries

According to Little (2001:486; 2005:7-8; 2006:19) Pratt (1986) reviewed thirty experimental studies conducted between 1948 and 1983 in the United States of America and Canada. All the multigrade classes contained an age range of 2-3 years. The achievement variable studies were usually reading and mathematics. There was no general pattern in the achievement result (usually, but not always, achievement in maths and reading). Learners in multigrade classes showed higher achievement in maths and reading in ten studies, worse in five and no difference in thirteen.

Miller's (1991) review of 21 studies in the USA confirmed that learners in multigrade classes performed no better or worse than students in monograde classes (Little 2001:486; 2005:8; 2006:19).

Veenman's (1995) review of studies, mainly from OECD countries, distinguished achievement results in different types of monograde and multigrade class.

- Multigrade classes, formed of necessity, from imbalanced or inadequate enrolments
- Single grade classes and
- Multiage, non-graded classes, formed for pedagogical or philosophical reasons (Little, 2001:487; 2005:8; 2006:19).

Little (2005; 2006) reports that learning in multigrade or multiage classes was neither inferior nor superior to that in monograde classes. According to Little (2005; 2006) Mason and Burns (1997) confirmed the general picture of no consistent cognitive achievement differences.

Hattie (2002 cited in Little, 2006) also suggests that there is no consistent evidence to argue that multigrade or single grade teaching is more effective than the other. Ireson and Hallam (2001 cited in Little, 2006) report no consistent effects of ability – grouped single grade classes on achievement compared with heterogeneous (mixed ability) groups within single grade classes. Classroom effects are much more likely to be attributable to the quality of teaching and the expectations of principals, parents and pupils rather than to the composition of classes.

2.9.2 Studies in developing countries

As mentioned earlier Little (2005:8) found that studies on cognitive achievements in comparing multigrade and monograde classes in developing countries are few. In number when compared to developed countries. She cites the following cognitive achievements.

According to Little (2005:8; 2006:20) in Burkina Faso and Togo, Jarousse and Mingat (1991) studied achievement in the French language and maths of students in Togo and Burkina Faso. According to Berry (2001:6) in both countries they found that students in multigrade classes outperformed those in monograde classes. These differences were significant for students in both grade 2 and 5. The multigrade classes were mostly located in rural areas, indicating that they were probably in multigrade school type contexts.

In Colombia Escuela Nueva has been acknowledged as the pioneering reform (Mc Ewan, 2008: 6) and is often cited as best-practice in rural school reform. Mc Ewan

(1998 cited in Mc Ewan 2008) analysed a representative sample of all rural schools in the Pacific region of Colombia, collected in 1992 by the official Ministry of Education assessment system. The analysis found that Escuela Nueva grade 3 learners scored 0, 26 to 0, 45 standard deviations higher in Spanish and Maths respectively. Grade 5 learners also performed better in Spanish. Little (2005:8; 2006:20) reports that in Pakistan, Rowley (1992) showed cognitive differences in favour of monograde schools. In the Turks and Caicos Islands, Miller, Forde and Smith (1994) found that learners in multigrade schools consistently outperformed those in monograde schools in the terminal grade of primary school.

Berry (2001:6) also studied student achievement in the primary school system of Turks and Caicos Islands. He focused on reading score data obtained during a three year in-service teacher education project conducted in a Technical Correspondence Institute between 1993 and 1996. The project focused on the support of teaching and learning in all primary schools. The data analysis shows that pupils in multigrade school in a TCI performed better on test reading than those in monograde schools but the advantage was greatest in the lowest achieving learners.

Berry (2001) in his study on achievement affects in monograde and multigrade classes in the Turks and Caicos Islands explores the practices inside the classroom that might explain why low achieving students in multigrade classes perform better than low achieving students in monograde classes. According to Little (2006):

- Low achievers have opportunities to revisit material.
- When teachers interact with pupils it tends to be in the context of a small rather than large group
- Learners engage in more independent work in the multigrade class and as a result they learn how to learn
- There seems to be more opportunities for peer instruction.

Lungwangwa (1989 cited in Berry 2001) studied the impact of a pilot multigrade teaching project in Zambia. Berry further reports that case studies were conducted in the four schools. As part of the evaluation, the end of primary school test results in the schools was analysed. Lungwangwa reports that the proportion of students passing the test in the four schools is at least comparable to the national average, and in three of the schools well above it.

Little (1995) also cites cognitive study that was undertaken in Philippines. Cummings (1986 cited in Little, 1995) reports that positive results from the Philippines Project IMPACT were reported frequently (e.g. INNOTECH 1978). But Cummings cautions readers to interpret the results with care and he also raises questions about the background characteristics of the non-IMPACT schools and the students used for purposes of comparison. According to Little (1995 citing Cummings 1986:89) the educational and socio-economic levels of the students attending IMPACT schools were generally higher than those students in the non-IMPACT schools and teacher characteristics more favourable. The cognitive achievement scores were generally higher for grade 4 students but showed no differences for students in the higher grades.

Pavan cited in Little (1995) in his review of 57 Canadian and American studies, found that in 91 percent of the studies, students in multigrade classrooms performed as well as or better than students in single grade classrooms academically. Their greatest gains tended to be in language and reading. According to Little (1995) citing Pavan this higher literacy achievement is attributed to the integration of curricula and the construction of meaning where language skills and strategies are tools used to learn content.

Little (2006) points out that cognitive achievement gains in multigrade classes were also demonstrated in the action research undertaken in Sri Lanka and Vietnam. She notes that these two pieces of action research demonstrated how changes in lesson plans and small adaptations to the sequence of curriculum material changed the way that teachers used their time in class. In turn, this

raised the levels of cognitive achievement of learners in multigrade classes in comparison with learners in monograde classes.

2.10 Summary

The literature review provided a conceptual framework on the concept of investigating teachers' perceptions of the benefits and challenges of teaching and learning in multigrade settings. This study has been conceptualized and based on the theories of perception and perceptual experiences portrayed by the Gestalt theories.

These theorists believe that people do not experience life in isolated pieces, but see objects as perceived within the environment according to various elements united, as a global construct. The researcher looked at how Gestaltists study pattern perception, that is, how people organise perceptual experiences and their importance in believing that context was very significant in perception. The researcher looked at Lewin's Field theory which proposes that behavior is the result of the individual and his/her environment. In other words, this theory draws attention to the interaction between an individual and his/her environment. The environment in this case is the multigrade setting in which teachers work.

The researcher also looked at the various definitions of multigrade teaching and various interpretations explained by multigrade analysts in various contexts. What appears significant is that multigrade teaching is not universal but widespread. Even in the South African context there is no one unique definition or interpretation for multigrade teaching. Aspects like prevalence and conditions under which multigrade teaching takes place by multigrade advocates (Brunswick and Valerien, 2004; Little, 2005) have been discussed. The motive may be deliberate choice made for political or pedagogical reasons or could be borne out of necessity. The literature review showed teachers teaching in multigrade schools located in the rural areas of industrialized countries do far better compared to their counterparts

teaching in multigrade schools in rural areas in developing countries – they benefit from resources not available to their counterparts.

The study also looked at pedagogical practices in multigrade classes, that is, different instructional practices applied and classroom management practices. Various explanations and criticism have been suggested by multigrade analysts (Berry, 2005; Miller, 1991). The study also examined the benefits and challenges facing multigrade teachers in multigrade classroom contexts. Benefits of teaching and learning have been investigated in London (Little, 2005) and collated perceptions are reported by UNESCO/APEID (1989).

There is also evidence that the perceptions of multigrade teachers can influence attitude. It should be noted that in the South African context, nothing has been said in literature about assisting or supporting multigrade teachers. The researcher discovered no interest or impact on programmes and strategies from the Department of Education officials to help, encourage or to support multigrade teachers. Aspects such as cognitive achievements and social and personal learning effects were examined and discovered to be dissimilar; they seemed to differ according to the countries where the tests had been performed. According to the findings provided by different multigrade analysts, there seems to be no conclusive differences between developed and developing countries. It was found that in the context of South Africa, most multigrade teaching arose out of necessity; a feature of rural areas that is rural townships and commercial farms (Brown 2007, Joubert, 2007; Mathot, 1998).

The studies find that multigrade teachers feel overworked (Joubert, 2004; Mathot, 1998: 12). This study also looked at how Little (2005) explains conditions for ensuring or strengthening multigrade modality to the benefit of learners, aspects such as: increased awareness, curriculum adaptation, transformation of philosophy of learning, learning materials and teacher preparation and assessment systems. The study focuses on teachers' perceptions of the benefits and challenges of teaching and learning in multigrade settings and describes the

responses of the subject advisor regarding the issues raised by multigrade teachers and their implications for sustainability of multigrade teaching in schools.

The next chapter outlines the research design and methodology. It explores research questions, research paradigm, research design, research methods, sample and realization of samples, data collection, data processing/analysis, measures to ensure trustworthiness, and ethical considerations.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The previous chapter reviewed the literature on the multigrade teacher perception of the benefits and challenges of teaching and learning in a multigrade setting. It concluded by noting the documented evidence of both benefits and challenges in developing and developed countries. In this chapter methods to investigate benefits and challenges of teaching and learning in multigrade settings are explained. The chapter presents the research design and methodology. This chapter explains the type of research design and methodology applied in the study.

The main research question that serves as a guide to the aims of this study is the following: what perceptions do multigrade teachers have regarding the benefits and challenges of learning/teaching in multigrade settings, and what tools do they recommend towards promoting quality teaching and learning in a multigrade classroom setting?

This chapter provides a description of the logic behind using the selected methods and techniques for the present study and a narrative of the design and its appropriate methodology. Methodology refers to the body of methods used in a particular activity or research process. Research methodology includes variables such as target population, size and description of the sample, and research instruments used. It is the blueprint for the data collection, measurement and analysis of the data in order to achieve the objectives of the study. Thus, while it outlines details of the study, the design of the research, the decisions regarding population and sampling procedures followed, methods employed to collect data and procedures used to analyze the data, the primary focus of this study is to

generate empirically tested results and conclusions on the perceptions of multigrade teachers and the benefits and challenges of teaching and learning in multigrade settings.

3.2 Research paradigm

The study adopted an interpretive paradigm. The first thing a researcher must consider in research design and methodology is to outline the paradigm that underpins the study (De Vos, Fouche and Delport, 1998). A paradigm according to Babbie (2001: 42) as quoted by De Vos et al., (1998) is the fundamental model or frame of references used by researchers to recognize their observations and reasoning. Creswell (1998: 74) as also quoted by De Vos et al., (1998) adds that all qualitative researchers approach their studies with a certain paradigm or world view.

Yin (1989) suggests that when the purpose of the study is to understand a phenomenon, the appropriate research paradigm is interpretivism. This suggests that although other research paradigms exist (Saunders, Lewis and Thornhill 2003: 125) they were automatically excluded from consideration for the study because the knowledge interest of this study was to understand multigrade teacher perceptions. The study was conducted in the interpretivist paradigm, where the researcher sought to understand the phenomena. Two reasons justified the choice. First a qualitative approach allows the researcher to enter participants' life-worlds and study their lived-experiences (Brown and Schultze, 2001). This means that dynamic, holistic and individual aspects of the teachers' experiences were captured. This research was keen to capture this holistic aspect in entirety, within the context of the teachers' experience.

Interpretivist researchers are interested in the meaning that people give to phenomena. Phenomena in this study refer to teachers' perceptions of the benefits and challenges of teaching and learning in multigrade settings. Interpretive paradigm involves qualitative research. In this paradigm the

researcher interprets the social environment and looks at human behavior. In this case, human behavior referred to teachers' perceptions' of benefits and challenges of teaching and learning in a multigrade setting. Through this paradigm the researcher was able to get rich, in-depth meaning of the 'lived-experiences' of teachers in a multigrade environment. Interpretive studies generally attempt to understand phenomena through the meanings that people assign to them. They also differ from positivist researchers in that they regard people as agents who take meaningful, reflective actions, and that these meanings, rather than only outward behaviours, are worth researching. Within the interpretivist paradigm meaning is constructed by individuals and groups, in interaction with each other and language (van Rensburg, 2001: 16).

In the light of these perspectives, the essence of the researcher is to enter into the participants' everyday life-worlds to explore and understand their 'lived experiences' and their perceptions of the benefits and challenges for teaching as well as learning in multigrade settings (Brown and Schultze, 2001). Knowledge interest in this paradigm will not be technical, that is, to inform interventions through research, but rather to develop a deeper understanding of a situation, person, community or other cases.

Interpretivists researchers reflect an interest in contextual meaning-making, rather than generalised rules. Instead of surveying large groups, they rather prefer individuals or small groups, in their natural settings, using in-depth case studies. Interpretivists would rather look for rich, detailed information of a qualitative nature through in-depth interviews, observations or interpretation of documents, artifacts and other sources (van Rensburg, 2001).

It should be noted that in this paradigm, the researcher interprets the social environment and looks at human behavior. In this case the social environment refers to multigrade settings, and human behavior refers to the teachers' perceptions of the benefits and challenges of teaching and learning in a multigrade

setting. Within this paradigm dynamic holistic and individual aspects of the teachers' lived experiences will be captured within their context.

The qualitative paradigm differs from the quantitative paradigm in a number of ways. It stems from an antipositivistic, interpretative approach. It is idiographic and is holistic in nature and aims mainly to understand social life and meaning that people attach to everyday life. McRoy (1995:2009 – 2015) as quoted by De Vos et al., (1998) further explains that the qualitative research paradigm in its broadest sense refers to research that elicits participant accounts of meaning, experience or perceptions. It also produces descriptive data in the participant's own written or spoken words. It thus involves identifying the participant's beliefs and values that underlie the phenomena.

McRoy (1995) in De Vos et al., (1998) states that the qualitative researcher is concerned with understanding rather than controlling measurement, and the subjective exploration of reality from the insider perspective as opposed to the outsider perspective that is predominant in the quantitative paradigm. As such, qualitative study is concerned with non – statistical methods and small samples are often purposively selected.

Babbie and Mouton (2005: 309) seem to agree with McRoy (1995) cited in De Vos et al., (1998) in many points. Their key points include the following:

- Research is conducted in the natural settings of social actors
- Qualitative research emphasizes process rather than outcome.
- The actor's perspective (the "insider" or "emic" view) is emphasized.
- The primary aim is in-depth ("thick") descriptions and understanding of action events.
- Understanding social action in terms of its specific context (idiographic motive) is more important than attempting to generalize to some theoretical population.
- The research process is often inductive in its approach, resulting in a generation of new hypotheses and theories.

- The qualitative researcher is seen as the “main instrument” in the research process.

3.3 Research design

A number of research designs fall within the interpretive paradigm. Saunders et al., (2003: 125) indicate that the research design chosen must suit the nature of the research being undertaken. Since the purpose of this study was to understand multigrade teachers' perceptions and the researcher was interested in gaining an in-depth understanding of teachers' perceptions of the benefits and challenges of teaching as well as learning in multigrade settings, a case-study design allowed the researcher to explore this understanding. Multigrade schools and multigrade teachers within these schools were selected in this study.

Robson (1993: 40) cited in Saunders et al (1997) defines a case study as the development of detailed, intensive knowledge about a single “case”, or a small number of related cases. The case study approach also has considerable ability to generate answers to the question ‘why’? as well as ‘what’? and ‘how’? Yin (1984: 23) defines a case study as an empirical inquiry that investigates a contemporary phenomenon in its real-life context by using multiple sources of evidence. Yin (2003: 1) acknowledges that as a research strategy the case study is used in many situations to contribute to researcher knowledge of an individual, a group and organizational, social, political and related phenomena. Yin (2003) further confirms that the case study method allows investigators to retain the holistic and meaningful characteristics of real-life events such as individual life cycles, organizational and managerial processes, neighborhood change, international relations, and the maturation of industries. A case study design may be exploratory, descriptive or explanatory. (Saunders *et al*, 1997; Yin, 1981a; 1981b cited in Yin 2003). According to Creswell (1998: 61) as quoted by De Vos et al., (1998) the exploration and description of these cases takes place using detailed in-depth data collection methods, involving multiple sources of information that are rich in context. These include interviews, documents, observations or

archival records. As a result, the researcher needs to access and gain the confidence of the participants. The product of this research is an in-depth description of or cases.

Yin (in Saunders, et al., 2003: 140) distinguishes between a single-case strategy and a multiple-case strategy by noting that in a single-case strategy a unique phenomenon is studied, whereas in a multiple-case strategy more than one case is studied; with this in mind the researcher conducted interviews in three multigrade schools using them as three cases. The multiple-case approach allows the researcher to establish whether the findings of one case occur in other cases. The researcher's purpose was to establish whether the findings from one school occur in other schools.

For this reason, the multiple-case study design was preferred in this study. The multiple-case approach would also give the researcher the flexibility to include subject advisors for curriculum development in the study. According to Herriot and Firestone (1983) as cited in Yin (2003), multiple-case designs have distinct advantages and disadvantages in comparison to single-case designs. The evidence from multiple-cases is often considered more compelling, and the overall study is therefore regarded as more robust. Yin (2003) suggests at the same time that the rationale for single-case designs usually cannot be satisfied by multiple cases. He also cautions that the conduct of a multiple-case study can require extensive resources and time beyond the means of a single student or independent research investigator.

Yin (2003) also raises the concern that every case should serve a specific purpose within the overall scope of inquiry. A major insight is to consider multiple-cases as one would consider multiple experiments – that is, to follow replication logic. In a multiple-case study, convergence can be achieved by asking about the same phenomenon across cases (Denzin, (1978) in Babbie and Mouton, (2005). Yin (2003) further suggests that the logic underlying the use of multiple- case studies

is the same. Each case must have similar results (a literal replication) or predict contrasting results but for predictable reasons (a theoretical replication).

As already mentioned earlier case studies are holistic or embedded although a design calls for multiple-case studies, this does not eliminate the variation identified earlier with single cases. The difference between these two variants depends on the type of phenomenon being studied and the research question. In order to conduct a case study a researcher must acquire skills for data collection. The next step discusses sample and realization of sampling.

3.4 Sample and realization of sampling

A sample is a small portion of the total set of objects, events or persons that together comprise the subject of one's study. Qualitative research often works with small samples of people, cases or phenomena nested in particular contexts. Therefore samples tend to be more purposive than random. Furthermore, in contrast to more quantitative approaches, samples may not always be pre-planned in advance, but may evolve once fieldwork has begun (Gray, 2004: 324). Random or representative sampling is not preferred because the researcher's major concern is not to generalize the findings of the study to a broad population or universe but to maximize discovery of the heterogeneous patterns and problems that occur in the particular context under study. These scholars further explain that purposive and directed sampling through human instrumentation increases the range of data exposed and maximizes the researcher's ability to identify emerging themes that take adequate account of contextual conditions and cultural norms.

In the study the researcher purposively selected respondents whom she regarded as relevant to provide her with the phenomena she sought to explore in multigrade settings. The researcher followed Patton (1990:169) cited in Erlandson, Harris, Skipper and Allen, (1993) as he writes:

The logic and power of purposeful sampling lies in selecting information – rich cases for study in depth. Information rich cases are those from which one can learn a great deal about issues of central importance for the purpose of the research, thus the term purposeful sampling...is select information-rich cases whose study will illuminate the question under study.

The sample consisted of three multigrade primary schools and three multigrade teachers in each school. That means a total of nine multigrade teachers participated in the researcher's study. The selection of respondents was guided by De Vos et al., (1998) and Saunders, et al., (2003) view that the purposive sample is based entirely on the judgment of the researcher, and the aim is to select informants who are deemed information-rich. The researcher used this notion of information-richness to guide her decision regarding schools. In the selection of the purposive sample, the researcher was guided by the foregoing statements offered by these scholars. Three multigrade primary schools and three multigrade teachers from each school were drawn purposively by the researcher. She used her judgment in selecting these teachers as her informants because they were information-rich. Yin (1989) notes that the guiding criteria for selecting a sample purposively include cases which are critical, extreme, typical or a mixture of these.

With this view in mind the researcher's decision to select these three multigrade teachers was based on three facts:

- The schools have a long history of arranging learners on a multigrade basis.
- Teachers in these schools are within a reasonable distance (within 80 kilometer radius) to a Higher Education Institution located in East London which they have access to enhance, if required, their professional development needs
- These schools are heterogeneous in terms of the number of classes and the gender of the learners in each multigrade class.

This variety has allowed the researcher to construct a range of perceptions based on the lived experiences of these multigrade teachers. This is consistent with Yin (1991) as cited in Miles and Huberman (1994: 29) that multiple-case sampling adds confidence to findings. By looking at a range of similar and contrasting cases, we can understand a single-case finding, grounding it by specifying 'how' and 'where' and if possible 'why' it carries on as it does. We can strengthen the precision, the validity, and the stability of the findings. Therefore we are following a replication strategy. Gray (2004: 324) holds the same view, stating that by using a number of cases that yield similar findings we can show replication. Miles and Huberman (1994) advise that the best strategy is to initially target those cases that are most likely to yield the richest data. This is in line with the researcher's selection of schools which have a long history of arranging learners on a multigrade basis teaching and learning.

This view is also supported by other scholars; for example Erlandson et al., (1993) draw attention to the aspect of sample size in purposive sampling. They argue that the basic rule is, "There are no rules for sample size." In qualitative research one is looking more for quality rather than quantity, more for information-richness, than information value. Having this in mind therefore the researcher decided not to reduce the number of teachers in the purposive sampling.

3.5 Access to respondents and research sites

The data were collected from three multigrade primary schools in the rural areas of East London. To observe the principles of anonymity and confidentiality the primary schools were coded "school A" "school B" and "school C". In gaining access to the research sites and research participants, the researcher used the District Education Officer and the principals of three research sites as gatekeepers (Saunders et al., 2003). To achieve this, a letter to the District Education Officer and principals was written informing them of the research and soliciting their cooperation (see Appendix 1). It should be noted that gatekeepers are essential because they are the point of introduction of the research target participant. The

gatekeepers also help to remove prospective obstacles that would otherwise inhibit the investigation.

3.6 Research sites

This section describes the research sites under investigation. One of the case study primary schools “school A” is located about 30 kilometers in a southerly direction from the N2 road to East London. The school is not too far from the Chintsa Beach Resort; the distance is only about 10 kilometers. There are also nearby farms and the school is in the heart of a farming community. The enrolment consists of 196 learners from grade R to 7. The school was established by a certain farmer with the intention of providing the children of farmers with education. All the teachers are engaged in multigrade teaching including the principal. The only teacher who does not combine classes is the grade R teacher. Some learners commute to school while others are transported by bus. What characterizes this school is that it is supported by overseas missionaries. Even during the interview time, there were white ladies from overseas teaching learner’s computer literacy and basic English to all classes.

School B is not far from school A. School B is located about 20 kilometers also in a southerly direction from N2 to East London. The distance to Chintsa Beach Resort is about 15 kilometers. The surrounding community does not differ from school A; it is also a farming community. But just near the school within a distance of about 200 meters, there is a business site with butchery, express garage, restaurant and few trading shops. There are also hawkers selling vegetables and fruit just opposite on the gravel road near the business site. This means that some residents work at the business site. It should be noted that most of the parents in school A and school B are farm workers. As in school at all the teachers multigrade including the principal. The only teacher that tutors one class is the grade R teacher. The enrolment of the school is consisted of 190 learners from grade R to 7.

School C is also situated in a farming community. As in school A and school B, all the teachers have multigrade classes even the teacher in her third year of teaching experience. She multigrades the whole foundation phase. The enrolment of the school from grade R to 7 consisted of 124 learners. Contrary to school A and school B this site is about 80 kilometres from East London and is not far from the Kei Mouth Holiday Resort. The distance is only about 10 kilometres and the road to Kei mouth is tarred. What is particularly interesting and characterizes the school is that the area is usually visited by tourists and especially by people who happen to visit Kei Mouth Holiday Resort. Near the school which is just situated opposite the tar road there is a large plane which attracts people who are travelling on the road. The plane is on Billy Nell's farm,; who is a former cabinet minister of the Eastern Cape legislative. He bought the plane from a popular farmer in East London named Rieger who is a farmer as well as a business man in Gonubie, East London. This was very interesting to the researcher as she is a Riegerton Park resident, (about 400 from Rieger's farm.)

What is common among the three research sites is that they are farming communities; some learners commute to school and some use school transport provided by the Department of Education. Lastly everyone teaches multigrade classes including the principal. Only teachers tutoring Grade R do not multigrade.

3.7 Data collection

In this study, data collection involved setting boundaries for the study, collecting information through interviews and following the protocol for recording information (Creswell, 1998).

3.7.1 Phenomenological interviews

The researcher served as a data collection instrument; Henning, van Rensburg, and Smit, (2004: 10) state that the instrument in qualitative research is the human mind. Interviews were conducted as the main data collection method. Kvale (in

Sewell, 2001: 1) cited by De Vos et al.,(1998) defines qualitative interviews as "attempts to understand the world from the participants' point of view, to unfold the meaning of peoples' experiences and to uncover their lived world prior to scientific explanations". The specific method of interviewing employed in the study was the 'hierarchical focusing' interview technique (Tomlison, 1989) which is a particular version of the semi-structured phenomenological interview. The 'hierarchical focusing interview' is a technique comprised semi-structured questions to gain an in-depth account of meaning.

The interviews facilitated data gathering for answering each of the four questions (see Appendix 2). The interviews sought to gather data on:

- a) Aspects of teaching/ learning in multigrade settings multigrade teachers perceive as beneficial or challenging to teachers as well as learners.
- b) Multigrade teaching impact on learners
 - (i) socially and in terms of
 - (ii) cognitive achievement

During the process of interviews the researcher also asked probing questions as the conversation developed to ensure that all her areas of interest were covered. According to Patton (2002: 372) probes are used to deepen the response to a question, increase the richness and depth of responses, and give clues to the interviewee about the level of response that is desired. Saunders et al., (1997: 226) suggest that the probing questions may be worded like open questions but request a particular focus or direction. Yin (1984) cited in Erlandson et al., (1993) asserts that "most case study interviews are of an open-ended nature in which an investigator can ask key respondents for the facts of a matter as well as for the respondents' opinion about events... may even ask the respondents to propose his or her own sights... as the basis for further inquiry "(Erlandson et al., 1993: 83).

3.7.2 Interview process

The researcher made arrangements for interviews by visiting the schools. School A and school B were visited on the same day as they were nearby. The respondents were given a consent form to sign (see Appendix 3). In the form the purpose of the research was explained and the researcher also requested permission to use a tape recorder. All the respondents agreed unanimously. Interviews with teachers were conducted at the schools during working hours, each interview took about 60 minutes. The interviews were tape recorded verbatim with the interviewee's permission.

3.7.3 Document analysis

The second method of data collection was reviewing documents such as minutes of staff meetings, professional plans and school reports. Excerpts from the minute book were extracted (see Appendix 4). Documents were reviewed for references to any benefits or challenges that teachers might have mentioned that multigrade teaching posed. Yin (2003: 83) points out that evidence for case studies comes from six sources: documents, archival records, interviews, direct observation, participant-observation, and physical artifacts. In the light of this the researcher's method of document analysis is in line with Yin's perspective.

De Vos et al., (1998: 322) state that most documents are not written with a view to research. A variety of non-personal documents such as minutes of meetings, agendas and internal office memos are written during the continual functioning of an organization or for the establishment of a particular matter. Except for studies of preliterate societies, document analysis is likely to be relevant to every case study topic (Yin, 2003). De Vos et al., (1998). And Yin (2003) caution that in undertaking document analysis as a method of data collection there are some advantages and weaknesses. What was of most importance was that the researcher used this method of data collection to correlate the evidence received

from the investigated multigrade teachers. The next session discusses data analysis.

3.8 Data processing/analysis

Terre Blanche, Durrheim and Painter (2006: 323) assert that data gathering is not just a mindless technical exercise, but involves development of ideas and theories about the ideas being studied. According to these scholars, this means that by the time the researcher comes to the data analysis he/she should already have a preliminary understanding of the meaning of his/ her data. According to Miles and Huberman (1996) the purpose of data analysis is to provide structure to, and illicit meaning from, the research data gained during the study. After transcribing the data of interviews verbatim (see Appendix 5), the researcher followed suggestions made by Creswell (1998) quoting Agar (1980) as cited in De Vos et al., (1998: 343).

“Read the transcripts in their entirety several times. Immerse yourself in the details, trying to get a sense of the interview as a whole before breaking it into parts.”

As Marshall and Rossman (1995: 113) cited in De Vos et al., (1998:343) say “Reading, reading, and reading once more through the data forces the researcher to become familiar with these data in intimate ways.”

People, events and quotes sift constantly through the researcher’s mind. In the execution of the process of data analysis the researcher read and reread all the data several times and listened repeatedly to the tape recordings of each interview in order to gain familiarly with the contents (Steyn and Van Wyk, 1999). Cluett and Bluff (2000) identified that before data can be analysed it must first be transcribed verbatim. Data obtained through interviews were written word for word.

The method used for analyzing data from the interviews was thematic content analysis. The ability to use thematic analysis appears to involve a number of

underlying abilities, or competencies. One competency can be called pattern recognition. It is the ability to see patterns in seemingly random information (Boyatz, 1998: 7 quoted by Patton, 2002: 452). Patton (2002: 453) goes on to explain that content analysis usually refers to analyzing text (interview transcripts, diaries or documents) rather than observation based field notes. More generally, however, content analysis is used to refer to any qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings. He also identifies that case studies, for example can be content analysed. This thematic content analysis entails identification, coding and categorizing patterns in the interview data (Corbin and Strauss, 1998).

During the process of reading repeatedly, the researcher was able to identify responses relating to the research questions, similar points from different interviews. Categorization was taken into consideration, including categories that emerged during the process of data analysis. Words, phrases, lines, sentences, everything relevant were coded. Categorization enabled the researcher to draw up themes that integrated the categories. Patton (2002: 453) explains that core meanings found through content analysis are often called patterns or themes. Alternatively, the process of searching for patterns or themes may be distinguished, respectively, as pattern analysis or theme analysis. During the process of coding the body of data was broken down into labeled meaningful pieces with a view to cluster the bits of coded material together under the code. They were finalized as clusters relating to other similar clusters (Terre Blanche et al., 2006). During data analysis this process helped the researcher to develop a better understanding of different themes and how they related to each other.

Table 3.1 Summary of research questions and data

Research questions	Data Process			
	Data sources	Data generation instruction and techniques	Data analysis	Possible limitations
What aspects of teaching/learning in multigrade settings do multigrade teachers perceive as beneficial to teachers and learners respectively?	Teachers	Semi-structured interview Documents	Thematic analysis	Demanded many categorizations. Had to manage subjectivity
What aspects of teaching/learning in multigrade settings do multigrade teachers perceive as challenges for teachers and learners, respectively?	Teachers	Semi-structured interviews Documents	Thematic analysis	Demanded many categorizations Managed subjectivity
What does the data on the benefits/challenges show in terms of multigrade teachers' impact on learners : i.) Socially, and terms of ii.) Cognitive achievement	Empirical data & literature review	Researcher	Meta-analysis	Demanded many categorizations Managed subjectivity

3.9 Measures to ensure trustworthiness

If an intellectual inquiry is to have an impact on human knowledge, either by adding to an overall body of knowledge or by solving a particular problem it must guarantee some measure of credibility about what it has inquired (Erlandson et al., 1993). These scholars further explain that it must communicate in a manner that enables application by its intended audience, and must enable its audience to check on its findings and the inquiry process by which the findings were obtained.

Erlandson et al., (1993: 29) point out that valid inquiry must demonstrate its truth value, provide the basis for applying it, and allow for external judgments to be made about the consistency of its procedures and the neutrality of its findings or decisions. They confirm that Guba and Lincoln (1985) have referred to these combined qualities as “trustworthiness” and have in their various writings described how trustworthiness can be assessed and strengthened. Therefore it was essential to address trustworthiness measures in this research. According to Erlandson et al., (1993) as well Lincoln and Guba (1985) the following strategies measure and ensure trustworthiness:

3.9.1 Credibility / Truth Value

According to Lincoln and Guba (1985: 290) a central question for any inquiry relates to the degree of confidence in the “truth” that the findings of a particular inquiry have for the subjects with which –and the context with which –the inquiry was carried out. Credibility or truth value needs to be established with the individuals and groups who have supplied data for the inquiry. It is assessed by determining whether the description developed through inquiry in a particular setting “rings true” for those persons who are members of that setting. Lincoln and Guba (1985) have proposed a series of strategies for accomplishing this such as:

- Prolonged Engagement: This implies that the researcher must spend enough time in the context being studied to overcome the distortions that are due to

his/her impact on the context, his/her biases and the effect of unusual or seasonal events; Enough time in the context will enable the researcher to understand daily events in the way that persons who are part of that culture interpret them.

- **Persistent observation:** While the researcher spends enough time in the context being studied he/she must be able to identify those events and relationships that are most relevant for solving a particular problem or resolving a particular issue.
- **Triangulation:** People in the context who are known to have distinctly different opinions and understanding of a topic should be deliberately sought out by the researcher. Data obtained directly from the statements of the individuals should be checked against observed behavior and various records and documents.
- **Referential Adequacy Materials:** Hence data must be interpreted in terms of their context; it is most important that materials be collected to give a holistic view of the context. Videotapes, documents, photographs, and other useful materials will provide a supportive background that communicates to the reader a richer contextual understanding of the researcher's analyses and interpretations.
- **Peer Debriefing:** It is suggested that occasionally, the researcher should visit the context being studied to review perceptions, insights, and analyses with professionals outside the context who have enough general understanding of the nature of the study to debrief the researcher and provide feedback that will refine and, frequently, redirect the inquiry process.
- **Member Checks:** Because the realities included are those that have individually and collectively been constructed by persons within the context of the study, it is imperative that both data and interpretations obtained be verified by those persons. No data obtained through the study should be included if they cannot be verified through member checks.

3.9.2 Transferability/ Applicability

Lincoln and Guba (1985: 290) state that an inquiry is judged in terms of the extent to which its findings can be applied in other contexts or with other respondents. Implementation of an inquiry's findings always requires an estimation of applicability because even if the inquiry in a particular context is meant to guide decisions about the operation of that context in a succeeding time frame, time will change both the context and the individuals who are in it. In every context, their constructions also change (even if the individuals remain the same). Two strategies are suggested to facilitate transferability:

- **Thick Description:** It has been suggested that effective thick description brings the reader vicariously into the context being described. By description of specific sights, sounds, and relationships, the scene created in the reader's mind may be remarkably close to that which would be gained by direct experience
- **Purposive Sampling:** Hence the foundation of transferability is an adequate description for the investigating the context, the search for data must be guided by the processes that will provide rich detail. This requires a sampling procedure that is governed by emerging insights about what is relevant to the study and purposively seeks both the typical and the divergent data that these insights suggest.

3.9.3 Dependability / Consistency

Lincoln and Guba, (1985: 290) believe that an enquiry must also provide its audience with evidence that if it were replicated with the same or similar respondents (subjects) in the same (for a similar) context, its findings would be repeated. The inquiry must meet the criterion of consistency. Dependability is communicated through a dependability audit.

Dependability Audit: To provide for a check on dependability, the researcher must make it possible for an external check to be conducted on the processes by which

the study was conducted. This is done by providing an audit trail that provides documentation (through critical incidents, documents, and interview notes) and a running account of the process (such as the investigator's daily journal) of the inquiry.

3.9.4 Confirmability / Neutrality

Lincoln and Guba (1985: 290) stress that an enquiry is judged in terms of the degree to which its findings are the product of the focus of its inquiry and not of the biases of the researcher. The researcher has to trust in the "Confirmability" of the data. "This means that data (constructions, assertions, facts, and so on) can be tracked to their sources and that the logic used to assemble the interpretations into structurally coherent and corroborating wholes is both explicit and implicit" (Guba and Lincoln, 1989:243). Confirmability, like dependability, is communicated through an audit.

Confirmability Audit: An audit established to ascertain dependability by looking at the processes used in the study also enables the external reviewer to make judgments about the products of the study. An adequate trail should be left to enable the auditor to determine if the conclusions, interpretations, and recommendations can be traced to their sources and if they are supported by the inquiry.

3.10 Ethical considerations

During data collection the researcher followed ethical considerations; anyone involved in research needs to be aware of the general agreements about what is proper and improper in scientific research (Babbie, 2001: 470 as quoted by De Vos et al., 1998). Erlandson, Harris, Skipper and Allen (1993: 89) seem to be in support of what Babbie says that ethical considerations should be always at the forefront of the research. The first element common to every protocol is the researcher's respect for the person and group under study. In this study the

researcher respected the voices of the respondents. The respondents were afforded the right to withdraw from the study at any point during the interview. De Vos et al., (1998) postulate that informed consent relates to the communication of all possible information, as accurately as possible, about the research to the research participants. The researcher followed what Saunders, Lewis and Thornhill (2003) say about gatekeepers. A letter was written to the Provincial District Education Officer explaining my intentions about the research. On receiving positive feedback, the researcher wrote letters to the three principals of the schools where she intended to conduct interviews, review document analysis and explain intentions.

As already mentioned earlier, gatekeepers are essential because they are the point of introduction of the researcher to the target participants. Gatekeepers always help to remove prospective obstacles that would otherwise inhibit the investigation. All the respondents were provided with information about the research and the researcher formally requested their permission to participate in the investigation. This was done by posting letters on the notice board of each school and a leaflet with information about the study at the three different schools, sent to the Provincial Department of Education offices. These were accompanied by response slips requesting teachers to participate in the goals of the study and also related to the procedures of study, and possible advantages. Permission from the District Education officer was sought to interview the subject advisor, which was granted. It should be noted that the respondents of my research were adults, who had the capacity to give informed consent directly. Hakim (2000: 13) cited in De Vos et al., (1998) suggests strongly that informed consent becomes a necessary condition rather than a luxury or an impediment. De Vos et al., (1998:66) also confirm that informed consent ensures the full knowledge and cooperation of subjects, while also resolving, or at least relieving, any possible tension, aggression, resistance or insecurity of the subjects. This was exactly the purpose of the research for observing the rules involved.

When the researcher received feedback from these schools, meetings were arranged with the principals and the staff and arrangements for interviews were made. All the respondents were informed that the study would be strictly voluntary, with respondents having freedom to withdraw at any time.

Strict anonymity and confidentiality of the respondents was maintained and guaranteed. The identity of the respondents and the research sites were not disclosed while reporting the findings. In order to maintain anonymity and confidentiality all the respondents were assigned individual codes such as Teacher A, Teacher B , Teacher C, Teacher AA, AAA, BB, BBB, CC,CCC and even their sites were coded. These codes were only known to the researcher.

The researcher assured all the respondents that strict anonymity and confidentiality would be maintained in this study, even if the findings were published in the future. They will be communicated to the respondents formally. This is also highlighted by Erlandson et al., (1993: 89). Ethical issues surrounding interviews include the researcher's motives and intentions as well as the study's purpose and the protection of respondents through the use of pseudonyms in the study.

It was explained clearly to the respondents that the name and address of data sources would not be recorded, and every attempt would be made to group the data collected so that personal characteristics or traceable details of the respondents would not become known (Yin, 1989).

As during the process of interviews the respondents were tape recorded with their permission; the researcher assured them that on completion of the study, all tape recorded data would be destroyed discreetly.

3.11 Summary

The researcher has shown that this study was conducted in an interpretive paradigm as an attempt to capture the rich detail of the lived world of the respondents. A multiple-case type of case-study design was used as nine multigrade teachers from three multigrade schools were interviewed. The study also looked at the sample and realization of sampling. Three multigrade schools and nine multigrade teachers made up the sample of the study. These three multigrade schools and the nine multigrade teachers were drawn purposively by the researcher.

The researcher looked at the methods of collecting data for this study. Two methods were used, that is hierarchical focusing interview technique and document analysis. The researcher served as the data collection instrument. The researcher explained that the main aim was to capture or gain in-depth accounts. The study explained the types of documents that would be examined. It was explained how the data was processed and analysed. After listening repeatedly to the tape, recorded data were transcribed verbatim; the researcher wrote transcribed data word for word. The next step was to read and reread the transcribed data. The method of data analysis used in the study was thematic content analysis. This entailed identifying, coding and categorizing patterns.

The study explained how the measures of trustworthiness would be applied in the study. Trustworthiness of the findings was addressed by means of Guba's model of trustworthiness, namely credibility, truth value, transferability/applicability, dependability/consistency, and conformability/neutrality.

Ethical issues have been addressed in my study. The study discussed how the researcher obtained informed consent from the schools, teachers of the schools and from the District office. Participation in the study was strictly voluntary and there was freedom to withdraw at any time. Strict anonymity and confidentiality

of the respondents was be maintained in the study. The researcher explained that on completion of the study, all tape recorded data would be destroyed discreetly.

The next chapter presents data presentation, analysis and discussion of findings.

CHAPTER 4: PRESENTATION, ANALYSIS AND DISCUSSION OF DATA

4.1 Introduction

The previous chapter discussed the research methodology adopted in the study. The purpose of this study was to explore multigrade teacher's perceptions of the benefits and challenges of teaching and learning in multigrade settings and to make recommendations on tools to promote quality in teaching and learning in multigrade classrooms. In this study an investigation into multigrade teacher's benefits and challenges regarding classroom organisation, teaching strategies and time, curriculum adaptation for multigrade teaching, cognitive and social impact on learners, adequacy of resources and training was carried out. The chapter commences with an overview of specific research questions and then proceeds to describe the demographic and school characteristics sample. The data is analysed according to the research questions 1, 2 and 3 (see research question in the section below 4.2). The fourth research question is addressed in the following chapter. The chapter ends with a summary of findings.

4.2 Specific research questions

The study investigated four research questions. Three of these questions focused on multigrade teacher; their perceptions of benefits and challenges. The other question focused on the views of the subject advisor on the issues raised by the multigrade teachers about their challenges.

1. What aspects of teaching/learning in multigrade settings do multigrade teachers perceive as beneficial to teachers and learners, respectively?
2. What aspects of teaching/learning in multigrade settings do multigrade teachers perceive as challenging for teachers and learners respectively?

3. What does the data on the benefits/challenges show in terms of multigrade teaching impact on learners
 - (i) Socially and in terms of
 - (ii) Cognitive achievement?
4. What tools do you recommend for promoting quality teaching and learning in a multigrade classroom setting?

4.3 Composition of the sample

The sample consists of nine teachers from three schools. It also includes minutes of the meetings from the three schools.

4.3.1 Demographic characteristics of the respondents

A multiple-case type of case-study was used in the study. From each of the three multigrade schools involved in the study, there were three respondents making a total of nine respondents. Pseudonyms for the nine respondents were used in order to comply with anonymity and confidentiality.

Table 4.1 Case Studies

Case Study 1	School A	Teacher A	Teacher B	Teacher C
Case Study 2	School B	Teacher AA	Teacher BB	Teacher CC
Case Study3	School C	Teacher AAA	Teacher BBB	Teacher CCC

All nine multigrade teachers from School A, B and C have been purposefully selected for the reason I have already stated in the methodology chapter (c.f. 3)

4.3.1.1 Demographic characteristics of the multigrade teachers

SCHOOL A

Teacher A

Teacher A is a female teacher who started teaching in 1970. She has 3 years teaching experience in monograde classes. She came to her current school as an educator in 1973 and in 1989 she took the position of principal. Now she has completed thirty six years of teaching experience in multigrade classes. Her highest professional qualification is Primary Teacher's Course and Higher Diploma in Education. She combines three classes i.e. grade 4, 5 and 6. In grade 4; twenty two learners, grade 5; twenty four learners and in grade 6; twenty four learners.

Teacher B

Teacher B is a male teacher with no experience of teaching monograde classes. He joined School A for the first time in 2004 has 15 years experience teaching multigrade classes. He combined grade 6 and 7 that is, intermediate phase and senior phase. In grade 6 he has twenty four learners and in grade 7, twenty three learners. His highest professional qualification is Senior Primary Teacher's Diploma.

Teacher C

Teacher C is a female teacher with three years teaching experience in monograde classes and 8 years teaching experience in multigrade classes. At her current school it is her 5th year but she has been teaching multigrade for 3 years in the same locality. Her highest qualification is an Advanced Certificate Education. In 2008 she combined grade 1, 2 and 3 meaning that she was responsible for the

whole foundation phase. In 2008 she taught twenty learners in grade 1, twenty five learners in grade 2 and thirty three learners in grade 3. In this current year 2009 she combined grade 1, 2 and 3. In grade 1 she has twenty seven learners, grade 2, twenty seven learners and in grade 3, twenty two learners.

All the three multigrade teachers in School A stated that multigrade teaching at their school is due to the low enrolment of teachers and a shortage of classrooms.

SCHOOL B

Teacher AA

Teacher AA is a female teacher without any experience of teaching monograde classes. She started teaching at her current school in 1992 by teaching multigrade classes. In 2002 she took a position of principal. Her highest professional qualification is a Bachelor's Degree in Technology in Management and she is currently studying a Bachelor's Degree in Education Honours with Nelson Mandela Metropolitan University. She proudly informed the researcher that, this was her final year and she would be graduating in 2010. She teaches 4 multigrade classes. She teaches grade 4, 5, 6 and 7. In grade 4 she has seventy one learners, grade 5, twenty one learners, grade 6, twenty three learners and in grade 7, thirty one learners.

Teacher BB

Teacher BB is a female teacher with no experience of teaching monograde classes. She joined School B for the first time in 1993. Her highest professional qualification is Senior Primary Teachers' Diploma plus Advanced Certificate in Education in Life Orientation "because of this burden to take me out of this". From 1993-2000 when she arrived she combined grade 3 and 4. From 2002 up to date she combines grade 4 and 5, grade 6 and 7. These are different phases. She offers Xhosa, Social Science, Technology, Economic Management Sciences and

Art and Culture. In grade 4, she has twenty one learners, in grade 6, twenty three learners and in grade 7, thirty one learners.

Teacher CC

Teacher CC is a female teacher with ten years teaching experience in monograde classes and ten years teaching experience in multigrade classes. Her highest qualification is Primary Teacher's Certificate. She combines grades 2 and 3. In grade 2, she has thirty one learners and in grade 3, sixteen learners.

The three multigrade teachers at School B indicated that multigrading at their school is also due to low enrolment numbers and the shortage of classrooms.

SCHOOL C

Teacher AAA

Teacher AAA is a female teacher with no experience of teaching monograde classes. She started teaching in 1995 in a multigrade school in the same locality. She has just assumed duties in the current school in January but is not new to multigrading or to the staff of her current school. She is a qualified teacher with a three year Diploma in Remedial Education and a Higher Diploma in Education. She teaches Technology, Economic Management Sciences, English and Natural Sciences in grades 4, 5 6 and 7. That means that she teaches intermediate and senior phases. In grade 4, she has fifteen learners, grade 5, ten learners, grade 6, eleven learners and in grade 7, thirteen learners.

Teacher BBB

Teacher BBB is a female teacher with three years experience of teaching monograde classes and twenty six years of teaching experience in multigrade classes. Her highest professional qualification is Primary Teachers' Education

plus a Higher Primary Diploma in Education. She joined school C in 1983. This means that this is her 26th year at the current school teaching multigrade classes. In 1983 she combined sub A and sub B. From 1991- 2000 she combined the whole foundation phase i.e. grades 1, 2 and 3. Then from 2001 up to date she teaches grade 4, 5, 6 and 7. This means she is not only combining grades, she combines phases as she teaches intermediate and senior phases. Teacher BBB has experience of multigrading in all the grades. The enrolment of learners in grade 4 is fifteen, grade 5, ten learners, grade 6, eleven learners and grade 7, thirteen learners.

Teacher CCC

Teacher CCC is a female teacher with no teaching experience of monograde classes. She joined School C for the first time in 2007. That means this is her third year of teaching experience in multigrade classes. Her highest qualification is Senior Primary Teachers' Diploma. She is currently teaching the whole foundation phase i.e. grade 1, 2 and 3. In grade 1, she has nineteen learners, grade 2, thirteen learners and in grade 3, eighteen learners.

Teachers stated that the combining of classes was due to the low enrolment of learners and a shortage of classrooms. The building block contains not only classrooms but also some bedrooms for the teachers.

The following table shows the summary of the respondents' demographic characteristics according to the case studies.

Table 4.2 Demographic characteristics of the multigrade teachers

Participants	Gender	Highest Professional Qualification	Rank	Years of experience in monograde classes	Years of experience in multigrade classes
Teacher A	F	HDE	Principal	3	36
Teacher B	M	SPTD	Educator	Nil	15
Teacher C	F	ACE	Educator	3	8
Teacher AA	F	B.Tech in Management	Principal	Nil	17
Teacher BB	F	SPTD & ACE	Educator	Nil	16
Teacher CC	F	PTC	Educator	10	10
Teacher AAA	F	Diploma in Remedial Teaching & HDE	Principal	Nil	14
Teacher BBB	F	Primary Teacher's Education & HPDE	Educator	3	26
Teacher CCC	F	SPTD	Educator	Nil	3

Table 4.2 above indicates that nine teachers from three multigrade farm schools participated in the interviews. Of the nine multigrade teachers interviewed, eight of them were females and one was a male teacher. This table also indicates diversity in their experience of teaching. It however shows that teaching experience in multigrade classes dominates more than experience or non-experience in teaching monograde/single grade classes. The majority of teachers have never taught monograde classes, they have no idea at all of how it feels to face one class. With regard to their educational qualifications, the highest professional qualification of these respondents was a Bachelor's Degree in Technology.

4.4 Presentation and analysis of data

The main purpose of this section is to present the multigrade teachers' perceptions in relation to their multigrade settings. The themes in this analysis have been categorized as a response to the research questions that guided this study. There were two categories, namely: the benefits of teaching and learning

in multigrade settings and challenges of teaching and learning in multigrade settings.

The patterns derived from the teacher-respondents' responses and minutes of school meetings are indicated in table 4.3 below. Direct quotations of recorded data are provided to complement extracted patterns.

Table 4.3 patterns of the study and their manifestations: (benefits and challenges)

PATTERNS	MANIFESTATION	DATA INSTRUMENT
Benefits of multigrade learning and teaching.	Peer Tutoring Shy learners are free in their groups Lower grade level learners gain advance information	Interviews Interview Interviews
Challenges of teaching and learning	Integration of learning areas	Interviews
	Social Impact	Interviews
	Cognitive achievements	Interviews
	Lack of discipline	Interviews
	Lack of space and overcrowding	Interviews and fieldnotes
	Unsuitability of learning materials	Interviews
	Inadequate lesson planning and assessment	Interviews
	Lack of time for individual attention and remedial activities	Interviews and fieldnotes
	Inability to complete the curriculum	
	Violence and bullism	
Challenges	Lack of discipline	Interviews

	Lack of space and overcrowding	Interviews
	Unsuitability of learning materials	Interviews
	Lesson planning and assessment	Interviews
	Lack of time for individual attention and remedial activities	and Minutes Interviews
	Inability to complete the curriculum	Interviews
	Violence and bullism	Interviews and Minutes

4.4.1 Benefits of teaching and learning in multigrade settings

As presented in the table above, the first pattern is benefits of teaching and learning in a multigrade setting. The presentation and discussion of benefits of teaching and learning, as well the impact on learners' social and cognitive advancement, have been discussed. The following categories are the perceived benefits of teaching and learning in multigrade settings:

- **Peer Tutoring**

Peer tutoring was seen as beneficial in a multigrade setting by the respondents. Teachers in these classrooms confessed that employing a peer tutoring system meant that learners were used as tutors in small groups. The following extracts demonstrate how peer tutoring has been beneficial:

Teacher A from School A:

Because I've found that they learn better when they are tutored by their peers. I have told you about a child who could not read to me – but that one helped me. I am telling you that one is the one in the class-pointing to the

picture and to the word; I said to myself this one is going to memorize the whole lesson but when I called him to read, I found that he reads with understanding. I was saying to myself this one is difficult this one is going to waste my time. But now he is the best, he likes reading he is among those you see them reading during the morning prayers.

Teacher AA from School B

They get the opportunity...they like helping each other. So I have learnt a lot, I have learnt that if you have grouped them your work becomes easier somewhere and somehow because the one who is better than the others is going to help them. They help each other. When I group them I mix the sexes that is boys and girls although they do not like that boys want to be with boys only so I have struggled.

From the 2 extracts we learn that learners learn and understand easily when tutored by their peers. Both respondents claimed that the learners learnt better from their peers compared to how they would learn from them as teachers. For example, Teacher A from School A says “they learn better when they are tutored by their peers”. She confirms how peer tutoring has turned around the situation of one learner that she thought was memorizing as opposed to learning with understanding. To her surprise the method of teaching used by the peer has helped the learner to read fluently. She mentions that the learner was pointing to the picture and associated the picture with the word and that is how the learner coped with reading. Teacher AA from School B sees peer tutoring as an opportunity for learners to help each other. This suggests how learners respond positively to their peers. Therefore in multigrade settings grouping should be done in a way that should enable active interaction with peers. Miller (1991) recommends that peer tutoring is one of the most effective and successful strategies of teaching in multigrade. It should be understood how peer tutoring benefits both the teacher and the learner. According to the extracts, the multigrade teacher can provide greater opportunities for innovation.

The following is a discussion that shows how shy learners benefit from working in a group.

- **Shy learners are free in their groups**

Working in a group does not only allow opportunities for peer tutoring but also opens an opportunity for shy learners to express their views. The following extracts show how the shy learners benefit from working with others.

Teacher A from School A:

When learners are grouped in this way-some of them are very shy to speak to a teacher or to a big group but in their groups, when you visit their groups-now that he is among the group, you'll find that even the one who is too shy and not confident he is speaking, he is sharing, he knows something. But when you are talking to him as a teacher, he doesn't even lift up her or his hand. In this group you'll find that he is the one who is telling them that is not right and this is wrong. This is right, now she gains confidence, now he is able to share his ideas.

Teacher CC from School B

Learners who are shy to speak, they are able to speak; now they have time to ask and now they are getting individual attention from their groups.

Teacher C from School A

Yes, because it is easy to understand for those who are shy, they are free to talk, shy ones even when they know the answers they do not raise their hands when asked questions by me.

All three extracts confirm that shy learners are free to talk in their small groups. Both Teacher A from School A and Teacher C from School A, claim that learners who could hardly put up their hands are free to discuss in their groups and make a contribution towards the discussion. Teacher CC from School B sees the group discussion as an opportunity for individual attention of learners by their peers. Similar to the other two respondents, this allows the shy learners to be free. The opportunity for the shy learners to express themselves freely in their groups could be attributed to strategies employed in classroom organisation such as mixed abilities, cross grading, within and across learning areas grouping and mixed gender grouping. These factors allow slow learners to consult the more advanced learners in the learning area. It is clear from the above responses that there are

benefits for learners working in a group. As already indicated above shy learners feel free in group discussion because there is no teacher standing in front of them.

Teacher A from School A

And you'll find that the group that slow to understand know that they lack understanding – but I never told them that I have grouped them according to their ability – but you'll find that this group that is backward is always consulting that group for help and you'll find that no one is from that advanced group.

The respondent above claims that slow learners or learners who lack understanding make it their responsibility to seek help from those who understand better. She says “this group that is backward is always consulting that group for help and you'll find that no one is from that advanced group”. In this case the teacher does not have to mention which group has the ability because learners themselves identify who the advanced learners are in that learning area.

From this evidence it could be argued that the groups that lack understanding find it crucial to seek help from the advanced group. A spirit of competition and peer-assistance and teamwork could also be linked together.

This dimension of advanced learners helping the slow learners also applies to cognitive stretching of learners in a lower grade. By virtue of being in the same classroom, learners at a lower grade become more advanced.

The following extracts show how lower grade learners benefit from learners in upper grades.

- **Lower grade level learners gain advance information**

Teaching lower grade level learners together with upper grade level learners was identified as one of the benefits of teaching and learning in multigrade settings by the respondents. Teaching the same lesson to both grades was perceived as an

opportunity for lower grade level learners to gain advanced information from upper grade level learners resulting in revision in the following year.

The following extracts show how lower grade learners benefit from upper grade learners.

Teacher B from School A

In these grade 6 and 7 in a way I am teaching one thing because they are in one class so it is advantageous for the learners who are doing grade 6, it is sort a form of repetition for the next year, so when they go to grade 7 having done that in grade 6 it is sort of revision, sort of advantageous for those who are doing the lower grade you know, but without disadvantaging those who are doing grade 7.

Teacher CC from School B

Ja, because grade 2s can hear from the grade 3s. When they are doing grade 3 some of them can remember what last year's work they heard this from grade 3s of the previous year

Both respondents confirmed that the learners from a lower grade benefit from being taught together with upper level learners. Multigrade teaching has been found to be beneficial on the basis that the lower grade learners gain information in advance and that information becomes revision of what was done in the previous year. The respondents confirmed that lower grade learners benefit from the upper grade curriculum.

This evidence seems to suggest that multigrade classes in most cases are treated as if they are monograde when it comes to instructional practices. However, although the respondents have cited the benefit of teaching to the upper grade level they were silent about the gap regarding the lower grade level curricula that are not taught. For example in both mentioned cases they do not mention how they address the lower grade curriculum. It could be argued that although this is seen as a benefit it could also disadvantage the curriculum for lower grades because there seems to be a focus on higher grade curriculum.

Thus far the discussion has been on the benefits of grouping learners in a multigrade setting. The following discussion is on benefits of integration of the curriculum in a multigrade setting. This is a new finding in multigrade teaching, one that has not been documented.

- **Integration of learning areas**

Integration was identified as one of the benefits of teaching and learning in multigrade teaching. Integration was perceived as a time saver for both teaching and learning. The following abstracts support this view.

Teacher AA from school B

We integrate Maths and Language; Natural Science and Life Orientation. There are benefits because sometimes it saves time because if you were going to do this Life Orientation but now it is there in Natural Sciences.

Teacher AAA from school C

The Life Orientation with the Language, which is English, Economic Management Science with Maths, Natural Science and Technology integrate. Yes there are benefits because I tell another teacher that I am teaching this so that may benefit from it. Learners are not always aware that some aspects of the lesson have been covered in another learning area. You have to remind them.

Teacher B from school A

Yes when we plan for multigrade classes, that is what we are practising in these grades....because it saves time and it is great to integrate if I am conducting this lesson for instance I'm conducting maths with social sciences, for example i am teaching maths, when I am in geometry teaching shapes i.e. triangles and all polygons all those shapes in a way those triangles integrate with social science when we are talking about pyramids in Egypt. So I move to say "ok guys we talked about triangles and properties of triangles so now right in Egypt the famous triangular buildings were pyramids".

All the respondents from the above extracts indicate that integration serves a multipurpose in their teaching. Instead of planning for separate learning areas

which is time consuming and more demanding their time is economized by covering more than one or more learning areas. Learning areas where integration is effective have been identified as Language and Life Orientation; Arts and Culture and L.O; Social Science and Maths; Natural Science and L.O. It is noteworthy that Language integrates with all the various learning areas hence it is medium of instruction involved whenever a content subject is being taught to the learners. It has also been argued that the learners are not always aware the lesson is being repeated so the teachers have to draw their attention.

It has also emerged that integrated sequence of learning activities sometimes happens without planning. The following extract expresses that view:

Teacher BB from School B

Yes sometimes it comes without being planned. I do not integrate by myself but when I plan this, I found that even when I am planning this Technology there is Natural Science, it integrates in that way. Usually Language integrates because it is the medium you use when you are teaching.

The views expressed by the respondents suggest that an integration strategy in multigrade classrooms does reduce the workload of the teachers. Instead of planning for each area teachers identify common areas across the learning areas. It is commended that if this strategy is accompanied by adequate skills it becomes more effective. However this did not mean that learners are always aware of how the learning areas have been integrated. The benefits of learning in a multigrade setting include social and cognitive impact on learners in this setting. This has been discussed above but now the discussion will focus only on learning benefits as opposed to teaching and learning benefits as presented in the previous section.

4.4.2 Impact of social and cognitive benefits

In this section the impact on learning in a multigrade setting is discussed. There are two categories of such benefits, namely social impact and cognitive achievements. These will be discussed in turn.

4.4.2.1 Social Impact

Respondents highlighted the positive aspects and social impact on learning in a multigraded setting. The following extracts support this view

Teacher AA from school B

In some groups they (learners) work together, collaborating relationships is there, they boost each other's self – esteem in some groups. Our learners are very close to each other. I do not know whether it is because they are coming from the farms. They love each other---- they like to help each other --- but 80% have that friendship---- if you get in the class you cannot identify, you cannot say this is grade 6 or grade 7 learner it is just the same classroom with same kids.

Teacher BB from school B

There are social benefits , the is friendship that is developing for instance grade 6 and grade 7 , grade 4 and 5 borrow each other's pens.

Respondents indicated that a multigrade setting has a positive social impact on learners regardless of their grade levels. Deducing from the above evidence it would appear that the multigrade environment context has a positive social effect on learners and teachers. Respondents claim that they find learners sitting with other learners irrespective of their grade clearly revealing that these multigrade learners interact socially in their multigrade classes. At the same time it shows the closeness and love for each other. This may indicate that there is no boundary line in multigrade learner friendships. Relationships could be easily cultivated between older and younger learners.

Another finding that emerged from the data was that among the learners in multigrade classes there is that 'sense of belonging' together. Learners as they are combined in one class irrespective of their different ages, grades, abilities and maturities, and taught by the same teacher, they consider themselves as belonging together. As explained in the previous section on how learners in the multigrade setting become close, in this section the focus is the social interaction

and the level of bonding as a family that learners assume. The following extract is an example of how teacher respondents painted this picture.

Teacher B from school A

Coming to the funeral thing, if a learner has one of her or his family passed away, they (learners) should contribute R2.50 as a way of showing condolences --- then we collect the money with the help of the head boy and head girl – we go to that particular home prior (the funeral) and hold a prayer. And really there is that sense of belonging ---- those who will not be attending funeral are presented by the teachers and learners.

The respondent explains how learners in multigrade settings show a sense of belonging together. In this picture we see that when one of the learners loses a loved one the other learners support the bereaved learner morally and financially. In other words learners have a sense of brotherhood and sisterhood. This shows in the level of closeness and togetherness of the learners.

4.4.2.2 Cognitive achievements

As part of cognitive achievements of teaching and learning in multigrade settings the respondents perceived that their learners were doing better than the learners from a monograde teaching and learning setting. The cognitive achievements were attributed to the reports they receive from the high schools to which their learners moved to. This is evident in the following extracts.

Teacher A from School A

There is no difference as such with multigrade classes they are doing very well because they are competitive and doing very well. The thing is when these students are taken to High School- we have reports that they are doing very well even more than children coming from the monograde classes---.Teacher B from School A also narrates: Yes I'll say that because from my own experience we have been getting recognition or appraisal from the High School, we are getting recognition or appraisal from the High School we are sending our learners to saying that our learners show themselves that they are coming from a school where thorough teaching was done....they excel n way.

Teacher AAA from School C

From my experience there are kids that I taught-but you know they have passed their matric-others are in Technikons. Do you know that there is a child from my school who got an award for writing English essay? She has passed matric now in Byletts. Do you know Byletts? That child is from a multigrade farm school-she got an award in whole South Africa-.

Both respondents perceive the achievements of the learners in high school as cognitive benefits of coming from a multigrade teaching and learning environment in the past. Cognitive achievement is measured by the matric pass as well the learner's ability to move to institutions of higher learning like Technikons. Both respondents take pride in the excellence of the learners beyond the multigrade classrooms. In this regard Teacher A from School A claims that they are praised by the high school teachers, whilst Teacher AA from School C is proud that a learner she taught was nominated as the best English essay writer in South Africa.

Benefits therefore were identified as inter-related for both the teachers and learners. The analysis of what is perceived as benefits by multigrade teachers shows that multigrade teaching and learning settings are seen as beneficial regardless of the demands and workload accompanied with them. This is in spite of the challenges that multigrade teaching imposes on teachers in comparison to single grade teaching. However this does not mean that everything goes well with teaching and learning in multigrade classrooms. It has challenges. The following section is a discussion of those challenges of teaching and learning in multigrade setting.

4.4.3 Challenges of teaching and learning in multigrade settings

This section deals with themes regarded as challenges by respondents through interviews as well as from the staff meeting minutes. As indicated already in table 4.3 challenges of teaching and learning in multigrade settings include problems such as classroom management, classroom organisation, curriculum organisation

and assessment organisation. The following is a discussion of themes perceived as challenges of teaching and learning in multigrade settings.

- **Lack of discipline**

It has emerged from the data that classroom organisation poses many demands. This relates to the classroom organisation in the context of teaching and learning in a multigrade classroom. The following extracts explain this quandary.

Teacher BBB from School C

Sometimes you take other groups outside. The syllabus is different. If you teach other grade inside you'll find that one is listening but when you teach her syllabus you'll find that he has mastered that one (lesson for another grade). Outside maybe they play whether you have given them some tasks to do because they are alone.

Teacher CC from School B

When I'm teaching grade 2 for instance I take them for reading outside so I can not disturb grade 3s. Then grade 3s – I give them some task to do. Then when I come back I give grade 2s a task to do and attend the grade 2s and 3s and then correct the task they have made. Then on the following day I take grade 3s outside for their reading.

Teacher C from School A

Sometimes there are problems as sometimes you'll find they are playing if I am attending another group. They do not concentrate to their groups.

The respondents' report highlights the difficulty of having more than one grade in the same class. From these extracts we learn that it is difficult to discipline learners in a multigrade setting. All respondents confirm that due to the multi tasks that teachers have to handle, the learners become ill disciplined. This also indicates that at times teachers leave learners unattended whilst they are busy with other grades. The problem of lack of discipline according to the extracts above indicates the multigrade classroom is a demanding environment for a teacher. The challenge for the respondents has been to teach learners at different

levels effectively. The response shows that teaching learners of diverse ages and abilities in the same classroom sometimes seems to be confusing and ineffective, hence the loss of control.

- **Lack of space and overcrowded classrooms**

Lack of space and overcrowded classroom have been identified as a challenge. The problem relates to classroom layout and classroom management. In a multigrade class the layout of a class is a crucial parameter in facilitating learning. All the respondents expressed this as more challenging as it hinders effective classroom organisation, thus likely to lower the quality of multigrade teacher's instructions. The respondents said that their classrooms were too small to accommodate learners of more than one grade. Furthermore they could not move freely even when they want to demonstrate a lesson presentation. The following extract exemplifies the frustration of the respondents.

Teacher AA of School B

Even when you are demonstrating something on the chalkboard it is not easy to move when you want to go to the chalkboard but you have to 'squeeze' yourself and try by all means to demonstrate. In other words it would appear that it limits the opportunities of a teacher to attend to slow learners effectively.

It would appear that the problem of cramped classrooms creates a gap in effective classroom organisation and in teachers' instructional strategies. Lack of space and overcrowding has been cited in Mathot's (1998) survey of multigrade classrooms locally and in Collingwood's (1991) list of challenges/difficulties faced by multigrade teachers internationally. On the basis of these two perspectives, it could be argued that teaching and learning cannot be conducive and healthy under these adverse conditions. Recent and previous research (c.f.2) has demonstrated that multigrade practices cannot be implemented well and smoothly under undesirable conditions. It is unsurprising that teachers teaching under these conditions hold negative attitudes. The researcher has also observed that

most of the buildings in the research sites were temporary structures built as small prefabs. This draws immediate attention to the administrators to see that problems of lack of space and overcrowding are resolved in multigrade classroom contexts for effective teaching and learning to take place. Not only are these teachers and learners disadvantaged by inadequate teaching space but there is also a shortage of resources like furniture and teaching resources. The following extracts highlight the problems experienced by the respondents due to a lack of resources.

Teacher A from School A

We have been hammering the Department telling that we have ordered furniture but the Department doesn't respond.....we have been even writing letters not one letter requesting for old furniture that is there at Rhubusana District Office, they do not respond...even reminding the Department when submitting official school documents.

Teacher BB from School B

Sowe used to go to other classes or put the learners in three's instead of two's in a table.....they were uncomfortable at first but we have got no other option. But even now some still sit in those three's and that is the problem.

From the above we learn that respondents complain of shortage of furniture as one of the problems. Kyne (2005) points out that this model of teaching can be more or less difficult, depending on the context in which it occurs. Furthermore Little's (2001) research has demonstrated that rural schools in 'industrialized' countries generally, have adequate economic resources. Additionally, it would appear that (c.f.2) in turn these intolerable conditions have an impact on how multigrade teachers perceive multigrade teaching. Most significantly, their perceptions towards multigrade teaching tend to be negative. The analysis above suggests a strong sense of the role that should be played by the Department of Education to meet the multigrade teacher's needs. Birch and Lally (1995) suggest that most of these causes are related to the 'remoteness' of the contexts in which multigrade schools are located. Furthermore, one of the challenges is the

inattentiveness of education officers to the needs of the multigrade teachers and multigrade schools.

- **Unsuitability of learning materials**

According to the multigrade literature a large number of teachers teaching multigrade classes lack appropriate resource materials for both learners and teachers. Available material tends to be written for monograde classrooms thus hampering effective learning and teaching.

That is how **Teacher A from school A**

I take it is a challenge; these learning materials are not designed for multigrade classes.yes when I am preparing....I have to look for grade 4 curriculum (books), 5 and 6 curricula. We do not have teacher's guide that has been designed for multigrade teaching, this demands a multigrade teacher's time. shows her frustration; so the new design for multigrade has to be in place but I don't know when or the multigrade must be 'abolished' I don't know the how and when.

Teacher AA from school B

We improvise where you can change the scenario so that it can suit these learners, never guided how to improvise. What the Department of Education does, they tell us that this is grade4 work and this is grade 5 work, you must do grade 4 work' only' for grade 4s and do grade 5 work only for grade 5s but I don't know how

From the above extracts the respondents express frustration at teaching in a multigrade setting. The lack of support from their supervisors has aggravated the burden of the respondent teachers in these classrooms. Teacher A from school A expresses frustration at the lack of guidance when it comes to teaching in a multigrade classroom. She is overwhelmed that she has to prepare for all three grades (4, 5 and 6), yet the curriculum is silent on how to accomplish this task. She shows signs of negative attitude towards the multigrade pedagogy. This is evident in her suggestion to abolish multigrade teaching. Teacher AA from school B claims that she improvises so that she can cater for learners at different levels,

however the lack of guidance from the Department of Education is what paralyses her as she says “ but I do not know how.” The minutes of school meetings in all three schools and the issue of lack of support from government officials was extensively discussed. According to the minutes from school A further steps were taken by sending the principal to invite officials from the Department of Education to come and address their problems. However, the minutes further reflect this intervention by the principal has also failed because the Department of Education officials have still not come to the rescue of the school. Birch and Lally (1995) state that among the challenges faced by multigrade teachers in remote contexts are ‘inattentiveness’ of education officers to the needs of multigrade teachers and schools. The problem highlighted here by the respondents is that the current approach to teaching is not compatible with teaching in a multigrade setting.

Planning for different grades from a curriculum that has been designed for single-grade classes is one of the challenges in multigrade classes. The following section deals with this challenge.

- **Lesson planning and assessment**

The problem with lesson planning and assessment involves different learning outcomes and assessment standards for each grade. Consequently it becomes difficult for these teachers when combining grades. The following extracts show how the respondents portrayed lesson planning and assessment as problematic.

Teacher AAA from School C

A lot of work I’m ‘switching and switching’ as I have said that I am teaching grade 4 and 5 and I teach grade 5 curriculum if I notice that grade 4s are struggling I switch to grade 4 curriculum.....when I notice that grade 6s are struggling from grade 7 curriculum I switch from grade 7 curriculum to grade 6 curriculum – it is difficult.

Teacher BB from school B

Assessing them is not easy because they are different; they are many in the same classroom. Then ...observation, I used to choose my own tools to assess them I improvise... these tools are tools that are in the curriculum but I look the ruby and said so I must choose this one.

Teacher C from school A

Yes I have a problem because ... especially in literacy. The words in literacy are very difficult as you see the words written on the chalkboard – ‘amaqebengwana’ (that means pieces of meat in English).

The respondents viewed planning and assessment for multigrade setting as an extra workload and challenging. The challenge they face is not only about planning for multi grades but the assessment of the learners. From the extracts the respondents are aware that they must develop the learner as whole but are not clear on how they should do it. This is evident in the use of terms like ‘switching and switching’. The respondents were trying to use their own methods to ensure that the learners from different grades understand the lesson. This became evident in the field notes as well: From School A it was recorded that one of the new teachers complained of being unable to cope with assessing two grades simultaneously. From both sources of data the problem was with conducting continuous assessment across different grades. The following challenge is identified as a lack of time for individual attention even for those learners that deserve remedial intervention.

- **Lack of time for individual attention and remedial activities**

Lack of time for individual attention reflects the workload that the teachers in multigrade setting are confronted with. As discussed above teaching two or more grades, even more than one phase, in the time allocated to teach one grade increases the workload of the teacher. The following extracts express the challenge faced by the respondents.

Teacher AA from School B

Sometimes you concentrate on two learners per day but you cannot concentrate or reach all the learners. The reason is because you are faced with two different classes with 54 learners and maybe you have to do two learning areas per day to these grades and you also faced with administration while I am faced with these four classes every day. I do not have time for remedial teaching.

Teacher BB from school B

You know why it is very difficult? It is because we are two educators for two different grades eh difficult phases intermediate and senior phase in the same classroom. Really we run short of time, time is our main problem. But it is not the time that much but the "manpower" I can say. If there can be educators you watch and see. If the government can consider the learning areas and the manpower. Look at my case, I am an educator for 4, 5, 6 and 7 and I have to have 20 files to make this effectively you see.

From the above statements it could be argued that although teachers have no time for individual and remedial activities they make an attempt to help the learners. It has emerged from the various explanations shared by the respondents and a major finding of this study that there is no time for individual attention or remedial activities. But what was more interesting, was the respondents' efforts to offer individual attention. Factors such as 'teacher shortages in multigrade settings is not new at all in the South African literature.

Brown (2007) has cited that multigrade teaching has been triggered mainly by concerns about teacher shortages and irregular yearly enrolment of learners in some schools in mainly rural areas (c.f.1). Furthermore, this problem has been highlighted in previous studies by multigrade scholars such as Veenman (1995; 1996) and Mason and Burns, (1995; 1996) (c.f. 2) that multigrade classes mean more planning, preparation, organisation and work, catering for a wider range of abilities and maturity, less time for meeting individual needs and for remediation and less time for reflection on teaching.

Not only did respondents complain of lack of time for individual attention but also complained of not enough time to complete the curriculum. The following section is a discussion of the respondent's ability to complete the curriculum.

- **Inability to complete the curriculum**

Primary curriculum documents usually include or are supported by a list of minimum learning competencies (MLC), which are analysed into objectives appropriate to each grade level. Suggestions on a methodology to be employed to achieve these objectives are also stated. Research evidence suggests that teachers in multigrade settings struggle to deliver a national curriculum that has been designed for monograde schools. A question was posed on whether the respondents managed to complete different curricula for different grades or phases. They were questioned on the criteria they used in order to decide what aspects of the curricula to omit. They were also asked how they recognize or restructure the curriculum to the multigrade situation. Another key finding that emerged from the study was that all the respondents do not complete the curricula for the different combined grades. One respondent from school B was the only one who reported that she only manages to complete the prescribed curriculum in only one learning area. The following extracts reveal what respondents are doing in an attempt to complete the curriculum.

Teacher C from School A

I do not manage to complete the curriculum--- it is not easy. Especially for grade 3 as I do not finish the syllabus it is difficult because next year they'll be going to another teacher. What I do is to tell the next teacher that is, grade 4 teachers "I have not done this and that" so now at the beginning of the year he or she'll start teaching that.

Teacher AAA from school C

My worry is about grade 7 who is leaving my school and I am not worried about grade 6 because I am still going to teach them on the following year. I am 'switching and switching' as I have said that if I am in grade 4 and 5 I teach grade 5 curriculum if I notice that grade 4s are struggling, I 'switch' to grade 4 curriculum. And also when I am teaching grade 6 and 7, when I

notice that grade 5 are struggling I 'switch' from grade 7 curriculum to grade 6 - – it is difficult.

Teacher BB from School B

We are depriving them. Each grade has its own learning outcomes and assessment standards. When you teach grade 4 s, grade 5s have to cooperate because this is the same class I teach...the lesson plan I use may be it is for grade 5s today ---and tomorrow it may be grade 4 lesson plan --- they talk about ' progression' but we do not get it because we are mingled. I just 'jump and jump. It this 'jumping and jumping'. The only thing I use for restructuring the curriculum is to teach grade 4 curriculums today and tomorrow in the class everybody is going to be grade 5.

From the 3 extracts we learn that it is impossible for respondents to complete the curriculum. Both Teacher C from School A and Teacher AAA from School C seem to be worried about the grades that will be taught by other teachers in the following year. Teacher C from School A, suggests that she follows the learners to the teacher of their next grade. For example, when learners move to the next phase grade 4 without having completed the curriculum for the foundation phase grade 1-3, she informs the teacher in grade 4 how far she has gone with them. This without doubt shows the burden those teachers in a multigrade setting experience. Not only are they faced with their own classrooms but are also worried about the level of preparedness of their learners when they move to the next grade. This view is also expressed by Teacher AAA from School C, who is concerned about grade 7 learners who will be leaving for high school. The respondents in multigrade seem to choose what they think is important for learners to know. They use terms like 'switching', 'jumping and jumping' to show that the learners are disadvantaged in the curriculum that is not covered fully. The inability to complete the curriculum is also seen by these respondents as depriving the learners. This evidence from all the respondents indicates a lack of clarity on how to deal with a curriculum that has been set for a monograde class in a multigrade setting. This problem that teacher-respondents are confronted with in this multigrade setting has also been a question raised by scholars like Kyne, 2005; Mathot, 1998, Ninnes, 2006. In fact Little (2005) and Mc Ewan, (1998) claim that curricula, premised on a single grade school structure, need to be adapted to suit multigrade

requirements. Little (2005) goes further to suggest that curriculum adaptation should be done by both national curriculum developers and teacher educators.

The following section discusses violence and bullying aspects as one of the challenges of multigrade setting.

- **Violence and bullism**

Violence and bullying are the results of negative social interaction between learners.

Teacher B from School A

We have got that (referring to violence and bullism) but in a controlled manner because if somebody is doing something that is against the school rules once one of the learners breaks the school rule is reported immediately.....as soon as something like fight is about to start those who are around are quick to tell the teacher.

Teacher BB from School B

Sometimes you'll find out that the big, older ones are bullying these young ones. Maybe sometimes they took pens from the younger ones 'no this is my pen'....things like that.

Teacher AA from School B

There is no violence but there is an element now among those who have gone to the mountain (circumcision school). Among some of them there are two who want to bully others. As a result they want to be naughty but not that much.

Three respondents make claims that the older learners bully the younger learners in the classroom. Both from the respondents and the staff meeting minutes the issue of bullism has been mentioned. This seems to be the problem with mixing diverse learners in age. Teacher AA from School B associates bullism with boys who have gone through circumcision and who see themselves as men as opposed to school children. The problem in multigrade classrooms is that learners are of different ages.

4.5 Summary of findings

The findings of this chapter relate to perceptions of multigrade teachers on benefits and challenges of teaching in multigrade class. It became evident in this empirical chapter that benefits were more inclined to learning as well the impact on learners' social and cognitive advancement. The same cannot be said about the challenges. Challenges were mostly focused on the struggles experienced by teaching multigrade classes. The challenges regarding learning in a multigrade setting were found to be minor.

In terms of benefits peer tutoring, the teaching strategy was found to be beneficial in teaching in a multigrade class. The benefit was associated with learners learning much better when taught by their peers. It was revealed that teachers also learnt the methods that learners used to make their peers understand. Most importantly multigrade classroom grouping enables positive active interaction. Learners who were shy felt more comfortable to ask questions from their peers rather than the teacher or in a larger group. The finding has been attributed to strategies employed in classroom organisation such as mixed abilities and cross grading. This strategy was seen as a way to free up shy learners to ask from advanced learners in their class. The learners in these classrooms sought help from their peers without the teacher's intervention. This promoted a spirit of competition and willingness to help those in need of knowledge. This contributes to the cognitive advancement benefit of learning in a multigrade setting. It has also been highlighted as a finding that lower grade learners in these multigrade settings gain information in advance and therefore by the time the learners move on, that information becomes revision. The criticism of this approach was that the teachers in these classrooms seemed to be more concerned about the higher grade curriculum. The respondent teachers seemed to be silent about the gap created by focusing on the higher grade curriculum at the expense of the lower grade not being taught what was appropriate to its level.

Integration of learning areas has also been found to be beneficial in that it reduces the workload. It was seen as a time saver for both teaching and learning. Integration of learning areas was seen as serving a multipurpose in teaching multigrade classes. Instead of planning for separate learning areas, more than two learning areas were covered in terms of teaching. The disadvantage with this approach was that learners for most of time were not able to make the connection across the learning areas.

The multigrade setting was found to have a positive social impact on learners in that there were no boundary lines in terms of how they formulated friendships. In this empirical chapter learners in multigrade were found to be doing much better than learners in a single-grade. This was deduced from the performance of the learners at matric as well in higher education institutions.

From the empirical work in this chapter, multigrade teaching was found to be challenging in terms classroom management, classroom organisation, curriculum organisation and assessment organisation. Discipline was found to be a challenge in multigrade classrooms. Because of multi tasks that teachers in multigrade classrooms are confronted with. Teaching and learning in multigrade classrooms is ineffective because of inadequate teaching space. The classrooms are too small to accommodate more than two grades. Learners of various grades cannot work effectively because of lack of space. At the same time teachers have no space to give instructions or monitor a learner's progress. The material and curriculum is inadequate for teaching multigrade class because it was designed for single classes. The difficulties in these classrooms are exacerbated by a lack of support from the Education Departmental officials. Planning and assessment in multigrade classrooms is burdensome. Furthermore teachers do not have the skills to assess more than one grade simultaneously. The teachers are also confronted with challenge of understanding learners holistically. There is never enough time to give individual attention. Whilst each grade has its own prescribed curriculum in multigrade classrooms there is not enough time to cover the curriculum for all grades. Teachers have to choose what they perceive to be

important. It was found that teachers attempted to deal with the multi curricula even though they were not trained to do so. Violence and bullism have been identified as challenges in the multigrade setting. These are associated with the diverse age groups that share the space in a multigrade setting.

The next chapter is the concluding chapter.

CHAPTER FIVE: TOOLS PROMOTING QUALITY TEACHING AND LEARNING IN A MULTIGRADE SETTING, LIMITATIONS AND RECOMMENDATIONS

5.1 Introduction

The evidence of the research was presented and discussed in the previous chapter. In this chapter tools to promote quality in teaching and learning in multigrade setting are recommended. In so doing the reflections of the challenges from the empirical work are done in the light of the literature reviewed on multigrade learning and teaching. The discussion is guided by research question four of this study which states as follows: What tools are recommended for promoting quality teaching and learning in a multigrade classroom setting? Also the limitations and recommendations of this study are highlighted.

5.2 Recommended tools to promote quality in teaching and learning

In this section recommended tools to promote quality teaching and learning in a multigrade setting are discussed. As indicated in the empirical chapter (chapter 4) challenges included teaching learners of different levels of understanding simultaneously, a lack of learner support material and the teacher's lack of skills and tools to teach these classes effectively. One step towards quality promotion in a multigrade setting is by identifying the challenges of the environment and to develop means to overcome the challenges. In this regard the literature supports the autonomy of the multigrade school when it addresses its problems.

- Learning area grouping and whole class teaching

The learning area grouping and whole class teaching model refers to the presentation by the learning of one learning area programme or learning area to all grades in a multiple-grade class at the same time. This is the simplest approach for teaching. The teacher has only one lesson to prepare, less support

materials to prepare, so both time and effort is saved. The main characteristic of this kind of teaching is that the lesson is planned for learners with an average level ability in the class (Little, 2004). This form of presentation does not take into account the vertical differences in the grade levels. This model is usually teacher-centered. A lesson is presented in the talk/chalk style and at the end of the lesson learners may be given the same activity to work on.

The recommendation is that multigrade teachers should not use this approach for most of the work because the entire lesson is focused on the average learner. The multigrade class is diversified in terms of abilities, age and levels. Low performing learners fail to acquire expected assessment standards whereas high performing learners become bored because the task does not challenge them. This ultimately causes discipline problems.

The multigrade teacher should recognize that whole-class (cross-grade) teaching must revolve around open task activities if learners are to be engaged. For example, a teacher can introduce a writing assignment through topic development where learners can brainstorm ideas. In this context, learners from all grades can discuss different perspectives. They can learn to consider and respect the opinions of others.

- Curriculum organisation

From the empirical work, a common problem area was how to teach multiple grades through an outcome based education approach. From this study it was not clear what attempts the education system has made to assist teachers on how to organise a curriculum for multigrade teaching. The syllabus arrangement also seemed not to cater for minimum learning competencies expected of the teachers' grade levels. This resulted in extreme cases where young learners were subjected to difficult learning material, for example when grade three learners were taught the grade four syllabus. Another extreme case is when grade four learners are taught a grade three syllabus while in grade four. Such learners

become bored and ill behaved when work does not correlate with their level of complexity. (Kyne, 2005; Lingam, 2007; Little, 2005; Ninnes, 2006)

The process to modify and adapt the curricula of different grades to the multiple structures is crucial. (Little, 2005). One of the key steps for reorganizing the curriculum to suit a multigrade class is to try and identify the minimum learning competencies necessary to be achieved by learners of each grade. This suggests that teachers need to determine what learners need to know and what they already know. The teacher has to identify common and related skills for direct and indirect teaching content and skill areas for integration. This means that the teacher needs to plan activities for teaching and learning on the basis of learners' learning competencies. The teacher also has to prepare the learning material. Lastly the teacher has to know the assessment tools required. The assessment tools should provide evidence for learning in relation to the minimum learning competencies.

- Planning with outcomes in mind

There is a need for quality teaching in multigrade as in monograde classes. A step towards achieving quality is to develop teaching plans. The plans should entail long-term planning; (what to teach for a specific phase in a multigrade setting for three years) and short-term planning (the what, why, how and who to teach- these are daily plans). This makes planning time about teaching.

By using outcomes to plan the teacher to uses his/her own imagination and initiative, to reflect on his/her own practice, resulting in quality teaching. By using outcomes to plan learning requires one to be informed of the national curriculum (policy documents). This enables the teacher to develop lesson outcomes that provide more detail about core learning content, logical sequencing and appropriate conceptual depth.

- Classroom organisation

In multigrade classrooms, learners of different ages, abilities and grades are engaged in activities as individuals, pairs and in groups on different learning areas. Teachers have to deal with learners who are more diverse. To cope with this challenge Mason and Doepner (1998: 172) point out that educators should employ various strategies of teaching learners of a multigrade class as individuals, pairs and in groups in the same place, and simultaneously. In addition these teachers have to impart knowledge and skills effectively to all of them.

- Classroom layout

Classroom layout refers to the arrangement of furniture, learners and learner support material. The classroom layout is crucial in facilitating learning in a multigrade classroom. The following are the recommendations in this regard:

The teacher should be able to talk quietly to one grade while the other learners are busy.

Learners not working with the teacher should be positioned in such a way that they are not distracted by the external activities. The teacher should be able to reach every learner's desk. Learners in a particular grade should be placed in such a way that they can easily work in a group.

The basis for the abovementioned recommendations is that the layout in the classroom is such that learners of the same grade are put in a row. The teacher's position is detached from all grades. In a traditional classroom the layout described above is good for drilling and testing. Such a layout is too rigid and fragmentary for a mixed-ability class, with its need for flexibility. In addition such a layout excludes the possibility of exploring any interest that learners might have outside the prescribed work. On the dynamics of the multigrade setting, the group/cooperative learning classroom is revealed by the respondents and literature as the most effective one. The group layout is ideal for a multigrade set

up. It is applicable to several activities: discussions, group reading and project presentation. This layout encourages more learner participation when they work under their leaders with whom they are acquainted and with whom they feel less anxious.

The cooperative layout involves working together and being responsible, for both their own and each other's learning. It is a valid approach to teaching and learning that addresses and caters for the most fundamental, cognitive and social needs of the learner. (Mathot, 1998)

Layout has the potential to radically change the quality and relevance of learning in a multigrade class. It challenges the normal stresses that accompany a multigrade teacher but is rewarding because of the many skills learners acquire from learning cooperatively.

- Classroom management

Classroom management deals with the management of space and resources. There are various approaches that can be commended such as *the learning centre approach, activity centre approach, learning area, resource centre approach and a temporary interest centre approach*. For the purpose of this study changing of approaches is recommended. The centre is created for a specific class theme which may change every week.

Thorough planning should precede managing a multigrade classroom. What is recommended is that teachers should have learning area centres. The following questions can be used as a guide for teachers:

1. What type of activities normally occurs in the classroom?
2. What type of activities would you like to occur?
3. How best can you facilitate learners' group activities?
4. Do you work with the whole group or separately with individual learners?

In addition to the above, the multigrade teacher needs to be flexible in the management of the class. Most important in classroom management is the flexibility to rearrange centers as the need arises.

5.3 Limitations

One of the limitations of this study is that the findings cannot be generalized because this is a multi-case study investigating multigrade teachers teaching in rural areas – farms involving a sample of multigrade teachers from three multigrade schools.

The researcher did not anticipate that the respondents would be emotional about their frustrations of teaching in multigrade schools and this limited her readiness to address them. For example in instances where the principal was the interviewee because he/she teaches in multigrade class, the researcher could have asked some questions involving leadership of multigrade schools.

5.4 Recommendations

In this study an attempt has been made to suggest tools to promote quality in teaching and learning in a multigrade setting. A further study could look at reskilling and retooling educators of multigrade teachers. Another recommendation could be to look at how teacher training succeeds or fails in preparing teachers for a multigrade setting.

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Appendix 1: Permission to undertake a Masters Degree in Education Study

APPENDIX: 1

Faculty of Education

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27 July 2009

TO WHOM IT MAY CONCERN

Permission to undertake a Masters Degree in Education Study

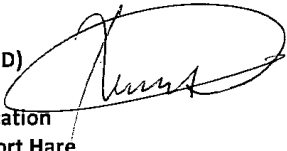
This is to inform you that Ms Sindiswa Matshoba, student number 200805016 is registered for the Masters Degree in Education, in the School for Postgraduate Studies, Faculty of Education.

As part of her studies, Ms Sindiswa Matshoba is required to conduct a research on an approved topic. The approved research is entitled "*Multigrade teachers perceptions of benefits and challenges of learning and teaching in multigrade settings: a case study*".

Ms Sindiswa Matshoba is soliciting information and is seeking permission to undertake this study. Your assistance in this matter is highly appreciated.

Yours faithfully

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Appendix 2: Teacher interview schedule

Multigrade Study 2009

Teacher Interview Schedule

Purpose of the study: **To understand the perceptions of multigrade regarding the benefits of teaching in multigrade classes. The information that you share will be kept confidential. Thus whatever you say will not be shared with others. Your identity will remain anonymous: there will be no mentioning of names or other personal details. If you wish, when this study is completed, I can share the findings with you.**

BACKGROUND INFORMATION

1. **Your Gender:** _____
2. **Your years of teaching multigrade classes:** _____
3. **Your years of experience in monograde classes:** _____
4. **Your highest professional qualification:** _____
5. **Did you receive any training in multigrade teaching? (If yes tell me about it, if no why not?)** _____

6. **How many multigrade classes do you teach?** _____
7. **What grades are combined in your multigrade class?** _____
8. **How many learners do you have in your multigrade class? (each class separately)** _____

9. **Did you request this grade combination, or was it assigned to you? (If assigned, how do you feel about it?)** _____

TEACHER PERCEPTIONS OF BENEFITS AND CHALLENGES

Classroom organisation

10. **Research findings suggest that the ways in which teachers organise their classroom is a key element in successful multigrade teaching (MGT).**

- 10.1 **Can you tell me how you address classroom organisation in your class (i.e. how do you organise your class for MGT)?** _____

10.2 **What strategies do you use to organise your classroom? Give examples of the specific things you do.**
(What strategies do you use to organise your class to ensure [a] teaching resources are safe / easily accessible to students; [b] free movement of the teacher and learners ; [c] is there a library corners; [d] learning corners; [e] storage; [f] display areas; etc) _____

10.3 **[a] How have you as a teacher benefitted from these classroom organisation strategies?;** _____

[b] How have your learners benefitted from being in a classroom organised in this way _____

10.4 **What problems have you encountered with organizing your classroom in the way that you have? How else would you have liked to organise it? Why haven't you done it in that manner?** _____

Teaching Strategies and Time

11. The quality of teaching and the nature of the teaching strategy using multigrade classes are critical issues for effectiveness.

11.1 **Can you tell me how you teach your multigrade classes (i.e. teaching strategies used)?** _____

11.2 What strategies do you find work best for you? _____ Why? _

11.3 Do you use workbooks/ worksheet in your teaching? (*benefits and challenges*) _____

11.4 [a] How have you as a teacher benefitted from teaching the classes using these strategies? _____

[b] What successes have you had with the learners using these teaching strategies?

11.5 What problems do you encounter in the use of these strategies? _____

11.6 Research has shown that Grouping as a teaching strategy is the most effective way to facilitate learning in multigrade, but grouping must be of certain forms/ types which enable active interaction with teacher and peers (*e.g. cross grade/ age groupings, within and across learning areas groupings, peer group teaching, paired groupings, mixed/ same ability groupings, etc*)

[a] Do you group learners for teaching? _____ Why? _____

[b] If yes, what criteria do you use to form/ structure the groups? (Mixed ability/ cross age/ grade) _____

[c] How do you structure the activities for learners to work in groups? (*Individual seatwork, worksheets, discussion, projects*) _____

[d] How much active interaction among group members is encouraged? _____

11.7 [a] How have you as a teacher benefitted from using the grouping strategies? _____

[b] What successes have you had with the learners using these grouping strategies? _____

11.8 What problems do you encounter in the use of these grouping strategies? _____

Research has shown that direct instruction (teaching) and high time on task for learners are two factors critical for learner achievement.

- *Direct Instruction*

11.9 How often do you use direct instruction in your class? (i.e. teaching the whole class at the same time) _____

11.10 If NO, what prevents you from using direct instruction. _____

11.11 If YES, describe when or in what instances direct instruction is used. _____

11.12 [a] How have you as a teacher benefitted from using direct instruction as a strategy? _____

[b] What successes have you had with the learners using the direct instruction strategy? _____

11.13 What problems do you encounter in the use of the direct instruction strategy? _____

• *Time on Task*

11.14 [a] How much of your class time, on average, is devoted to learners working on tasks? _____

[b] have the learners benefitted from the time allocated to the tasks? _____

11.15 Comment on your time [a] for individual attention with learners; _____

_____ [b] for remedial activities with learners; _____

_____ and [c] for enrichment activities with learners _____

Curriculum adaptation for multigrade teaching

12. Research has shown that the monograde curriculum needs to be adapted to suit the multigrade context and there is a need for integration across learning areas.

12.1 How do you go about planning your lessons to accommodate the different grade levels in one class? _____

12.2 [a] Based on your lesson preparation, how have learners benefitted from learning in multigrade settings? _____

[b] What are the challenges you face in lesson preparation for the multigrade settings? _____

[b] What are the *difficulties* you encounter when assessing learners of two or more grades in one class? _____

12.3 How many teachers teach multigrade in your school and do you plan together? _____

12.4 Based on the grades that are combined for your class (*above*) , how has this combination posed a challenge for your planning and teaching? (*difficulties in planning and teaching*) _____

**12.5 Do you plan for integration across learning areas? _____
If YES, which learning areas do you integrate? _____**

_____ What have been the benefits of this integration for you as the teacher and the learners. _____

_____ What have been the challenges? _____

12.6 Considering the scope of the work for each grade level , how have you gone about getting the learners to complete the curriculum when the learners are now combined as a group? _____

12.7 When you are unable to complete the curriculum, what criteria do you use to decide what aspects of the curriculum to leave out? _____

12.8 How do you reorganize or restructure the monograde curriculum to the multigrade situation _____

The Learner in the multigrade class

- Cognitive related aspects

13. Research has shown that there are no consistent differences in learner achievement between multigrade and monograde classes

13.1 How have your learners been performing in the various learning areas that you are teaching in the multigrade class (*are the learners doing better or worse than the monograde classes?*)? Why? _____

13.2 How have the lower grade level learners been coping with the upper grade level work? (*Give specific examples*):*e.g. learner benefitting cognitively as cognitive Stretching, Scaffolding occurs!!! Zone of Proximal Development?*

13.3 [a] Have you allowed for peer coaching? _____ What benefits emerged from this type of peer tutoring? (*e.g. lower grade level learners able to read better; have shown improvement in mathematical skills. Is this consistent across learning areas or in some learning areas only?*)? _____

[b] What challenges have you experienced with the above? _____

- Non –cognitive aspects

14. What social benefits and/or challenges have you observed from the older and younger learners interacting and working together? (*do you see a sense of confidence being developed/ A greater sense of belonging/ formation of relationship with older learners/ better personality adjustment/ better or worse attitude to work/ higher or lower stress levels/ less or more violence/ higher or lower drop outs/ higher or lower self concept/ spirit of collaboration/ is there a high or low teacher learner rapport*) _____

Classroom Management

15. Research has shown in the multigrade class teachers who manage their classrooms effectively, i.e. manage learner misbehavior and classroom space, enjoy teaching more, have greater confidence in their ability to affect learner achievement and maximize the time spent on learning.

15.1 How do you manage learner misbehavior in the multigrade classroom? _____

15.2 How has the way in which you have managed the class assisted you in maintaining discipline in the class? _____

15.3 How has the teaching strategy used contributed to your management of the multigrade class? (whole class teaching versus separate grade level teaching) _____

Resources

16. Tell me about the *adequacy* of the learning materials available for your multigrade class(es) _____

_____ [b] Ask WHY _____

17. [a] Tell me about the *suitability* of the design of the learning materials for multigrade teaching (i.e. are *the materials designed for MGT*) _____

[b] If the materials are suitably designed for MGT, what are some of the benefits you have had from using _____ them?

_____ If the materials are unsuitable, what are some of the challenges you have had in using them _____

Training

18. What kind of professional support/training (*advice*) have you been provided with for MGT _____

19. What aspects of multigrade do you find most difficult to handle _____

_____ and how would you like to be helped in it _____

How would you describe your attitudes toward multigrade teaching? _____

Appendix 3: Consent form

CONSENT TO PARTICIPATE IN THIS STUDY

I have read or had read to me in a language I understand the above information before signing this consent form. The purpose of this study has been explained to me satisfactory, the researcher has explained the procedures involved in this study, informed me of my rights as a participant, told me about possible risks and benefits of participation in this study. I am participating willingly; I have had time to ask questions. I understand that I am free not to answer any questions I am not happy about, or can withdraw my consent any time without any consequences to me.

I hereby consent to participate in this study.

Participant's.....(Please
print)

Participant's
signature.....Date.....

Researcher's
name..... (Please
print)

Researcher's
signature.....Date.....

Witness's
name.....(Please
print)

Witness's
signature.....Date.....

Appendix 4: Excerpts from minute book

SCHOOL A

2007/06/04: The Department has to take into consideration that the time teacher is spending in paper work is more than teaching. The teachers feel tired by the time they go to the learners. They are never up to date. One new teacher was still confused not knowing how to teach two classes at the same time. Suggestions were given to her and one teacher offered to help.

2008/03/12: the Department is introducing NSC and this has a lot of paper work. Teachers feel the Department is putting more burden on their shoulders. They are teaching multi-classes and now they are introducing NSC with its requirements. The teachers decided to work hard in hard trying to come up with the resolutions of the problem.

2009/03/10: teachers are feeling the burden of teaching multi-grade. They feel the Department does not employ teachers. They came to the decision that they approach the Department in connection with their complaint. They sometimes experience problems from the learners who are from the other schools who do not cope with the standard of work. They feel if they are having one class it was not going to be so heavy.

The teachers decided to visit the subject advisors or the EDO in connection of this. Teachers to visit Department were elected and one of those is the Principal.

2009/05/06: teachers have discovered ways and means of managing these multi-grades. They complained about the lack of vision by the subject advisors to develop them where they are lacking. One teacher said they (subject advisors) once suggested we call them when in need of them and a letter was written to them.

SCHOOL B

Planning- all 3 levels of planning. We are not clear as to how to go about planning but we do it irrespective of the problems/challenges that we encounter.

Multi-grade teaching. It is very difficult to plan in multi-grade classes because of the number of learning areas that we teach.

Learners who bullying young ones. It is very difficult not to accommodate them in our school as they are at risk of being exposed to crime activities if they are out of school.

Parents who work in farms near our school who stay in Ducatts which is +/- 40 km away from our school. The Department of Education is in the process of putting an end to the scholar transport that it has provided for schools. It is a problem in our school because parents cannot afford to pay for their children's transport, as proposed or suggested by the Department of Education, since their earnings are so little.

SCHOOL C

Assessment of learners of different grades is too difficult. This needs extra time and there is no time. We do not know how to solve this problem.

Planning for many grades is confusing. It is confusing when it comes to assessment standards and learning outcomes because they differ for each grade level.

Appendix 5: Extracts (Example of transcripts)

Teacher A from School A

Multigrade Study 2009

Teacher Interview Schedule

Purpose of the study: **To understand the perceptions of multigrade regarding the benefits of teaching in multigrade classes. The information that you share will be kept confidential. Thus whatever you say will not be shared with others. Your identity will remain anonymous: there will be no mentioning of names or other personal details. If you wish, when this study is completed, I can share the findings with you.**

BACKGROUND INFORMATION

20. Your Gender: Female
21. Your years of teaching multigrade classes: 36 Years (1973,1974 –to date)
22. Your years of experience in monograde classes: 3 years (1970 – 1972)
23. Your highest professional qualification: H.D.E
24. Did you receive any training in multigrade teaching? *(If yes tell me about it, if no why not?)*
No, we were only told how to teach these multigrade schools, it was all, never did it practically, only taught how to handle. Even practical teaching done in singlegrade classes.
25. How many multigrade classes do you teach? 3
26. What grades are combined in your multigrade class? 4,5 and 6
27. How many learners do you have in your multigrade class? *(each class separately)*
Grade 4 – 22, grade 5 – 24 and grade 6 – 24 total = 70 Learners
28. Did you request this grade combination, or was it assigned to you? *(If assigned, how do you feel about it?)*
No, it was assigned to me, it was due to numbers of learners, they were few in classes, it was due to low enrollment. I was not the only one – even the principal herself, combined classes.

TEACHER PERCEPTIONS OF BENEFITS AND CHALLENGES

Classroom organisation

29. Research findings suggest that the ways in which teachers organise their classroom is a key element in successful multigrade teaching (MGT).

29.1 Can you tell me how you address classroom organisation in your class (*i.e. how do you organise your class for MGT*)?

I group learners according to their ability. Grade 4 according to their ability, grade 5 according to their ability a grade 6 according to their ability. Their ability differs in learning areas, like other one is good in Maths, those who are good in maths, those who are good in maths, when we are doing maths they move from their group to that group. You'll find that the other one is good in science- and they know that now it is science, you'll see them moving from that corner to that corner. There is no need to tell them-they know their groups and I give them names. In maths they know that we are 'green' and so on and so on, according to colours and sometimes according to wild animals- there are 'lions' 'zebras' and so on. There are learners that are good in more that one or two learning areas.

29.2 What strategies do you use to organise your classroom? Give examples of the specific things *you do*. (*What strategies do you use to organise your class to ensure [a] teaching resources are safe / easily accessible to students; [b] free movement of the teacher and learners ; [c] is there a library corners; [d] learning corners; [e] storage; [f] display areas; etc*)

Every learner is taught to be responsible for the resources, because when we teach, we teach them to own everything here at school, every resource at school is hers, or for her brother who has not yet come to school-that helps us a lot. If a chart falls from falls the wall ,they what to do they pick it up and put on teachers table so that big boys will hang it.

The movement in the class is easy now that we have grouped them you can move from that corner to that corner even learner are moving easily. We have made a corner for the library where go according to their group. They that is library time they will go to that corner .There are reading books in that corner from the department of education for the curriculum. We have been also provided books by an organization called "Room to Read"-they are people who are interested in schools. We have also 'mobile library' which moves from that class to that class. When it is their time, they'll move to that corner to read. It has been organized by the whites like the ones teaching computer and basic English from grade R – they are teaching them separately.

29.3 [a] How have you as a teacher benefitted from these classroom organisation strategies?;

Yes, I see advantages, you'll find that sometimes learners are helping each other. By this way because each learner doesn't want to fail – these groups are competing.

[b] How have your learners benefitted from being in a classroom organised in this way

When learners are grouped in this way – some of them are very shy to speak to a teacher or to a big group but in their groups, when you visit their groups – now that he is among the group, you'll find that even the one who is too shy and not confident, he is speaking, he is sharing, he knows something. But when you are talking to him as a teacher, he doesn't even lift up her or his hand. In this group you'll find that he is the one who is telling them that is not right and this is wrong. This is right now she gains confidence, now he is able to share his ideas.

- 29.4 What problems have you encountered with organizing your classroom in the way that you have? How else would you have liked to organise it? Why haven't you done it in that manner?
- Sometimes we have no furniture toand gives us a lot of problems as you see that are few cupboards, even chairs. We keep our resources in that pile of card boxes in that corner and that one. Sometimes we do label them and sometimes learners know that what they are looking for is in this cardbox – they are responsible in that way. We also encounter problems because of space. Mmh I wish to have a big classroom where I can have a lot of space, but it is not inductive as such and furniture – that small bookshelf with piles of books is falling apart now at you can see. We have been hammering the Department – telling that we have ordered but the Department doesn't respond – we have been even writing letters not one letter requesting for old furniture that is there at Rhusana District Office and so on and so on but they do not respond – even reminding the Department when submitting official school documents. The EdO is visiting us mostly yearly and even now we expect him, but when he comes, when he is talking to us 'Oh I talked to the person who is in charge for the furniture and so on. Even myself I have been to the Dept for many years but I think that because I am in a farm school they do not recognize me, farm schools some stage other farm schools experience same problem.

Teaching Strategies and Time

30. The quality of teaching and the nature of the teaching strategy using multigrade classes are critical issues for effectiveness.
- 30.1 Can you tell me how you teach your multigrade classes (*i.e. teaching strategies used well*)?
- Well, I teach these learners, just eh-- , I use one curriculum this year, another curriculum for next year, I'll use another curriculum. For this year I am using grade 6 curriculum so the ones who are in grade 5 and in 4 are benefitting. For instance if I am teaching in science 'water', grade 5 and 4 also have 'water' in their curricula and grade 6 'water' – they only thing I am to be bit advanced for grade 6 and all my grades are gaining. even when I am teaching about 'animals' all they do gain so no ne grade is left behind – for instance you'll find that those who are in grade 4 are more advanced even to these grade 6 ones, they are the ones who are catching up everything and they are curious to know why is it like this.
- 30.2 What strategies do you find work best for you? _____ Why?
- When I just give them the topic, they are going to brainstorm what they know and you'll find that most of my lesson, most of what I have prepared is gonna come out of them because they know it and I teach them as one. I teach them as one class but I don't lecture them like saying this goes like this and this goes like this. I just throw to them, they ask questions in this same topic and you'll find that the knowledge I am gonna give them is just a small thing, they are used to this, they discuss the topic. Sometimes I tell them that tomorrow will be dealing e.g. with 'plants', so go and find out what we are we saying when we deal with plants and so they know by the time I am talking. You'll find that some of them have brought some plants and so we are going to talk about they see. Why it is learner – centered – they must know that we are here to help each other, even my self I've never seen these things, they must help me. Most of information comes from them.
- 30.3 Do you use workbooks/ worksheet in your teaching? (*benefits and challenges*)

I do use both workbooks and worksheets especially when I want them to put those worksheets in their portfolios. The workbooks help them to---- they are always advanced they know that we have done this exercise, now we are going to do the next one – when you go to that exercise they already know what you want from that exercise. Most of them even though they come from disadvantaged homes where parents are not coping, their mothers are not educated, most of them but you’ll find that they want, they are keen to learn, they ask help from other students. I used to tell them that although their mothers are not educated, they know, ask them – they are going to tell you whatever you ask – they know. Even in parents’ meeting here at school I tell them that ‘don’t tell your children that you are not educated, you are educated you are also teachers. In so much that one parent told me that because I was teaching the father and he said to me “when you were teaching us fractions you said this and that but now this boy say that you are teaching fractions in a different way, why now? I cannot help this boy, tell me what you have changed and so I have to teach the parent so that his child-----.

We do encounter problems. Sometimes you’ll find that a child has forgotten her books or has lost her books, or by the time he was studying a younger sister has torn the books or removed a page and she’ll come crying to me “my little sister has done this” and what else can you do?. You’ll find that these books most of them are written in English and so the parents cannot help them, so not they have to go and see those who are in High School and they are not teaching or helping or helping them – they are just giving them answers and when you ask her how did you do this? How he has done this exercise or tell the class, it is then that you’ll find that – you’ll see that they are being in other way, in not a way we want to help them.

30.4 [a] How have you as a teacher benefitted from teaching the classes using these strategies?

Me as a teacher, I have work and now it helps me to find those individual learners who are learners and so now I have to concentrate to them – them who are slow learners so that they pick up with others and you’ll find that by the end of they year have improved a lot and they manage to move from that class to achieve-----.

[b] What successes have you had with the learners using these teaching strategies?

It is confidence, a child to have confidence in whatever he is doing, that is success to me – even the zeal to learn, I used to say there should be no teachers who get upset because learners ask, we are here to work so they must come and ask questions – the teacher must repeat what you were saying yesterday so that you understand better than I know. Those are successes because learners are eager to learn and they are competitive, they do not want to be left behind. They want to be in that first group, there is competition among grade 4s and 6s.

30.5 What problems do you encounter in the use of these strategies?

Some are bullies, from each group you’ll find there is someone who is a bully who doesn’t want to be told – wants others to listen to him. In all grades there are bullies even in grade 4. Oh both sexes are bullies, it is worse with girls – they like to bully. That is the only problem – but even this bullism, now I am trying to control it so that everyone must know that they are equal, everyone should have a say in a group – no one is right or wrong. I change the group leaders so that everyone must be responsible and must learn and must learn and it is good because sometimes you’ll find that this one is a born leader and so on, everyone must take part.

30.6 Research has shown that Grouping as a teaching strategy is the most effective way to facilitate learning in multigrade, but grouping must be of certain forms/ types which enable active interaction with teacher and

peers (e.g. cross grade/ age groupings, within and across learning areas groupings, peer group teaching, paired groupings, mixed/ same ability groupings, etc)

[a] Do you group learners for teaching? _____ Why?

Yes I do group my learners. I want them to share. They should share their knowledge. Everyone must take part, everyone must be involved in that topic we are dealing with. I group them according their ability, sometimes in that group I have find 8 or 7 learners but I don't have a very big group. And you'll find that the group that is backward in this group they know that – but I never told them that I have grouped them according to their ability – but you'll find that this group that is backward is always consulting that group for help and you'll find that now one is from that advanced group is here trying to give help and I don't ask why are you here because I could see. You'll find if you are not in the classroom, you'll find everyone busy. You'll find this groups discussing and that groups are busy discussing. The noise they make is from discussion, sometimes by the time you come in, they have lots of questions. When the older ones are being grouped with younger ones it has an effect to the older ones, you'll find that these young ones are little brighter – so he doesn't want these ones to know that he is not as clever as they are, so you'll find that he is trying to grab whatever these little ones are saying – it is an advantage to him. If I can tell you now that one is very improving, is doing very well in grade 6 I put him with young ones – “hai boys maan help me and so on and so no”. To tell you he is a man now, he is here in grade 6 doing very well. They know that are slow learners but I never told them that they are slow learners, but they'll go to that group and ask for help even the big boy. To you as a teacher it is less work, the child is coming for individual ----

[b] If yes, what criteria do you use to form/ structure the groups? (Mixed ability/ cross age/ grade)

I have already answered, according to ability.

[c] How do you structure the activities for learners to work in groups? (*Individual seatwork, worksheets, discussion, projects*) sometimes I give them worksheets to work individually, even discussion, it is a way of assessing them. Discussion is that what has helped me, because like that child – centered because even asking questions they are discussing that topic. And once you say someone says something out of that they ask questions they are discussing that topic. And once you say someone says something out of that they ask questions from other out from that group while it reports as each group has its own scribe and so on and so on. Yes groups have projects especially in Social Science even in art – arts and Culture. If you are telling them that we are going to find or make music instruments they work as a group to collect some things.

[d] How much active interaction among group members is encouraged?

Yes, they must help each other , I do encourage interaction. There are shy ones, they do not even speak, but when they are interacting with their groups with peer groups and in their own groups, but not with me they share their views as they are encouraged. I do not tell my learners to group for different learning areas once they hear a bell rings they know its Maths now, one of the bell ringers is among them – they look at the timetable then they jump to their groups, they have names in each group – lions , zebras. It is not easy to stick to the timetable because sometimes you'll find that when the lesson you wanted to introduce to the learners did not understand easily, you have to repeat. So sometimes I take two periods and discuss, they should understand it so it is useless to rush with the timetable sometimes learners are not gaining anything, they must gain something.

30.7 [a] How have you as a teacher benefitted from using the grouping strategies?

I have already told you.

[b] What successes have you had with the learners using these grouping strategies? Learners who are shy to speak, they are able to speak, they are able to speak out and they are gaining confidence, now they have time to ask and now they are getting individual attention from their peer groups.

30.8 What problems do you encounter in the use of these grouping strategies?

I have already answered that one when I talked about bullism.

Research has shown that direct instruction (teaching) and high time on task for learners are two factors critical for learner achievement.

- *Direct Instruction*

30.9 How often do you use direct instruction in your class? (i.e. teaching the whole class at the same time)

I only use direct instruction in my class only when I want to introduce that lesson to them – otherwise I do not use any direct instruction.

30.10 If NO, what prevents you from using direct instruction?

Sometimes learners get bored because they are not involved, they are feeling that they are not the part. They do not even look at you, you'll find that they are busy with something else or playing with others. They need to be involved in a lesson so that once you started to do this direct instruction, they hate lecturing and they want to move. If you are doing something they want to be the part, they want to touch, even if you are talking about something they know you cant just tell them that se water is salty, they must taste it – although they are near the sea and all of them have been to Chintsa – but they want to taste.

30.11 If YES, describe when or in what instances direct instruction is used.

I think I have already told you that when introducing a new lesson.

30.12 [a] How have you as a teacher benefitted from using direct instruction as a strategy?

When I use direct instruction? I don't like that direct instruction because have told you that they get bored, they feel lonely as if they are neglected.

[b] What successes have you had with the learners using the direct instruction strategy?

I have already answered that.

30.13 What problems do you encounter in the use of the direct instruction strategy?

Even that is same to me as that one – they get bored, they do not want to listen anymore.

- *Time on Task*

30.14 [a] How much of your class time, on average, is devoted to learners working on tasks?

I cannot say much because they differ, it depends on how much is to give them, but at the same time I teach them not be slow, I teach them to answer correctly and they must contrite in what they are doing. Sometimes I tell them that I am giving them 15 minutes for this work because I look at the amount of work I have give

them and so on and so on – not to say the exact time, sometimes 20 mins but it depends on the task they are doing. For instance I cannot give them the whole hour for mathematics, I will not be right or okay with that because they are going to take time, they must learn to be quick.

[b] have the learners benefitted from the time allocated to the tasks?

Yes, they have benefitted a lot because now they concentrate and when I say they should stop and they all stop knowing that I want the work finished by that time – if you have not drawn the line, it means that you have not finished. It helps them a lot. Yes I did experience difficulties at first. Sometimes you’ll find that they do not care, do not have time to look at their work to check if it is correct, check spelling and so on and so on, have I counted this correctly if it is Maths. I have taught them now not to bring any work that has not been revised. They must do the work and then read it because there are mistakes that they can correct by themselves before coming to me. I don’t want to correct those mistakes, I must do my work and must correct their mistakes.

30.15 Comment on your time [a] for individual attention with learners;

Yes I do have time for individual attention with learners. For instance if a child is not coping well even in their groups, even others will tell me that this one is not coping. Even myself I then take that individual child while others are busy, I sit down with him. Yes. I do manage individual attention to all learners, there are ones who are advanced, they also help other learners individually. You know there was one who could not read very well but I look one of the children to help him who was good in reading – he was pointing to the picture and then pointing to the word. That was his own method and I was watching this pointing and I said to myself “ this one is going to memorize this” I discovered that this is helping this child because now she can read and to tell you that he is very good in reading now and I never thought that I could point to the picture and then to the word – so individual teaching is also done by the per group.

[b] for remedial activities with learners;

yes, these learners I give them activities and they’ll go and get information from the books, library books sometimes, even their books in the classroom that the government has provided, even from the teachers themselves. You’ll find that one is busy with the teacher trying to get information. Yes, I also encourage learners to get information from parents, that is, other people either than teachers. You’ll find that there is a lot of information in parents even from other people like if I teach them our language – mother tongue, IsiXhosa. Like ‘intonjane’ in Arts and Culture, they know that sometimes I used to call some of the parents to come and talk to the whole school about this ‘intonjane’ . they have modernized things now. Even when it comes to L.O, I involved parents, they tell their children that they know what is going on, what is right and wrong. I also involve the community, even parents who is teaching learners ‘beadwork’ and she is not paid.

_____ and [c] for enrichment activities with learners _____

Curriculum adaptation for multigrade teaching

31. Research has shown that the monograde curriculum needs to be adapted to suit the multigrade context and there is a need for integration across learning areas.

31.1 How do you go about planning your lessons to accommodate the different grade levels in one class?

As I have said in the beginning that if I am dealing with science, I am dealing with animals and then something happens like I want to integrate mathematics – lets say an animal has 4 legs as we know, but in the forest there are 10 animals who have 4 legs-then how many legs? The answer will come out (4x10=40).So science is not science now is another learning area. So even if I happen to slaughter and I happen to sell these pieces of meat-that is economics, now we weigh the kilograms of this meat. In L.O you can teach how Noah called the animals from the forest to the arch.

31.2 [a] Based on your lesson preparation, how have learners benefitted from learning in multigrade settings?

Yes they do benefit as I've said these grade 4s are curious to know what the grade6 knows so they are benefitting a lot from grade6. They do not mind about grade 5 but are competing with the top grade. For instance sometimes when I am giving them maths according to their grades now when I want them to work out maths, but if I am teaching maths separately about these.....but if I am teaching addition and subtraction I teach them all. When I am giving them exercises to solve exercises or problems in grade 4 and finish them and come and do problems for grade 6. By that some grade 6 have not finished. They don't mind the grade 5s they want the top ones. Sometimes you'll find that, this one doesn't understand a small or minor thing, so I have to sit down with them and you'll find that the next one is correct. They are really very competitive.

[b] What are the challenges you face in lesson preparation for the multigrade settings?

The challenge is that when I am preparing I have to go through all their 3 different curricula because when I teaching I must teach one thing and even to reach grade 4, 5, and 6 levels. It demands much of my time because I must do something that all these children are going to benefit from. I must not do it and say that I am experienced to this. I must sit down and do the work properly so that the children benefit. It demands my time even now I've got a lot of work to do-I have administration as principal and when the subject Advisor or the EDO comes he wants, they want their work. I don't say because of my administration.....they want their administration differently from the class work. I must do the same work as other teachers who have no administration. If I happen to be absent, even tomorrow I'll be attending meeting at Kwelhera – as I am not here in each group there are leaders.

[c] What are the difficulties you encounter when assessing learners of two or more grades in one class?

Especially at the end of the year – because as you want to move the child to another class or she is going to another school it is difficult because when the child is not..... in fact you take all the work she has done from January once you feel that the child cannot be taken to another class it is difficult now because you have to call the parent and discuss the matter with the parent and sometimes it is difficult in that way. You'll find that the parent doesn't not accept that his child should be retained. We do call the parents even during the year but it is because some parents are not enlightened. Once you show her performance the parent will take her child to another school. It is also difficult to assess all these 3 grades at the end of the year. For instance we give their parents their children's portfolios so that they can have a look and sign, but most of the parents are illiterate but others when you sit down with them they do understand.

12.3 How many teachers teach multigrade in your school and do you plan together?

3 teachers – all of us are teaching multigrade classes. Yes meet and plan together.

12.4 Based on the grades that are combined for your class (*above*), how has this combination posed a challenge for your planning and teaching? (*difficulties in planning and teaching*)

Yes, as I have said previously if you are combining you have to look at the level of each class.

12.5 Do you plan for integration across learning areas? Yes, we do

If YES, which learning areas do you integrate?

If you are teaching language you intergrade with maths, with Life Orientation so on and so on. I can tell you a story, and out of the story, and out of the story you gonna find L.O, Maths like – I once told my class that there was a louse which was in the forest and then there was going to be umgidi ‘initiation ceremony’ in that area and then boys were sent to cut trees with their axes. There was a loud big voice there “I am the one who devours every dirty boys”. Boys ran home leaving their axes and reported that there was something with a very big and loud voice that devours every dirty boy and men also went there and the big voice told them that it devours every dirty men. Even women went there with their axes and the loud voice told them that it devours every dirty women. Then girls said “let us go by ourselves because we want this ceremony to be held. They also heard the big voice “ I am the one who devours every dirt girls. The girls started to search everywhere and found that it was a louse and they killed it. This means that everyone should be clean. So that is Health Education – L.O, and how many times people from the location went to the forest – that is maths. What have been the benefits of this integration for you as the teacher and the learners?

There are some benefits – when you are conducting a lesson the learners are on the alert. They ask questions from science, L.O. or A and C immediately. When you talk about cleanliness they know that we were talking about water. This integration helps them even to study and revise their work.

What have been the challenges?

The challenge is that, it’s for you as a teacher to be clear of what I am saying to learners because they ask questions. And they are going to do research even researching their previous learning areas and you’ll find that the child is referring you to what you have said in that previous lesson you have taught in social science. You have to prepare thoroughly knowing that you are going to be caught by the learners.

12.6 Considering the scope of the work for each grade level, how have you gone about getting the learners to complete the curriculum when the learners are now combined as a group?

It is just not easy but at the same time it is not wise to rush to complete the curriculum and yet if you are rushing alone and you have left the learners behind. What is important is not to complete the curriculum. What is important is the knowledge the children get from you as a teacher.

12.7 When you are unable to complete the curriculum, what criteria do you use to decide what aspects of the curriculum to leave out?

It is difficult to say something that you know that these children will help them in anything. You just leave out those things out – for instance in my area here there is no need to teach children about....I don’t know what to say. There are things in social science where you know that this thing is irrelevant to this area. For instance I am supposed to be teaching ‘tourism’ because this area is close to Chintsa, teaching them skills like plumbing and so on and so on but I see that it is difficult to complete this, I am unable. I take out those things like teaching them about the things in Social Science are irrelevant in this environment, even when you are talking about them, the children will not understand what are you

talking about. For instance teaching them about the Table Mountain and Mt Auxes they shall never go those places. I better teach them about something they are going to benefit even when I am choosing from the curriculum I take out the things that children are familiar to them and going to benefit from them.

- 12.8 How do you reorganize or restructure the monograde curriculum to the multigrade situation
Yes, I think I've already answer that I say that I say that I choose the topic according to the level of each class.

The Learner in the multigrade class

- Cognitive related aspects

- 13 Research has shown that there are no consistent differences in learner achievement between multigrade and monograde classes

13.1 How have your learners been performing in the various learning areas that you are teaching in the multigrade class (*are the learners doing better or worse than the monograde classes?*)? Why?

There is no difference as such but with my multigrade classes they are doing better to me because they are competitive and are doing well. The thing is when these students are taken to High School we have reports that they are doing well even more than the children coming from the monograde classes and here at school as I am talking now I have a good teacher who was schooling here – she is a product of a multigrade I have a lot.

These are the best, they are used to this competition. They compare themselves with the top ones, that is grade 6 and they are doing wonders. And they are not taught by the same teacher, they are so competitive that they want to top grade 6 as I have told you. I have also narrated a story of Nantos, they were doing well in these three classes (4,5&6). My position one came from grade 4 and her mark topped grade 6 ones about 22 marks because I had a common paper for all of them. I took my schedule to my principal and she told me to bring papers so that she could remark them by herself and memorandum and she marked them. Position 1 and 2 were sisters and as I am telling you now they are hoo..... they never failed. Perhaps some teachers may say that my numbers are few whereas they have more than 50 in singlegrade classes

- 13.2 How have the lower grade level learners been coping with the upper grade level work? (*Give specific examples*):e.g. learner benefitting cognitively as cognitive Stretching, Scaffolding occurs!!! *Zone of Proximal Development?*

It is what I have been telling you about.

- 13.3 [a] Have you allowed for peer coaching? Yes I do What benefits emerged from this type of peer tutoring? (*e.g. lower grade level learners able to read better; have shown improvement in mathematical skills. Is this consistent across learning areas or in some learning areas only?*)

Because I've found that they learn better when they are tutored by their peers. I have told you about a child who could not read to me – but that one helped him. I am telling you that one is the in the class-pointing to the picture and to the word, I said to myself this one is going to memorize the whole lesson but when I called him to read, I found that he read with understanding. I was saying to myself, this one is difficult, this one is

going to waste my time. But now he is the best, he likes reading, he is among those you see them reading during the morning prayers. You know when I was teaching addition I never knew that method used by one child. I said “ come to me and tell me how you have this answer, you have copied this, and she said “I didn’t” and she started to show me – this is really what we call mathematics because you do not depend on somebody’s method, you have your own method and you are going to come up with the answer.

[b] What challenges have you experienced with the above?) Yes there are some challenges, this tutor now sometimes wants to be benefit for helping this one “ Can I have your bread, sweets so on and so on. I cannot just work for nothing” So those are the few things but I am trying. When they are outside they have their own lunch although they are provided with lunch here at school. This one has to share with that one. And I’ve said that no one must take or ask for your provision, just come to me. If she does not want to help you she must not help you-but not your food. That is the only problem. When you are teaching they must know that sharing is very good especially when it is done on agreement. No one forces you to help somebody, you must do that in a good way.

- Non- cognitive aspects

14. What social benefits and/or challenges have you observed from the older and younger learners

interacting and working together? (do you see a sense of confidence being developed/ A greater sense of belonging/ formation of relationship with older learners/ better personality adjustment/ better or worse attitude to work/ higher or lower stress levels/ less or more violence/ higher or lower drop outs/ higher or lower self concept/ spirit of collaboration/ is there a high or low teacher learner rapport)

Yes, that sense of ---- you’ll find that sometimes the older ones they became friends and closer with the younger ones and even that thing of bullism you’ll find that is subsiding. The grade 6 seeing that grade 4 s are after them academically they now form friendship and that one is sure about what he is saying and he has proof and to me it sur about what he is saying and saying that the book says this, where do you get your answer? Self – confidence grows among them. There are no dropouts. The dropouts we had, it was due to teenage pregnancy only. There is also no violence. I must say that Christianity plays a lot. The school itself is a Christian based school, it is from the Emmanuel Mission School, so we having child evangelists visiting them. So there is that spirit of, and that play a lot in their personal life. As I said that, for instance we have young men who are from the forest here at school but you cannot see that because they are so humbly that they are among other boys. Those things like crime and violence you’ll not experience here. For instance when you hear that a child has done this and that, we are wondering where does he get it and you’ll see that it was something else, he didn’t plan it. We have no problem like that.

Classroom Management

15. Research has shown in the multigrade class teachers who manage their classrooms effectively, i.e. manage learner misbehavior and classroom space, enjoy teaching more, have greater confidence in their ability to affect learner achievement and maximize the time spent on learning.

15.1 How do you manage learner misbehavior in the multigrade classroom?

In these 3 classes I have monitors, prefects- so once a child misbehave even inside or outside school. There are rules in the classes, in the school – you should respect teachers and other learners, keep the classroom clean and so on. Those are the class rules so if one doesn't abide by the rules, he knows very well that 'I do not belong to this school.'

15.2 How has the way in which you have managed the class assisted you in maintaining discipline in the class?

These rules I have already mentioned. There is discipline, no misbehavior.

15.3 How has the teaching strategy used contributed to your management of the multigrade class? (whole class teaching versus separate grade level teaching)

I do not teach these three grades separately and I have talked about competition.

Resources

16 Tell me about the *adequacy* of the learning materials available for your multigrade class(es)

There is not enough learning materials for these three grades.

[b] Ask WHY

We have no funds we depend on the Department of Education and donors, that is reason. We do request for learning materials, but I understand that it is something that is all over because you'll find that even schools in the rural areas are blaming that they haven't adequate learning materials. From Mandela Foundation which is one of the donors we got the computers that you see. Every day, every time we come together the Department knows.

17 [a] Tell me about the *suitability* of the design of the learning materials for multigrade teaching (i.e. are *the materials designed for MGT*)

They are not designed for the combined classes, they are designed for separate, monograde classes – that is why I have to take all the curricula together and see each grade level so that in my preparation I have that.

[b] If the materials are suitably designed for MGT, what are some of the benefits you have had from using _____ them?

_____ If the materials are unsuitable, what are some of the challenges you have had in using them Yes I take it as challenge that these learning materials are not designed for multigrade classes. Yes when I am preparing because I have to look at for grade 4 curriculum, 5 and 6 curricula. We also do not have a teacher's guide that has been designed for multigrade teaching.

Training

18 What kind of professional support/training (*advice*) have you been provided with for MGT

There are no courses for multigrade classes. We attend courses just like it is for grade 1 or 4. They say that it is for that grade. Sometimes they call it for intermediate or foundation phase and then you'll go for that. There is nothing of that sort, that is for all those who are teaching multigrade.

We , most of the schools who are multigrading we have raised that problem. Look at this, when we are attending courses, we are having teacher portfolios, I must have teacher portfolio for grade 4, a portfolio for grade 5 and for one for grade 6. So we were complaining that this is too much. They are always saying that we are going to take this to the seniors, to our senior.

When they are visiting our school I also tell them that. I once had an Inspector by the name of Mr. Bhoxongo, I was teaching social studies that day and he said "do you notice that the grade 4s are the best in answering your questions?"

I said yes and he asked which class is grade6. And he said that-so it means that teach this syllabus to all of them because these ones are keen to learn, because they are listening, those who are supposed to know they do not know. That EDO saw multigrade teaching as an advantage according to him. But these EDOs now are saying that we put these ones ie grade 4 and 5 in disadvantage-you are disadvantaging these ones, that is what they said when they were here and yet they do know that --. They want us to teach grade 4 alone, separately grade 5 separately and grade 6 separately. That is impossible, I said that to them that I so wish that you were here. They do not even look at the preparation as they are supposed to take the curriculae for grade 4,5and 6 and see or look at your preparation.

This is not possible to teach these 3 grades separately. To this grade I must have an hour for social science for grade 4 an hour for grade 5 and an hour for grade 6-how many hours do I have in a day? Which classes I am not going to teach? And yet now I manage to teach all my learning areas knowing that I've used all my 3 curriculae e.g. in social science I have taken this.

19 What aspects of multigrade do you find most difficult to handle?

Its – if you can ask that question in another way? As I have said before that it is time, you must have time, as you are teaching these multigrade classes you have to have time to look at 3 different curriculae and you have to look at the level for each grade and the class must not suffer as you are going to teach this lesson. Planning is not easy because you have to have... and it is difficult for a teacher not to answer a child who has prepared her question. Yabona, you must be able-sometimes they come with a question from High School there as we are nearer Byletts High School. They want us to answer that question and we have to be right as I have said that even the teachers themselves have to be on the alert. It is a workload. If the Department could help us with planning for the multigrade classes it would be better. For instance they have planned for us not for the multigrade for different classes that is, singlegrade classes. Even what they have planned for us that cannot be taught in one day and you'll find that they say in their time allocation it is 8 hours and you'll find that there is lot that needs attention. and how would you like to be helped in it Yes we are right with learning materials' but it would be very easy if they can plan for multigrade, planning for multigrade classes, it will help us a lot. I have already talked about the courses, they are not for multigrade teachers only for singlegrade teachers.

20 How would you describe your attitudes toward multigrade teaching?

Attitude is that... We do not like it because it brings us lot of work and even in marking. When you are marking it is a lot of work. But I am used in teaching these multigrade classes but really, really it is

frustrating because it has lot of work, it has a lot of preparation. It is not easy to teach these multigrade classes but I am used, I am used to it.

Teacher BB from School B

Multigrade Study 2009

Teacher Interview Schedule

Purpose of the study: To understand the perceptions of multigrade regarding the benefits of teaching in multigrade classes. The information that you share will be kept confidential. Thus whatever you say will not be shared with others. Your identity will remain anonymous; there will be no mentioning of names or other personal details. If you wish, when this study is completed, I can share the findings with you.

BACKGROUND INFORMATION

32. Your Gender: Female
33. Your years of teaching multigrade classes: Since I have started teaching in 1993 up to now - 16 years
34. Your years of experience in monograde classes: Never. Sometimes when attend these workshops at Stirling I feel like going to those schools and see how happy and friendly they are to teach while I am "burning here" because I have a lot of work to do. Yes I am burning. Is used to sayyou know there was a visit here at school, we were visited here it was in January two weeks after the opening the Province together with the district. When they came I was very happy because I was going to put this on table and say how I am going to do this? I was sure that it was going to be solved especially the man whom I was talking to. Instead he said he is going to bring 20 files for me so that I can file all of my learning areas. I felt like crying and I told myself alone I am going out of this school, I am going to look for another place where at least I am going to teach 3 learning areas.
35. Your highest professional qualification: Diploma 3 yrs – SPTD plus ACE (Life Orientation) I decided to specialise in L.O. because of this 'burden' to improve so to take me out of this.
36. Did you receive any training in multigrade teaching? (If yes tell me about it, if no why not?) No. It was not a multigrade training at Rhusana Training College from 1989 – 1992. Even during practice teaching it was single grade classes. I have never met multigrade until I reached here. I think at Rhusana there was no provision for multigrade.
37. How many multigrade classes do you teach? From 1993 – 2000 when I arrived it was grade 3 and 4 (2 grades). From 2002 up to now it is 4 grades.
38. What grades are combined in your multigrade class? 4, 5, 6 and 7. It is subject teaching. I teach Xhosa, Social Science, Technology, EMS, Arts and Culture.
39. How many learners do you have in your multigrade class? (each class separately) Grade 4 –17, Grade 5 – 21, Grade 6 – 23, Grade 7 - 31
40. Did you request this grade combination, or was it assigned to you? (If assigned, how do you feel about it?) No I did'nt request but it was a must. There were no other options. We were only the two educators for this Intermediate and Senior phase. Ja, because the load was too much, it was a must.

TEACHER PERCEPTIONS OF BENEFITS AND CHALLENGES

Classroom organisation

41. Research findings suggest that the ways in which teachers organise their classroom is a key element in successful multigrade teaching (MGT).

- 10.1 Can you tell me how you address classroom organisation in your class (*i.e. how do you organise your class for MGT*)? It is not very easy, it is very very difficult because you find out that you group them in groups. The grade 4's together with grade 5's. You are not going to teach grade 4 today, the period is one, the day is one, the teacher is one. So I group them in the same table, 3 grade 4's and 3 grade 5's. Same applies to grade 6 and 7. I mix, I mingle girls and boys. I don't look for the gender. The ability works a lot because they are going to learn from each other.
- 10.2 What strategies do you use to organise your classroom? Give examples of the specific things *you do*. (*What strategies do you use to organise your class to ensure [a] teaching resources are safe / easily accessible to students; [b] free movement of the teacher and learners ; [c] is there a library corners; [d] learning corners; [e] storage; [f] display areas; etc*) Alright, as I have said that the arrangement in the classroom is in groups so there are spaces in between so that we can move to and from and they also go out easily in between their desks because there is a space. And also for the resources it is not very easy to give the resources to the learners we put them in the cupboards where we lock them. I can say we have enough cupboards but we do not have enough space for our reading corner. During the time of reading or library time, we took the card – we have got the card from 'Room to Read' whereby there are some books. During that time we have got the timetable on the wall. It is grade 4 and 5 timetable. I am the librarian I was trained. We take the card so that we can open it on the verandah. We have no room to use as library. They go and read what they want then I go and record. They read inside the classroom and then they go out with them to read for their parents and also to be helped to read books especially those who are not as good as others in reading so that they come back with better reading from home. And then they read back for the teacher. Sometimes they retell the story

and summarize. Coming to display my work, I have a very big problem. My classroom is also a church room, a community hall, many things like that. And when I display sometimes I find that they are destroyed even by the learners. Even when I am gone to the workshop even for two days or three. When I come back everything is torn out – they are like

10.3 [a] How have you as a teacher benefited from these classroom organisation strategies?; There are some. The advantage is that they help each other. There is a teamwork and then they have the chance to show their creativity. Maybe for instance I have given them right now a ‘simple switch’ they are in groups already. I have photocopied the page into 10 pages. (Do you have a photocopier here at school?) No-nooooo you have to pop out your money. Those are good they are going to help those who are slow. When the learners learn more when it comes from them then they listen to you. They listen to you and then after that they do it practical. And it becomes better when they see from one of them. I am talking about technology now.

[b] How have your learners benefitted from being in a classroom organised in this way. Already answered that.

10.4 What problems have you encountered with organizing your classroom in the way that you have? How else would you have liked to organise it? Why haven’t you done it in that manner? No, it was easy but not yet easy because there were no chairs, eh enough chairs, lack of chairs. So we used to go to other classes or to put them in three’s instead of two’s in a table. They were not comfortable but we have got no other option. But even now some still sit in those three’s and that is the problem. I would like to have a class for each and every grade because sometimes it is not good to teach them another grade’s work while they are in this grade you see. What I mean that is to deprive them. I see that somewhere somehow I just deprive some of these learners – maybe it can be grade 4 or grade 5 because I feel that no sometimes the time is finished now, let me teach these grade 5’s so that they can go to grade 6 with something on their field while the grade 4’s are suffering because they are busy doing grade 5 work. I wish that because of their specific learning outcomes for that grade.
It is because we don’t have”why and what mean” there are only 4 classrooms but the grades are 7 with grade R.

Teaching Strategies and Time

11 The quality of teaching and the nature of the teaching strategy using multigrade classes are critical issues for effectiveness.

11.1 Can you tell me how you teach your multigrade classes (*i.e. teaching strategies used*)? As I have said that they are in groups and I photocopy the work for each group so that they have enough resources.

11.2 What strategies do you find work best for you?
Why?

That's what I am doing in my class – this grouping. I also give them homework sometimes so that they go and research. Like here where I am working there are so many businesses, so giving them the pamphlets with questions and like the interviews they come back with the answers and report in groups. There are shops, butchery, garage in this complex and the farmers also.

11.3 Do you use workbooks/ worksheet in your teaching? (*benefits and challenges*) _____

I use.....eh we've got the books for the class work, we've got the files whereby where the work that has been photocopied we put in files or the formal assessment. The books are for class work and homework and sometimes tests. Yes, there is a lot there are benefits, yes there are benefits because before we go straight to the formal, you start first from the informal. In the informal work there is sort of practising, when they go to the formal they have already done informal work and then now it is better now when you mark formal work. The books were used for informal work then these files for formal work.

Yes there are challenges. The challenges are the files, the Department maybe give us only 60 and the learners are more than 60, and the learning areas are 9, for each learning area there should be a separate file. To solve that we ask them to ask for their sisters in High School to give them used files. We don't have any big problem on files because of that of that solution. At this Friday they'll keep them in their bags we will just ask for them when they are going to be assessed by the Advisers.

11.4 [a] How have you as a teacher benefitted from teaching the classes using these strategies? As I have just mentioned.

[b] What successes have you had with the learners using these teaching strategies?

They see that this is education because it is not familiar for them to have files. And these files are very neat because they decorate them whatever they think with their minds. They show their insight. When we want the files we get them.

11.5 What problems do you encounter in the use of these strategies? The problem is because of these classes as I have said. If each grade can have its own class I don't think there will be any problem and we also need additional staff.

11.6 Research has shown that Grouping as a teaching strategy is the most effective way to facilitate learning in multigrade, but grouping must be of certain forms/ types which enable active interaction with teacher and peers (*e.g. cross grade/ age groupings, within and across learning areas groupings, peer group teaching, paired groupings, mixed/ same ability groupings, etc*)

[a] Do you group learners for teaching? _____ Why? Yes. I have already told you the reasons.

[b] If yes, what criteria do you use to form/ structure the groups? (Mixed ability/ cross age/ grade) _____
I have already answered thatI am burning and I hope for the solution you see. When I see people coming inside that gate asking us about this, "I can talk until tomorrow" because I have a hope that one day there will be something.

[c] How do you structure the activities for learners to work in groups? (*Individual seatwork, worksheets, discussion, projects*) Okay, as I have said that sometimes I give them the interview to go to the business people. They go as individuals because they are going to come back and report what are their findings. Projects also individual work where they give up the structure they create the car. They do this as individuals because if done in groups there are those who are so lazy who'll not come and do anything. Yes I have group leaders. They are not from upper grades. I mix them so that they can have experience.

When I choose them I just look for those who are 'sharp-sharp' – those who are not going to delay the process. If you choose those who are shy aah-h that thing will never be

[d] How much active interaction among group members is encouraged? I give them chances. Those who have said something already must sit down and then others have to say something.

11.7 [a] How have you as a teacher benefitted from using the grouping strategies? As I have already said.

[b] What successes have you had with the learners using these grouping strategies? No I have said that.

11.8 What problems do you encounter in the use of these grouping strategies? Ja, sometimes those who understand easily sometimes you'll find that they get bored and want to answer always and then I stop them. Yes, there must be one person to answer my question – that is what I am doing because they'll answer all of my questions and depriving those who are shy. I even come closer to those who are shy and repeat the question so that he can give me the answer I am looking for. Though they work in groups I also interrupt them when I ask questions. I do not leave them alone, I am up and down, if I am talking with this group I will be closer to them.

Research has shown that direct instruction (teaching) and high time on task for learners are two factors critical for learner achievement.

- *Direct Instruction*

11.9 How often do you use direct instruction in your class? (*i.e. teaching the whole class at the same time*) If I am coming with the new topic like 'Global Warming' so I have to teach them before group work. A new topic which is not familiar to their understanding.

11.10 If NO, what prevents you from using direct instruction. Yes I do direct instruction.

11.11 If YES, describe when or in what instances direct instruction is used. Already answered that.

11.12 [a] How have you as a teacher benefitted from using direct instruction as a strategy? Yes I do benefit because I have to go and find out what the topic is about. Even myself talking right now about the example I give you when I am going to teach about this global warming I have to go to the library so that I can go deeper and be able to answer their questions because they watch the T.V. there may be some questions they are going to pick up. They must watch and listen and they must report and then we combine it with my topic.

[b] What successes have you had with the learners using the direct instruction strategy? Yes there are successes because they even have the time to share what they know and I also receive from them because maybe sometimes I don't know what they know and when they share to me I also repeat and they also receive from me when I teach them.

11.13 What problems do you encounter in the use of the direct instruction strategy? They get bored because they are very used in doing more than listening but to get them is to teach and ask some questions in

order to collect their minds. And when you are doing so, you'll find that they are listening because you may ask that one.

- *Time on Task*

11.14 [a] How much of your class time, on average, is devoted to learners working on tasks? On Xhosa maybe, when I am teaching Xhosa I need to use 4 hours per week – so I have to take an hour for each day. It depends on different learning areas. For instance Arts and Culture is 2 hours per week, Social Sciences 3 hours per week, EMS 2 hours per week. I am referring to all my grades that is, grade 4, 5, 6 and 7.

[b] have the learners benefitted from the time allocated to the tasks? They are not very quick at writing but they do finish most of the work.

11.15 Comment on your time [a] for individual attention with learners; Very very difficult, yoo-oo very very difficult. You know why it is very difficult? It is because as we are two educators for two different grades eh different phases, intermediate and senior phase in the same classroom. Really we run short of time ja, time is our main problem. But it is not the time that much but the 'manpower' I can say. If there can be educators you wait and see. If the government can consider the learning areas and the manpower. Look at my case. I am an educator for 4, 5, 6 and 7. And I have to have 20 files to make this effectively, you see. That's why I say if the government can look at the 'learning areas' and the 'manpower' yho-yho!! This education can be 100% good. You know I feel like to be a child when I see the things these learners are doing as compared to what I did from 1973 – 1991. I feel like to be a learner these days. It is very very good and right but the 'manpower' is the major problem.

_____ [b] for remedial activities with learners; As I have said it is not good, really, because the time and the learning areas they do not allow me for that, and [c] for enrichment activities with learners The homeworks are helping them because we do not have this time we give them 'too much homework' so that they go home and do their homework and when they come back we get into a new thing.

Curriculum adaptation for multigrade teaching

12 Research has shown that the monograde curriculum needs to be adapted to suit the multigrade context and there is a need for integration across learning areas.

12.1 How do you go about planning your lessons to accommodate the different grade levels in one class? Yho, yho we cried and cried to the Department to the extent that they did plan took cluster leaders for each learning area they go to plan with other clusters and then they brought learning areas to us. But it is the same because we cannot teach grade 4, 5, 6 and 7 alone. But this planning is not for us multigrade. It is very good for Ziphunzana (Duncan Village) and Mdantsane teachers and they are very happy when they are getting this. You'll find that in that corner are grade 4 educators and in that corner all the grade 5 teachers are sitting there collecting their lesson plans while as I am teaching grade 4 I have to go up and down.

The resources that I use are accommodating these learners because if today I thought that I didn't teach grade 5 work yesterday I only considered the grade 4's because they should have to have their work on their files when the Advisers called grade 5 only, they want to see the work of grade 5 only, not a mix

work. So to capture those grade 4 while I am doing - - presenting those grade 5's the resources that is teaching aids that I am using are also catering the grade 4's so that they can practise what are we going to do with grade 5. At the same the grade 4's are involved in this lesson plan but I know in my head that this is grade 5 work and it is going to be in their files. This planning for different grades, it is not easy, it is not easy, hey this is very difficult.

12.2 [a] Based on your lesson preparation, how have learners benefitted from learning in multigrade settings? At least they benefit because they do gradethey do upper grade work while doing their own. When they are in the next grade there are things that are familiar which were done last year. And then they capture and capture and they go on.

[b] What are the challenges you face in lesson preparation for the multigrade settings? As I have said.

[c] What are the difficulties you encounter when assessing learners of two or more grades in one class? Yho! Yho!!eh – eh, assessing them is not very easy because they are different, they are many in the same classroom. Then observation, I used to choose my own tools to assess them. I improvise. These tools are tools of the curriculum but I look the ruby and said so I must choose this one.

12.3 How many teachers teach multigrade in your school and do you plan together? We are three. No in my life I never plan with anybody inside here because the learning areas I am teaching are different. They are very different, yho! yho! and they 'my own'. I have just to go to the school that is why when we go to cluster meetings I look up and down, north and west, and I can't see anybody unless I go out.

12.4 Based on the grades that are combined for your class (above) , how has this combination posed a challenge for your planning and teaching? (difficulties in planning and teaching) I have talked about this.

12.5 Do you plan for integration across learning areas? Yes _____ If YES, which learning areas do you integrate? Yes, sometimes it comes sometimes without being planned. I do not integrate by myself but when I plan this, I found that eh even when I am planning this technology there is natural science it integrates in that way. Usually language integrates because it is the medium you use when you are teaching.

What have been the benefits of this integration for you as the teacher and the learners. Yes there are benefits because it reminds them of what they have learnt maybe. Maybe they have not learned about that but when I taught them this, then this next educator when talk about they will be clear about that. What have been the challenges? _____

12.6 Considering the scope of the work for each grade level , how have you gone about getting the learners to complete the curriculum when the learners are now combined as a group? As I have said so before we come to this question you know we are depriving them. Each grade has its own learning outcomes and assessment standards. When you teach grade 4's grade 5's have to co-operate because this is the same

class I teach. Today I have to look at grade 5's, 4's so that they have to come closer to grade 5's. Tomorrow I will look at grade 5. The lesson plan I use maybe it is for grade 5 today, then grade 4's have to co-operate because this is my class and my period, this is their learning area and tomorrow it may be grade 4 lesson plan. But we know that we are depriving them. But its not supposed to be like that as each grade has their learning outcomes and assessment stand. They talk about progression but we do not get it because we are mingled.

12.7 When you are unable to complete the curriculum, what criteria do you use to decide what aspects of the curriculum to leave out? No I can't, I can't – I just jump and jump and jump (in the curriculum)

12.8 How do you reorganize or restructure the monograde curriculum to the multigrade situation It is this jumping and jumping and jumping. The only thing I use for restructuring it is to teach grade 4 curriculum today and then tomorrow in the class everybody is going to be grade 5.

The Learner in the multigrade class

- Cognitive related aspects

13 Research has shown that there are no consistent differences in learner achievement between multigrade and monograde classes

13.1 How have your learners been performing in the various learning areas that you are teaching in the multigrade class (*are the learners doing better or worse than the monograde classes?*)? Why? Hey I feel like to be in that school with monograde classes. The miracle that we use to see is to see grade 6 doing better in the grade 7 work. Grade 6's jump to that work but it is very bad because even next year they will come up with some things they have done in the previous grade. I am not sure I was talking about my situation where we combine grade 6 with grade 7.
Okay I can say that they could be better because they receive enough time with the upper grade even if we do not finish the syllabus they get enough time because last year they did this work and even this year is the same work. And then you see that last year you have done up to here and try to finish up and when they go out they will know how to do some work.

13.2 How have the lower grade level learners been coping with the upper grade level work? (*Give specific examples*):e.g. learner benefitting cognitively as cognitive Stretching, Scaffolding occurs!!! *Zone of Proximal Development?* Shame!! It is very veryOh! It is a shame really because are from three learning areas now coming to this class with nine learning areas. Sorry I thought that you were talking about the 'Foundation Phase'. No we don't have a problem with that as I have said.

13.3 [a] Have you allowed for peer coaching? _____ What benefits emerged from this type of peer tutoring? (*e.g. lower grade level learners able to read better; have shown improvement in mathematical skills. Is this consistent across learning areas or in some learning areas only*)? Yes as I have said that they are in groups. Yes there are benefits as they help each other.

[b] What challenges have you experienced with the above?) I have already said that the challenges are the one's that I have already told you.

- Non –cognitive aspects

- 14 What social benefits and/or challenges have you observed from the older and younger learners interacting and working together? (*do you see a sense of confidence being developed/ A greater sense of belonging/ formation of relationship with older learners/ better personality adjustment/ better or worse attitude to work/ higher or lower stress levels/ less or more violence/ higher or lower drop outs/ higher or lower self concept/ spirit of collaboration/ is there a high or low teacher learner rapport*) Sometimes you'll find out that the big, older one's are bullying these young one's. Maybe sometimes they took pens from the younger one's 'no this is my pen' things like that but it is not the most case that we experience. Ja, there is a good relationship. They also go to sport where they play soccer and then we took bigger boys in grade 7 and combine them with grade 6. Yes you can see that there is friendship in class as I have told you that you'll find that these grade 6's are getting more from the grade 7's work. So they find out that oh that one knows let me befriend this one.

Classroom Management

- 15 Research has shown in the multigrade class teachers who manage their classrooms effectively, i.e. manage learner misbehavior and classroom space, enjoy teaching more, have greater confidence in their ability to affect learner achievement and maximize the time spent on learning.
- 15.1 How do you manage learner misbehavior in the multigrade classroom? And there is a lot as I told about taking one's pen. Eh we have made the rules. They know that if they do not meet rule number so and soThey must do what we have said. For instance if you take someone's pen and it is not yours, you are disturbing that person, go for your own pen.
- 15.2 How has the way in which you have managed the class assisted you in maintaining discipline in the class? I think I have said so in the case of a pen.
- 15.3 How has the teaching strategy used contributed to your management of the multigrade class? (whole class teaching versus separate grade level teaching) I have answered that one.

Resources

- 16 Tell me about the *adequacy* of the learning materials available for your multigrade class(es) No-no there is nothing that has been done for this multigrade. There is nothing that has been done for multigrade, this material has been designed for single grade. We maneuver in our classrooms. [b] Ask WHY I.....I.....I don't think there is a place where this can be designed because everybody especially when you are going to towneven to the workshops you'll find that even the facilitator that we are listening to her or him was a single class teacher and they don't know, and I don't think that they want to come and experience it – they can see from us. They have no experience of multigrade teaching.
- 17 [a] Tell me about the *suitability* of the design of the learning materials for multigrade teaching (i.e. are the materials designed for MGT) They are not suitable for multigrade classes.

[b] If the materials are suitably designed for MGT, what are some of the benefits you have had from using them? Yes you know that this is not a good thing to do, you were not taught what you are doing inside this classroom. You were taught to teach learning outcome 1, assessment standard 3 for grade 4's and now we mix these grade 4's with grade 5's. You see this thing?

If the materials are unsuitable, what are some of the challenges you have had in using them _____

Training

- 18 What kind of professional support/training (*advice*) have you been provided with for MGT For multigrade?
No I have said that I have been trained at Dr Rhubusana Training College. No it is just workshops and then these workshops as I have told you now "that corner is grade 4 educators, and in that corner grade 5 educators, 6 and 7 there". I choose to go where I think may be grade 4 corner maybe it is long time that I didn't take or teach the grade 4's so I'll go there and listen and listen. I don't know what is happening in grade 5, 6, 7 corners when I come back to my working place I have to see grade 4's and 5's in the same class and grade 6 and 7 in the same class. No, there is nothing, no workshop. I can be very happy if there could be a training for the multigrade educators only, because at Stirling we are mingled with one learning area educator and sometimes she will tell you that "Oh I am an HOD. I only teach this Life Orientation in grade 4" and then you see that this person is living alive. No advice, no document. On my side I never got any
- 19 What aspects of multigrade do you find most difficult to handle I think it is the tuition of multigrade classes. Because you'll find out that when they call educators for assessing their work like coming with workbook as educator, and come with the learners' work they will call Arts and Culture facilitator will be there, EMS will be there. And then this facilitator calls grade 4's and this grade 5's – you have to (And then what do you do?) I 'sweat' like anything and I arrive there very early because if I am very late because I am going to set up these things as they need. Sometimes I find out that it is very late to go to Arts and Culture facilitator and then I have to go to Rhubusana where MdantsaneYhoo. This is very difficult.
_____ and how would you like to be helped in it As I have said before that, if the government can consider the 'learning areas' and the 'manpower'. That is the only thing because when I look at inside town it is not the same as to our side as in farms.
- 20 How would you describe your attitudes toward multigrade teaching? Wow! Wow! Hey ha-ah because there is nothing that I can do but when the officials come in I used to them that if they didn't give me the answer that I think it is a solution I used to say "that is why I am going to take my books and put them on my head and look for other schools that are better than this one, because here it is not easy to work. I used to have 20 files and then I am going to be here in South Africa to be the only teacher, educator who is going to have 20 files because I am teaching 4 grades, different grades, different phases and 5 learning areas in each grade".
Yes, we do raise our problems in workshops, all of us. The response isyho!..... My other facilitator used to pull me by my leg saying that "No maan you are (no maan what is this, I want to

repeat his words) you are the 'trading shop' you are selling the hoes, you are selling bread, you are selling paraffin, the bag of mealie-meal" – everything is in my shop so that no-one can go out and look.