

PERCEPTIONS OF TEACHERS, LEARNERS AND PARENTS REGARDING  
MULTIGRADE TEACHING: DEVELOPMENT OF AN INTERVENTION  
PROGRAMME FOR SELECTED MULTIGRADE PRIMARY SCHOOLS IN  
KUNENE REGION, NAMIBIA

A DISSERTATION SUBMITTED IN FULFILMENT

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BY

GISELA SIRIRIKA

8919593

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MAIN SUPERVISOR: DR. C. N. S. SHAIMEMANYA

CO-SUPERVISOR: PROF J. KANGIRA

## **ABSTRACT**

The primary goal of this study was to explore the experiences and perceptions of Grades 2 and 3 multigrade teachers, learners and their parents with regard to multigrade teaching. Secondly, the study aimed at developing an intervention programme for multigrade teachers for effective teaching. Key theories and models of multigrade teaching served as cornerstones for this study.

This research was a qualitative study embedded within an interpretive case study. Data were collected from a purposively selected sample through in-depth face-to-face semi-structured interviews, focus group interviews using an audiotape recorder, and analysis of relevant policy documents. The interviews were conducted after class observations at the schools and recorded digitally using an interview guide, transcribed verbatim, translated and coded. Data collected from interviews and focus groups were first transcribed in Otjiherero and then translated into English. Fifteen classroom observations were carried out in order to understand the nature of multigrade teaching classroom practices. A video camera was used to capture classroom activities and interactions between teachers and learners. The video recorded lessons were analysed verbatim. The data were analysed using the Tech's data analysis method. The four criteria of trustworthiness, namely, credibility, transferability, confirmability and dependability were used to establish the trustworthiness of this study.

The findings of this study revealed that teachers in rural Namibian multigrade schools in the sample, faced common challenges. Some of the challenges were attributed to lack of resources, lack of infrastructure, lack of appropriate lesson planning and classroom management skills and competencies, poor socio-economic background, differentiated teaching, lack of continuous support both at school level and at national level, and lack of training. The results further showed that teachers, learners and parents are in favour of multigrade teaching if support is provided. This study developed an intervention programme for multigrade schools. The major recommendations are that multigrade teachers need training and support. The study further recommends that policy makers and curriculum developers should develop policies and a suitable curriculum for multigrade teaching. The study also made recommendations for further research. Finally, the study concludes that providing support to multigrade teachers will change their attitudes towards multigrade teaching.

**Keywords: Multigrade teaching, monograde teaching, quasi-monograde, subject staggering, multi-year curriculum, terminus, intervention programme**

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## **LIST OF ACRONYMS**

<b>ABEK</b>	Alternative Basic Education for Karamoja
<b>ACE</b>	Advance Certificate in Education
<b>BETD</b>	Basic Education Teachers Diploma
<b>CEPD</b>	Centre for Education Policy Development
<b>CPD</b>	Continuous Professional Development
<b>EFA</b>	Education for All
<b>EMIS</b>	Education Management Information Systems
<b>EN</b>	Escuela Nueva
<b>ETP</b>	Education Theory and Practice
<b>ICT</b>	Information and Communication Technology
<b>MBESC</b>	Ministry of Basic Education, Sport and Culture
<b>MBEC</b>	Ministry of Basic Education and Culture
<b>MEC</b>	Ministry of Education and Culture
<b>MoEAC</b>	Ministry of Basic Education, Arts and Culture
<b>MDGs</b>	Millennium Development Goals
<b>MoE</b>	Ministry of Education

<b>MUSE</b>	Multigrade School of Education
<b>NCBE</b>	National Curriculum for Basic Education
<b>NGOs</b>	Non-Governmental Organisations
<b>NIED</b>	National Institute for Education Development
<b>TRC</b>	Teachers' Resource Centre
<b>UNAM</b>	University of Namibia
<b>UNESCO</b>	United Nations Educational, Scientific, and Cultural Organisation
<b>ZPD</b>	Zone of Proximal Development

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## **DEDICATIONS**

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**DECLARATIONS**

I, Gisela Maritjituavi Siririka (Student number 8919593) declare that the dissertation, which I hereby submit for the degree of Doctor of Philosophy (Curriculum, Instruction and Assessment Studies) at the University of Namibia (UNAM) is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution. Where secondary materials are used, this has been carefully acknowledged and referenced in accordance with the university guidelines.

**Signature**.....

.

**Date**.....

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## CHAPTER 1

### INTRODUCTION AND BACKGROUND

#### 1.1 Background and Orientation of the Study

Namibia is a country with diverse topography and sparsely populated areas, especially in the historically disadvantaged remote areas. The number of learners in such areas is very low and therefore teachers cannot be supplied for each grade level. Schools are left without any option but to use multigrade teaching to ensure access to all children of primary school-going age. Multigrade teaching refers to a classroom situation in schools where one teacher teaches two or more grades simultaneously within a timetabled period (Boonzaaier, 2008). Multigrade teaching is said to arise from either necessity or choice (Little, 2005). Multigrade teaching classes are also formed due to a chronic shortage of teachers, inadequate number or size of classrooms and teachers' absenteeism (Little, Pridmore, Bajracharya & Vithanapathirana, 2006). Little (2005) states that multigrade teaching arises due to low population density where schools are widely scattered and inaccessible. Juvane (2005) adds that multigrade schools are often located in remote areas that are difficult to reach. Multigrade learners are disadvantaged, belonging to impoverished, marginal populations who may be nomadic or live in isolated, remote areas (Blum & Diwan, 2007).

Namibia is no exception to the situation of multigrade teaching. In Namibia, it is regarded as the only viable strategy and practice to reverse the negative trends that

characterise rural education. Multigrade teaching enables learners from previously neglected and sparsely inhabited areas to have access to equal and quality education (Haingura, 2014; Kapenda, 2010). Many African governments, including Namibia, unfortunately tend to focus on improving monograde schools, often leaving the development of multigrade schools to local initiatives (Joubert, 2010). As a result of this, most multigrade schools remain poorly developed in terms of the provision of resources such as textbooks and qualified teachers.

Schools with multigrade classes are generally found in remote, usually rural areas where school enrolment figures are perceived as economically unjustifiable to appoint one teacher for each grade level. As a result of this, more than two grades are taught by one teacher in the same classroom. According to Haingura (2014) no specific training has been provided for teachers teaching multigrade classes and that there is a lack of policy guidance for these teachers. Haingura (2014) recommends that research and support is needed for teachers teaching in the multigrade contexts. However, little has been done to redress the situation.

The Ministry of Education does not recognise multigrade teaching as unique when it comes to curriculum delivery. It is presupposed that it will be handled within the monograde curriculum. As a result, multigrade schools are essentially left to fend for themselves. The multigrade schools use the same curriculum, have the same conditions of service, the same national legislation and have the same policies as

other public schools in the country. This suggests that the content of the curriculum, teaching and learning materials are geared for monograde classes. It is against this background that the researcher carried out this study in order to understand the teachers' perceptions on multigrade teaching in rural schools in Namibia in general and Kunene Region in particular.

A considerable number of countries require all teaching to follow national curricula that is monograde. Namibia is no exception. Teachers have a responsibility to prepare and utilise materials that are oriented to the monograde context. This requirement places teachers in multigrade teaching contexts under severe pressure. There is no time available for teachers to design such curricula and to re-design national requirements to fit local contexts. Brown (2008) suggests that the application of a monograde national teaching syllabus in the multigrade teaching situation creates problems for multigrade teaching. He indicates that such a syllabus generally is not structured for multigrade teaching classes and it places a heavier workload on multigrade teachers compared with their monograde teaching counterparts. Brown (2008) continues to say that doing so impedes the capacity of the multigrade teachers, given the lack of facilities and problems of management at the local level, and does not allow for the time constraints placed on multigrade teachers, given the time of preparation required and the need to address a wider range of learners' needs.

Multigrade teaching has been in Namibia since the introduction of formal education in 1980, although it has become more prominent after independence in 1990, when the new majority government proposed it to be a norm (Ministry of Basic Education and Culture [MBEC], 1996). Multigrade teaching is prevalent in primary schools in the Kunene Region of Namibia. It is found in hard-to-reach areas in remote rural communities and they are common especially in parts of the Kunene Region, serving people who are disadvantaged, such as the Ovahimba, Ovazemba, Ovatwa and Ovahakaona schools in small villages and settlements. There are 41 multigrade schools in the Opuwo circuit in the Kunene Region in Namibia (MoE, 2011a).

A number of studies have been carried out to investigate the implementation of multigrade teaching in rural primary schools. For example, according to Titus (2004) multigrade schools in Namibia are often far from the educational centres and receive little support in teaching. In another study on the teaching of mathematics in multigrade upper primary schools, Kapenda's (2010) findings revealed that the lack of knowledge and expertise in developing enrichment activities in multigrade teaching can cause disciplinary problems in multigrade as well as in monograde classrooms. Haingura's (2014) study on the investigation of multigrade teaching in the Kavango region, revealed that the teachers who manned these schools were not trained in methodologies and classroom organisation developed to work with children of different ages and different abilities in one class in the Kavango region. In Namibia, textbooks on curricula and teaching methods, teacher guides and

education pedagogy in colleges and universities do not incorporate enough of the knowledge, skills and values required for teachers to apply multigrade teaching methodologies successfully (Little, 1995).

Be that as it may, multigrade teaching should not be viewed as an abnormality to be eradicated. The problem lies with teacher training. Teachers have only been trained for monograde teaching but are forced to teach multigrade. Adequate supervision and support, including appropriate teaching and learning materials are sorely lacking. This situation is not unique to Namibia. Countries such as Greece, South Africa, Sri Lanka, Sweden, Uganda, United Kingdom, Venezuela, Zambia, Zimbabwe, and many others in the world have experienced similar challenges. Each of these countries has devised some form of a teacher development programme for multigrade teachers. The most successful programmes have included the training of education officials so that an efficient mentoring system can be put in place.

Although much research into multigrade teaching has been conducted elsewhere, little is available about Namibia. Certain interventions need to be applied. An intervention programme could support multigrade teachers in teaching and learning. In this intervention approach, learners and parents could benefit as well. This study set out to explore teachers', learners' and parents' perceptions on multigrade teaching and proposed the development of an intervention programme aimed at assisting teachers in implementing multigrade teaching.

## **1.2 Statement of the Research Problem**

The Ministry of Education in Namibia advocates education for all and access to education, even through multigrade teaching (MEC, 1993). However, extant literature shows that multigrade teachers in Namibia still experience diverse challenges with the implementation of this setting (Kapenda, 2010; MoE, 2011b; Titus, 2004). A report on monitoring and evaluation of multigrade teaching schools (MoE, 2011b) was published reflecting most of the concerns of multigrade teachers. The report drew attention to multigrade teachers who, it is said, were unable to plan lessons properly, use appropriate teaching strategies and manage classrooms effectively among others things (Beukes, 2006; MoE, 2007; MoE, 2011b; Kapenda, 2010; Titus, 2004). The report further alludes to the negative attitude of teachers, learners and parents towards multigrade teaching.

There seems to be a general negative perception prevailing on teachers', learners' and parents' attitudes towards multigrade teaching in different African countries (Cornish, 2006; Joubert, 2005). Ames (2004) argues that the isolating conditions of work reinforces teachers' negative attitude towards multigrade teaching.

Further indications from extant literature show that teachers feel unprepared to work in multigrade classrooms (Little, 2005). Lesson planning for multigrade teaching is seen as a burden, conditionally imposed upon teachers Berry (as cited in Little, 2005; Vithanapathirana, 2006). Veenman (1995) also note that multigrade classes place a

greater workload on teachers and that a lack of appropriate resources also contributes to multigrade teachers' ineffectiveness. Veenman further argues that multigrade teachers generally teach the grades separately; that is, while one grade group is involved in direct teaching, the other is idling and levels of time-on-task are lower. Lingam (2007) found that teaching in multigrade classes is difficult particularly when the teacher is unable to use appropriate methods for multigrade teaching. According to Mason and Burns (1997), the multigrade setting is inherently inferior to the single-grade setting and, unless interventions are made, teachers and learners will do little in this setting. These studies further established a need for a programme to improve teaching and learning in multigrade classrooms.

Worth noting is that most of the available research on multigrade teaching focuses on cognitive and non-cognitive outcomes. What is especially lacking in the available literature or the gap that exists in extant literature is a focus on the strategies that teachers can use and the ways that can assist teachers cope with the complexities and challenges of this instructional setting (Mulryan-Kyne, 2005). There seems to be a dearth of research on the intervention programmes on a multigrade setting, especially in Africa in general and Namibia in particular.

It would appear research has ignored the programmes that could assist teachers in implementing multigrade teaching. As a result, the area of multigrade teaching is poorly developed (Veenman, 1995). There is also, an absence of research that

develops guidelines for such programmes in other classroom settings. Hence, there is no known intervention programme in Namibia.

This study therefore sought to address this research gap that has become very apparent in academic circles. This study also aimed at exploring the experiences and perceptions of teachers, learners and parents in the implementation of multigrade teaching in schools in the Kunene Region and its implications for improving multigrade teaching in Namibia. The study further aimed to develop an intervention programme and devise guidelines that would assist teachers in their effort to implement multigrade teaching at schools in Namibia.

Given the above problem statement, and the above research topic, the following research questions emerged:

### **1.3 Research Questions**

The following are the research questions that this study aimed to answer:

1. What are the perceptions of Grade 2 and 3 teachers, learners and parents on multigrade teaching in Kunene Region?
2. What are the perceptions of Grade 2 and 3 teachers and parents on the development of an intervention programme for multigrade teaching?
3. What are the implications of developing and implementing an intervention programme in Namibia?

4. How can an intervention programme assist multigrade teachers in terms of teaching and learning?

#### **1.4 Significance of the Study**

The value of this study is evident as it is a response to recommendations made by other researchers (Hailombe, 2011; Haingura, 2009; Kapenda, 2010; MoE, 2011b; Titus, 2004), who have called for more research to be conducted on this topic not only into the teaching strategies that multigrade teachers use and the impact of the training, but also in the support, training and assistance multigrade teachers need. Therefore, the main aim of this study is to fill this gap identified by NIED and other studies.

No study has been done yet on programme development to improve multigrade teaching in Namibia. This study therefore aimed to fill this gap in current knowledge and make a contribution towards resolving some inconsistencies that characterised previous NIED research in this regard. The findings of the study sought to address aspects of multigrade programme development and improve management proficiency, which are vital to the effective implementation of a multigrade teaching programme in a sustainable manner.

The intervention programme could contribute to the improvement of multigrade schools for all teachers in Namibia and specifically at higher education institutions

where multigrade teachers are trained. Accordingly, it is expected that this study would make a valuable contribution to multigrade teachers in general and, more importantly, to the entire teachers of Namibia teaching in such situations in particular.

For new and experienced multigrade teachers, the implementation of this programme is done through the in-service training aimed at providing knowledge and skills. This provides them with a sense of empowerment and a sense of pride in their work, as their status as multigrade teachers improve. Subsequently, a change in attitude towards multigrade teaching and increased motivation to provide high quality teaching should be evident. For the teachers, an obvious improvement in their teaching needs, which is an urgent need, was be the result. This provides a sound basis for the fulfilment of other needs for the teachers as well. This study, furthermore, contributes to the body of knowledge and academic discourse in multigrade teaching and learning in Namibia.

### **1.5 Paradigmatic Perspectives**

In this section the researcher provides a brief overview of the epistemology, methodological and ontological paradigms that guided this study. According to (Polit & Beck, 2006) a paradigmatic perspective is a world view, a general perspective, a way of breaking down the complexity of the real world. Detailed discussions follow in Chapter 3.

## **1.6 Minimisation of Bias in the Study**

The researcher has been the coordinator of multigrade teaching at the National Institute for Educational Development (NIED) since 2007. She was involved in the development of the multigrade teaching Teacher's Manual and the training of multigrade teachers with the other multigrade teaching committee members in the whole country. She did monitoring and support in order to empower teachers in implementing multigrade teaching effectively.

The researcher piloted the study and discussed the findings of the pilot study at the University of Namibia Postgraduate seminar in 2015. Bias from influencing the findings and conclusions of the study was removed through conducting interviews in the participants' language which in this case was Otjiherero. The researcher avoided summarising what the participants said in her own words and direct quotations were used. The researcher avoided questions that imply there is a right answer (close-ended questions) and focused on open-ended questions which provided the participants' point of views and perceptions. The researcher used various phrases such as "tell me more," "can you elaborate "and "after that?" in an effort to encourage the participants to talk more freely (Creswell, 2007). Trustworthiness was established through credibility, confirmability, dependability and transferability (Guba & Lincoln, 1994). The researcher further used multiple people such as an independent coder who analysed and coded data peers while supervisors reviewed the results and conclusions to see omissions and gaps that needed to be addressed

and to provide affirmation that the conclusions were sound and reasonable. An assistant transcriber was used to transcribe raw data. Different data collection methods or sources (individual interviews, focus group interviews, classroom observations and document analysis) were used for triangulation purposes. Different theories, models and programmes were used to develop the intervention programme. The researcher avoided trying to understand the multigrade problem from a single perspective but rather went beyond her own point of view by thoroughly consulting literature on multigrade teaching from different perspectives which might propose different answers to the research questions.

The researcher admitted her own bias in the study and this maximised the trustworthiness of the study (Shenton, 2004). The results of this research were therefore a detailed account of the experiences and perceptions of multigrade teaching teachers, learners and parents. Member-checking further confirmed the themes the researcher identified, reflecting the perceptions and experiences and voices of the teachers, learners and parents.

The researcher made sure to conclude only what the findings indicated; she was not seduced by her personal, prior beliefs and possible expectations, including her work designation.

## 1.7 Context of the Study

Context refers to a particular setting where a study is conducted that includes a particular environment and people (Pequegnat, Strover & Boyce, 2011). Since this study was contextual in nature, the context of this study was the multigrade junior primary rural schools in the Kunene Region. The Kunene Region had three circuits, namely Kamanjab, Outjo circuits including Opuwo circuit which was targeted in the study as this circuit had more multigrade schools. In addition, there were 37 Ondao mobile schools, called units, in Opuwo, Ehomba, Etanga, Kaoko-Otavi and Okangwati clusters. There were 64 schools, 3 circuits, 16 clusters, 77 teachers. In total there were 2137 learners. The region's name is derived from Kunene River which forms the Northern border with Angola. The region is a mountainous area.



Figure 1: Namibian Map (Source: Hailombe, 2011)

The region also comprised of five constituencies namely, Opuwo, Epupa, Etanga, Ehomba, Kamanjab and Outjo. Opuwo is the largest town and the capital of the Kunene Region.

The Kunene Region is one of the 14 regions (see Figure 1), and the largest region in Namibia. It is an arid, remote region in the north-western part of Namibia and is populated by the Ovahimba, Ovazemba, Ovatwa and Ovahakaona indigenous people. The common languages spoken in this region are Otjiherero, Otjizemba and Khoekhoegowab. The areas currently served by the Ondao Mobile School with multigrade teaching are situated in the four constituencies that are further north namely Opuwo, Ehomba, Etanga and Epupa which borders on Angola. The dropout rate in the Ondao mobile school units is more than 40%. The current statistics estimate that only 50% of the children in the Kunene Region had attended school by 2010 (Hailombe, 2011).

Hailombe (2011) indicates that the Kunene Region covers an area of 144 255 square kilometres in terms of territory. Hailombe (2011) further indicates that according to the 2014 National Population and Housing Census (2011), the Kunene Region is home to 86,856 people of which 43,253 were women and 43,603 were men, the soil is poor and rains are unreliable. Consequently, the majority of the inhabitants of this region are pastoralists that migrate with their livestock to different waterholes from season to season.



The creation of mobile school units in the Kunene Region have succeeded in moving education in Namibia closer to achieving the Millennium Development Goals (MDGs) in terms of access, equity and quality of education (Hailombe, 2011).

A contributing factor in terms of providing education to children from the Himba and Zemba communities is the weakness of the school network. In the north west of Kunene Region there are few monograde schools and mobile school units serving a very extensive area (Hailombe, 2011). The main reasons given by the Himba and Zemba parents, for their children not attending school is that there were no schools available in the area. There are long distances to existing mobile school units.

Hailombe's (2011) study reveals that the reason the Ovahimba people do not send all their children to school is that some of the children have to assist with the household chores; mainly with herding cattle and goats.

### **1.8 Theoretical Framework**

The researcher chose Vygotsky's theory of constructivism, Kolb's (1984) theory of experiential learning; the adult learning theory of Knowles (2004); and Dickoff, James and Wiedenbach's (1968) Practice Theory as theoretical perspectives of this study.

## **1.9 Conceptual Framework**

According to Burns and Grove (2009), a conceptual model can be defined as a set of highly abstract logical structures that broadly explains phenomena of interest, expresses assumptions and reflects a philosophical stance, to link findings to the body of knowledge of multigrade teaching. It is further explained that in a study that has its roots in a specified conceptual model, the framework is a conceptual framework (Polit & Beck, 2009).

As an underlying theory, the researcher relied on the Practice-Oriented Theory, which forms the basis of the conceptual framework of Dickoff, et al. (1968), to conceptualise the findings. The justification for the choice of this theory for this study was adopted as a reasoning map in order to serve as a conceptual framework for the findings of the study. This reasoning map was adapted in developing and implementing the programme to assist the teachers in implementing multigrade teaching. The application of this framework is described in detail in chapter 5.

## **1.10 Theoretical Basis of Programme Development**

### **1.10.1 Kolb's (1984) Experiential Learning Theory**

Kolb's, theory of experiential learning, developed four stages of the cycle namely: concrete experience, reflection, abstract conceptualisation and active experimentation (Johnson, Sonson & Golden, 2010). Detailed discussions on this learning cycle were discussed in Chapter 6 of this study.

### **1.10.2 Knowles's (1984) Adult Learning Theory**

Knowle's theory in this study guided the development of the programme. Knowles' (1984) theory focuses on the following assumptions: experience, problem-centred focus, and adults need to know why they need to know something. A detailed discussion on this learning cycle was provided in Chapter 6 of this study.

### **1.11 Research Design**

The research design provides the overall structure for the procedures the researcher follows, the data the researcher collects, and the data analysis the researcher conducts (Loots, 2016). A qualitative design was used (Babbie & Mouton, 2009). A detailed discussion of the research design was provided in Chapter 3.

### **1.12 Development of an Intervention Programme**

Programme development constituted Phase 4 of the study. The programme was developed through five phases as indicated. A detailed discussion on the programme development was discussed in Chapter 6 of this study.

### 1.13 Phases of the Study

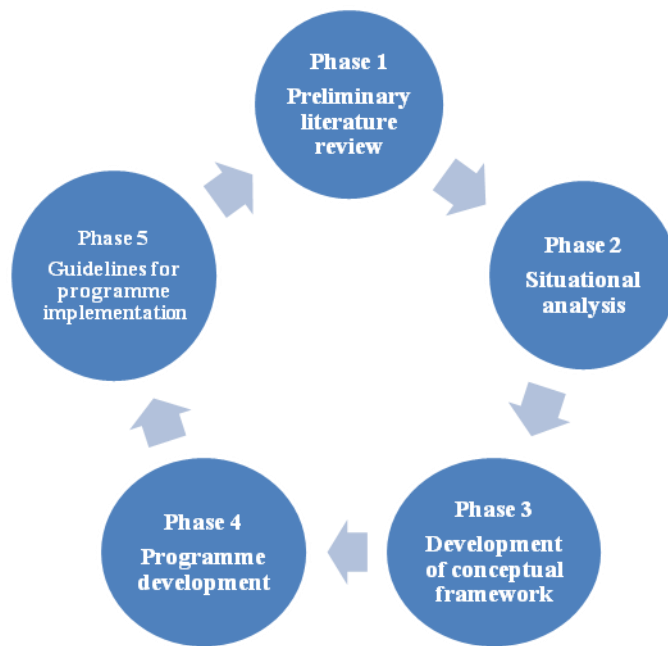


Figure 1.3: Illustration of research phases of the study [adapted from Meyer and Van Niekerk, 2008]

The five phases in the framework were:

**Phase 1:** a preliminary literature review phase: A review of the literature based on the research questions of this study was presented in greater detail in Chapter 2 in order to identify information from existing research that guided this study.

**Phase 2:** situation analysis: comprised of situation analysis that explored and described the experiences of multigrade teachers regarding multigrade teaching. It ensured that the programme was relevant and appropriate for the multigrade teachers.

**Phase 3:** development of the conceptual framework: Phase 3 dealt with the development of a conceptual framework for the development of a programme to support multigrade teachers during teaching and learning in their multigrade classrooms.

**Phase 4:** programme development: During this phase a programme to support multigrade teachers was developed guided by the results of the situation analysis and the conceptual framework (Dickoff, et al., 1968).

**Phase 5:** guidelines for implementation of the programme were described: The last phase of the study focused on developing the guidelines for implementation of the programme. These guidelines were compiled based on the conceptual framework and aimed at putting the programme into practice in the multigrade schools.

The phases of the programme development were described and discussed fully in Chapter 6.

#### **1.14 Study Trustworthiness**

Trustworthiness in this study was maintained by using Guba's (Babbie & Mouton, 2009; De Vos, 2009) model criteria, i.e. credibility, transferability, confirmability and dependability. A detailed discussion of this is found in Chapter 3 of this study.

### **1.15 Limitations of the Study**

All studies have limitations (Drisko, 2005) and this study was no exception. There were three limitations in this study that needed to be acknowledged. These limitations were related to the methodology used.

Firstly, methodological limitation was related to the possibility of researcher bias. The researcher endeavoured to minimise this bias by keeping a diary and recording key ideas, thoughts, and assumptions. Secondly, methodological limitation related to the language. All data collected for this study (i.e. individual interviews, focus group interviews, classroom observations and documents analysis) were in Otjiherero. This meant that the researcher was required to translate all of these materials into English. While the researcher made an effort to check each and every translation, it was possible that during this process some errors might have been made and misinterpretations provided. The final limitation related to the initial idea of sample selected (Grades 3 and 4) which ended up in selecting Grade 2 and 3 sample due to the curriculum reform spearheaded by National Institute for Educational Development (NIED). Grade 4 became part of the Primary Phase (Grades 4-7) and not Lower Primary Phase (Grade 1-4) as it was previously. The initial idea of the researcher was to have a sample of 10 schools but discovered that there were only seven Grades 2 and 3 multigrade schools in the Kunene Region. In other words, there were only Grades 2 and 3 multigrade schools in this particular region at the time.

## **1.16 Definitions of Key Terms**

For the purposes of this study, the meaning of some of the concepts had to be clarified. These definitions indicate how these phrases or words have been used in this study.

### **1.16.1 Multigrade Teaching**

Multigrade teaching means teaching children of different ages, grades and abilities in the same group (Little, 1995). Joubert (2007, p.6) contends, "...Multigrade teaching is a setting where the teacher is responsible for teaching children of different grade levels at the same time." In the context of this study, multigrade teaching referred to the teaching of two grades in one classroom by one teacher at the same time.

### **1.16.2 Monograde Teaching**

In the context of this study, monograde teaching referred to the teaching of one grade in one classroom by one teacher (Joubert, 2010).

### **1.16.3 Programme**

Programme is defined as a learning process that involves the acquisition of knowledge, skills and change of attitudes and behaviour to enhance the performance of teachers (Nelumbu, 2013). In this study, a programme referred to the teachers who

were provided with the knowledge, skills and attitudes needed to ensure the best performance results.

#### **1.16.4 Programme Development**

Programme development is a continual systematic process that professionals follow while they are planning, implementing, and evaluating their intervention programmes (Neshuku, 2015). In this study, the process was applied on a small scale to a two weeks workshop in a town in the Kunene Region.

#### **1.16.5 Quasi-Monograde Teaching**

According to Kapenda (2010) quasi-monograde teaching is a situation whereby a teacher takes turns to teach grade groups as if they were in a monograde classroom. The same or a different subject is taught at the same time and teachers have a mandate of distributing time equally/unequally between grade groups, depending on the tasks they are busy with (Little, 1995).

#### **1.16.6 Training Programme**

According to Neshuku (2015), a training programme is a brief organised and directed outline to be followed at an educational gathering session with the aim of transferring knowledge and skills to the one who is being educated with the express intent to bring about change. In this study, training programme referred to a programme for improving teaching and learning in multigrade classrooms.

### **1.16.7 Intervention Programme**

An intervention programme is defined as a programme or a set of activities and training aimed at bringing about a desired change in an individual (Mothiba, 2012).

In this study, an intervention programme referred to the development of a programme to offer assistance, guidance and support to multigrade teachers in order to improve the multigrade situation in Namibian rural schools.

The NIED programme on multigrade teaching had certain weaknesses due to the cascade model used, therefore the researcher found it necessary to come up with another programme for multigrade teachers. The MoE (2011b) study recommends that there should be a deviation from the traditional cascade training model to capacity building whereby school-based training should be offered. The study further recommends that NIED should develop a curriculum for multigrade teaching, guidelines for multigrade teaching, thematic scheme of work and manuals to assist multigrade teachers (Haingura, 2014; MoE, 2011b; Titus, 2004). The study also recommends NIED to consider offering on-site continuous professional development with demonstration (model lessons) to multigrade teachers. Titus (2004) further recommends models for multigrade teaching with best practices like in the Colombia and Australia models which can be developed for multigrade teachers. Haingura (2014); MoE (2011b) and Titus (2004) studies find that the curriculum needs to be adapted or adjusted to meet the needs of multigrade teachers. Haingura's (2014) further indicates that there is a need for a clear policy about multigrade schooling to

enable the leadership and managers at all educational levels to cope with the quest for multigrade teaching. Various studies suggested that the curriculum and teacher's manuals need to be developed for multigrade teaching (Kapenda, 2010; MoE, 2011b). This is a clear indication that the existing teachers' manuals are out-dated and therefore not in line with the current curriculum reform. The studies conducted by (Haingura, 2014; MoE, 2011b; Titus, 2004) find that there are no lesson plan samples and schemes of work to guide the teachers on teaching and in multigrade classrooms, especially the unqualified and untrained teachers. The studies further found that the workshops currently undertaken by NIED are only for three days and trainers would pick what is relevant and important to them. This sometimes happens after three years due to the National budget cuts in Namibia. According to the MoE (2011b) study, the cascade model used is not effective because teachers do not transfer the knowledge and skills to others. Studies conducted in Namibia on multigrade teaching recommend that NIED need to re-emphasise the training of multigrade teachers (Haingura, 2004; MoE, 2011; MoE, 2011b). Multigrade rural schools are isolated and in remote areas; therefore teachers find it difficult to come to town to attend workshops (Haingura, 2014; Little, 2005; MoE, 2011b; Titus, 2004). Titus (2004) recommends that a network can be established at regional and national level and be linked with NIED so that multigrade principals can share their experiences and challenges with each other. MoE (2011b) recommends guidelines which address common topics and suggesting multigrade teaching approaches.

Based on these challenges therefore, the researcher deemed it necessary to come up with a new programme for multigrade teachers to better assist multigrade teachers and learners.

### **1.17 Structure of the Dissertation**

This study is divided into seven chapters.

#### **Chapter 1**

This chapter comprised an introduction to the study, explanation of the orientation of the study, research design and an overview of the whole study. The philosophical assumptions and the theories underlying the study were also discussed in this chapter. The ontological and epistemological stance of the researcher was introduced. A preliminary review of literature was presented. The theoretical basis of the study regarding the programme development was discussed. It further defined terms used frequently throughout the study.

#### **Chapter 2**

This chapter reviewed relevant literature mainly based on perceptions and experiences in multigrade teaching by Vygotsky's constructivism theory and other theories, programmes and models that informed the study relating to multigrade teaching. Teachers', learners' and parents' attitudes towards multigrade teaching were discussed. The challenges in implementing multigrade teaching were discussed.

Gaps in the existing literature were discovered and those that can be filled in by future research were also exposed.

### **Chapter 3**

This chapter discussed the research design and methodology. It explained the data collection, research instruments that the researcher used to conduct the study. The selected epistemological paradigm and research methodology approach were explained. The chapter presented the method used to analyse data. It further specified the target population and samples and explained the procedures used to identify the participants of the study. The chapter also indicated the research ethics and discussed measures to ensure trustworthiness. Data analysis was explained.

### **Chapter 4**

This chapter presented the results, analysis and interpretation of the study, in terms of the three main themes and the related sub-themes that emerged following inductive data analysis. The research findings were also discussed.

### **Chapter 5**

This chapter discussed the findings of the study against the background and within the context of existing multigrade literature, indicating similarities, differences and omissions that came to light when comparing the findings, the researcher received and those captured in the multigrade existing body of knowledge. The chapter also

synthesised the findings and provided a summary of the researcher's findings. The researcher discussed the results in terms of the themes and sub-themes that the researcher identified. The chapter also discussed linkages that emerged from the study. Finally, a conceptual framework for the programme was developed.

## **Chapter 6**

This chapter discussed the development of the intervention programme for multigrade teachers. The chapter outlined the programme developed for multigrade teachers in the Kunene Region. The programme aimed at assisting teachers in multigrade teaching and learning was also outlined in this chapter. It also addressed the broad objective of the study of developing a programme for multigrade teachers and to describe the content of the developed programme. The programme also described the implementation of the programme. The chapter also suggested possible future research. Finally, the chapter discussed the implications of developing and implementing a programme for multigrade teachers.

## **Chapter 7**

This chapter presented the conclusions, summarised the findings and recommendations of the programme to support multigrade teachers during the implementation of multigrade teaching. The chapter considered the similarities and differences in the participants' perceptions regarding multigrade teaching. These

conclusions had been used to determine whether the objectives of the study were achieved.

### **1.18 SUMMARY**

This chapter provided the background and orientation of the study and illustrates the rationale for the study. The background to the problem was discussed and the research problem, the research questions were presented. The purpose of the study was discussed. Definitions of key concepts used in the study were provided. Limitations of the study were discussed. The structure and phases of the study were spelt out. The theoretical, epistemological and methodological paradigms were introduced. Finally, the quality criteria and the ethical considerations were introduced. In the next chapter, the researcher reviewed relevant literature and the theoretical framework of the study.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The first part of this chapter states the theoretical framework underlying this study. Secondly, the chapter discusses the supporting theories, programmes and models of this study. The third part presents definitions, reviews of the existing literature and practices related to multigrade teaching. The final part of this chapter considers the following key focus areas: historical background of multigrade teaching; perceptions of teachers, learners and parents towards multigrade teaching, opportunities and challenges of multigrade teaching, prevalence of multigrade teaching; rationale for multigrade teaching attitudes towards multigrade teaching, teacher training, teaching and learning strategies, advantages of multigrade teaching; challenges of multigrade teaching; teacher education, support for multigrade teachers, needs of multigrade teachers.

#### **2.2 Theoretical Framework for this Study**

This study draws heavily on the constructivism theory. What follows is an overview of Vygotsky's (1978) theory of constructivism including social constructivism. Models, such as Little's Multigrade School Education (MUSE), are also discussed here to support Vygotsky's theory.

### **2.2.1 Vygotsky's Social Constructivist Theory**

The Vygotsky's (1978) Social Constructivist Theory was the underlying theory for this study. Vygotsky defines the theoretical principles of social constructivism as a model that is based on interaction with others through collaboration and peer tutoring. Teaching and learning in the Namibian schools is based on the learner-centred approach. This instructional methodology has its origins in the social constructivism philosophy with Vygotsky's ideas of 'child-centred learning'.

Vygotsky (1978) believes that children's cognitive development is shaped by the cultural context in which they live. This belief in the importance of social influences, especially instruction, on children's cognitive development is reflected in Vygotsky's concept of the Zone of Proximal Development (ZPD) (Santrock, 2011).

A key component of the social constructivism theory is the ZPD, which is, in essence, the gap between what a child already knows and what he/she has as the potential to learn with the guidance of an adult or through contact with other children. In simple terms, the ZPD defines levels of development within which learners can solve a problem that is beyond their capabilities, with the aid of adults or more competent peers (Vygotsky, 1978). Vygotsky (1978) further indicates that such interactions and activities that occur within the ZPD are proposed to foster development.

Besides the ZPD, the scaffolding teaching strategy provides individualised support based on the learner's ZPD (Chang, Sung, & Chen, 2002). In scaffolding instruction, a more knowledgeable peer provides scaffolds or support to facilitate the learner's development. The scaffolds facilitate a learner's ability to build on prior knowledge and internalise new information. The more capable peer is seen as the one providing the scaffolds so that the learner can accomplish (with assistance of the peer) the tasks that he or she could otherwise not complete, thus helping the learner through the ZPD (Schunk, 2009).

Vygotsky (as cited in Raymond, 2000, p. 176) defines scaffolding instruction as the "role of teachers and others in supporting the learner's development and providing support structures to get to that next stage or level". An important aspect of scaffolding instruction is that the scaffolds are temporary. As the learner's abilities increase, the scaffolding provided by the more knowledgeable learner is progressively withdrawn. Finally, the learner is able to complete the task or master the concepts independently (Chang, Sung, & Chen, 2002). Therefore, the goal of the teacher when using the scaffolding teaching strategy is for the learner to become an independent and self-regulating learner as well as a problem solver (Hartman, 2002). As the learner's knowledge and learning competency increases, the teacher gradually reduces the support provided (Vygotsky, 1978). Vygotsky (1978) further ascertains that the external scaffolds provided by the teacher can be removed after the learner has developed.

### **2.2.2 Vygotsky Theory's View of Learners in the Multigrade Teaching Setting**

According to Bacharach et al. (1995), the theoretical framework of Vygotsky lays the foundation for multigrade teaching. There are two Vygotsky's (1978) socio-cultural theories of learning relevant to multigrade teaching which is discussed in this review. The major theme from Vygotsky's theoretical framework is that social interaction plays a fundamental role in the development of cognition. Paramount to this theory is that Vygotsky believes that everything is learned on two levels. Firstly, through interaction with others, and then, next, it is integrated into the individual's mental structure. This fits well with multigrade teaching since this is where multigrade teaching and learning is best practiced in an environment where learners are able to participate in their learning as self-directed learners and work collaboratively with each other (Kyne, 2005; Lingam, 2007; Little, 2005;). Kyne's (2005) reference to collaborative teaching strategies implicitly suggests a constructivist perspective as a conceptual tool to understand the practices and provides the basis for the processes in multigrade teaching. In Lingam's (2007) view, the implementation of pedagogical techniques such as peer tutoring, small group teaching, and independent study, will help multigrade learners to find learning meaningful. Although Lingam does not refer directly to constructivism, his assertions reflect an open acceptance of a constructivist approach in multigrade teaching.

A second aspect of Vygotsky's theory is the idea that the potential for cognitive development is limited to a "zone of proximal development". This "zone" is the area

of exploration for which the learner is cognitively prepared but requires help and social interaction to fully develop (Briner, 1999). A teacher or more experienced peer is able to provide the learner with "scaffolding" to support the development of learners' understanding of knowledge domains or development of complex skills. Collaborative learning, modelling, and scaffolding are strategies for supporting the intellectual knowledge and skills of learners and facilitating intentional learning.

Vygotsky defines development in terms of his theory on the zone of proximal development as:

*the distance between (a child's) actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Vygotsky 1978, p. 6).*

Further, Vygotsky's theory stresses the view that due to the different levels of understanding within a multigrade classroom, "peers in multigrade classrooms can facilitate development by assisting learners in moving to the next level of understanding" (Bacharach et al., 1995, p. 10).

Notably, this type of classroom structure is best associated with Vygotsky's theory of "zone of proximal development," which was previously discussed. Typically, learners work in groups wherein two or more grades are represented. Learners in a multigrade classroom not only receive assistance from their teacher but may also take on the expert role by serving as peer-tutors. Multigrade classrooms foster a

sense of collaboration and sharing, offering the opportunity to extend their learning in a variety of ways. This study therefore focuses on social constructivism, because it links well with the objectives of the study in Chapter 1.

Multigrade teachers execute their roles where education constitutes a shift from teacher support, to group support, to peer support and ultimately towards individual self-directed learning (Mulryan-Kyne, 2007). This implies that there is a balance between individual constructivism and social constructivism (Vygotsky, 1978). More significantly, Little (2005) is of the view that friendship patterns, self-concept, self-esteem, cognitive and social development are more favourable in multigrade schools. Multigrade classrooms are therefore ideal in a constructivist's system. In this sense, teachers guide learners and learners guide their peers towards their own independent learning.

### **2.3 Multigrade Intervention Programmes from other Countries**

Various types of models and programmes have been designed by researchers in their study of multigrade teaching to explore issues concerning multigrade teaching. A review of some of these models provides some insights into the programme of multigrade teaching adopted by the schools in this study. For example, Little and Pridmore (2004) propose a training programme, known as the Multigrade School Education (MUSE). The MUSE programme was used as the framework to identify

the training programmes adopted by the multigrade teaching schools in Finland, Greece and Spain.

This prominent training programme, the MUSE, for multigrade teaching has therefore been selected for this study. The MUSE programme aims to provide quality primary education to learners in rural areas in multigrade schools. Core areas in this programme serve as the framework for this study. These core areas in the MUSE setup are the teacher training and support teachers' needs, active learning, and community support and participation. Countries such as Columbia, India, the Netherlands, Greece and Australia also had to deal with discrepancies in learners' achievement levels and have developed programmes, curricula, resources and strategies to address educational issues in a multigrade setting (Aghazadeh, 2010; Cornish, 2006; Joubert, 2010; Rao & Rama, 2010; Tsolakidis, 2010; Vithanapathirana, 2006).

### **2.3.1 The Multigrade School Education (MUSE) Intervention Programme**

Little and Pridmore (2004) developed the MUSE project. This programme is vital to this study because it focuses on multigrade teaching intervention programme for multigrade teachers. This programme is, therefore, important in framing this study as it could help the Ministry of Education, particularly NIED and the Kunene regional office, to respond to the needs of multigrade teachers. The MUSE programme was aimed at developing an in-service training programme that would be designed to

meet the needs of multigrade teachers in order to improve their performance in the multigrade schools (Little & Pridmore, 2004). The training is based on methodological approaches of multigrade teaching and the use of Information and Communication Technology (ICT) applications so as to provide (Little & Pridmore, 2004) an in-service training programme for teachers of multigrade schools; and the use of the internet in order to develop a platform for training, collaboration, networking and exchange of ideas between teachers and learners.

The MUSE programme provides multigrade teachers with continuous training and support, enhancing communication among remote multigrade school teaching environment and outside the educational community (Little & Pridmore, 2004).

Little (2004) identifies seven aims of the MUSE programme. Firstly, there was a need for the development of a specialised in-service training programme for teachers in multigrade schools. Within the framework of the programme, a specially designed training programme was developed in order to meet the needs of the teachers. The programme included training on the methodological approaches that would be applied to the multigrade school environment. In addition, the programme focused on the familiarisation of teachers with the use of ICT as an assistive tool for multigrade teaching (Little & Pridmore, 2004).

Secondly, there was a need to enhance the professional skills of multigrade teachers and the development of abilities to design lesson plans according to the needs of the

specific school environment. The training programme included presentation of case studies and examples of good practice on how teachers have to face the particularities of the multigrade school environment. The teachers participating in the programme were trained in designing and implementing programmes and activities. Thirdly, there was a need to develop a model that allows continuous training and support for the multigrade teachers. The programme developed a platform for continuous interaction between teachers and trainers. Fourthly, the conduction of an intervention study on multigrade teaching across Europe was necessary. The programme was implemented in multigrade schools in Greece, Finland, Spain and United Kingdom (Little & Pridmore, 2004).

### **2.3.2 The Centre for Multigrade Education (CMGE) Intervention Programme**

The multigrade Education centre was established in 2009 at the Cape Peninsula University of Technology in South Africa through a grant from the Royal Netherlands Government to enhance the development of multigrade education solutions and to develop the capacity to make a significant difference in the success of rural primary school children (Joubert, 2010). According to him, the Centre's vision is to mainstream multigrade education as one of the key mechanisms to address the quality of rural education and therefore also rural poverty. It is the Centre's mission to establish an international centre for the development of quality instruction and learning in multigrade education, based on research and good practices, and supported by technology (Joubert, 2010). The CMGE is committed to

make rural schools “centres of excellence” which will nurture a generation of well-educated and informed leaders of the future (Joubert, 2010). The drivers of education policy have the responsibility to prioritise and support these schools and their learners. Without this support, millions of children will continue in poverty and deprivation (Joubert, 2010).

According to Joubert (2010), the research programme of the Centre for Multigrade Education focuses on the following:

1. Multigrade pedagogy
2. Multigrade curriculum
3. Multigrade teaching and learning materials
4. Teacher training and
5. The physical and social context of the multigrade rural school.

#### **2.4 Literature Review**

This section reviews literature on the historical background of multigrade teaching, rationale for multigrade teaching, driving factors of multigrade teaching in Africa, opportunities and challenges for multigrade teaching, prevalence of multigrade teaching, rationale for multigrade teaching, attitudes of teachers, learners and parents and the development of the multigrade programme and strategies that could be used to promote effective learning.

This literature review enables the researcher to develop a clear understanding of multigrade teaching; establish what has already been established in multigrade teaching and identify gaps in multigrade teaching, which the researcher's study can fill. It also highlights concepts and theories on multigrade teaching (Bless & Higson-Smith, 1995).

#### **2.4.1 Historical Background of Multigrade Teaching**

Multigrade teaching has a long history, as the majority of state schools in the USA in the nineteenth century were multigrade or one-room schools (Vinjevold & Schindler, 1997). Monograde teaching became a norm later, at the end of the nineteenth and in the early twentieth century (Thomas & Shaw, 1992). Multigrade teaching, however, remains an important part of schooling in both developed and developing countries, but for different reasons (Haingura, 2014).

It would seem that scholars and education practitioners do not share a common appreciation for or understanding of multigrade teaching (Brown, 2010). For many, the concept of multigrade teaching remains contested, which has made it challenging to reach consensus on its meaning (Haingura, 2014). Joubert (2010) argues that, while the concept of multigrade teaching is not a worldwide phenomenon, the practice is universal. Meanwhile, Little (2006a, p. 4) highlights that understandings of multigrade teaching differ from country to country, with a variety of terms being

used to describe what is recognised as multigrade classes: “combination class”, “composite class”, “vertically-grouped class”, “family class”, multigrade class”, “consecutive class”, “double class”. Despite these various descriptions and terminologies used in a variety of situations to indicate what is meant by a multigrade class, Little (2006) points out that it should not be assumed that they mean the same in different countries, communities and contexts.

For Brown (2010) a composite class consists of two or more classes working in the same classroom with one teacher, but usually with a separate curriculum. This means that, in a composite class, each grade follows its selected learning programme or curriculum (Brown, 2010). What is special about a composite class is that the curriculum maintains its traditional monograde structure and is taught strictly through separate grade materials (Brown, 2010).

Similarly, the Centre for Education Policy Development (Birch & Lally as cited in CEPD, 2011) defines multigrade teaching in terms of learners who are in different grades being taught by one teacher in one classroom, which usually involves Grades 1, 2, 3 and 4. While learners from Grades 1 up to 6 are grouped together in countries such as Pakistan and Australia (Birch & Lally as cited in CEPD, 2011), multigrade teaching in Malaysia involves the instruction of learners from two or more grade levels close to each other (Brown, 2010). For example, Grades 1 and 2, or Grades 4 and 5 would be combined, rather than Grades 1 and 3 or Grades 2 and 4, because no

grade should be skipped in the grouping. In Indonesia, multigrade teaching involves a teacher teaching more than one grade at the same time, either in different classrooms or in the same room divided by sliding doors (Little as cited in Brown, 2010). For the purposes of this study, the understanding of multigrade teaching refers to learners who are in two different grades, being taught by one teacher in one class at the same time.

In the African context (Brown, 2010, p. 7), the preferred definition is offered by Kyne (2005) who stipulates that “Multigrade teaching is understood as referring to a case or cases where learners who are supposedly in different grade levels are taught in one class, by one teacher at the same time. This shows that multigrade teaching is embedded in the graded system. Learners in multigrade classes retain their grade designation.” Kyne’s definition agrees with that proffered by Pridmore’s (2007, p. 6), who refers to multigrade teaching as “a situation in which one teacher has to teach learners of two or more grade levels during one time-tabled period usually in the same classroom”. This contrasts with ‘multigrade’ contexts in which one classroom has learners comprised of age variations and differentiations. Such age variations occur even in classes that are traditionally classified as monograde and should not be used as a descriptor of a multigrade class (Kyne, 2005).

In South Africa, multigrade teaching is not unique (Joubert, 2010). Multigrade schools comprise 30% of all schools in that country (Brown, 2010). Although multigrade schools account for approximately 30% of all primary schools in South

Africa, many multigrade rural learners do not receive equal access to quality education (Bloch 2009; Taylor, 2008). The reality is that many South Africans are living in poverty, which is widespread, they are vulnerable, powerless, and isolated (Pretorius & Mampuru 2007; Prinsloo, 2005). Multigrade teaching is often established as a result of necessity; often the result of political or educational rationalisation (Brunswic & Valerien, 2004), population density resulting from rural-urban migration, excessive numbers of learners in certain grades, and competition for schools that are seen by parents as being more desirable.

According to the Centre for Multigrade teaching, multigrade teaching is used in approximately 7 000 South African schools. Most of which are located in rural or remote areas (Joubert, 2010, 2009). Vinjevold and Schinder (1997) explain that multigrade schools in South Africa are generally in rural or remote areas, characterised by extreme disadvantages of inadequate facilities, such as a lack of classrooms and libraries, the absence of infrastructure such as roads, electricity, water, and untrained teachers. The highest number of multigrade schools is found in Limpopo, the Eastern Cape and KwaZulu-Natal (Brown, 2010) provinces of South Africa.

In many countries multigrade teaching has been introduced in schools that are mostly in rural and sparsely populated areas that also have a difficult terrain (Joubert, 2010).

This has also been the case in South Africa. The main reasons Joubert (2010) cited for the introduction of multigrade teaching in South Africa include:

1. Increasing access to education provision to disadvantaged areas
2. Increasing access to learning in understaffed schools
3. Maximising the use of available teachers and classroom space and
4. Ensuring the cost-effective use of available resources

The provision of education in multigrade schools is affected by a number of challenges which impact negatively on the provision of quality teaching and learning in multigrade schools (Joubert, 2010). Teachers, for instance, that are situated in these schools have been trained in monograde teaching approaches. Perceptions of many teachers regarding multigrade teaching in South Africa are that it is demanding and more complex than monograde teaching (Joubert, 2010). Some of the challenges include:

1. A lack of teacher training
2. Poorly resourced schools
3. A lack of curriculum adaptation
4. Planning requirements that are the same as for monograde classes
5. Limited exposure to suitable teaching strategies
6. Lack of support for multigrade teachers
7. Few learners in classes or overcrowded classes in certain instances
8. Inadequate infrastructure and

9. Inadequate number of teachers, especially in the “one teacher” schools.

In Namibia, multigrade teaching is viewed as an approach for increased access and school retention (MoE, 2011a; Haingura, 2014). In addition, multigrade schools are divided into two groups, namely full multigrade and partial multigrade schools (Haingura, 2014). In full multigrade schools, all the grades are taught through a multigrade mode, while in partial multigrade schools, some of the grades are taught through a multigrade teaching mode, while other grades are taught in a monograde mode (Haingura, 2014). Multigrade teaching in Namibia emanated from the low enrolment of learners, especially in rural areas, and the implementation of the staff norms policy of 2001, that required a ratio of 1/35 teacher to learners (MoE, 2011a; Haingura, 2014). It is also used in rural areas, for example where the number of school-going learners is too few to form a class. In such situations, multigrade teaching becomes the teaching mode. Multigrade teachers face severe challenges and difficulties unlike monograde classrooms (Beukes, 2006; Haingura, 2014). They need to plan and prepare for more than one grade per lesson. In Namibia, Beukes (2006) shared the challenges multigrade schools face such as: little or no guidance for the teaching of combination grades, inconsistent learner attendance, teachers' lack of classroom management skills, and time management.

In many developing countries, multigrade teaching was introduced as a necessity (Murlyan-Kyne, 2007; Kucita et al., 2013). This means that the system existed to remove some imbalances that existed in the colonial educational systems. The terms “combination classes”, “forced mixed age classes” and “forced mixed grade” usually refer to settings arising through necessity. Murlyan-Kyne (2007) see multigrade systems which are introduced through necessity as more complex, with many problems in terms of financial, geographic and demographical challenges. Some of these are associated with large classes, few teachers with few incentives, insufficient training, and few resources (Murlyan-Kyne, 2007).

In these developing countries, multigrade teaching is presented as a powerful pedagogical tool for promoting independent and individualised learning (Little, 2001). The pedagogical choice of multigrade teaching results when the practice is purposely selected by the institution. The terms ‘vertical grouping’, ‘ungraded’, ‘non-graded’ and ‘family grouping’ usually refer to settings arising through choice. For this reason, provision is made for policy makers and citizens to decide on the appropriate pattern and extent of multigrade teaching (Little, 2004).

The reasons for multigrade classes in Namibia are not different from those in other developing countries. Multigrade teaching has been a teaching practice since the introduction of formal education in 1980 (MoE, 2011a). However, it became more prominent after independence in 1990, when the reforms proposed it to be a teaching

norm (MBEC, 1996). In January 1996, the Ministry of Basic Education and Culture issued a Pilot Curriculum Guide that provided an outline for piloting the new Basic Education in Namibia. This was the first time after independence that multigrade classes were regarded as a teaching norm, with the directive that special attention ought to be given to Grade 1 (MBEC, 1996). In other words, where possible in a multigrade school, the Grade 1 class was to be taught in a monograde setting. However, while the Ministry of Basic Education and Culture acknowledged multigrade classes as a teaching norm, it did not provide the necessary training for multigrade teaching (MoE, 2011a).

#### **2.4.2 Prevalence of Multigrade Teaching**

Multigrade teaching is prevalent at the primary school level in many countries (Brown, 2010). Juvane, in (Brown, 2010) asserts that multigrade teaching is also a common feature of primary schools in different African nations, but that there is insufficient published data in this regard. According to Brown (2010), what is known is that a large proportion of primary school teachers worldwide are involved in teaching several grade levels in one classroom throughout the school year.

Little (2006b) presents the following statistics on the prevalence of multigrade teaching in different parts of the world: in England in 2000, 25.4% of all classes in primary education; in France in 2000, 29% of all classes in primary education; in Ireland in 2001, 42% of primary school classes; in Norway in 2000, 34% of all

primary school classes; in Nepal in 1998, almost all primary schools; in Peru in 1988, 21 100 primary schools and 41 000 multigrade teachers; and in India in 1986, 84 % of primary schools had three teachers or less.

In South Africa, the Educational Management Information Systems (EMIS) report (2010) states that the prevalence of multigrade schools across the nine provinces is as follows: Eastern Cape (26.88%), Free State (18.09%), Gauteng (38.63%), KwaZulu-Natal (19.69%), Limpopo (41.35%), Mpumalanga (25.00%), Northern Cape (13.83%), North West (29.49%) and Western Cape (15.35%), with 27% of all schools in the country being multigrade schools (Haingura, 2014). The Limpopo province had the highest (41.35%) number of schools with multigrade teaching, while the Northern Cape had the lowest (13.83%) number of schools offering multigrade teaching (Haingura, 2014).

In Namibia, the EMIS 2009 report (as cited in Hailombe, 2011; Haingura, 2014) indicates that the prevalence of multigrade schools in thirteen regions was as follows: Caprivi (4.8%), Erongo (1.2%), Hardap (3.6%), Karas (3.4%), Kavango (19%), Khomas (0.6%), Kunene (3%), Ohangwena (14.5%), Omaheke (2%), Omusati (16%), Oshana (8%), Oshikoto (11.8%) and Otjozondjupa (3.8%), with 16.4% of schools in the country offered multigrade teaching. The Kavango region had the highest (19%) number of schools offering multigrade teaching, while the Khomas

region had the lowest (0.6%) number of schools offering multigrade teaching (Haingura, 2014).

According to the information provided by the circular of the Kunene Education Regional Office on the 7 January 2015, the prevalence of multigrade classes in the eleven circuits in this region was as follows: Opuwo (50%), Okangwati (52%) and Etanga (45%), has the lowest percentage in the region (Haingura, 2014). The overall percentage of multigrade schools in the Kunene Region for the in 2015 was 54% (Hailombe, 2011; Haingura, 2014).

## **2.5. Rationale for Multigrade Teaching**

The relationship between the situation leading to the adoption of multigrade teaching and its actual practice in schools seems to be a problematic one, which offers important lessons to researchers (Brunswic & Valerien, 2004). Brunswic and Valerien (2004) theorised that when multigrade teaching is undertaken, it is often established as a result of necessity: based often on political or educational rationalisation. When multigrade teaching is established for reasons of necessity, the evidence suggests that it is motivated by:

*[G]eographic or demographic constraints (scattered settlements, low population density, declining population density resulting from rural urban migration, schools having a number of remote sites), or administrative or pedagogical problems (absenteeism, leave or lack of teachers, insufficient numbers of learners in higher grades, excessive numbers of learners in certain grades, competition between schools that are seen by parents as being of unequal quality). [p. 45].*

Brunswic and Valerien (2004) further argue that when the choice is made for educational reasons, it is made by innovative teachers, regardless of the status or type of school: government or private. But Brown (2008) contends that the motivation for multigrade teaching model in schools is more fundamental than professed by Brunswic and Valerien (2004). According to Brown (2008), multigrade teaching has been commonly understood as a teaching condition arising as a result of the shortage of teachers. In this type of a situation, educationists believe that multigrade teaching has a significant role to play if the goals of the World Declaration for ‘Education for All’, as affirmed in Jomtien in 1990 and the Dakar Framework of Action in 2000 are to be attained (Brown, 2008; Little, 2005). Most systems of education which face such conditions adopt multigrade teaching as it becomes the only option, or a last resort (Brown, 2008). This last point reinforces and highlights the necessity motive.

However, ‘necessity’ is not the only reason why multigrade teaching is adopted. Vithanapathirana (2006) argues that certain systems of education deliberately adopt multigrade teaching considering the advantages that can be drawn out of this approach. An example from England is given by Little (2006a) who suggests that in order to implement the child-centred approach, vertical grouping rather than horizontal grouping was encouraged through which learners are encouraged to learn through social interaction of the different grade groups.

But the ‘necessity’ motive appears to be a more prevalent cause for multigrade teaching than choice. In Africa, Tambulukani (2004, p. 8) as well as Brown (2008b, p. 6) maintain that the adoption of multigrade teaching is mainly out of necessity - usually associated with the need to:

- (a) *[I]ncrease access to education provision to disadvantaged areas;*
- (b) *increase access to learning in understaffed schools;*
- (c) *maximize the use of available teachers and classroom space;*
- (d) *cost effective use of available material resources.* [p. 8].

Multigrade teaching is said to arise from either necessity or choice (Brunswic & Valerien 2004; Little as cited in CEPD, 2011). According to Little (2006b, pp. 19-20), in cases where multigrade teaching arises from necessity, this is determined by factors such as:

1. Schools in areas of low population density where schools are widely scattered and inaccessible and enrolments are low. Schools may have only one or two teachers responsible for all grades.
2. Schools in areas where the learner and teacher numbers are declining, and where previously there was monograde teaching.
3. Schools in areas where parents send their children to more popular schools within reasonable distances, leading to a decline in the potential population of learners and teachers in the less popular schools.

4. Schools in which the number of learners admitted to a class exceed official norms on class size, necessitating the combination of some learners from one class grade with learners from another grade.
5. Mobile schools in which one or more teachers move with nomadic and pastoralist learners spanning a wide range of ages and grades.
6. Schools in which teacher absenteeism is high and supplementary teacher arrangements are non-existent.

There are cases, particularly in the developed world, where multigrade teaching has occurred by choice (Haingura, 2014). In these cases, a decision is made by policymakers and/or teachers to adopt a multigrade arrangement for pedagogic reasons (CEPD, 2011; Haingura, 2014). An example of this is in England, where multigrade teaching was deliberately adopted in order to implement child-centred approaches in which learners are encouraged to learn through social interaction with learners in different grades (CEPD, 2011; Haingura, 2014). Proponents of multigrade teaching argue that this model of teaching is a powerful pedagogic tool for promoting independent and individualised learning (Little, in CEPD, 2011). This idea is based largely on possibilities for peer and cross-age learning among children (Haingura, 2014).

Multigrade teaching in Namibia however, is not by choice (Haingura, 2014). Rather, it is a critical policy adopted by the Ministry of Education, Arts and Culture as it sought to provide schooling for out of school learners in areas of low population density (MoE, 2011b; Haingura, 2014). The learners in these areas have a right to quality education, just like any other children. Therefore, under such circumstances, multigrade teaching becomes the only available choice for these communities (MoE, 2011b; Haingura, 2014).

Although it is the stated aim of the Government of Zambia to eradicate illiteracy and to provide universal and equal access to Education for All (EFA) children of primary schooling age, many children in rural and remote areas where over 80% of the population live, do not have easy access to schools. Multigrade teaching was introduced to a number of primary schools in Zambia in the mid-1980s in a special project jointly supported by the Zambian Ministry of General Education and the Swedish International Development Authority. However, ministerial support did not provide a central curriculum for multigrade teaching (Lungwangwa, 1989; Mukupa, Ndhlovu, & Sichula, 2010). The context for multigrade teaching is worsened by the fact that some of the parents who can afford to send their children to monograde schools in Lusaka do so. As the children migrate from rural areas to urban areas fewer children are left in the rural areas and, in most instances, too few to warrant monograde classes. As a result, the remaining children are aggregated into a single class of multigrade consisting of an even greater range of grades, ages and abilities.

The problem of teacher shortage is exacerbated because teachers are reluctant to accept appointment in rural and remote areas (Lungwangwa, 1989; Mukupa, Ndhlovu, & Sichula, 2010).

## **2.6 Multigrade Teaching in the Namibian Context**

According to MoE (2011), report on multigrade teaching in Namibia, multigrade teaching is practised at both the junior primary (Grades 1-3) and senior primary phases (Grades 4-7), but the majority of the cases are at the junior primary phase. As in many other countries, the multigrade schools in Namibia are found mainly in rural areas. However, there are reports of multigrade practices in schools in areas generally considered as suburban as well. Unlike in the vast majority of cases reported in extant literature, a number of the multigrade schools in rural areas in Namibia are not located in geographically remote and inaccessible areas (MoE, 2011a; Haingura, 2014). Multigrade teaching is an under researched area in Namibia (MoE, 2011a) as such the number of schools with this practice nationwide is unknown. In rural communities, however, multigrade teaching is reported as those classified as public primary schools (MoE, 2011b).

The four studies (Beukes, 2006; Haingura, 2014; Kapenda, 2010; Titus, 2004,) conducted in the rural areas where multigrade teaching is common found that teachers in multigrade classrooms experience numerous and diverse challenges. These challenges range from problems in managing classrooms, not planning lessons

properly, lack of skills on how to use different teaching strategies, time management in terms of trying to adapt a timetable designed for a monograde classroom to that of a multigrade classroom. Other challenges include a shortage of resources, the absence of a multigrade curriculum, and a serious lack of training and support in multigrade teaching.

The studies further revealed that these challenges hold serious implications for teaching and are worsened by the fact that teachers in the study are not equipped to manage a multigrade classroom and are unqualified to teach. The studies further revealed that teachers used only two teaching strategies for lesson presentations, namely a quasi-monograde teaching strategy; a teacher teaches one grade at a time while the other grade is just sitting doing nothing. The other revelation was that of a common timetable teaching strategy, where the teacher teaches the same topic to all grades at the same time.

The results of the four studies also revealed that teachers are ill-prepared, frustrated, isolated and demoralised in their current classroom situations and, in the absence of any direction from the Ministry of Education, approach each day as it comes. Like the implications for teaching, the implications for learning are equally problematic and a reason for serious concern as observed by Haingura (2014). Depending on the grade on which the multigrade teacher focused on, for instance if the teacher focuses on one grade exclusively, learners of the other grades would be left feeling bored,

abandoned and disconnected in that classroom. Consequently, the teachers in the studies reported high failure and high drop-out rates. According to EMIS (2012) report (as cited in Hailombe, 2011) a total of 10 466 learners were counted, out of which 5 409 or (52%) are female and 5 057 or (48%) are male. The major reason for female learner drop out is pregnancy, 26% of overall female dropout. A large number of learners (816) dropped out because of long distance between school and home with Kavango, Khomas, Ohangwena and Oshikoto topping the list. Dropouts due to parents moving away might not be a really dropout because the learners might have started school in other regions, however, 4410 learners were reported to have left schools due to parental movements. There is, however, no specific mention of aspects on improving the situation in terms of developing an intervention programme to remedy the situation.

The NIED developed manuals in 2007 and conducted training workshops geared towards equipping education officers with knowledge and skills necessary for assisting the multigrade teachers in the regions. The training was followed by a monitoring and evaluation workshop in multigrade teaching in order to explore the knowledge gained during the training. The programme was implemented and used to teach the combined grades using the curriculum designed for monograde (MoE, 2011a). The MoE (2011b) study revealed that both teachers and learners did not like the concept of multigrade teaching. The teachers were faced with problems such as the fact that the forty (40) minutes period was found to be insufficient to teach the

combined grades. There was also no teaching material and that classrooms were overcrowded. The lack of visits by education officers and the absence of the multigrade teaching curriculum worsened the problems.

The study by MoE (2011b) recommended that:

1. The National Institute for Educational Development (NIED) needed to re-emphasise training on multigrade teaching with regard to multigrade teaching approaches, which teachers did not use during classroom visits and how to assess learners in multigrade classrooms
2. Training model should be changed from traditional cascade training model to capacity building whereby school based practical training should be offered by a trained teacher and co-facilitated by NIED and education officers
3. Workshop facilitators needed to consider multigrade teaching during subject related workshops
4. The multigrade training should be conducted once a term rather than once a year.

Few efforts to improve in-service training were established as part of the national policy on education. These include the training of multigrade teachers in all regions in 2011 and the second effort included the publication of training manual and a teacher's manual on multigrade teaching (MoE, 2011b). A few booklets have also

been produced to provide practical, locally relevant advice for teacher trainers (MoE, 2011b).

## **2.7 Experiences and Perceptions of Stakeholders in Multigrade Teaching**

In this study, the first research question was to explore and describe the experiences, needs and the perceptions of teachers, learners and parents in the implementation of multigrade teaching.

### **2.7.1 Teachers' Experiences and Perceptions Towards Multigrade Teaching**

Evidence on the ground suggests that many teachers are negative towards teaching in multigrade classrooms. In general, extant literature suggests that teachers prefer monograde teaching because multigrade classes require more planning, preparation, organisation and work. The multigrade teacher needs to plan catering for a wider range of abilities and maturity levels which means there is less time for meeting individual learner needs and for remediation. There is also less time for reflection on teaching and a lack of relevant professional training, as well as less satisfaction with their work (Little, 2005).

Given the negative attitudes held by the majority of teachers, and the extent of multigrade teachers, schools, and classes, Little (2005) claims that several conditions need to be met in order to make learning and teaching in multigrade settings

beneficial for learners. The attitude that teachers take to the multigrade environment is one such issue, which must be addressed in teacher training.

Extant literature suggests that multigrade teachers in developing countries generally hold negative attitudes towards multigrade teaching (Joubert, 2005; Little, 2005; Suzuki, 2004; Titus, 2004; Vithanapathirana, 2006). In a study of teachers in the Nuwakot and Kavre districts of Nepal, 50 out of 56 teachers with experience in multigrade teaching thought that multigrade teaching presented them with more difficulties than monograde teaching (Suzuki, 2004). Little (2005) found that in the Peruvian Amazon, multigrade teachers perceived the monograde class as the desirable norm, and the multigrade as the “second class” necessity. On the contrary, the study conducted in Bhutan found that 53% teachers felt positive about multigrade teaching and 47% negative (Kucita et al., 2013).

Available literature also points out that teachers feel unprepared to work in multigrade classrooms, judge that learners do not ‘get the same’ as in monograde classrooms, and report that they have insufficient educational materials to support learning in the multigrade classroom (Little, 2005; Kucita et al., 2013). However, an action research study undertaken in Sri Lanka saw a change among multigrade teachers from what was generally a negative to a more positive attitude. This could be attributed mainly to a realisation that there are strategies that can be used to improve learner achievement outcomes and lessen the teacher’s burden of intensive

lesson planning for several grades (Vithanapathirana, 2006). The isolated and isolating conditions of work and the poverty of the communities served by multigrade schools reinforce teachers' negative attitude to the school (Ames, 2004).

In Sri Lanka, attitudes of multigrade teachers to multigrade teaching are also generally negative. But a recent action research suggests that teachers' attitudes to multigrade teaching become more positive once they realise that there are strategies that can be used to improve learner achievement outcomes and lessen the teacher's burden of intensive lesson planning for several grades (Vithanapathirana, 2006).

In the available evidence on teachers' attitudes towards multigrade teaching in different African countries, a generally negative perception prevails (Joubert, 2005; Titus, 2004). In many developed nations, attitudes of parents towards multigrade teaching and learning are often negative, while in developing countries such as South Africa, the negative attitude is among teachers and school leaders (Brown, 2010).

### **2.7.2 Teachers' Experiences and Perceptions Towards Multigrade Classrooms**

Several studies have focused on perceived challenges posed by the multigrade classroom for teachers and their teaching tasks. In studies of teachers in developing countries, there is evidence of their generally negative perceptions towards multigrade classes and multigrade teaching (Little, 2005). In 2011, the Research Unit at NIED conducted a study on monitoring and evaluation of multigrade teaching in

Namibian schools. The study revealed that both teachers and learners did not like the concept of multigrade teaching. The teachers were faced with problems such as the fact that the forty (40) minute period was insufficient to teach the combined grades, lack of teaching materials and that classroom were overcrowded. The lack of visits by advisory teachers and the absence of the multigrade teaching curriculum exaggerated the problems.

The MoE (2011b) study results further revealed that learners who enjoyed multigrade teaching reasoned that they learnt more things when the teacher taught another grade. This practice enabled learners in higher grade to revise their previous work. In lower grades learners had the privilege of learning during lessons of the upper grade when the teacher taught the higher grade. However, learners had various reasons for not being willing to sit in multigrade classrooms. The majority indicated that the teachers were not giving them enough attention, and that effective teaching did not take place. The isolated and isolating conditions of work and the poverty of the communities served by multigrade schools reinforce teachers' negative attitude to the schools (Ames, 2004; Little, 2005). In Sri Lanka, attitudes of multigrade teachers to multigrade teaching are also generally negative. But a recent action research suggests that teachers' attitudes to multigrade teaching become more positive once they realise that there are strategies that can be used to improve and lessen the teacher's burden on intensive lesson planning for several grades (Vithanapathirana, 2006).

In Turkey and Caicos Islands, teachers, in light of multigrade teaching, showed negative attitudes toward specific aspects of their professional task as teachers. They reserved their most negative comments for the burden of lesson planning imposed by the multigrade classroom (Little, 2005). Earlier studies (Birch & Lally, 1995) refer to several other challenges faced by teachers, most of which, as Little (2005) highlights, are related to the remoteness of the contexts in which multigrade schools are located.

These challenges include:

1. Non-filling of vacancies in multigrade schools in rural areas.
2. Absence of teacher accountability in remote multigrade schools.
3. Lack of financial incentives for multigrade teachers.
4. Absence of promotion incentives.
5. Restricted opportunities for in-service training.

In Zambia, in the situation analysis study was undertaken in 2012 at a teacher training college and four primary schools offering multigrade teaching to identify the perceived benefits and challenges experienced by stakeholders in multigrade contexts. These schools were used by the college as demonstration schools for multigrade teaching. All the four primary school principals and six teachers interviewed agreed that the main reason they had set up multigrade classes was either too few students to warrant a monograde classroom or insufficient teachers to allow the allocation of a teacher per grade (Kivunja, & Wood, 2012).

It was clear from the study that teachers supported multigrade. However, the unanimous perception among the interviewees was that it involved more work than monograde. A problem that was pointed out by all the primary teachers interviewed was that their schools suffered from critical shortages of teaching and learning resources. Teachers emphasised that it was not possible to provide quality teaching without being given the basic resources and infrastructure. The shortages they mentioned included teachers, desks, textbooks, teaching and learning materials, chalkboards and even chalk. The teachers identified further problems that they had been trained only to teach a class of one grade and also their curriculum was designed for monograde classes. This latter problem was perceived as ‘one of the greatest challenges’ they faced as they had to improvise strategies to cope with the situation in which they found themselves, one that was strange since they had not expected it or trained for it. None of the schools surveyed had curriculum documents for multigrade teaching. Teachers were working from a centrally distributed monograde curriculum. This finding is consistent with the findings from baseline studies in South Africa (Joubert, 2009).

In the Gambia, the use of multigrade teaching was much more varied, and driven by individual school principals, rather than policy. Multigrade schools visited in the study found a number of variations on the multigrade system. The most common form of multigrade teaching occurred with one teacher teaching two grades at the same time, in the same classroom (Mulkeen & Higgins 2009). In one school there

were two teachers: one taught Grades 1 and 2 and the other Grades 3 through 6 (Mulkeen & Higgins, 2009).

In Uganda in 2005, over 3,000 schools had less than 300 learners and 20 percent of primary schools had less than seven teachers. Schools with fewer teachers than classes sometimes use informal multigrade systems, and sometimes leave entire classes unattended. In 2004, there were more than 30 multigrade schools in the pilot program, enrolling 5,600 learners of the 7.2 million enrolled for primary education nationwide (Mulkeen & Higgins, 2009).

Interest in providing support for multigrade schools within the Ministry of Education and Sports was strengthened in the late 1990s following a visit to Colombia by senior officials to observe the Escuela Nueva schools (Harris, 2004). A pilot project was established in Kalangala and Sembabule districts. In preparation, teachers from the pilot schools were provided with short training workshops. These workshops concentrated on the writing of materials for self-instruction, with the expectation that teachers would produce their own multigrade learning resources similar to those used in the Colombian Escuela Nueva (EN) schools (Harris, 2004).

To launch the pilot program, information meetings were held to sensitise the local communities and to clarify the nature and purpose of multigrade. For many of the parents, the arrival of a multigrade school meant the provision of a complete school

(from Grades 1-7) for the first time. There was a fairly high level of parent satisfaction with the system, as parents could see their children progressing further in school than before. Parents were reported to be supportive of both the school and the teachers, sometimes providing food to the teachers to supplement their incomes.

In Senegal multigrade schooling is an integral part of the education sector strategy. It is estimated that approximately 18 percent of schools nationwide has multigrade classes and 10 percent for the total primary school-going population is in multigrade classes. The number of multigrade schools has been increasing, in line with the strategic plan (Mulkeen & Higgins, 2009). Two separate models of multigrade schools have been developed. In the more common model, a teacher teaches two, normally consecutive, grades at a time. From 2001 a second type of multigrade arrangement was piloted in a small number (25) of schools. Single teacher's schools this school had one teacher working with up to six grades simultaneously (Mulkeen & Higgins, 2009).

There was little systematic sensitisation for either community leaders or teachers, and both communities and teachers tended to regard both forms of multigrade school as an inferior form of education. Teachers appointed to the multigrade schools were not provided with any systematic in-service multigrade training, although individual inspectors in the various departments arranged a number of support workshops to improve multigrade pedagogy. The availability and quality of workshops varied

reality from one department to the next. In one department the multigrade teachers had received no multigrade training and said they had acquired their multigrade teaching skills “just by doing it.” Some were not even trained teachers. In another department, a number of inspectors had produced a local multigrade training booklet that outlined a range of appropriate strategies for improving multigrade teaching (Mulkeen & Higgins, 2009).

Multigrade teaching was not included in pre-service teacher education courses. Teaching materials were in short supply and no additional teaching and learning resource materials were provided for the multigrade teachers. Many of the multigrade lessons observed were of a reasonably high standard, particularly when the two grades were consecutive (for example, Grades 1 and 2, Grades 3 and 4). When grades were not consecutive, teachers often had difficulties meeting the diverse needs of their learners. Work assigned to the group that the teacher was not working with was often inadequate or irrelevant, leaving this second group with either nothing to do, or with unproductive tasks. The more successful multigrade teachers had received some in-service multigrade training but because of the high turnover, many of the teachers had never had multigrade training at all.

The quality of multigrade schools was acknowledged to be poor. In interviews with inspectors and teachers, it was recognised that (i) the pedagogy needed to be improved, (ii) extra resource materials were required, and (iii) consecutive grade

groupings were more practical than non-consecutive. The inspectors active in single teacher's schools believed that the learning outcomes in many of these schools were unsatisfactory, a problem they attributed to (i) the lack of trained teachers, (ii) the lack of specific multigrade training, (iii) the lack of sufficient learning resources, and (iv) the isolation and low morale of the single teacher's schools. Single teacher's schools were also unpopular with teachers, many of whom were frustrated with their role and unwilling to continue.

The Gambia has embedded multigrade schooling in its strategy for basic education. Commitment to multigrade schools is included in the education sector plan; a multigrade component has been included in initial teacher education. Ten new multigrade schools were constructed, six two-room multigrade schools and four one-teacher schools, modelled on the Senegalese single teacher's schools. Previously, multigrade teaching had grown on an unplanned basis, as schools had insufficient teachers. In general, multigrade teaching was perceived by parents and school management as unsatisfactory, and school head teachers often sought to have additional teachers assigned to their school.

### **2.7.3 Learners' Experiences and Perceptions Towards Multigrade Teaching**

In 2011, the Research Unit at NIED conducted a study on monitoring and evaluation of multigrade teaching in Namibian schools. The sample consisted of 42 multigrade schools, selected through clustering sampling procedure in all 13 regions. The study revealed that learners in multigrade classrooms were not happy with multigrade

teaching. Among the groups (principals, teachers, learners and parents) which were interviewed, 78% of the learners did not like to sit in multigrade classrooms and only 22% of the learners liked to be taught in combined grades. Most of the learners that were happy with the multigrade teaching were in lower primary, now known as junior primary phase, grades (1-3). None of the upper primary learners were happy with multigrade teaching.

The findings of the same study conducted by MoE (2011b) revealed that learners also felt that the lower grades were noisy because their work was easy and they always finished earlier. These responses match with the teachers' responses who indicated that there was a need for them to learn how to plan assessment of learners, keep them busy all the time while teaching the other class group.

The learners complained of their classes being too full; hence, they did not get enough attention from teachers. This supports the (MoE, 2011b) finding that there is lack of space in multigrade classrooms and the noise making from inside and outside the classroom, standing and walking around and talking during lessons. Some learners indicated that teachers taught them very well and helped them to understand the lessons. However, there were some who felt that they did not get proper attention from teachers. The learners complained that teachers left classes with work and moved to the other grades. As a result, the teachers did not give them assistance because they were attending to another grade. The situation becomes worse

whenever the teacher taught two grades at the same time which were not in the same venue. In this case, learners made noise and disrupted the lessons when the teacher moved to another classroom. The learners indicated that moving between classes and dividing attention between learners in the two classes caused teachers not to honour the timetable. Teachers did not teach the subjects as they were listed in the daily timetable.

The study further revealed that in many multigrade classes, learners were seated in pairs, or in groups. Their views on the seating arrangement varied. Some indicated that they would like to sit with their friends, sit in groups of four or to sit according to their grades. However, some learners indicated that if the teacher allowed them to sit as they wish they would make noise and disturb others. The MoE (2011b) study found that group work was one of the common strategies used by multigrade teachers.

#### **2.7.4 Parents' Perceptions on Multigrade Teaching**

Multigrade schools are often located in remote areas that are difficult to reach (Juvane, 2005). They are often far from the educational centre and receive little pedagogical support (Titus, 2004). Titus found that the communities in which multigrade schools are located often do not see the value of education, and often speak a different language from the 'official' one of the school. For these reasons, Titus recommends the involvement of the community in the life of the school as a

strategy to build ties with the school and suggests that parents can be asked to visit schools as a resource; or the school might extend the curriculum out into the community. While the need to train multigrade teachers in approaches that would help them develop relations between the school and the community is recognised (Titus, 2004), there is a lack of empirically tested models on which to base these actions.

Despite the apparent utility value of parental support in the education process, it seems that multigrade teaching and teachers do not always find it easy to gain parents' support. Parental concerns about multigrade classes are commonly reported as negative (Bronfenbrenner, 2005; Cornish, 2006). In a recent study exploring these concerns in the Australian context, Cornish (2006) found that parents, as fundamental stakeholders in education, take issue with multigrade teaching because:

1. Many do not believe in multigrade classroom teaching.
2. Many parents believe that some grades and some learners are more suited than others to being part of a multigrade class.
3. Many are concerned about the practice of putting younger or older learners together.

In relation to the last point, Cornish (2006) suggest that biased selection of teachers or learners for multigrade classes had both positive and negative effects. Parents perceived that, when better teachers are taken from monograde and placed in

multigrade class, the selection would have a positive effect on the multigrade class but a negative effect on the monograde classes because, to them, it meant that the ‘good role models’ and the ‘best’ teachers are redeployed from monograde to teach multigrade classes. But Cornish (2006) found that, after realising how multigrade teaching was done, many parents had a change in attitude: they reported more favourable attitudes after a positive experience with a multigrade class. But not all parents were prepared to indicate their support for multigrade classes.

Parents’ attitudes and beliefs about multigrade teaching are not often reported in many parts of the world where multigrade teaching is practiced. One possible reason for this seems to be the fact that multigrade teaching is often an unclear practice in schools (Little, 2004). But this may not explain their behaviours in all cases. The observations reported by Cornish highlight the need for an inclusive management arrangement to support multigrade teaching structures and arrangement in schools. This perspective is consistent with the claim by Little (2005, pp. 7-8) that “[f]or learners to learn effectively in multigrade environments, teachers need to be well trained and supported, well-resourced and hold positive attitudes to multigrade teaching.” The study conducted by MoE (2011b) revealed that the majority of the parents interviewed had the opinion that their children did not benefit from the multigrade teaching. They emphatically opposed the policy of combining two or more grades in teaching.

The study also reported some positive opinions on multigrade teaching especially on the fact that parents had lack of choice because of the lack of teachers in schools surrounding their residences (Kucita et al., 2013). In addition, the few numbers of learners or low enrolment justified the multigrade teaching. This group of parents understood that the number of learners determine the appointment of teachers in schools. This implies that some parents were well informed on the policies and requirements of teacher learner ratio and perhaps the staffing norms.

## **2.8 Teacher Training in Multigrade Teaching**

A generally acknowledged point made by multigrade practitioners is that the multigrade classroom is more of a challenge than the monograde classroom (Kyne, 2005). Skills and behaviours required of multigrade teachers are different, and coordinating activities is more difficult (Lingam, 2007). Joubert (2007) found that national governments in Africa require all teaching to follow the national curriculum. However, the application of a monograde teaching national curriculum in the multigrade teaching situation, according to him, creates problems for multigrade teachers. This finding implies that multigrade teachers need to be supported in specially designed and appropriate ways to implement the programme.

As much as multigrade teaching can be an innovative strategy, it also faces numerous challenges. Pre-service and in-service teacher education programmes do not address the curricular and instructional demands of multigrade teaching. Teachers are

therefore ill prepared for the challenges they will face in practice as multigrade teachers (Brown, 2010; Juvane, 2005). The assumption is that they will adapt the curriculum to suit the circumstances. In his reflection, Veenman (1995) argues that multigrade teachers lack appropriate training for the multigrade setting. Appropriate resources are lacking, and time for individualised work, including remediation, is severely limited. All this suggests an impoverished teaching situation. In Juvane's (2005) view, the conceptual and skill requirements of the prescribed curriculum that multigrade teachers in Africa are implementing are higher than the conceptual competence and skills of the teachers and they are unable to cope. The lack of teaching support was one of the major challenges faced by the teachers at the three multigrade schools in the Kavango region and that there is no provision of advisory services to multigrade teachers throughout Namibia (Haingura, 2014).

Trained teachers have a better grasp of subject knowledge, pedagogy and classroom practices than untrained teachers (Darling-Hammond, 2005). In addition, there is evidence that the generally poor perceptions of multigrade teachers about their work can be mitigated by the provision of better resources and better formal training (Lingam, 2007; Mulryan-Kyne, 2005). In the research conducted in the Eastern Cape Province, (Brown, 2009, p. 69) reported that teachers "felt unprepared to perform" in the following areas of need: pedagogy, curriculum adaptation and multigrade classroom management.

Interviews with teacher training institutions confirmed a neglect of multigrade teaching in teacher education programmes (Joubert, 2007). Very few institutions are giving attention to multigrade issues. The Cape Peninsula University of Technology has been providing multigrade teaching programmes and is currently training multigrade teachers on behalf of the Department of Education. A few other institutions, such as the University of Venda and the University of KwaZulu-Natal, are beginning to look into the preparation of multigrade teachers. In particular, the University of Venda has started infusing multigrade issues into teacher intervention programmes.

However, more institutions need to look into the issue of training multigrade teachers. Joubert (2007) suggests that all training institutions should make multigrade teaching part of teacher training. The literature from other countries emphasise that it is crucial that multigrade teachers are trained prior to taking on jobs as teachers, and that they continue to receive professional development during their careers.

However, it is common for multigrade teaching to be excluded from teacher education programmes (Brown, 2010). A common reason given for not training these teachers as part of pre-service training is that there is a likelihood that such teachers will never teach in multigrade schools (Birch & Lally, 1995).

This argument ignores the extent of multigrade teaching in most countries. Teachers have, therefore, been trained in the traditional way and are prepared to teach in

monograde classrooms and for homogeneity in terms of age, ability and so on.

Teaching practice during the course of initial teacher training is usually undertaken in monograde situations. It is only in a few, exceptional countries that special pre- and in-service training curriculum have been developed for multigrade teachers.

Otherwise, preparation and support of multigrade teachers tends to be ad hoc (Joubert, 2007; Juvane, 2005).

As a result, multigrade teachers in South Africa and elsewhere are under-prepared for their roles and struggle with the conditions of work (Joubert, 2007; Juvane, 2005).

The situation is further worsened by the fact that many of the multigrade schools are situated in remote areas. This results in multigrade teachers being isolated from useful interaction with educational authorities and with other teachers with whom they could exchange ideas (Joubert, 2007; Juvane, 2005). Birch and Lally (1995) skills that multigrade teachers should acquire:

1. Curriculum adaptation.
2. Development of learning materials to suit diverse learner needs simultaneously.
3. Ability to cope with life in rural areas and
4. Skills for managing diversity.

The list from Birch and Lally (1995) provides pointers for what content to include in teacher education and development programmes in preparing teachers for multigrade teaching. Because multigrade teaching is not usually included in pre-service

programmes, Schafer (1999) identifies a need for in-service and pre-service teacher education to cater for multigrade teaching and offer support, advice and training in coping with an approach which is fundamentally different from the traditional monograde. These teachers are often left alone to find their way in terms of delivering content to more than one grade at the same time. Many teachers gain experience through practice. Teacher educators need to acknowledge the existence of multigrade teaching in order for them to prepare teachers adequately in this area.

In the Namibian context, the MoE (2011b) study recommended that:

1. National Institute for Educational Development (NIED) needs to reemphasise the training on multigrade teaching with regard to teaching approaches, for example, subject grouping and subject staggering which teachers did not use during classroom visits including how to assess learners in multigrade settings.
2. Training model should be changed from traditional cascade training model to capacity building whereby school based practical training should be offered by a trained teacher and co-facilitated by NIED and education officers.
3. Provision of multigrade related Continuous Professional Development (CPD) is essential for improving teaching and learning in multigrade classrooms. Consider offering onsite CPD with demonstrations for teachers.
4. Workshop facilitators need to consider multigrade teaching during subject related workshops.

5. The multigrade training should be conducted once a term rather than once a year.

In the Zambian context, data from the leading teachers' training college in Serenje District of Zambia revealed that the college has put in place systematic structures to skill its lecturers in the teaching of multigrade pedagogy and strategies to the pre-service teachers. This was done mainly through workshops. Of all lecturers, 28% had attended most of the workshops and 8% had attended only a few of the workshops (Mukupa, et al., 2010). Eighty per cent of all lecturers had participated in monitoring multigrade practice by the teacher trainees. The timetable allowed for multigrade pedagogy to be offered once a week. An additional session was also scheduled outside the normal timetable for extra instructions to the teacher trainees. In the sessions, students were taught the concept of multigrade teaching, the history of multigrade schooling in Zambia, the importance of multigrade to Zambia's efforts to provide universal primary education especially to children in the rural and remote areas, multigrade teaching strategies as well as measurement and evaluation. Students were also taught how to use locally available resources to make a wide range of teaching and learning aids and when and how to use them. Lecturers were unanimous in their call for more time to be allocated to the teaching of multigrade curriculum.

Apart from the theoretical preparation of the teacher trainees at the college, lecturers give their students practical skills in multigrade teaching in five ways:

1. Children from Basic School A, in a combined Grades 3 and 4 class, walk to the college where they are taught either by a lecturer or their regular teacher while being observed by the student teachers.
2. Student teachers walk to the primary school and observe lessons taught by the primary teacher.
3. Teacher trainees visit the primary school and teach the multigrade class observed by their lecturer and the regular class teacher.
4. All student teachers spend one semester on teaching practice in various schools. During that practice the students are observed by one of their lecturers and their approach to multigrade teaching is monitored using a special instrument.
5. A recent innovation involved bussing of thirty children from Basic School B to the college where they were taught by the teacher who is one of the teachers we trained in the multigrade workshops held the previous year. The whole cohort of second year teacher trainees observed the lesson. Although the room was very crowded, the lesson gave teacher trainees the opportunity to observe another teacher, specially trained in multigrade at work and to ask her questions after the lesson.

Following such training in multigrade pedagogy and methods, the student teachers sit a special examination of 1.5 hours on multigrade approach to teaching. At the end of their training, the graduates are given a certificate showing that they completed instruction in multigrade teaching methods.

## **2.9 Teaching and Learning Strategies of Multigrade Teaching**

Lewin (2006) identified various patterns which are commonly used in multigrade settings as follows:

1. Additional parallel class where the teacher is teaching one grade and keeps an eye on the other grade which may be doing individual or group activities.
2. Whole class, mixed grade groups where the teacher arranges the learners from different grades to sit in mixed groups and teaches the same content to the whole class.
3. Alternate teaching where the teacher takes turns to teach different grades which can be in the same class; in whole class.
4. Separate grade groups, where the teacher accommodates learners in one class but gives them the same or different activities.

In addition, (Miller, 1991) indicates that there are various curriculum adaptation strategies which one can use in teaching multigrade teaching. One of these is whole class teaching which is commonly used in many classrooms. In addition to this,

(Brown, 2008; Little, 2005) note four curriculum adaptation strategies that are effective for multigrade classrooms. These are:

1. Multi-year curriculum spans which spread the units of curriculum content across two to three grades rather than one and require learners to do common topics and activities.
2. Differentiated curriculum which covers the same general topic/theme with all learners and allows them to be engaged in learning tasks appropriate to their level of learning.
3. Quasi-monograde whereby a teacher takes turns to teach grade groups as if they were monograded. The same or a different subject is taught at the same time and teachers have a mandate of distributing time equally/unequally between grade groups, depending on the tasks they are busy with.

In addition, (Cornish, 2006; Kalaoja, 2006; Little, 2005) highlight four approaches of timetabling multigrade lessons as follows:

1. Common timetable option where all learners learn the same subject in a given timetable period, but each grade group follows its own work, according to its own work programme and grade level.
2. Subject stagger option, where subjects are staggered on the timetable so that grade groups learn different subjects in the same period.
3. Subject grouping option, where subjects are presented to all grade groups together at the same time.

4. Whole class teaching, where grades study and are taught the same subject at the same time and use the same material.

The Ministry of Education in Namibia has adopted these approaches in addition to the integrated approach. The integrated approach is a strategy in which learners are given permission to decide on the content they would like to learn provided that they inform the teacher who will assist them to identify the basic competencies (MoE, 2007). These approaches can be used with various teaching strategies in multigrade classrooms such as individual learning, whole class teaching, small group teaching, peer group and self-study. Little (1995) sees the last two as being mostly associated with multigrade teaching. Most of the Namibian schools seem to follow the quasi monograde system with common timetable. This results from the lack of teaching and learning materials (because multigrade schools are rarely supplied with sufficient materials) as well as the lack of preparations of multigrade teachers (MoE, 2007).

The grade specific syllabus and the arrangement of basic competencies in the syllabuses can also motivate teachers to practice this strategy. Moreover, the inflexibility in the Namibian school timetables can cause teachers not to use approaches other than the common timetable because teachers are mostly guided by the monograde timetables which are set in schools.

In peer teaching strategy, learners act informally as teachers of other learners, mentoring one another (Chapman, 1995). Peer teaching engages learners during class

through activities that require each learner to apply core concepts being presented. They then explain those concepts to their fellow learners. This cements their knowledge even further and younger learners look up to the older learners, making the knowledge more attainable (Little, 2006). In addition, (Collingwood, 1991) suggests three strategies multigrade teachers can use to teach effectively in multigrade classrooms:

1. Whole class teaching,
2. Grade differentiated teaching and
3. Peer teaching.

However, Taft (1997) maintains that it is not always a case of older learners helping younger ones. Rather, the more competent learners, irrespective of age, help each other: strong learners help the weaker learners. This promotes sharing of knowledge thus promoting meaningful opportunities for learning from modelling (Goto & Schneider, 2010). Some studies have suggested that being in a class with younger learners encourages older learners to work harder in order to stay ahead of their younger classmates.

Learners also gain confidence when they are occasionally given responsibilities to help younger or less able learners in their class. Veenman (1995) concludes that learners are better off in areas such as attitudes toward school, self-concept, personal adjustment and social adjustment in multigrade classes than in monograde classes.

Learners in multigrade classrooms demonstrate more positive attitudes toward school, greater leadership skills, self-esteem and less aggressive behaviour, compared to learners in traditionally graded schools (McClelland, & Kinsey 2004). In order for this model to work in practice, teachers require skills in the development of systematic, cooperative teamwork. These strategies can be effective when teachers are trained and supported in teaching in multigrade classrooms.

Younger learners seem to learn more quickly in a multigrade setting (Little, 2006a). They are able to absorb knowledge from older learners while they are being taught. Peer-tutoring is promoted and older learners serve as role models or mentors to help their younger peers. Peers are seen as resources allowing the teaching time to focus on groups or individuals (Little, 2006a). Since in the multigrade mode of education, learners are together in one class for as long as three years at a stretch, sound and meaningful bonds are established across age divisions between learners as well as between teachers and learners. Through increased opportunities for interaction and learning between learners across grade levels, collaborative work is encouraged (Pridmore, 2003). This applies in Namibian multigrade schools as learners become independent learners, self-directed learners and cooperative learners through collaborative learning. Among the strategies advocated are whole class grouping, small groups and pair groups where older and more advanced learners could tutor those who are younger and less advanced (Berry, 2007).

For cooperative learning to be effective, it needs to be structured and facilitated by the teacher. Teachers need to harness the knowledge that learners bring and draw on learners as resources in their classes. As Ames (2004, p. 62) points out:

*One of the most important...features is the rich experience of learners in multigrade groups in other learning situations outside the school. Thus, in the context of home and community, learners are used to playing, learning and working with other adults and learners of different ages. The multigrade character of this interaction is what makes learning possible in such a context. The multigrade school and teachers might take advantage of this if more attention was given to children's lives outside the school walls.*

Supporting this view, Veenman (as cited in Berry, 2007) posits that one of the explanations for multigrade learners not performing better when tested for cognitive ability is the limited utilisation of cooperative group work.

Kyne (2005) found three important strategies to be effective in this regard namely:

1. Peer teaching, in which learners act as teachers for each other.
2. Cooperative group-work, which involves small groups engaging in collaborative tasks; and
3. Individualised learning programmes which involve the learner in self-study.

Kapenda's (2010) study revealed that teachers have different ways of teaching mathematics in multigrade classrooms. Some teachers seem to have used "quasi-monograde," (Little, 2004) because they alternate in teaching two grades. She further adds that this strategy may be used very effectively if it is carefully planned with all

learners occupied meaningfully all the time with few disturbances. Again, her study revealed that some teachers used the “whole class approach” (Birch & Lally, 1995) while others used a combination of “quasi-monograde” and whole class approach to handle their multigrade classes.

Findings from her study further indicate that traditional approaches, such as monograde teaching were predominantly used in the teaching of mathematics, while more innovative and developmental approaches were used to a much lesser extent, thereby supporting previous research (Mason & Good, 1996; Veenman, 1995).

Whole class teaching was used primarily as an introduction to lessons or revision of work already covered which also supported previous findings (Mason & Burns, 1997). While whole class teaching was used to a much lesser degree than monograde teaching, it was used to a greater degree than in studies carried out by Kapenda (2010), who reports that multigrade teachers seldom used whole class teaching during mathematics instruction.

Innovative strategies such as peer tutoring and cross-age tutoring were not utilised to a significant degree, while no collaborative/cooperative learning occurred during classroom observations. These findings correspond to those of Mason and Good (1996) and Veenman (1995). In fact, too little diversity in content treatment and pedagogical strategies was evident in the mathematics curriculum in these classes, which support previous findings (Mason & Good, 1996).

Some of the definitions of multigrade teaching timetables proposed by Cornish (2006) are comparable to those elaborated by Kalaoja (2006). Cornish's definition of "common timetable" resembles the parallel curriculum, and her concept of "curriculum rotation" is similar to the alternating curriculum. However, Cornish (2006) identifies additional practices or strategies used in multigrade classes. "Split timetable or subject stagger" means that in a class with two grades, the grades study different subjects; the teacher prepares two different lessons and alternates between the grades (Little, 2005). "Common timetable" means that learners in each grade can study the same subject at the same time, but on the basis of different instructions and activities for each grade. "Some whole class teaching" refers to a practice in which the subject areas are the same for both grades and parts of lessons (often introductions and conclusions) are taught to all groups together. "Whole class teaching for the whole period" means that the two grades are taught the same subject and content at the same time. Cornish (2006) also describe "within-grade grouping", "cross-grade grouping", and "peer tutoring"; these are practices in which learners help one another.

## **2.10 Challenges in Implementing Multigrade teaching**

African governments often face similar problems with the implementation of multigrade teaching. These problems are as follows:

### **2.10.1 Planning from Curriculum**

Multigrade classroom is seen as being a labour-intensive situation requiring more planning, collaboration, and professional development than the monograde classroom (MoE, 2011b). Insufficient planning, staff development, materials, support, and assessment will have an impact on the success of multigrade teaching (Little, 2001). Policy makers need to be aware of the multigrade reality and then develop resources, plan properly, develop appropriate curriculum and materials, prepare teachers and strategies, in collaboration with multigrade teachers (Kapenda, 2010). Multigrade teachers should be provided with more encouragement, materials and training inputs in order to help them develop positive attitude towards multigrade teaching (Haingura, 2014; MoE, 2011b).

Many teachers identify the curriculum as a major constraint (Little, 2006; Kamel, 2010). Multigrade teachers generally acknowledge that teaching a multigrade class is more challenging than teaching a monograde class. They find it difficult to cope with the complexities and challenges of this instructional setting and to make the content meaningful to the learners (Kyne, 2005). Another major reason why multigrade teaching is not favourable is the dominance of the paradigm of developmental

psychology as reflected in the age-grade approach. Most countries have a national curriculum and this prescribed curriculum is similar for both urban and rural schools. The curriculum used is not differentiated or adjusted to the needs of multigrade classes and a one size fits all curriculum is used (Taole & Mncube, 2012). The MoE (2011b) study suggests the curriculum to be adapted to suit the multigrade situation; current content is not suitable for multigrade environment. Teachers face problems with the volume of work and with the distribution of teaching time (Shayi, 2016; Tsolakidis, 2010).

The national curriculum is typically produced for the monograde classroom (Little 2001; MoE, 2011b). Each set of grade-level material is typically placed in a separate booklet, which may include specific content to be taught as well as guidelines on how to teach it. The evidence shows that such a curriculum is difficult for the multigrade teacher to use because they tend to require plans to be written for each grade level separately (Juvane, 2005; Kapenda, 2010; Little, 2005; Titus, 2004). Ames (2004) found that using monograde curriculum in multigrade teaching is not only time consuming, but also results in ineffective teaching. Extant literature suggests that teachers need to be taught how to plan across grade-level objectives, or how to revise the curriculum to make it more suitable for their multigrade setting (Kyne, 2005). Similar observations may also apply to the school timetable. Given the multigrade classroom setting, multigrade teachers are required to plan more intensively as compared to monograde teachers (MoE, 2011b).

A considerable number of countries require all teaching to follow national curriculum that is monograde. Namibia is no exception. Teachers have a responsibility to prepare and utilise materials that are orientated to the monograde context (Kapenda, 2010, MoE, 2011a; MoE, 2011b; Titus, 2004). This requirement places teachers in a multigrade teaching context under severe pressure. There is no time available for teachers to design such curriculum and to re-design national requirements to fit local contexts. Brown (2008) emphasises that the application of a monograde syllabus in the multigrade teaching situation creates problems for multigrade teaching. He indicates that such a syllabus:

1. Is not structured for multigrade teaching classes.
2. Places a heavier workload on multigrade teachers compared to their monograde teaching counterparts.
3. Impedes the capacity of the multigrade teachers, given the lack of facilities and problems of management at the local level.
4. Does not allow for the time constraints placed on multigrade teachers, given the time required for preparation and the need to address a wider range of learners' needs.

One may conclude that any curriculum which is rigid and inflexible and which does not allow for individual differences can be a burden to the implementation of multigrade teaching.

### **2.10.2 Lesson Planning**

Available literature suggests that multigrade teachers find planning and preparation for multigrade classes more difficult and time-consuming than that for monograde classes because they have to plan for multiple grades (Little, 2006). Haingura (2014) echoes the same sentiments that multigrade teachers are required to plan more intensively than monograde teachers. Veenman (1995) also notes that multigrade classes place a greater workload on teachers, in the sense that more preparation time is needed, and better classroom management skills are required. Veenman (1995) suggests that outcomes of the multigrade setting would most likely be positive than those in the monograde setting if multigrade matters were addressed. In Veenman's (1995) view, the multigrade setting can potentially provide a richer learning environment for learners than the monograde setting but the teaching and assessment practices of the teachers in a multigrade setting must be addressed. According to Mason and Burns (1997), the multigrade setting is inherently inferior to the monograde setting and, unless interventions are made, learners will do less and perform poorly in this setting. There is a lack of research on the teaching and assessment practices in multigrade settings especially in Africa.

The fact that teachers do not always have lesson plans is an issue of concern for teaching practices in a multigrade class. For Berry (2007), planning for a multigrade class is all the more important given the need to think carefully about how to teach the various grades. The practice of careful planning serves to minimise the amount of

“dead time”, while maximising the amount of time devoted to meaningful interaction between the teacher and the learners in a multigrade class, as observed by Berry (2007). This points to the fact that the absence of lesson plans can potentially lead to ineffective multigrade teaching. The findings of the study conducted by MoE (2011b) suggests that there should be differentiations between the mono grade and the multi grade syllabus because of the combination of grades that necessitate differentiations on the time tabling, time allocation, assessment and teaching approaches.

### **2.10.3 Teacher Preparation**

Studies on multigrade teaching, generally report the on the unpreparedness of teachers for multigrade settings (Lingam, 2007; Little, 2005). In many countries, teacher education programmes continue to train teachers for teaching in a monograde class context (Little, 2006). Extant evidence suggests, that teachers are not trained in multigrade teaching, but are merely orientated (Vithanapathirana, 2006).

This reality points to the fact that pre-service and in-service education and training for teachers on the needs of the multigrade class is vital (Little, 2005). For multigrade teachers to be effective in their teaching tasks, they must be better trained (Lingam, 2007). Chandra (2004) emphasises the need for on-going professional development of teachers to enable them to be at the forefront not only of pedagogical techniques but also of school curriculum and communication technology.

For this to happen, teacher preparation must openly address the needs that are context-specific, diverse as they often are, of multigrade teachers.

Mason and Burns (1997, p. 298) suggest that the combined instructional environment is “difficult, complex, and generally disadvantageous.” These two scholars found evidence which shows that multigrade teaching is both different from and more difficult than monograde teaching. They argue, however, that teachers may avoid the effects of negative achievements by the extra effort they put into planning and adapting instruction; and taking time from those subjects considered to be less essential.

#### **2.10.4 Time Management**

One of the challenges facing multigrade teachers is insufficient time allocated to teaching (MoE, 2011b). In Namibian schools, the duration of one period of teaching per class in both monograde and multigrade classes is forty minutes (MoE, 2011b). Most multigrade teachers are of the opinion that, the equal allocation for both monograde and multigrade teaching is unfair, because multigrade teachers are expected to attend to the needs of learners operating in different grades, while also dealing with their individual problems.

Multigrade teaching demands more with regard to organisation and lesson planning (MoE, 2011b). Due to this limited teaching time, learners who struggle often receive

inadequate attention, resulting in inadequate acquisition of skills and knowledge (MoE, 2011b). The study conducted in South Africa on multigrade teaching revealed that teachers were concerned that they did not have sufficient time to spend with each grade level in each subject area (Mulryan-Kyne, 2005). Mulryan-Kyne further indicates that teachers reported experiencing management and disciplinary problems such as making noise, bullying, teasing each other, throwing papers around in multigrade classes.

### **2.10.5 Classroom Management Techniques**

Joubert (2009) contends that workload and time management remain a challenging factor for multigrade teachers due to the lack of classroom management skills. Berry (2007) found that learners also have a responsibility in the process of multigrade classroom management. In this regard Brown (2010) argues that learners need to be taught the value of independence and cooperation; and this can be done by involving them in classroom decision-making. This implies that in national cultures and education systems where little or no value is placed on values such as independence or cooperation, achieving effective multigrade teaching could be a major challenge, regardless of the subject areas/disciplines involved (Brown, 2010).

### **2.10.6 Teaching and Learning Support Materials**

Various studies conducted in Namibia found that lack of resources is a barrier to the implementation of multigrade teaching (Haingura, 2014; Kapenda, 2010; MoE, 2011b; Titus, 2004). Despite the variations reported in terms of availability of materials, concurred in pointing out that available materials were not multigrade specific (Kyne, 2005). Haingura (2014) study conducted in Rundu multigrade schools in the Kavango region indicates that learners had shared textbooks on Environmental Studies, three learners shared one English textbook, and three Grade 4 learners shared one textbook for Rumanyo. Materials available to multigrade schools tend to be the same as those used in monograde classes. Birch & Lally (1995); Little (1995) indicates that lack of curriculum resources and teaching materials for multigrade teaching is part of the challenge. They further indicate that this shortage is complicated by other issues such as distance and communication problems.

Even in countries which may be regarded as reasonably well resourced for single-grade teaching, too little attention has been given to providing multigrade teachers with appropriate teaching and learning resources. According to Little (2005), such materials are not effective in multigrade teaching. Little and Pridmore (2003) describe materials more suited for multigrade teaching as those that include a self-study element, which might be in the form of workbooks with a self-correction key, or a small classroom library that can be accessed independently by learners. Traditional textbooks could also be useful, but Little (2005) suggest that they need to

be developed with the view of the learner rather than the teacher as an audience.

They should also provide scope for development work in terms of the production of more school textbooks. An example of successful use of self-study materials can be seen in the Escuela Nueva programme in Colombia, where individual learner guides were developed for the six core subjects in their curriculum, and learners could use these guides for learning at their own pace (Little 2005).

Be that as it may, it is crucial to state that multigrade teachers face diverse challenges, many of which appear to be context specific. In this regard Titus (2004) found the following human and material resource challenges in parts of Africa:

*The multigrade classroom poses a paradox...many teachers are either untrained or trained in monograde pedagogy. (Teachers) regard the multigrade classroom as poor in relation to the better resourced monograde classrooms found in large urban schools and staffed by trained teachers. [p. 10].*

Titus (2004) found that multigrade teaching is suggested in most parts of Africa, but no policy or training has been provided for it. In the same vein, Kyne (2005) found that teaching and learning materials also tend to be written for the monograde classroom. Consequently, they are produced as grade-level textbooks and are designed to be delivered by the teacher to the learners. There is evidence to suggest that such materials are ineffective in multigrade teaching (Little, 2005).

Furthermore, extant literature suggests that teachers need to be shown how to produce such self-study materials in a cost-effective way (Little, 2007). However,

materials relevant for the situation of one country may not be appropriate in another. Birch and Lally (1995) include several examples of materials developed in Asia and the Pacific. The knowledge base on the nature of the learning materials used in, or how they are developed for multigrade classes in Africa is underdeveloped.

Available evidence suggests that successful strategies for multigrade teaching depend on adequate supplies of learning materials to support individual and group-based learning (Lingam, 2007; Vithanapathirana, 2006). Little (2005) reasons that this would enable teachers to spend time with some groups of learners while other learners work alone, in pairs or in small groups. Multigrade teachers need preparation in developing effective materials for learning in their unique teaching contexts.

It has been established by the Namibian scholars that in Namibia, multigrade schools lack teaching and learning materials in terms of syllabuses, textbooks, subject policy guides and teacher's guides (MoE, 2011b).

### **2.11 Teacher Education in Multigrade Teaching**

Trained teachers have a better grasp of subject knowledge, pedagogy and classroom practices than untrained teachers (Hammond, 2005). Furthermore, there is evidence that the negative perceptions of multigrade teaching by multigrade teachers about their work can be alleviated by the provision of better resources and better formal

training (Haingura, 2014; Kyne, 2005; Kyne & Lingam (as cited in CEPD, 2011) MoE, 2011b).

In countries such as Finland, multigrade teaching is already embedded in teacher education curriculum (Brown, 2010). In other words, teachers are trained during pre-service training on how to handle multigrade teaching because multigrade teaching is incorporated in the curriculum, while in Vietnam, multigrade teachers are trained to give different lessons to learners at different grade levels at the same time, as observed by Pridmore (as cited in Brown, 2010).

According to Brown (2010) the following three specific modules on multigrade teaching are integrated in the teacher education and intervention programme in Sri Lanka: (a) Module One: The concept of multigrade teaching: A generic intervention programme; (b) Module Two: The content of multigrade teaching: Reflecting on the challenges and needs analysis; and (c) Module Three: Learning and teaching of mathematics in multigrade teaching: Adopting a learner and materials centred approach (Vithanapathirana, 2006). A similar programme to that in Sri Lanka is also presented in Papua New Guinea as observed by DoE in (Brown, 2010), supported by multigrade teaching policy, effected in January 2001, for multigrade rural primary schools.

While there are many programmes, as Brown (2010) explains, meeting the needs of multigrade teaching multigrade teaching, according to Joubert (2007), is not addressed specifically in teacher education programmes in the majority of African countries. Governments tend to focus on improving monograde schools, often leaving the development of multigrade schools to local initiatives, which quite often means workshops and other unplanned sessions (Joubert, 2007).

Many in-service training programmes embrace a cascade training model of dissemination (Little, 2005). Brown (as cited in Haingura, 2014) argues that the cascade model is an approach often adopted by African countries as evidenced by a technical workshop attended by practitioners from six African countries that was organised in Uganda in November 2004. This workshop was organised to test new modules for multigrade teaching. In July 2005, Tanzania hosted a similar workshop for the first time, attended by eleven countries that were represented by policy makers, curriculum developers, educators and teachers. This was followed by a workshop in Lesotho in 2007. The major discussions, according to Juvane in (Brown, 2010), were on issues relating to the training of multigrade teachers. This is an indication that efforts to address multigrade teaching are still at discussion stages in terms of teacher training in most African countries (Haingura, 2014).

In Namibia, for example, the teacher education institutions in the country make no provision for separate training for multigrade teaching (Haingura, 2014; MoE,

2011a). Be that as it may, the training of multigrade teachers was considered during the revision of the Education Theory and Practice (ETP) course for Basic Education Teacher Diploma (BETD). The biggest challenge lies in the adequate preparation of teachers for multigrade teaching (Haingura, 2014; MoE, 2011a). Currently, the Ministry of Education trains teachers by using the cascade model at the National Institute for Educational Development (NIED) that offers a three-day workshop for teachers teaching multigrade classes in the country (Haingura, 2014; MoE, 2011b; MoE, 2011b;). The workshop covers the following topics: definition of multigrade teaching, the rationale for multigrade teaching, multigrade options, time allocation and timetabling, teaching and learning strategies, classroom organisation and management, advantages and challenges of multigrade teaching, lesson planning and preparation, experiences and challenges in multigrade settings, solutions and recommendations for multigrade settings, and assessment in multigrade teaching (Haingura, 2014; Kapenda, 2010; MoE, 2011b).

It is in this regard that Brown (as cited in Haingura, 2014) suggests that the cascade model is being questioned in several circles. For example, recent studies of a cascade multigrade teacher training programme in Nepal traced its effectiveness from context design at the national level to the training progress at the local level and the implementation of strategies in the classroom (Brown, 2010). Brown (2010) goes on to argue that, although teachers made gains in their knowledge of useful strategies and activities for multigrade teaching, especially in the provision and use of self-

learning activities and classroom monitors, evidence for the incorporation of the training messages at the classroom level was lacking. Suzuki (as cited in Little, 2006a, p. 331) identifies a number of areas in which improvements could be made in the future, but also identifies the main obstacles that would remain even if training were to improve. These obstacles include:

1. The lack of awareness on the part of policy makers of the existence of multigrade teaching.
2. The needs for multigrade classes; the absence of teacher-trainer experts in the practice of multigrade teaching.
3. The overwhelming negative attitude towards multigrade teaching, held by teachers, their trainers and supervisors due to the challenges of multigrade teaching.

Brown (2010) argues further that these findings suggest that the cascade model should be used with caution or might not even be the best approach. This is in line with what (MoE, 2011b; Haingura, 2014) recommended that training model should deviate from traditional cascade training model to capacity building whereby school based practical training should be offered by a trained teacher and co-facilitated by NIED and Advisory Teachers. Perhaps the best approach is to train teachers in multigrade teaching during their initial teacher education (Lingam, 2007), rather than addressing it using professional development programmes. Studies on multigrade teaching, as evidenced in the previous sections, generally report a lack of

professional training of teachers for multigrade settings (Mulryan-Kyne, 2005; Lingam, 2007 & Little, 2005; Brown, 2010). In many countries, teacher education programmes continue to train teachers for teaching in a monograde class context (Little, 2006). This evidence furthermore suggests that teachers are not trained in multigrade teaching, but are merely orientated (Vithanapathirana, 2006). Brown (2010) further argues that issues relating to epistemology, which provides the conceptual tools to guide teachers to navigate the new pedagogy, have been underestimated. This has hindered the practice, as well as teacher conceptual development, innovation, creative thinking and imagination.

It is with this in mind that Little (2005) argues that pre-service and in-service education and training for teachers on the needs of the multigrade class are vital. For multigrade teachers to be effective in their teaching tasks, they should be trained professionally Chandra (as cited in Brown, 2010). In addition, (Brown, 2010) emphasises the need for on-going professional development of teachers to enable them to be at the forefront not only of pedagogical techniques, but also of school curriculum and communications technologies. For this to happen, teacher training should openly address the context-specific needs, diverse as they often are, of multigrade teachers (Haingura, 2014).

## **2.12 Support for Multigrade Teachers**

Brown (2010) argues that multigrade teachers need both internal and external support (internal support refers to support received by teachers within the school, while

external support refers to support from outside the school) and urges the communities in which multigrade schools are located to be involved in school affairs. Vinjevoll and Schindler (1997) suggest that the type of support that is required includes community support, local or regional government support, national policy support, and support from school principals.

In view of this understanding, Vinjevoll and Schindler (1997) assert that local governments in Indonesia, for example, provide funds to encourage community participation in rural schools, and multigrade schools in India are encouraged to foster closer school community ties. In other words, communities in India realise that in order for multigrade schools to succeed they should offer their full support. This is done through providing funds, teaching materials and human resources to multigrade schools (Vinjevoll & Schindler, 1997). In the same vein, (Titus, 2004 as cited in Brown, 2010) argues that the communities in which multigrade schools are located often do not see the value of education, and often speak a different language from the 'official' one of the school. For this reason, (Brown, 2010) recommends the involvement of the community in the life of the school as a strategy to serve as a resource, or that the school might extend the curriculum out into the community.

The creation of opportunities for multigrade teachers to meet, exchange experiences and collect resources is also recommended in extant literature (Thomas & Shaw, 1992). Training for pedagogical advisers in multigrade teaching methods and

materials is seen as being essential for the provision of these support activities (Vinjevold & Schindler, 1997). Multigrade teaching requires support from national policy for its success to be realised.

Recent literature on multigrade classes points to the importance of national policy in delivering effective multigrade teaching (Vinjevold & Schindler, 1997). An inter-regional workshop on single-teacher schools and multigrade classes in Norway (Vinjevold & Schindler, 1997) recommended that the first step would be to persuade governments and legislators of the advantages of multigrade schools. Thomas and Shaw (as cited in Vinjevold & Schindler, 1997) assert that drawing on the experiences of many developing countries, there should be two stages in implementing a multigrade programme: a pilot phase and an expansion phase. In the expansion phase, national policy decisions are necessary with regard to the creation of a decentralised administrative system; the provision of teacher training in multigrade techniques; the recruitment and support of multigrade teachers; curriculum adaption; and the development and allocation of resources to multigrade schools (Vinjevold & Schindler, 1997).

The support of school principals for multigrade teachers ranges from ordinary advice on how to implement multigrade teaching effectively, to staff development, training in multigrade teaching at school level or at cluster level (MoE, 2011a; Haingura, 2014). In addition, most of the support offered to multigrade teachers is based on

class visits coupled with positive feedback (Haingura, 2014). School principals also look for opportunities with the Ministry of Education or other stakeholders that have interest in providing workshops on multigrade teaching and promoting the standards of education in general. They also assist multigrade teachers with knowing how to help learners who experience difficulties in learning and encourage them to have remedial teaching after school (Haingura, 2014; MoE, 2011b).

Unfortunately, there is little evidence available in extant literature relating to a process of support and preparation of teachers and schools as they gradually learn, come to understand, become skilled and competent in the use of new ways, ensuring growth, improvement and support in a multigrade context. According to Little, Pridmore, Bajracharya and Vithanapathirana (2006), this reality exists because in most countries teacher education for multigrade teaching does not exist at all, is not embedded in their teacher education curriculum or is offered as part of in-service training. Many of the in-service training programmes in multigrade teaching adopt a cascade model of dissemination and therefore are subject to many of the issues surrounding effectiveness that face cascade training programmes in general (Little, 2005).

It is observed that there are a few examples of pre-service teacher training courses that address multigrade teaching in existence (Little, 2005). In Finland for example, multigrade teaching is embedded in teacher education curriculum, while in England

multigrade teachers express the desire for in-service training and curriculum support for the multigrade class, but generally have to rely on their training in the principles of diversity and differentiation in coping with the demands of a multigrade class (Little, 2005).

Unfortunately, Veenman (1995) suggests that most teachers do not take advantage of this opportunity. However, it would appear Veenman did not explore the reasons as to why these strategies are not utilised. It is in this context that Juvane (2005) speculates that it may be a result of inadequate training among teachers.

However, in his reflection, Veenman (1995) argues that multigrade teachers lack appropriate training for the multigrade setting, appropriate resources are lacking, and time for individualised work, including remediation, is severely limited. All this would suggest an impoverished teaching situation. Mason and Burns (1997a) concur with Veenman (1995) on the teaching and assessment practices of teachers in the multigrade setting. 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 two separate curriculums in the basic subjects and all grades together for other subjects. In particular, they suggest that most multigrade teachers teach separate grades for mathematics and reading and a single curriculum in science and social studies. Titus (2004) argues that for this reason, multigrade teachers need

to be well trained and well supported, with a satisfactory provision of appropriate resources.

### **2.13 The Needs of Multigrade Teachers on a Global perspective**

Studies conducted in Greece, Spain and Finland show diverse and professional needs for multigrade teachers. These needs differ from country to country. For example, in Greece, Tsolakidis (2010) reported that data was collected through a MUSE questionnaire survey of 900 multigrade schools. The questionnaire survey revealed that teachers felt that the curriculum they had to teach was neither differentiated nor adjusted to the needs of multigrade schools. They faced problems with the volume of work and with the distribution of teaching time. Similarly, 12 Grades 2 and 3 teachers with 30 and 70 learners from eight multigrade schools in rural areas in Northern Finland, reported that teachers felt that one of the greatest pedagogic challenges in the multigrade classroom was the differentiation and individualisation of teaching. In Europe it was also reported that there is a lack of effective implementation methodology which leads to curriculum requirements in multigrade schools suffering as a result. Teachers had no theoretical background on how to teach in multigrade schools.

While much of the evidence discussed throughout this report reveal specific professional development needs among multigrade teachers, and while these needs are likely to vary from one context to another, Tsolakidis (2010) found these

common specific needs among multigrade teachers in Europe: lack of teacher training and support, relevant curriculum for multigrade schools and lack of resources. Another pertinent issue reported in the study conducted in Greece was the lack of continuous training and support for teachers including the newly appointed teachers in multigrade schools who had the need for continuous professional development. The findings in the three studies further indicated that there was a lack of communication between multigrade schools, education authorities and the community. This resulted in teachers feeling isolated from monograde teachers. Multigrade teachers had professional needs in each of these areas. Tsolakidis (2010) report that 12 teachers from eight multigrade schools in rural areas in Northern Finland, where each school had 2-3 teachers and between 30 and 70 learners felt that their work was professionally very demanding. The study further found that teachers had insufficient time to complete the teaching of the main subjects, which had a negative impact on the less important subjects to which they allocated less time or they did not teach at all. Combined with this, teachers expressed a view that inability to cope with extra work and extra pressure is caused by multigrade teaching.

In Spain, Tsolakidis (2010) established that teachers had multiple non-professional needs as well and reflected critically on the situation in which they work. The needs and concerns identified included lack of resources and poor physical structure of buildings used for multigrade teaching and learning.

On the other hand, Joubert (2007) found that national governments in Africa require all teaching to follow the national curriculum although the application of a monograde teaching national curriculum in the multigrade teaching situation is creating problems for multigrade teachers. This finding implies that multigrade teachers need to be supported in ways that will help to implement the programme effectively. In support, Joubert (2007); Daniel (2004) found that in Africa multigrade teachers need to know how to structure monograde syllabus to suit the multigrade setting and that they need to know issues of time management and workload planning. This is supported by Juvane (2005) who contends that the conceptual and skill requirements of the prescribed curriculum that multigrade teachers in Africa are implementing are higher than the conceptual competence and skills of the monograde teachers, and they are unable to cope. There is an immediate need for continuous training evident in this claim.

## **2.14 Summary**

In this chapter, the background of the Namibian education system in general and multigrade teaching in particular was reviewed. Related literature in multigrade teaching in developed and developing countries was discussed. There is a general agreement in the literature that multigrade teaching places greater demands on teachers than monograde teaching. Various studies also indicated that teachers have negative attitudes towards multigrade teaching due to workload and lack of support in many African countries. It is also evident that multigrade teaching is more prevalent in remote rural areas with sparse population and more so at the junior primary phase. Different multigrade teaching programmes, models and perspectives in developed and developing countries are used to improve multigrade teaching classroom practice and methodology. Challenges hindering the implementation of multigrade teaching have been reported in developed as well as in developing countries, including Namibia (which is entirely a developing country in itself). These ranged from lack of skills in lesson planning, time management, teaching and learning strategies, timetabling and classroom management. In addition, literature have reported lack of relevant training, appropriate resource materials, time for individual attention and learner support as well as lack of parental support. Opportunities for learner support and learning together were also highlighted in various studies. Studies conducted in different countries show diverse and professional needs for multigrade teachers and Namibia is no different. There is evidence of the success of teachers in multigrade classes in various parts of the

world, but Africa, and Namibia in particular, need first to recognise multigrade teaching as a practice and support teaching in such classes. The literature indicates the support multigrade teachers need. Vinjevold and Schindler (1997) suggest that the type of support that is required includes community support, local or regional government support, national policy support, and support from school principals. Teacher education programmes in Namibia should incorporate multigrade teaching into the curriculum in order to prepare teachers to teach in multigrade settings rather than maintaining the focus on monograde teaching since it is a grave concern in the country. The following chapter provides a detailed description of the methodology employed in the study.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter discusses the research design, methodology, procedures used to collect and analyse data. The study follows a qualitative approach and is situated within the interpretivist paradigm. The chapter further justifies the selection of the interpretivist paradigm in which the study is situated. Trustworthiness of the study was discussed. Finally, ethical measures and limitations of the study are discussed.

#### 3.2 Paradigmatic Perspectives

In this section, the researcher discussed the epistemological, ontological and methodological approaches of this study. The research design that the researcher used in this study falls within the interpretivist paradigm (Creswell, 2007). This paradigm involves taking the participants' experiences as the essence of what is real for them (Creswell, 2007).

In this study, the researcher worked from an interpretive paradigm as she believed that experiences were subjectively understood through interpretation. The researcher sought to understand the internal reality and subjective experiences of multigrade teachers through interacting with them and then using qualitative techniques to interpret the data (Terre Blanche et al., 2006). The researcher thus made sense of her participants' perceptions and experiences by interacting with them. The interpretive

paradigm was pertinent to this study because it helped the researcher to explore the perceptions and experiences of multigrade teachers, learners and parents regarding multigrade teaching in the Kunene Region. In this study, the researcher relied on the voices and interpretations of the research participants. The researcher therefore, approached the research context with an open mind and allowed multiple perspectives of multigrade teaching to emerge. The reasoning behind this was for the researcher to have an in-depth understanding and interpretation of the perceptions and experiences of the participants on multigrade teaching. This study was situated within the interpretivist paradigm context since it allowed the researcher to view the world through the perceptions and experiences of the teachers, learners and parents (Terre Blanche et al., 2006).

According to Golafshani (2003) interpretive paradigms rely on naturalistic methods such as interviews, observations and analysis of existing texts. Golafshani (2003) furthermore states that an interpretivist paradigm is typically used for small-scale educational research as it deals with perspectives or choices of participants within the process of interaction. It was therefore, appropriate for this study since the researcher conducted semi-structured, individual and focus group interviews with Grades 2 and 3 multigrade teachers, learners and parents in an attempt to get a clear understanding of their true perspective on multigrade teaching.

### **3.2.1 Epistemological Paradigm: Interpretivism**

Epistemology refers to how we know what we know (Holloway & Wheeler, 1996).

For the purposes of this study the researcher was informed by an interpretivist epistemology, a qualitative approach to research, which allowed the researcher to gain a deeper understanding of the multigrade teachers', learners' and parents' experiences and perceptions with regard to multigrade teaching.

This qualitative case study research can be conducted from an interpretivist point of view (Myers, 2009). Informed by this epistemological approach, the researcher acknowledged that reality presents itself through people's actions and thoughts, and that a description of reality can therefore be obtained from an existing external source (Chesebro & Borisoff, 2007; Wagner, et al., 2010).

According to Creswell (2013), the aim of this epistemology is to depend greatly on the participants' view of the phenomenon under study. Multigrade teachers, learners and parents were interviewed in their local context in general and at their schools in particular. Following an interpretivist approach, the researcher was able to ask questions that were open ended (Wagner, et al., 2010), with the specific intention to obtain rich data regarding the teachers', learners' and parents' perceptions on multigrade teaching (Jackson, Drummond & Camara, 2007). An interpretivist paradigm furthermore allowed for data collection to take place in a flexible manner

(Silverman, 2011). As an interpretivist researcher, the researcher was involved in the interpretation of data throughout the research process (Chesebro & Borisoff, 2007).

Qualitative researchers believe that the world is made up of people with their own assumptions, intentions, attitudes, beliefs and values (Creswell et al., 2011). In order for the researcher to explore the perceptions and experiences of teachers, learners and parents in multigrade teaching in the Kunene Region, the researcher engaged with some of the concerned teachers, learners and parents in order to understand their experiences. This was crucial in order to establish how they had constructed reality. The researcher achieved this through the use of semi-structured interviews (Creswell, 2007). The researcher then explored their activities in terms of meanings of what they said in the interviews especially what appeared to be their perceptions regarding multigrade teaching.

### **3.2.2 Methodological Paradigm: Qualitative Research**

Following a qualitative approach allowed the researcher to get a rich and detailed understanding of the teachers, learners and parents involved in the context of multigrade teaching (Farquhar, Parker, Schulz & Israel, 2006). The researcher was able to adjust to the different research situations as a result of the flexibility that comes with the qualitative research design (Farquhar et al., 2006; Houser, 2011).

Qualitative research allowed the researcher to work directly with the teachers, learners and parents during the data collection phase, and, to a certain extent, during the data analysis phase. This made it possible for the researcher to work with the participants in a non-threatening way. This was achieved by way of focusing the attention away from power relationships that often exist between researchers and participants (Creswell, 2013).

Other potential challenges that the researcher had to be conscious of throughout the research process included the potential for subjectivity when interpreting data, and the lack of consistency in data generation (Houser, 2011). Potential bias or subjectivity was reduced by member checking, while inconsistency was limited by means of debriefing sessions with the supervisor and co-supervisor throughout the research process (Clarke & Braun, 2013; Jackson et al., 2007).

### **3.2.3 Ontological Paradigm**

Ontological assumptions are implicit in our understanding of human nature, society, the status of mental entities, the meaning of obstacles, causality and intentionality in human behaviour (Mouton, 2005). Reality is multiple, subjective and mentally constructed by individuals (Polit & Hungler, 1999; Polit & Beck, 2006). This is to say that reality arises out of each individual's perception of their experiences. In this study, it applied to the multigrade teachers in terms of how they experienced teaching in their multigrade classrooms.

### **3.3 Research Design**

The study adopted a qualitative case study research design. Burns and Grove (2009) define a research design as the structural frame of the study.

Since this study was a qualitative study, it was important to use multiple cases as this allows the issues to be explored through more than one lens or a single lens (Creswell, 2009). The approach was important since it ensured that the issue was not explored through one lens which may be biased, but rather a variety of lenses which allowed for multiple aspects of the phenomenon to be revealed and understood (Creswell, 2009). The units of analysis in this study were as follows:

1. Case 1: Grades 2 and 3 multigrade teachers
2. Case 2: Grades 2 and 3 multigrade learners
3. Case 3: Parents of the selected Grades 2 and 3 learners

These multiple case studies provided the researcher with opportunities to spot differences and similarities amongst numerous cases. It also enabled the researcher to analyse within each setting and across settings and to interact with ‘real people in real situations’ as suggested by Creswell (2009), who emphasises the need to study things in their natural settings.

### **3.3.1 Qualitative Research Design**

This study was a qualitative study that was inductive and interpretive in nature. The study was located in a qualitative paradigm because it was consistent with the research questions and problem statement (Brookes, 2007; Burns & Grove, 2009; Silverman, 2011; Shank, 2006). This study took this route since very little is known about this major problem especially in the Namibian context (Domegan & Fleming, 2007). Therefore, the qualitative research design helped the researcher to understand multigrade teachers, learners and parents, and the social and cultural context within which they live (Myers, 2009). Qualitative research is associated with an interpretive worldview (Daymon & Holloway, 2011; Ritchie, Lewis, Nicholls & Ormston, 2013). In this regard, this study was interested in exploring how social reality was constructed from the point of view of teachers, learners and parents in multigrade teaching. This was done through the use of face-to-face individual in-depth semi-structured interviews, focus group interviews, field notes, classroom observation and document analysis.

Qualitative designs are also naturalistic in nature. In this regard the researcher was able to enter the participants' life-settings or real-life situations. This enabled the researcher to have a better understanding of the meaning attached to multigrade teaching as well as help the researcher to construct and make sense of the world of multigrade teaching. The qualitative research design was the most appropriate design

for this study because the data collected was in the form of words and behaviours as they occur in the natural environment (Johnson, Christensen, 2004 & Shank, 2006).

### **3.4 Population**

Population is a group of elements that comprise characteristics of interest to a researcher and who meet the specific characteristics that a researcher has predetermined (Polit & Beck, 2009). Babbie and Mouton (2009) support this by noting that a population is a group or collection that a researcher is interested in. With the population defined, it is important to note that the group that is targeted might not all be available and, therefore, some of the participants may be excluded from the study. The participants who are available or accessible as participants of the study are called accessible population (Botma, Greef, Mulaudzi & Wright, 2010). In this regard a group is defined as an “entire set of individuals in the universe who possess common characteristics” (Babbie and Mouton, 2009; De Vos et al., 2005, p. 193).

The target population in this study were all Grades 2 and 3 multigrade teachers, learners in Grades 2 and 3 multigrade classes whilst the target population for the parents were all parents of learners in Grades 2 and 3 in the selected schools that used Otjiherero as the medium of instruction.

**Table 1: Matrix of the Participants**

<b>Method used</b>	<b>Teachers</b>	<b>Learners</b>	<b>Parents</b>
Participants	Seven Grades 2 and 3 multigrade teachers in the Kunene Region where Otjiherero is used as the medium of instruction.	Grades 2 and 3 learners in the selected multigrade schools who were taught in Otjiherero as the medium of instruction.	Parents of the Grades 2 and 3 learners in the selected multigrade schools.
Sample size	Seven multigrade teachers from the seven selected schools.	Six Grades 2 and 3 learners per focus group	Six to eight parents of the selected learners per focus group
Number of interviews	Seven individual interviews with multigrade teachers	Six focus group interviews with learners	Six focus group interviews with parents
Sampling	Purposeful sampling	Purposeful sampling	Purposeful sampling
Method of data collection	Individual interviews, classroom observations, document analysis.	Focus group interviews	Focus group interviews
In total, 80 participants consisting of 7 multigrade teachers, 35 learners and 38 parents from the seven selected schools participated in the study.			

### **3.5 Sample and Sampling Procedure**

Burns and Grove, (2009); Brink et al., (1998); Shank, (2006), refer to a sample as a subset of the population that is selected to represent the population. In the same vein, Johnson and Christensen (2004) define a sample as a group of individuals, items, or events that represent the characteristics of the larger group from which the sample is drawn. Purposive sampling method was used in this study with a specific intention to select the seven Grades 2 and 3 teachers, based on the defining characteristics of the population and the main purpose of this study, which was to obtain the richest and best data that would answer the research questions (Creswell, 2007).

In this regard, purposeful sampling was used because multigrade teachers, learners and parents in this study had been deliberately chosen (Creswell, 2007). The cases selected for the in-depth study of the phenomenon are regarded as “informants” because of the knowledge and information they possess (McMillan & Schumacher, 2001, p. 401). In any research smaller samples are valuable for the deep and rich data they provide (Daymon & Holloway, 2011). In addition to purposeful sampling, criterion sampling was selected because the criterion chosen assisted in selecting the participants, most likely to have the experience, or knowledge about, or insights into multigrade teaching in the Kunene Region (Creswell, 2007).

The sample size entailed seven multigrade teachers, six focus groups with learners and six focus groups with parents which were determined by data saturation. ‘Data

saturation' means no new themes were emerging from the participants and the same data were being repeated (Daymon & Holloway, 2011). In this study, the researcher observed the repetition of the same data from the participants, which was an indication of saturation (De Vos, Strydom, Fouche, & Delpont, 2005). The first sample comprised of seven Grades 2 and 3 multigrade junior primary teachers in the Kunene Region. The second sample consisted of Grades 2 and 3 learners in these seven selected multigrade rural junior primary schools. The third sample comprised of parents of these Grades 2 and 3 learners from the selected schools.

The researcher selected particular schools purposefully from the population that would be informative on the topic of this study and considered as rich samples for an in-depth study (Macmillan & Schumacher, 2001), namely the multigrade teaching, based on the criteria set. The selection was made in order for the researcher to obtain a more accurate picture of Grades 2 and 3 combined grades in the Opuwo, Etanga, Okaoko-Otavi, Epupa and Okangwati circuits. In total, eighty participants consisting of seven Grades 2 and 3 teachers, thirty-five Grades 2 and 3 learners, and thirty-eight parents from the selected seven schools participated in this study. These seven rural multigrade schools were chosen since they were the only Grades 2 and 3 multigrade schools in the Kunene Region.

Since the researcher adopted a purposeful sampling, the selected participants were informed regarding the research problem and the rationale for the study (Creswell,

2007). The choice of this sampling was in line with the methodological approach of the study. An important criterion was that the schools had to be junior primary phase multigrade rural schools. The Kunene Regional Education Office was approached to help identify schools that met these criteria. The schools and the participants were selected based on the following criteria (Creswell, 2007):

1. Grades 2 and 3 multigrade rural schools in the Kunene Region.
2. Junior primary phase (Grades 2 and 3) multigrade teachers with learners in these combined grades and their parents from the seven selected schools.
3. Schools where Otjiherero is used as the medium of instruction.

The purpose of this study was not to get generalisable results, but rather to answer the research questions and achieve the objectives of the study by gaining an in-depth understanding of multigrade teaching from the participants' points of view (Patton, 2002).

### **3.6 Research Site and Participants**

The place where data is collected is referred to as a research site (Creswell, 2013). For this study, data was collected at the multigrade rural schools selected to participate in this study.

This research was undertaken in Kunene Region in the north-western part of Namibia. The most common languages used in the Kunene Region were Otjiherero,

Otjizemba, Otjihakaona and Otjihimba. It is crucial to state that most multigrade schools in Kunene were situated in rural areas. Seven multigrade schools were involved in this study. These multigrade schools are called Ondao Mobile Schools; these are nomadic communities that move because of grazing and water shortages in this arid region (Hailombe, 2011).

### **3.6.1 Description of the Participants**

A total of eighty (80) participants took part in this study with seven being Grades 2 and 3 multigrade teachers and thirty-five being Grades 2 and 3 learners and thirty-eight being parents of the selected learners. For the sake of maintaining the ethical principles of anonymity and confidentiality, the researcher used pseudonyms to refer to the research site and research participants. The multigrade teachers in this study were referred to as Teacher 1, Teacher 2, Teacher 3, Teacher 4, Teacher 5, Teacher 6 and Teacher 7. The focus group interviews for learners and the parents were referred to as FG (1), FG (2), FG (3), FG (4), FG (5), FG (6) and FG (7).

### **3.6.2 Description of the Research Site**

All the participated schools in the study were rural Ondao Mobile Junior Primary Schools in the four clusters of Opuwo, Okangwati, Kaoko-Otavi and Etanga clusters. Two junior primary multigrade schools were selected from Opuwo cluster; two junior primary multigrade schools from Okangwati cluster; one junior primary multigrade school from Etanga cluster and two junior primary multigrade schools

from Kaoko-Otavi cluster. The grade combinations at all these schools were Grade 2 and 3. All schools were run by more than two teachers except School E which was run by one female teacher. The schools were referred to as School A, School B, School C, School D, School E, School F and School G. Otjiherero was the medium of instruction and English was taught as a subject at all the schools that formed part of this study. The context in which the schools were organised was a mono-cultural context. The general classroom environments at all schools were not appealing.

### **School A**

This school had 68 learners enrolled, three teachers (two females and one male) and was situated 15 km from Opuwo town. It was a combined school which caters for pre-primary to Grade 3. It consisted of one traditional hut classroom for Grade 1, one tent classroom for Grades 2 and 3 combined, and a permanent building for pre-primary learners. The tent classroom served as the head teacher's office. The school had a tent classroom with one small chalkboard for both grades. It was a rural school with few learners. The school had few learners due to low population density. There were 13 Grade 2 and 11 Grade 3 learners in the combined class. The road to the school was bad and bumpy. Parents at this school were uneducated and illiterate. Firewood was used for cooking learners' food. Learners fetched water for their food before school started.

## **School B**

School B was 5 km from the main town, Opuwo, and the road to the school was bumpy. Pre-primary was taught under a tree while Grade 1 was taught in an open old torn tent. Grades 2 and 3 were taught in an old torn tent as well. A hut served as an office, a store room for stationary, textbooks, exercise books and school food storage. There were 20 Grade 2 and 21 Grade 3 learners in the combined class. Learners sat on broken chairs and there were not enough chairs per learner. The chalkboard was folded to be used as a desk for learners to do a given classroom task. Learners fetched water, collected wood and cooked their meals before the school started. It was observed that 6-10 learners shared textbooks and used out-dated textbooks. It was also observed that there was a shortage of chairs and desks.

## **School C**

This school had a pre-primary class and Grade 1 was a single classroom, Grades 2 and 3 were combined classes. The Grades 2 and 3 combined class was overcrowded with 41 learners. It was observed that School B and C had more learners compared to the other schools. The cupboard at school C was vandalised and locks were damaged. In addition, an old torn tent classroom served as an office and a storeroom for keeping learners' exercise books, textbooks and school food storage. A total of between 3-6 learners shared a desk, whilst a total of between 10-15 learners shared a pole.

Firewood was used for cooking learners' food. Learners at this school fetched wood and water from a nearby community borehole so that they could prepare their food. It is important to state that these learners prepared their own food. This school was located in a poverty-stricken rural area approximately 15 km from the main town. The school provided two meals a day to all learners in the school. Most learners from School C came from child headed households or lived with their grandparents. The researcher observed that there was no water at the school for few days following her arrival at the school.

#### **School D**

This school had a pre-primary class, the Grade 1 was a single classroom and Grades 2 and 3 were combined classes. There were 15 learners in Grade 2 and 11 in Grade 3. The school had a permanent structure with a storeroom. The school accessed water from a borehole which was located at a distance of about 3 km. Compared to all the other schools in this study, School D was better resourced in terms of infrastructure. The school had solar energy electricity and a toilet for teachers only and not for learners. The learners' food was stored safely in a separate room unlike in School C where food was stored in the tent classroom with other items. The same scenario happened at School D where learners did not have water for drinking and cooking. The principal went to fetch water for breakfast before the school started. There were 15 learners in Grade 2 and 11 in Grade 3.

### **School E**

School E was 100 km from the main town, Opuwo. This school's enrolment consisted of 34 learners, from pre-primary to Grade 3. The school had few learners due to the low population density in the area. The school was run by one female teacher. She indicated that when she was absent the school would be closed. The teacher was one of the teachers who were interviewed although classroom observation was never done because she was on sick leave most of the time when the researcher planned to visit the school. Unfortunately, no classroom observation was done due to this change as the school automatically changed from being a multigrade (which was the subject of this research) to being a monograde school.

### **School F**

School F was 130 km from the main town, Opuwo. The enrolment of this school was 36 learners from Grade 1 to 3. The school had few learners due to the low population density in the area. There were 11 Grade 2 learners and 4 Grade 3 learners. The classroom for Grades 2 and 3 was a small overcrowded traditional hut. The road to the school was impassable and could only be reached using a four-wheel-drive vehicle. The road was in a poor condition and some learners had to walk for a long distance to school. According to the teachers interviewed from this school, learners usually came to school hungry and tired. There was no fence around the school.

## **School G**

This school had 54 learners enrolled and three teachers and was situated 43 km from Opuwo town. It was a combined school which caters for pre-primary to Grade 3.

There were 11 Grade 2 learners and 16 Grade 3 learners. It was a rural school with overcrowded and torn tents. The teaching staff in this school consisted of three teachers (two females and one male). It consisted of one traditional hut classroom for pre-primary, a tent for Grade 1 and another torn tent classroom for Grades 2 and 3 with one small chalkboard for both grades. The tent classroom served as the head teacher's office and a hut served as the storeroom for the school food. The school had few learners due to the low population density in the area. The school was isolated, was in the mountainous area and far from the main road. The road to the school was bad and bumpy. Parents with children at this school were uneducated and illiterate. Firewood was used for cooking the learners' food.

### **3.7 Data Collection Procedures**

The researcher collected data during the course of March 2015 for the pilot study and the actual study started in September 2015, March 2016 and continued in March 2017 and September 2017 until saturation was achieved in order to enable a thick description of the participants' experiences. Prior to interviewing, the teachers were asked to complete written consent forms while learners and parents gave their consent verbally.

Before the data collection process started, the researcher visited the research site in order to familiarise herself with the participants and establish rapport. The researcher also managed to identify one regional officer who assisted her to get access to the research sites and assisted with the identification of the targeted Grades 2 and 3 multigrade schools.

### **3.8 Research Instruments**

Multiple data collection methods used in the study were individual, semi-structured interviews, semi-structured focus groups interviews, field notes, classroom observations and document analysis in order to answer the research questions and to gather in-depth data that would provide credibility and trustworthiness to the study.

#### **3.8.1 Individual Interviews**

The researcher conducted face-to-face individual interviews with seven Grades 2 and 3 teachers (Creswell, 2009). Rich and meaningful data was collected using an interview schedule with questions and semi-structured, open-ended questions meant to get the teachers' learners' and parents' views and opinions (Creswell, 2007; Creswell, 2009). Researchers can use semi-structured interviews in order to gain a detailed picture of the participants' beliefs, perceptions or accounts of a particular topic (De Vos, et al., 2011). Prior to the visit to the multigrade schools, the researcher contacted the principals of these multigrade schools in order to make appointments for interviews with Grades 2 and 3 teachers and their learners. This

was also the first step towards building rapport with the Grades 2 and 3 multigrade teachers.

In order to ensure consistency in the interviewing process the researcher conducted the unstructured, one-on-one, in-depth interviews with teachers. De Vos (2009) explains that unstructured, one-on-one interviews are also referred to as in-depth interviews. In-depth interviews were used because they are important when one needs to discover feelings and attitudes of individuals concerning a specific situation (Creswell, et al., 2011).

All the interviews were recorded using a digital voice recorder, with the prior permission of the participants. This was done to prevent possible disturbances and breakages in eye contact between the researcher and the participants during interviewing session (Henning, Stone, & Kelly, 2009; Zastrow, 2009).

Interviews were conducted at places where the participants felt comfortable, namely, under a tree at the school. With the exception of one face-to-face and one focus group discussions, that were planned to be held in a tent, all the participants agreed to be interviewed under a tree or in the classroom. However, the arrangement to interview one focus group in the tent did not materialise as it was very hot inside the tent. Thus, it was eventually conducted under a tree like all the others and there were some interruptions that occurred during the interviews since it was in an open space.

One good example of disturbance was that of a passing parent who greeted a teacher who was busy with the interview and another one who was busy teaching in an open tent.

During the interviews the researcher listened attentively with minimal talking on her part while the participants were encouraged to talk as freely as possible. The participants were interviewed in the Otjiherero language and this, in turn, helped ensure the quality of the data obtained because the participants were able to understand the proceedings of the interview. Their responses were later translated into English. The researcher and a trained assistant transcribed these recordings later verbatim in preparation for data analysis.

The participants were asked questions which had been prepared and reviewed during the piloting stage. Furthermore, in order to link the responses to the main question, elaboration, clarification, probes and follow up questions were also posed during the interview process. The interviewer also used various techniques such as nodding and phrases such as “tell me more” "can you elaborate "and “after that?” in an effort to encourage the participants to talk more freely (Creswell, 2007). Each face-to-face interview with teachers lasted for an average of 30 to 60 minutes while the focus group interviews with learners and parents lasted for an average of 10 to 30 minutes.

After introducing herself, the researcher welcomed and thanked the participants for making themselves available. The participants were provided with the purpose of the interview, and their permission for the researcher to use the voice recorder as a tool to help capture everyone's comments was also sought. After the multigrade teachers indicated that they were happy to have their voices recorded, they were further requested to complete a consent form to indicate their voluntary willingness to participate in the study. At that stage they were reassured of the confidential nature of the interview. The fact that they were free to withdraw from participating whenever they wished to do so, was also reiterated and confirmed. All the questions from the group were adequately addressed before the interview could begin.

After establishing ground rules, face-to face individual interviews were conducted using a discussion guide that had been prepared in advance to ensure that the appropriate topics were covered in the session and to ensure that time limits determined for each topic beforehand were respected.

The guide was designed to elicit the teachers', learners' and parents' views, opinions and experiences on multigrade teaching. The topics in the guide related to:

1. Participants' understanding of multigrade teaching.
2. Experiences, perceptions, opinions, views, attitudes and feelings of teachers, learners and parents regarding multigrade teaching.
3. Challenges of multigrade teaching.

4. The need of teachers regarding support, training and assistance.
5. Perceptions regarding the development of a programme
6. Structure of the programme (what the programme should entail).
7. Implications of developing and implementing an intervention programme.

Few interviews were transcribed within 24 hours (Lofland & Lofland, 1995) with follow ups or member checking for clarification or further information sought by telephone or in person. All interviews were recorded on a digital Smartphone. Permission to record the interview was sought again at the start of the interview. Additional hand-written notes were taken by the researcher to prompt further questions or to be used in data analysis. This style of questioning allowed the researcher to collect rich and thick data.

Prior to the focus group sessions and face-to-face individual interviews, the researcher prepared the recorder by creating a new file which indicated the new number of the interview session. No participants' names were used in naming the files, and the participants' names were not used during the recordings to protect their identity and to maintain confidentiality (De Vos, 2009; Babbie & Mouton, 2009). After recording each interview session, back -up copies were created by transferring the recorder to the researcher's laptop. The back-up copies were created in order to be retrievable and usable should problems arise with the main recordings. The recorder had a locking function and the researcher locked it every time after an

interview session to ensure confidentiality. Participants were informed that the recordings would be destroyed after three years had lapsed after the interviews.

### **3.8.2 Focus Groups Interviews**

Focus groups help in producing a collective rather than an individual view on the subject of research (Cohen, Morrison & Manion, 2007). The discussions took place in small groups of between six to eight individuals (males and females), representing the group of interest, and were directed by a researcher who controlled the flow of the discussion. Few data collected during interviews was transcribed immediately after interviewing each participant. After introducing herself, the researcher welcomed and thanked the participants for making themselves available.

The focus group interviews were conducted in Otjiherero, as all participants spoke this language. As the researcher had no assistant, she had to take notes, be observant about the functionality of the recorder and also observe non-verbal cues from the participants. In order to be in full control of the situation, the researcher requested that any participant wishing to contribute to the discussion should indicate their intention by way of putting up his/her hand. Each of the focus group interviews lasted between 10 and 30 minutes and the participants expressed their excitement for the experience of being involved in discussion groups.

The researcher facilitated the focus group interviews and typically opened each session with very broad questions or general questions such as: How do you experience combined grades? Or, what are your feelings about having your child in a combined classroom? The questions became more focused as ideas and opinions emerged from the discussions. These questions became more specific when participants expressed their ideas, opinions, experiences and perceptions. The process of interaction provides the opportunity to obtain the meanings and answers to a problem that are "socially constructed rather than individually created" (Berg, 2004, p. 127), leading to the capture of real-life data. A schedule of guided questions was developed to engage the learners and parents to stimulate group discussions. The guided questions were first reviewed by experts, friends and supervisors to determine whether they would stimulate discussion and to ensure the appropriateness and clarity of the wording (Krueger & Casey, 2009). A pilot study with guide questions was conducted in 2015 with possible participants to fine-tune the questions, to seek comments and to make adjustments to the whole procedure (Krueger & Casey, 2009). As a result, minor changes to the wording of the questions were made.

The guided questions included opening, introductory, transition, key and ending questions (Krueger & Casey, 2009). The opening question was an 'ice breaker' to encourage, learners and parents to start talking and to make them feel comfortable and at ease. The introductory questions encouraged participants to think about their connection with the topic and promoted conversation, while the transition questions

linked the introductory and key questions and helped learners provide information in more detail. Two to five key questions were used, along with follow-up questions to strengthen the concept of multigrade teaching, when necessary. Finally, the ending questions brought closure to the discussion with the participants. It is important to reiterate that the focus group interviews were audio recorded and the recordings were supplemented by written notes, taken by the researcher, on any non-verbal interactions that occurred.

### **3.8.4 Classroom Observations**

Before the classroom observations commenced, the researcher requested permission from the multigrade schools' principal who was stationed in Opuwo town. The researcher arranged meetings with the principal, inspector and the Head of Department. They were informed that the observation was for study purposes and would be kept confidential and anonymous. Classroom observations were conducted from the beginning of March 2015 for the pilot study. The first set of classroom observations for the main study took place in September 2015 and the second classroom observations were done in March 2016 while the last classroom observations took place in March 2017 and September 2017. The video recordings were used to capture the non-verbal communication that might slip the attention of the researcher. The overall observation was based on teaching methods and approaches used in multigrade classrooms. For purposes of reliability and validity of the data collected, classroom observations were repeatedly carried out with six

teachers. In order to determine how teachers, practice multigrade teaching in their classrooms with observations focused specifically on the following:

1. Classroom interactions
2. Lesson presentation and time management
3. Use of teaching strategies
4. Classroom organisation and management
5. Differentiation of activities between two grades
6. Use of multigrade teaching options

Detailed field notes were taken during the classroom observations, which composed of a descriptive note section where the researcher summarised all activities that took place during classroom observation, and a reflective note. Video-recordings containing the classroom observed lessons were transcribed verbatim and duplicated and stored in a safe place after they had been transcribed. The researcher transcribed the video-recorded lesson verbatim. Then the researcher read and re-read the transcribed lessons one by one several times in order to make sense of the raw data. The researcher then went on to formulate categories for specific themes as they emerged from the lessons. In order to check for consistency, the researcher revisited the analysis categories after some weeks and verified whether the coding was still consistent with the initial coding system. Where changes were made, it was done by going through all the transcripts once more.

The researcher and the assistant transcriber transcribed the observations transcripts verbatim. The observation method may supplement what the oral interview may not be able to solicit. The collected information will be kept for 3 years on the computer folder.

### **3.8.5 Document Analysis**

Documents that underpinned the teaching and implementation of multigrade teaching were considered as an important source of data for this qualitative and interpretive study. These were various written documents that were consulted to validate the study. Creswell (2009) considers documents as a crucial source of information in qualitative studies. These were used to compare and verify data that emerged from interviews and behaviours noted during classroom observations.

The documents analysed were the ones available and which the researcher was given access to. These were analysed in order to find out some of the responses and issues that emerged from the face-to-face interviews, focus group interviews and classroom observations. In addition, it was to see how the multigrade teaching lessons were planned for the two different grades and the curriculum documents were reviewed to see if the teaching topics, learning objectives, basic competencies and lessons were aligned.

The researcher took care to evaluate the authenticity and accuracy of the materials before she used them for example, to verify whether the teacher used out-dated syllabuses and textbooks or the revised syllabus and textbooks in relation to the new curriculum reform. Documents in this study served to substantiate the evidence from interviews and classroom observations. Before the actual analysis began, the researcher collected teachers' lesson plans (of which the researcher needed to copy some), thereafter the researcher collected these into a case file before she started with the process of data analysis (Krueger & Casey, 2009). The following documents for Grades 2 and 3 were analysed to contextualise, verify and clarify the data obtained from the interviews: National Curriculum for Basic Education (NCBE), syllabuses, textbooks, National subject policy guide, integrated training manuals, exercise books, lesson plans, schemes of work and wall displays. The documents were also analysed to see the extent to which these documents are aligned and support multigrade teaching. The researcher reviewed and summarised the content of each policy document and took detailed notes on what was in each document in relation to multigrade teaching.

### **3.8.6 Triangulation**

Triangulation was one way of promoting rigor in this qualitative study whereby the researcher used more than one method of data collection and involved triangulation of data, multiple coding (independent coders for cross-checking coding) and theories (Brookes, 2007). Combining various methods or instruments helped the researcher to

overcome biases and the problems that come from the use of a single method (Ugwanga, 2007).

Although there are various kinds of triangulation, in this study the researcher used triangulation by data source, (the data was collected from different participants namely, teachers, learners and parents), and also by different instruments (the researcher conducted various individual and focus group interviews and classroom observation and document analysis). These methods were chosen in the light of the purpose of the study and for reliability and validity of the findings.

### **3.9 Strategies used to Ensure Trustworthiness**

Trustworthiness in research means that the information is reliable, it may be trusted and it is worthwhile. In this sense, (Guba & Lincoln, 1994; Schwandt, Lincoln, Guba, 2007; Shenton, 2004) identify four quality criteria for evaluating the trustworthiness of qualitative research, namely, credibility, dependability, transferability and confirmability. These criteria were used to establish the trustworthiness of this study.

#### **3.9.1 Credibility**

As a qualitative researcher, energy was spent towards ensuring that the findings from this study were credible (Guba & Lincoln, 1994). Credibility involves establishing that the results of the research are believable De Vos (2009). Guba & Lincoln (1994)

argue that the aim of credibility is to ascertain if there is a match between the views of the participants and the way the researcher represents data. A couple of strategies were used to ensure credibility in this study and these were reflexivity and prolonged involvement.

De Vos (2009) suggests that reflexivity refers to a thoughtful consideration of how a researcher's standpoint can influence the research. This researcher acknowledged that she had her own views regarding multigrade teaching as a coordinator of multigrade teaching. Be that as it may, the researcher ensured that her own views did not have an effect on the progress of the study. In this case, the researcher was honest in conducting the study and ensured that her beliefs and views did not influence the flow of the study (Shenton, 2004).

The researcher also used prolonged involvement throughout the study in order to build trust between the researcher and the participants. This was achieved through getting to know the participants better by getting involved with the participants before the interviews in order to establish rapport between the participants and the researcher (Creswell, 2012). Furthermore, Shenton (2004) asserts that examination of previous research findings is a key strategy in ensuring trustworthiness. The researcher cited key multigrade teaching scholars in the literature review chapter (Shenton, 2004). The researcher did this by way of relating her findings to an existing body of knowledge, which made the study credible and trustworthy.

Through the use of member checking, the researcher was able to return to the participants in order to establish whether or not they regarded the results as accurate (Creswell, 2007). This means that the participants had the opportunity to review the transcribed data and confirm that their opinions and views were captured accurately. Data was also triangulated through the use of different data collection methods such as individual, focus group interviews, classroom observations, field notes, document analysis and verbatim transcriptions (Guba & Lincoln, 1994). Finally, credibility was strengthened through the use of the participants' exact words and quotes from transcriptions, in reporting the results in Chapter 4 of this study (Creswell, 2007).

The researcher included triangulation as the first and most vital step in the process of validating this study. The different data sources became useful in building a "rich and comprehensive picture" for the themes that emerged (Creswell, 2012 p. 536). When themes are established through converging different data sources then such a process is considered as adding validity to the study (Creswell, 2008).

### **3.9.2 Transferability**

Transferability refers to the extent to which research findings can be transferred to similar settings (Creswell, 2009). In using an interpretivist paradigm, the purpose of this study was to gain an understanding of the teachers', learners' and parents' perceptions and experiences with regard to multigrade teaching, and not to generalise the findings the researcher obtained (Creswell, 2009).

However, transferability in qualitative research implies that findings can be transferred to other specified contexts or participants, against the background of a detailed description of the contexts and research (Guba & Lincoln, 1994; Huberman & Miles, 2002). The researcher therefore included in-depth, thick descriptions of the unique setting, participants and the context within which this research took place (Huberman & Miles, 2002).

### **3.9.3 Dependability**

Creswell (2007) asserts that dependability means the researcher asks whether the research process is logical, well documented and audited. Shenton (2004) also indicates that dependability points to the fact that if the research was to be repeated under the very same circumstances and with the same participants, similar results would be obtained. To ensure dependability the researcher reported the processes of the study in detail which enables the reader to assess the extent to which proper research practices have been followed (Shenton, 2004). This detailed report includes more details on how the researcher handled data collection, data analysis and the research design. As a result, future researchers can depend on this study to conduct the same or similar studies (Shenton, 2004).

Dependability of findings is comparable with reliability and consistency in qualitative research (Guba & Lincoln, 1994). The researcher was guided by a clearly-

defined purpose and research questions, ensuring that the research took place in a dependable way (Creswell, 2007). Finally, the analysis of the data and the progress of the researcher's work was continuously audited by, and conducted in close cooperation with peer reviewers, the supervisor and co-supervisor, supporting the dependability of the study (Creswell, 2007).

Dependability was ensured by the careful description of each step of the data collection and analysis processes. The researcher completed the data analysis and coding processes. A qualified independent coder assisted by doing a similar process of assigning codes to the transcribed data. The expert evaluated the dependability of data analysis.

#### **3.9.4 Confirmability**

Shenton (2004) suggests that confirmability refers to the ability of others to confirm or verify the findings. In this study, confirmability had been reached because the findings of the study were a result of experiences and perceptions of participants rather than the preferences and characteristics of the researcher (Shenton, 2004). The researcher recorded the participants and transcribed the data collected through audio recordings. In the study, thick descriptions were used to ensure a thorough representation of the phenomenon of inquiry and its context as perceived and experienced by the teachers, learners and parents (Creswell, 2007). The researcher admitted her own bias in the study and this maximised the trustworthiness of the

study (Shenton, 2004). The results of this research were therefore a detailed account of the experiences and perceptions of multigrade teaching teachers, learners and parents. Member-checking further confirmed the themes the researcher identified, reflecting the perceptions and experiences and voices of the teachers, learners and parents.

Confirmability means that the research findings were solely applicable to the participants and not to other viewpoints and biases (Creswell, 2007). Thus, other researchers may follow the study and arrive at a comparable conclusion. This may be achieved by checking either the raw data on the tape recorder or through data reduction and data analysis of the data given to the co-coders (Babbie & Mouton, 2009; De Vos, 2009). In addition, the researcher ensured the safekeeping of the recorders, the written documents and the notes from the interviews in case a need for tracing and double checking ever arose.

Confirmability was verified through the involvement of an experienced researcher who, as an independent coder, analysed transcriptions and reviewed raw data, recorded data, documents and results independently. Seminars and conferences were attended to establish the truth-value of the data. In addition, confirmability was maintained by keeping field notes during the interviews and data analysis processes; any preconceived ideas and observations were noted. Detailed records of the coding and analysis process were kept.

### **3.10 Ethical Measures**

This study was in accordance with the terms and conditions of the Ethics Committee of the University of Namibia (2015) guidelines. The researcher began with an application for ethical clearance from the University of Namibia Ethics Committee, as soon as her proposal was successfully defended before the research commenced. Once the application for ethical clearance was approved the researcher sought and obtained approval from the Ministry of Education through the Permanent Secretary and from the Kunene education region before the researcher could start with the study activities. In this regard letters for permission to visit multigrade schools were sent through the Kunene Regional Director.

The researcher respected the participants' autonomy and privacy throughout the study. Every safety measure was taken prior to the commencement of the interviews to ensure both confidentiality and anonymity. Thus, ethical issues around data collection, data analysis and reporting were kept in mind from the beginning of the study (Munhull, 2007). Anonymity implies that participants should not be identified either in person or in any other way (De Vos, et al., 2011). In this study, any dishonesty was avoided by obtaining the informed consent of the participants and by protecting their privacy.

The names of the participating schools, teachers, learners and parents were not disclosed in this study. Instead, they are referred to as Teacher 1, Teacher 2, Teacher 3, Teacher 4, Teacher 5 Teacher 6 and Teacher 7 as well as School A and School B,

School C, School D, School E, School F and School G. In this study, no person who was not involved in the study was permitted to gain access to the information without the permission of the participants.

Participants were made aware that participation was voluntary and that they were at liberty to withdraw from the study at any time (Creswell, 2007). It was, therefore, essential in this study that the participants were informed of the objectives of the study, the research methods and the duration of the study, as well as the identity of the researcher (Burns & Grove, 2009; Munhull, 2007).

Ethical measures in research were essential to ensure that the rights of the participants as from the beginning of the research up to the end were not violated (Creswell, 2007). In summary, it was important for a researcher to pay close attention to the state in which he/she left the research site (Creswell, 2009), as well as the manner in which the findings were reported. Informed consent was obtained for both conduct and digitally recorded all interviews.

### **3.11 Limitations of the Study**

All studies have limitations (Drisko, 2005) and this study was no exception. There were five limitations in this study that needed to be acknowledged. Four of these related to the methodology and two related to the theoretical perspective used. Firstly, this study was an exploratory case study that explored and described the

experiences and perceptions of teachers, learners and parents regarding multigrade teaching in the Kunene Region.

A second methodological limitation was related to the possibility of researcher bias. The researcher endeavoured to minimise this bias by keeping a diary and recording key ideas, thoughts, and assumptions. A third methodological limitation related to the language. All data collected for this study were in Otjiherero. This meant that the researcher was required to translate all of these materials into English. While the researcher made an effort to check each and every translation, it was possible that during this process some errors might have been made and misinterpretations provided.

The fourth limitation related to the initial idea of the sample selected (Grades 3 and 4) which ended up with the selection of Grades 2 and 3 sample due to the curriculum reform spearheaded by NIED. Grade 4 became part of the Senior Primary Phase (Grades 4-7) and not Lower Primary Phase (Grades 1-4) as was the case previously. The initial idea of the researcher was to have a sample of 10 schools but found out that there are less than ten Grades 2 and 3 multigrade schools in the Kunene Region. Kunene Region is so vast and the distances the researcher had to travel coupled with the frequency of travelling as well as the costs involved, were some of the limitations.

### 3.12 Data Analysis Process

In most qualitative studies, data collection and analysis take place simultaneously (Ary, Jacobs, Razavieh & Sorensen, 2006). The researcher analysed data at the same time as data collection was taking place. Data was analysed using Tech's open coding method (Botman, Greeff, Mulaudzi & Wright, 2010; Saks & Allsop, 2007). This method was chosen, since it was a systematic approach and its procedures were clearly described. There was a consensus discussion with the independent coder to identify themes, sub-themes and categories. The following steps as proposed by Tech were followed:

*Step 1: Reading to make sense of the whole:* The researcher familiarised herself with the data by reading and re-reading the first transcripts several times and notes were made by the researcher as ideas came to mind.

*Step 2: Identifying topics:* picked one transcript. The first transcript on top of the pile was selected to find the underlying meaning or topic, that is, what the piece of data was about. Topics noted were written in the margin.

*Step 3: Grouping and labelling similar topics, creating major topics, unique topics and leftover topics:* The procedure described above was followed for a number of transcripts and a list of all the topics that emerged was compiled. Similar topics were grouped together manually and thereafter the researcher arranged the topics in columns headed "major topics", "unique topics" and "leftovers".

*Step 4: A preliminary organising system.* All data materials belonging to a topic were grouped together, and a preliminary analysis was performed;

Step 5: *Refining the organising system*. Topics became themes or subthemes and relationships between topics were mapped.

Step 6: *Collected data were grouped*. Names of categories were simply generated by the researcher herself according to Strauss and Corbin (as cited in Merrill & West, 2009).

Step 7: *Final abbreviation of theme*. The names of the themes and sub-themes were given in Table 5.1 in Chapter 5.

Step 8: *Categories or themes are formed into concepts*. The researcher grouped the experiences, perceptions, ideas and feelings into groups of phenomena to form themes and subthemes (Walker & Avant, 2005). Three themes that emerged were used to develop the programme for multigrade teachers (See Chapter 5).

In this study, the data collection and data analysis took place simultaneously. The tape recordings of each individual interview and focus group interviews were transcribed verbatim, inclusive of all the amusement, pauses, stutters, laughter and exclamations (Olivier, et al., 2005). For example, [Hmm], [Uuh], [Silence], [Laugh loudly], [Aye], [Tji], [Ho] and more others.

The data from an observation schedule is presented in descriptive form. While most of the results from interviews were reported in the form of descriptive notes, key quotations from interviews were also included. Clarification of the extracts was given in brackets [.....] where necessary in order to place the quotation in context for the reader. The results were presented in accordance with the research objectives

that guided this study and according to themes and sub-themes that were generated from research questions. The use of participants' voices in this study was very powerful and it was for this reason that selection from the transcripts of interviews had been used to ensure that participants' voices were heard.

**Table 2: Outline of the Research Methodology Followed in this Study**

<b>PARADIGMATIC ASSUMPTIONS</b>	
<b>Epistemological paradigm</b>	Interpretivism
<b>Methodological paradigm</b>	Qualitative research, multiple case study
<b>Research design</b>	Qualitative
<b>CASE STUDY</b>	
<b>Selection of case</b>	Purposive sampling
<b>Selection of participants</b>	Purposive sampling
<b>DATA COLLECTION</b>	
<b>Data collection techniques</b>	<b>Data documentation techniques</b>
	1. Interviews (audio recordings and verbatim transcriptions)
	2. Classroom observation (video recordings verbatim transcriptions)
	3. Field notes
	4. Document analysis
<b>DATA ANALYSIS AND INTERPRETATION</b>	
Inductive thematic analysis and interpretation	
<b>QUALITY CRITERIA OF THE STUDY</b>	
Credibility, transferability, dependability, confirmability and authenticity	
<b>ETHICAL CONSIDERATIONS</b>	
Autonomy, privacy and no harm, respect, freedom and non-discrimination	

### **3.13 Summary**

This chapter discussed the research rationale, research design, and method. The paradigmatic and methodological paradigms that guided this study were discussed. Procedures and steps involved in selecting the participants of this study; and in generating and analysing the data were explained. Trustworthiness in terms of credibility, transferability, dependability, and confirmability of this research was evaluated. The next chapter deals with the data presentation, analysis and interpretation of results.

## **CHAPTER 4**

### **DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS**

#### **4.1 Introduction**

This chapter provides the research findings for this study and the interpretation of the relevant data gathered. Since the study was grounded in interpretivism, inductive data analysis was the preferred form of analysis. This allowed the researcher to produce rich and meaningful categories from the data in terms of the themes and sub-themes that emerged following an inductive analysis. The main purpose of this chapter is to present and analyse the collected data to align this with the research questions which guided the study. Themes were not predetermined and were allowed to emerge as the researcher engaged with the transcripts. Verbatim (word-for-word transcripts) direct quotations from the participants are provided. Excerpts from the field notes to support the themes and sub-themes that were identified are also provided in order to support the research findings. Only themes and sub-themes that have a bearing on the research questions are presented and discussed in this chapter.

#### **4.2. Demographic Information of Teachers who participated in the Study**

All multigrade teachers were Otjiherero speakers. There were seven multigrade teachers comprised of five males and two females from seven junior primary multigrade schools in the Kunene Region. Their teaching experiences started from one and half (1.5) years to fifteen (15) years. Their age categories ranged between 25

years and above 45 years. Two teachers had been teaching for 15 years while five had been teaching for between 1 year and 5 years. The teachers' highest qualifications included ACE and BETD. Among these seven teachers, one had an Advanced Certificate in Education (ACE) while two had the BETD. Except for the three teachers with qualifications, all the other four (4) teachers were unqualified i.e. they did not have the minimum qualification of three years' degree required for consideration as a qualified teacher. The fact that the majority of the teachers in the sample were unqualified was unsurprising since this was an acknowledged problem constraining the multigrade setting in most rural schools.

The participants' demographic information was drawn in aspects such as gender, age, academic qualifications obtained, training level, and qualifications in multigrade teaching, years of teaching experience and years of teaching multigrade classes. The participating teachers were herein identified by numbers to protect their identity, meaning that they were numbered and referred to as 'T1 to T7'. The majority of the teachers were only trained as monograde teachers, and only two teachers (T1 and T5) aged 25 and 40 years respectively, indicated that they had attended a one-week training workshop on multigrade teaching facilitated by the Kunene Education Regional Office and NIED. All schools were headed by one principal stationed in Opuwo at the Ondao Mobile Schools Office.

### 4.3 Demographic Information for the Learners who Participated in the Study

Table 2 provides the demographic data for learners at the seven multigrade schools within which this study was carried out. The ages of the learners who participated in this study ranged from 7 to 19 years as shown in Table 4.1. Out of six learners' focus group who participated in the study, there were 17 females and 18 males.

**Table 3: Demographic Information for the Learners who Participated in this Study**

No.	Focus Group (FG) participants	School	No. of learners in each focus group	Age groups	Gender
1	FG (1)	School A	6	7-11	3 Males; 3 Females
2	FG (2)	School B	6	7-17	3 Males; 3 Females
3	FG (3)	School C	6	7-19	3 Males; 3 Females
4	FG (4)	School D	6	7-13	4 Males; 2 Females
5	FG (5) School E- classroom observation, focus group with learners and parents were not conducted but interview with the teacher was conducted.				
6	FG (6)	School F	6	7-11	3 Males; 3 Females
7	FG (7)	School G	8	7-19	2 Males; 3 Females

*Key: FG=Focus group*

### 4.4 Demographic Information of Parents who Participated in the Study

The researcher failed to get hold of all the targeted parents, as expected.

Nonetheless, a total of 38 parents, 18 of whom were males and 20 females participated in the study. All thirty-eight (38) parents interviewed were from rural areas, impoverished homes and were illiterate. All parents interviewed had children

in Grades 2 and 3. It is important to reiterate that the home language used for the parents interviewed in this study was Otjiherero. Table 3 shows the demographic information of the parents who participated in this study.

**Table 4: Demographic Information for Parents who participated in this Study**

No.	Focus Group (FG) participants	School	Number	Gender
1	FG (1)	School A	6	3 Males; 3 Females
2	FG (2)	School B	7	4 Males; 3 Females
3	FG (3)	School C	6	2 Males; 4 Females
4	FG (4)	School D	7	4 Males; 3 Females
5	FG (5) School E- classroom observation, focus group with learners and parents were not conducted but interview with the teacher was conducted.			
6	FG (6)	School F	8	3 Males; 5 Females
7	FG (7)	G	4	2 Males; 2 females

*Key: FG=Focus group*

#### **4.5 Classroom Observations**

Classroom observations were carried out in the following lessons: Otjiherero, Mathematics, Environmental Studies and English. These observations focused on: 1) teacher interaction with learners; (2) learners' interaction with one another; (3) learners' responses to teacher instruction; (4) the use of resources to support learning; (5) teaching strategies teachers use; (6) use of timetabling options; (7) teachers' skills in differentiating activities from one grade to another; (8) classroom organisation and management and 9) time management.

The choice of being a participant as an observer enabled the researcher to explore and understand what was happening in the multigrade classrooms. There were few learners in some classes because most of the time learners went for cattle herding and to tend their goats which were a cultural practice of the Ovahimba people. Code switching from English to Otjiherero and vice-versa was a common occurrence in the teaching and learning process at all the schools visited.

During classroom observations, the researcher found herself a place at the back of the tent classroom, from which she could observe and watch carefully what was happening in the classrooms and jotted down some key ideas to help her remember what transpired during each particular lesson observed. After each observation, the researcher went back to a quiet place and wrote down as much as she could remember had taken place during the class lesson observed. The researcher also reviewed the lesson observation notes using the guideline questions as provided in the classroom observation guide. Most of the sounds that were heard in the classrooms at School B, C, D, E and G, were of learners talking to each other and in some cases singing or screaming. The teacher at School A and G used peer tutoring in their lessons, while they were busy with another grade. They used the common timetabling options where they taught the same topic to Grades 2 and 3 but gave different activities based on the competencies stipulated in the syllabus. This was a clear indication that the teachers went through some multigrade training.

It was also observed that in all classrooms where learners were allowed to choose their seats, learners of the same gender were observed sitting together. Although some teachers spoke of the advantages young learners had of having older learners in the same class to help those in the lower grade, little formal cross-grade interaction among learners, except to ask siblings for pencils or other materials, was observed. Large group activities that combined both grades were observed in classroom B and C. However, these activities involved interacting with the teacher rather than with learners from the other grade. These classes were taught by teachers who had not been formally trained in multigrade methodology. It was also observed that in some classrooms, some grades were sitting separately except at School B, C and F due to classrooms that were overcrowded.

#### **4.6 Participants' Understanding of Multigrade Teaching**

Teachers were asked to define the term multigrade teaching as they understood it. Generally, scholars in this area agree that, multigrade teaching refers to a teacher teaching more than one grade simultaneously in one classroom. However, in terms of this study, the teachers were expected to teach two consecutive grades, namely, Grades 2 and 3. During the interview, the seven teachers revealed that they had a similar understanding of multigrade teaching, as shown by their responses.

The results of this study showed that a fundamental problem emanates from the teachers', learners' and parents' understanding of multigrade teaching and how

teaching should unfold in that setting or context. They did not regard multigrade teaching as teaching two grades in one class. Some of the teachers did not take into account the different levels of learners in their classrooms, for example, their ages and different levels of abilities. This came out clearly in the following quotes which capture their views and perceptions around what multigrade teaching meant to them. Teacher -1 was mostly of the opinion that multigrade teaching was common especially in the Kunene context: *“This is what we know in our region where you have two or more grades in one class taught by one teacher.”* Teacher-4, however held the view that *“I think multigrade teaching is teaching two grades in one class”* Teacher-5 said: *“Teaching different learners with different abilities.”* while a parent from Focus Group 1 at School A said multigrade teaching *“is a family class.”* In contrast, a learner from Focus group 3 at School C had this to say: *“When different learners of different grades sit in one class.”* Another teacher, Teacher-7, had this to say: *“You teach them all together.”*

From these views and perceptions, one may conclude that although the teachers, learners and parents were in one accord in the above-mentioned aspect, they held different conceptions of multigrade teaching or had different opinions about it.

#### **4.7 Reasons for Multigrade Teaching at Respective Schools**

When multigrade teachers were asked the reasons for having multigrade teaching in their respective schools, they had various opinions on that question. The following

quotes illustrate their reasons: Teacher-2 said: *“I think multigrade at our school is because of shortage of teachers and few learners in Grades 2 and 3.”* Teacher-6 had this to say: *“We do not have enough teachers at our school.”* In addition, Teacher-3 said: *“Learners are very few because the population in this village is very small.”*

These responses and reasons showed that multigrade teachers in this study were aware of the fact that multigrade teaching was one of the solutions to address the shortage of teachers, having few learners and having a small population. However, one teacher blamed the regional office for multigrade teaching, highlighting the view that the Kunene Regional Office does not appoint more teachers. This showed that not all multigrade teachers were up-to-date with the rationale for multigrade teaching in their respective schools.

#### **4.7.1 Participants’ Perceptions Regarding Multigrade Teaching**

From the response data on multigrade teaching it was clear that there were mixed feelings regarding this subject across all schools involved in this study. Responses ranged from quite negative to positive findings.

##### *Teachers’ Perceptions*

The first question was aimed at finding out the teachers’ perceptions regarding multigrade teaching. The findings of the study from the teachers showed negative as well as positive perceptions about multigrade teaching. The broad opinion that

emerged from the teachers was that multigrade teaching was hard work, more work, tiring and more demanding than monograde teaching. Some teachers were in favour of multigrade teaching while a few did not support this setting. The teachers who held positive perceptions did so because they considered that multigrade teaching was important in rural isolated, poor areas and that it was a better solution for smaller schools.

Multigrade teaching was viewed as a necessity rather than an option in the Kunene Region. Multigrade teachers' perceptions were that multigrade teaching helped address the issue of access to school, as such, it contributes to education for all. Multigrade teachers indicated that multigrade teaching was the only approach for Namibia to provide education to all learners in the remote and isolated communities such as the Ovahimba, Ovazemba, Ovahakaona and Ovaherero communities. On the contrary, the broad opinion that emerged from the teachers who were negative towards multigrade teaching was that multigrade teaching meant hard work, commitment, complicated and too demanding and therefore perceived as a system that needs to be abolished. These teachers expressed problems and concerns with regard to implementing multigrade teaching and referred to it as a hardship and a burden. The concerns raised include the overcrowded multigrade classrooms, heavy workload, lack of multigrade curriculum, lack of teaching and learning materials, lack of physical facilities and lack of teacher training which makes the classroom management difficult.

Multigrade teachers interviewed suggested that better classrooms were needed to support the management and organisation of multigrade classes. In addition, the newly appointed unqualified teachers explained that they were not trained in multigrade teaching and yet had been assigned to teach in multigrade schools without any experience. They did not know how to prepare multigrade lessons, manage time, organise and manage multigrade classrooms.

The interview responses also suggested that it would be more effective and easier for multigrade teachers to prepare lesson plans if the national curriculum was adjusted or re-aligned across grades. Another reason for negative attitudes towards multigrade teaching was that multigrade teaching was annoying, difficult and frustrating. Only a few teachers saw multigrade teaching in a negative light or were not in favour of multigrade teaching due to the reasons they gave. Other reasons given were that they were not supported; they were neglected, isolated, ignored by NIED and the regional office and therefore demoralised. Often, one reason for the negative attitude was that multigrade teachers compared their workload of teaching to the workload of teaching in a monograde classroom with multigrade being more challenging. Teacher-7 from a different school expressed the following belief: *Monograde is far better when it comes to lesson plan workload and opportunities.*” This statement was confirmed by a learner in a different focus group interview 2 at School B: *“Teacher is not giving*

*us enough attention.*” The rest of the focus group did not dispute this view. It is further evident from the responses that multigrade learners want to receive the same type of education and receive the same opportunities as learners from monograde systems. It was evident from the following remark that conditions in multigrade schools were not the same as in monograde schools. Teacher-3 commented: “*If we are all regarded as public servants, why should we be treated as different from monograde schools?*” These preceding statements encapsulate the general opinions of the multigrade teachers that suggest that monograde teachers were favoured as compared to multigrade teachers.

Teacher-6 concurred with the first two teachers (Teacher-1 and-2) that multigrade teaching was a “good thing” but had some reservations expressed as follows:

*Although multigrade teaching is good, it calls for hard work. There are no multigrade teaching and learning materials. There is no multigrade syllabus, textbooks, policies and multigrade curriculum. Teachers were not trained to teach in this multigrade setting. All these problems hinder teaching and learning in multigrade classrooms.*

Although in this response it was indicated that multigrade teaching is good this teacher listed a number of challenges that come with multigrade teaching. Teachers equally agreed with all the other teachers quoted in saying that multigrade teaching is good in the sense that it allowed rural learners or learners in remote disadvantaged schools to attend school. From the responses, it can be concluded that the fact that multigrade schools were mostly in rural areas and far from towns resulted in minimum visits from advisory teachers from the regional office.

One may also conclude that teachers were ill-prepared to teach in multigrade classrooms. A lack of commitment on the part of some teachers in the pedagogy was also evident, as they felt that it was not a normal practice. Teachers were observed not to be familiar with the lesson planning required for multigrade teaching. It was further observed that lesson plans prepared by teachers did not incorporate all components such as learning objectives, basic competencies, timetabling options and activities for two different grades. Teacher -7 said: *“I do not include the multigrade option because I do not know what it is.”* Teachers also indicated that multigrade teaching should be abolished if possible. This shows that teachers did not see the importance of multigrade teaching and hence they were not comfortable teaching in this setting. This could be attributed to the fact that teachers were not trained or qualified to teach in this setting. Some teachers complained that they were not just teaching but also carrying out administrative duties because the same person was a teacher and a secretary at the same time. They carried out all managerial duties like attending meetings at the regional office, cleaning the school and classrooms, repairing chairs and providing materials. It was further revealed that carrying out all these activities takes time, affects the quality of teaching and the teacher’s commitment in multigrade schools.

It appeared that multigrade teachers felt uncomfortable teaching in multigrade classrooms. There was an indication that the lack of multigrade knowledge made

them unsure whether they were doing it right as it might have a negative impact on the outcome of the teaching and learning in classrooms.

### *Parents' Perceptions*

Parental involvement is one of the key role players in the Namibian education system. A total of 38 parents were interviewed in focus group discussions. They were asked to give their perceptions and views regarding multigrade teaching. Contrary to the teachers' views, it became evidently clear that the majority of the parents at different schools were in full support and in favour of multigrade teaching. The views of the majority of the parents were that multigrade teaching brings their children closer to home. They were also of the opinion that multigrade teaching kept siblings in one classroom which was something good for them. They were thus in favour of multigrade teaching and saw it as a good option for rural, remote and disadvantaged schools and communities.

In contrast, some parents of children in the schools visited did not know whether their school used multigrade or monograde teaching. This is not surprising given the fact that most parents in the rural areas of Kunene Region were illiterate. They were aware that their children were sharing classrooms, that there were not enough teachers and that there were not enough chairs and water. However, most parents perceived multigrade teaching positively since it provided education for their children and helped keep them in rural isolated areas without which they would not

have had any access to education. They also appreciated the presence of schools near their homes. One parent from focus group 2 at School B was however doubtful about the benefits of multigrade teaching. She perceived it as a second-rate option or inferior to monograde teaching. She felt that teachers go for workshops and meetings leaving their children unattended as indicated by Teacher 5 at School E who revealed that she sent learners at home when she goes for workshops.. Be that as it may, in this parent's view, it was better to have a teacher for each grade rather than leave their children unattended. In a nutshell, this parent at School B preferred monograde teaching. Over all, parents felt that their children were enjoying being in multigrade classes which allowed them to be together with their siblings.

### *Learners' Perceptions*

In response to the question: "How do you feel about being in a multigrade classroom?" the majority of the learners expressed a negative response and indicated that they did not like being in a multigrade class because the teacher taught Grade 3 only while Grade 2 had to sit and wait for lessons. Others indicated that they did not like multigrade teaching because older learners laughed at them when they made mistakes in answering questions.

Given the above reactions, what emerged from the learners' interviews were two sets of perceptions regarding their presence in multigrade classrooms. The first sets of perceptions were from those who viewed multigrade teaching as a positive practice.

The second set was from those who viewed multigrade teaching as a negative practice. In both cases the learners were able to give their reasons. These were not necessarily negative perceptions about multigrade teaching, but rather concerns related to infrastructural issues, learning materials, attitudes of other learners and the conditions of most multigrade schools.

Furthermore, these learners indicated that teachers concentrated on one grade only and did not teach both grades equally and that learners were given to teasing each other. A Grade 2 learner at School B said in response to the above question:

*Mmm! I do not like multigrade teaching because the teacher teaches Grade 3 only while we are just waiting.*

This differed slightly from a learner in focus group 6 at School F who mentioned that multigrade teaching was not good because the Grade 3 learners laugh at them and tease them. This was evident during classroom observations at School G where Grade 3 learners were laughing at the Grade 2's when they gave a wrong answer. One could see how the Grade 2 learners were demoralised: *It is not good because I feel that the Grade 3 learners laugh at me. They are also teasing us that we do not know the work.* It is therefore apparent that learners did not like multigrade teaching because of various factors such as learners teasing each other and laughing at each other. This is exemplified in the experience of a Grade 2 learner from focus group 4 at School D who said: *If you say something wrongly, the big learners will look at you and laugh.*

On a positive note, some learners in focus group 1 at School A presented a different scenario and they had this to say: *“I like it because my sister is helping me if I do not understand.”* It was also revealed that older learners help the younger ones; they learn from each other and work together. A learner from focus group 3 at School C happily commented: *“I like multigrade teaching because we help each other if you do not understand.”* One of them, a learner from focus group 2 at School B when asked if he liked to be in a multigrade class replied: *“I like to work in groups because you learn from others.”* Similarly, a learner from focus group 6 at School F added: *“I like to work together, older learners help us.”*

Given the above responses from learners, one may conclude that the concerns raised against multigrade teaching were influenced by a number of issues ranging from a lack of infrastructure, lack of resources, and new way of teaching and generally negative attitudes against this new setting of teaching. It was therefore, fair to assume that, based on the comments there was a concern regarding multigrade teaching. It could, therefore be inferred from these comments that some learners were not in favour of multigrade teaching. Across all schools visited, multigrade was seen as being inferior to monograde teaching. On the other hand, there were some learners who were in favour of multigrade teaching as noted earlier. The classroom observations show that trained teachers performed better than the untrained teachers and that they had better methodological know-how of multigrade teaching. They had the expertise in their subject content.

It can therefore be concluded that the perceptions of teachers, learners and parents regarding multigrade teaching pointed to the need for training, support and empowerment of the teachers so that they can teach effectively.

#### **4.7.2 Perceptions Regarding the Challenges Hindering the Implementation of Multigrade Teaching**

Analysing the responses from the teachers, it became apparent that there are various challenges that hinder the implementation of multigrade teaching. The challenges can be divided into the following sub-themes: (a) lesson planning, (b) managing the 40-minute lesson periods, (c) shortage of resources, (d) poor infrastructure and (e) lack of teacher training. In addition, the study showed that the multigrade teachers and the communities where the schools were situated lacked support from the regional office and the surrounding schools. In order for multigrade primary schools to be effective and productive there must be more support provided to multigrade teachers so that teaching and learning in these schools improves. Lack of support for multigrade primary schools had a negative impact on results as learners miss a lot of work which formed the basis of their curriculum. Ignoring issues such as the training of teachers and the provision of resources to these schools also affected multigrade schools negatively.

The two preceding statements summarise the general feeling held by the multigrade teachers involved in this study. Qualified teachers teaching in these multigrade schools mentioned the need for teacher training and support in multigrade teaching which is indicative of an expectation of some form of support. On the other hand the untrained teachers highlighted what they referred to as “empowerment and support”. This also indicates that they needed some training in order to offer quality lessons within their multigrade setting. One may conclude that the main concern in terms of this theme was that of support, as was evident above. The teachers agreed that support during their training programme was one of their biggest expectations coupled with support in the delivery of teaching through the provision of teaching materials.

#### *Inappropriate Lesson Planning Skills*

The organisation of the curriculum had implications on the use of multigrade teaching. The classroom observation results showed that multigrade teachers followed a monograde orientation in accordance with Ministry of Education, Arts and Culture expectations. Teachers also indicated that the curriculum, resources and all training were geared towards monograde teaching. The results showed that planning for multigrade teaching classrooms was a challenge to all observed classrooms. In addition, the results showed that teachers used one lesson plan for two different grades and did not incorporate the different grades taught in the classroom. Teachers indicated that they did not do separate lesson planning for the two grades

that they were teaching instead they did single planning for multigrade or monograde. This showed that learners were treated in the same way while they were in two different grades with different competencies.

Multigrade teachers indicated that they were overwhelmed by the amount of work that they had to do when teaching two different grades in one class; as such they did not have enough time to prepare separate lessons. They further indicated that they planned their lessons according to the NIED Integrated Training Manual and the National Subject Policy Guide provided. However, this planning was geared towards monograde classes and not multigrade teaching. They further indicated that the curriculum used in their schools was not developed for multigrade teaching but rather for a monograde setting.

Most of the teachers involved in this study were concerned and worried that they had heavy workloads and were unable to prepare two different lesson plans for two different grades. The study results showed that the multigrade teachers in the Kunene Region were not prepared or were ill-prepared to teach in multigrade classrooms.

This was confirmed by Teacher-6 who said:

*I have few learners in my class which I can manage but multigrade teaching is a big challenge because of two different grades with different basic competencies in the syllabus.*

It was crucial to state that teachers thought that they would be relieved from the huge task of lesson planning. Teachers only needed to follow the lesson plans developed

for monograde teaching in the correct sequence, pace and adhere to the 40 minutes' time allocation so that basic competencies stipulated in the Grades 2 and 3 syllabuses can be achieved. However, during the individual interviews, teachers confessed that keeping the pace with the structured lesson plans was overwhelming. Teachers were faced with new challenges as they struggled to keep up with the lessons plans which required special skills.

Teachers also found the allocation of time for some activities for two grades as being insufficient and challenging. This was evident during classroom observations as no teacher could finish within the 40 minutes period. All teachers taught one subject for two periods (60-80 minutes) or had to stop the lesson in the middle. It became clear that time was an issue and therefore led to frustrations. When asked about the nature of the curriculum and the time required to complete the syllabus in multigrade classrooms, this was what Teacher-2 had to say:

*We cannot manage two different grades in 40 minutes, it is not possible. We do not finish on time.*

As can be noted from the quoted teachers, multigrade teachers were not happy with the amount of time (40 minutes) they spent in teaching Grade 2 and 3 learners. They further indicated that they used the same amount of time to teach one grade for monograde classes. For example, Teacher-6 requested training on how to manage time in multigrade classrooms. To this effect the teacher said,

*It will be better if the regional office or NIED train us on how to manage time for two different grades at the same time.*

During the interviews, it was pointed out that teaching different topics to two different grades was a challenge for many teachers. Once again it came out that teachers had difficulties in using subject staggering as a multigrade option (two different subjects and two different topics to two different grades in one period). This was attributed to lack of multigrade teaching knowledge and skills. During the classroom observations, it was evident that all teachers used the common timetable option where a teacher used the same theme and topic in both grades but a differentiation of activities was missing in all observations. Document analysis showed that multigrade teachers only used one multigrade timetabling option which was known as a common timetable. This indicated that these teachers did not understand the multigrade teaching setting. The results further showed that teachers used a common timetable in all observed multigrade schools.

When it comes to the attitudes of teachers regarding lesson planning, the teachers expressed both positive and negative experiences. To shed some light on this point, both qualified and unqualified teachers showed a mixture of negative and positive attitudes. Teachers with more years of experience were more positive as compared to those with less years of experience.

During classroom observations, it became evident from document analysis that the teachers were struggling with multigrade lesson planning. It is evident from the responses given by some of the teachers that lesson planning was difficult and strenuous. Drawing from these responses, the researcher is of the opinion that

multigrade teachers need assistance especially in lesson planning. Teachers indicated that they are overwhelmed by the amount of work that they had to do when teaching two grades at the same time in the same class. They lamented that they did not have time to prepare separate lessons for each grade. They further indicated that they planned according to the NIED lesson plan format. It was clear from the lesson preparation that teachers did not differentiate activities for the two different grades. However, this format was geared towards a monograde setting and not multigrade context. All teachers complained about heavy workload regarding lesson planning and assessment. Upon further probing, regarding training on how to plan multigrade lessons, some of these teachers claimed that they were not trained on how to plan multigrade lessons properly. The responses implied that they were trained on lesson planning but not necessarily how to plan for more than one grade. The following were some of the responses they offered to express their dissatisfaction with lesson planning. Teacher-2 said:

*To tell you the truth I do not know how to plan two lessons for two different grades in one lesson. I'm preparing one lesson for both grades by looking at the same themes and topics. I do not make any difference.*

The issue of time management also came up as concern to teachers. Teacher-3 commented: *“For me, I start with the preparation of Grade 2 and then move on to Grade 3. This takes my entire afternoon. It is time consuming.”* On the same question Teacher-4 stated that he was preparing one lesson for each grade. He said: *“I prepare two different lessons for each grade and it takes time.”* One could see that some teachers were trained in multigrade teaching because they could differentiate basic

competencies and activities. This was evident during classroom observations.

Teacher-1 confirmed:

*I am preparing single lesson for both grade with different competencies and activities. That makes my work easier. But my colleagues are doing it differently. I do not know, now.*

This was an indication that some teachers knew how to plan a lesson for two different grades while others found it difficult. During classroom observation and during document analysis it was evident that most teachers could not plan lessons properly. It was also evident during document analysis that the time allocation for Junior Primary Phase in the NIED policy document entitled National Curriculum for Basic Education (NCBE) for Grades 2 and 3 was not the same. It came out that for Grade 2 its 34 periods per week while for Grade 3 its 40 periods per week. But during classroom observations it was observed that both grades at all schools leave at the same time which was at 13:10 instead of Grade 2 going out earlier than Grade 3.

### *Teaching Strategies*

Teachers were asked about the teaching strategies they employed in their multigrade teaching. In order to gauge the experiences of teachers practicing multigrade teaching, teachers were asked the following question: ‘How do you implement multigrade teaching in your classroom?’ The following quotes capture their responses to illustrate the teaching strategies that they used in their multigrade classes. Teacher-6 remarked:

*I always ask the fast learners to help me while I am busy with the other grade. I ask the Grade 3 learners to help me with Grade 2. But the problem is that learners start bullying each other because they feel that they have all the power to do what they want. Programme development will show us the right way.*

Similarly, Teacher-3 said:

*I do not believe in learners teaching each other. I do it myself. Let the programme start and show us the right way of doing it! I look for similar themes and topics and teach according to the competencies given in the syllabus for that specific grade. But my problem is only when it comes to activities, I give them the same activities because I do not know how to differentiate them. I need the programme because I am just trying on my own.*

This was evident during classroom observations at School G when the teacher asked the Grade 3 learners to sit next to each Grade 2 learners who was getting assistance from Grade 3 learners as they were reading. The remarks of Teacher-5 sums up the general sentiment of these teachers:

*I find it difficult to teach two different topics to two different grades at the same time especially in Environmental studies. I do not know how to talk about two different topics at the same time. It's a problem. There I am totally lost and confused. I need help on that one maybe in a form of training or induction or that programme will take me out from the confusion state [laugh loudly].*

Classroom observations also confirmed what was said by the teachers in the previous comments and reactions. For example, it was observed that while the teacher was busy with one grade the other grade would be busy with a task which they had to complete. This task was completed without the teacher's support, input or supervision. In most cases, the learners did not complete the tasks assigned to them. The teachers did not try to ask learners about the task, as it was used only to keep

them busy while the teacher was teaching the other grade. This could be attributed to a lack of proper planning on the part of the teachers. In addition, planning prepared by teachers did not incorporate the two different grades to be taught in that specific multigrade classroom. Their responses can be summed in the words of Teacher-2 who said:

*I teach both grades the same content and I mixed the groups in order to help each other. I do not separate the grades or activities. They all do the same activity because each group consist of Grade 2 and 3 learners. Everything is just the same.*

This was confirmed at School B when both grades were taught the same content and the activities were the same without differentiating the activities. This was a clear indication that multigrade teachers needed support. Teacher-1 demonstrated the ability to manage two grades at the same time and was mostly able to keep both grades working on meaningful activities for most of the class time. The main difficulty was in starting the day, when teachers frequently left one grade with nothing to do while starting with the other grade. Learners in these two classrooms were also seen to have developed skills of working independently, helping each other and working in small groups. This was evident during classroom observation at School A when two learners were helping each other. Teacher-1 supported this by saying:

*I give them independent work while I am busy with the other grade and it works. Sometimes I divide them into smaller groups to help each other.*

Teachers were asked to express their feelings on the teaching strategies they used in their classrooms. However, teachers revealed that the practical side of using teaching strategies such as peer tutoring, self-directed learning and cooperative learning was not possible due to lack of space in their multigrade classrooms. Teachers stated that due to the small tent classrooms it was impossible for them to employ different types of teaching and learning strategies. Another interesting point was that teachers indicated that they needed skills on how to use these strategies. This was put across succinctly by Teacher-3 who stipulated:

*[With confidence] I do not use any group work in my class because my tent is too small and overcrowded for group work. The programme should come and assist some of us!*

In the same vein Teacher-7 lamented:

*My tent is overcrowded and very small. Therefore, I do not use any group strategy.*

The results of this study indicated that multigrade teachers believed that a single method, in this case, that group work was suitable for all the teaching contexts or settings. The results showed that two multigrade teachers used the group work strategy and gave learners different tasks in each group. However, they indicated that they could not control the noise made by the other grade while busy with the other group. This showed that even though two teachers were using group work to teach in multigrade classrooms, they did not know how to manage it. In addition, teachers indicated that it was not easy to choose the same topics for different grades. This could have been caused by the use of a different syllabus for each grade.

### *Perceptions on Classroom Organisation and Management*

Managing a multigrade classroom is difficult because there is more than one grade level in the classroom. Hence, the teacher must be skilled in managing teaching to reduce the amount of 'dead time' during which learners are not productively engaged on tasks. This means that teachers must be aware of different ways of grouping learners, the importance of independent study areas where learners can go when they have finished their work, and approaches to record keeping which are more flexible than those prevalent in the monograde classroom. Learners may need to be taught the value of independent learning, self-directed learning and cooperative learning by involving them in classroom activities. Teacher-2 disclosed:

*When I am busy with Grade 3, I want Grade 2 to be quiet otherwise I will not know how to handle them it will disturb me.*

What emerged from individual and focus group interviews with learners and classroom observations was that teachers faced disciplinary problems in their multigrade classrooms. It was clear that disciplinary problems surfaced, as Grade 2 learners during this study took longer to understand things, which could potentially cause Grade 3 learners and faster learners to become bored. It is the responsibility of the teacher to create a classroom that is conducive to teaching and learning and free from disruptive behaviour. However, teachers in multigrade classrooms in this study indicated that classroom management was particularly problematic for them. They indicated that they did not know how to maintain discipline in their classes as in most cases learners were noisy. It was observed that learners did individual classroom

activities in their exercise books and submitted them at the end of the lesson, which, according to the researcher, took half of the time. In contrast, two teachers at two different schools, Teacher-4 and Teacher-2 had different classroom practices with regard to classroom activities. The learners were given insufficient classroom Maths activities, because they were encouraged to come forward and write the answers on the chalkboard and this caused chaos and wasted time.

It became evident during the observation that the teachers tended to focus more on the Grade 3's while the Grade 2's threw papers and ran around in the class. This situation presented itself across the six schools that formed part of this study. The reason might be that the teachers felt that they needed to meet the competencies required in Grade 3 since they were in their final year of the junior primary phase. It was also observed that Grade 3 learners dominated the class discussions. For example, at School A, C and F Grade 3 learners were more active compared to the Grade 2's. However, the researcher noticed that some Grade 2 learners were very active during lesson activities by responding to the questions meant for Grade 3. Comments were made regarding behavioural or disciplinary problems in all schools. Code switching was common across all six observed classrooms. Learners were observed calling the teachers for help when given a task. It was also observed that teachers had difficulties in meeting the diverse needs of both grades. It was further observed that the work assigned to the grade that the teacher was not working with

was often inadequate or irrelevant to the grade, leaving the one grade with either nothing to do or with unproductive tasks. Teacher-2 lamented:

*Ms you can see it for yourself I have 41 learners in the class. How can I really handle them? This is a tent and it has this number of learners. What is the ministry thinking? I cannot move around no group work and no individual attention. It is not easy.*

It was also observed that these learners did not develop skills to work independently in small groups and therefore continued making noise. Teachers did not have the skills or materials to assign tasks to one grade while busy with the other grade, and learners spent much of their time idling. Teacher-3 comment confirms this:

*The problem is only when you want to start with the other grade. I really do not know what to do with the other grade.*

Teachers at School C and F reported that they were frustrated by overcrowded classrooms. As a result, they could not manage two different grades at the same time. From classroom observations, the researcher found that teachers who had no multigrade experience commonly resorted to giving direct teaching to one grade while the other grade sat idle waiting for their turn with the teacher. It was also observed that Teacher-4 commanded discipline when he commanded learners to be quiet while busy with the other grade. It is safe to conclude that the teacher lacked multigrade skills.

#### *Lack of Resources and Late Delivery of Resources*

The lack of appropriate resources to meet the specific needs of teachers and learners was identified as an obstacle across all visited multigrade schools. It seemed that

inappropriate resources was a concern and impacted negatively on the multigrade learners. The availability of resources was crucial to effective implementation of multigrade teaching. Specific resources to support autonomous learning had been developed, but these had not reached the schools by the time of the research.

However, the lack of resources contributed to negative attitude, poor teaching and frustrations. This was put across succinctly by Teacher-2 who lamented:

*I do not have sufficient resources when it comes to teaching and learning. Are there no materials specific for multigrade teaching? I am, referring to prepared lessons, timetable and workbooks with self-directed activities.*

Teacher-5 argued that the lack of learners' textbooks led to frustrations among learners and poor performance since learners had to share textbooks. Learners, on the other hand, in support of their teachers had negative feelings about the lack of textbooks in their schools. For example, it was observed that Grade 2 learners at School C shared a single Environmental Studies textbook, three learners at School B shared an English textbook, and at School C seven Grade 3 learners shared one Otjiherero textbook. The same scenario was observed at School G. There were only 3 Mathematics textbooks, 5 Environmental Studies textbooks and 3 Otjiherero textbooks. Teacher-3 revealed that the community provided transport so that materials can be collected from the regional office. "...lack of resources such as syllabuses, integrated manuals, textbooks and reading books is a big problem."

Teacher-2 alluded:

*We do not have syllabus in Otjiherero. They are all in English and we have to teach in Otjiherero. We are trying to translate which is difficult because we are not good in English.*

During lesson observations, the lack of resources was evident. This presented itself across all visited schools. Among these materials, the Otjiherero materials which were the first language of these respective schools were not available at the time of the visit. Shortage of textbooks was identified as a problem by both teachers and learners. It was evident from the responses that teachers were struggling with a shortage of resources. Teachers in multigrade classrooms did not have resources such as syllabus, integrated manuals, subject guide policies, textbooks for learners and teachers' guides.

Teacher-6 indicated that he had most of the resources at his disposal to improve the implementation of monograde teaching and not of multigrade teaching. He agreed that most of the monograde materials were delivered at their school:

*We have received most of the materials during the monograde workshop. We have the syllabus, subject policy guide, lesson plans format and examples, integrated manual but these are all for monograde teaching.*

It was observed that teachers spend excessive amounts of time writing instructions and tasks on the chalkboard and providing oral explanations for tasks. Five to six learners shared one book (1:5 or 1:6) or some sat without books. Learners confirmed that they are sharing textbooks in their classrooms. When learners were asked how they felt about sitting in a class without textbooks or sharing textbooks, a learner in focus group 3 at School C had this to say:

*It is not good because we are many using one book.*

Another learner from focus group 6 at School F echoed: *“I want to buy my own books but I do not have money.”* The statements were also confirmed by teachers at School B and School C, who indicated that learners did not have enough textbooks and that made their teaching very difficult. Teacher -2 had the following to say:

*Sometimes it’s only the teacher who has the teacher’s guide and a textbook which makes it difficult to teach learners who sit without textbooks.”* On the same question, Teacher -3 said: *“It frustrates you as a teacher to have three textbooks while you have forty learners in a class.”*

It is evident from the sentiments that the late arrival of materials and insufficient materials frustrated multigrade teachers. They were of the opinion that timeous delivery of books and stationary could improve the implementation of multigrade teaching. An analysis of the data indicated that the following needs to be addressed by stakeholders to improve teaching and learning in rural schools: upgrading of school infrastructure, as well as timeous delivery of teaching and learning support materials.

#### *Poor Infrastructure, Lack of Facilities and Basic Resources*

The main concern for teachers and learners in terms of inadequate infrastructure in multigrade schools and the lack of basic services such as water and sanitation, adversely affected teaching and learning in multigrade classrooms. Poor road conditions, access to multigrade schools, also poor infrastructure of schools and lack of basic resources were major challenges faced by multigrade teachers and learners from rural schools.

The interviewed teachers complained that multigrade schools did not have adequate facilities for the implementation of multigrade teaching. The researcher observed that in all schools visited, resources such as chalkboards, teacher's table, chairs and desks cupboards were not available despite the small number of learners in some schools (ranging from 10-24) in the classrooms. It was also observed that there was a huge shortage of teachers at two schools, namely, School B, and School D. It was evident during classroom observations that learners were sharing chairs, desks, sitting on the ground, standing the whole day, sitting on poles and on broken chairs.

It was unfortunate that learners had completed their classroom tasks writing, with books on their lap. Six teachers were operating in tent classrooms and some teachers reported that during the rainy season water dripped in their classrooms and that affected teaching and learning. Temporary structures were all reported as hampering factors to the implementation of multigrade teaching. For example, teachers reported that during the rainy season teaching and learning was practically impossible. It was evident during classroom observation that the tent classrooms were very hot and learners could not concentrate well from 12h00.

Although the Ministry of Education, Arts and Culture has been providing textbooks and learners' exercise books for all learners in the junior primary phase, other physical facilities like chairs, desks, chalkboards, cupboards and books were inadequate. Sanitation and hygiene in all six of the multigrade schools that were part

of this study were so poor that many had no toilets, drinking water or washing facilities. A worrying factor that came to light during some of the observations and during interviews was the manner in which food was stored and the way food was prepared by the learners themselves.

### *Lack of Teacher Support and Training*

One of the main findings of this study was that the multigrade teachers interviewed did not receive any professional training to teach in a multigrade class context. This was acknowledged by five teachers interviewed. The training that teachers receive at higher institutions of learning prepares them mainly for teaching in a monograde class environment. This led to multigrade teachers feeling unprepared to perform to expectations in the multigrade classes.

The lack of teacher support was one of the major challenges faced by the teachers at these multigrade schools. Currently, there was only one senior education officer for multigrade teachers throughout the Kunene Region. One of the main findings of this study was that teachers interviewed did not receive any professional or proper training to teach in a multigrade class setting. All teachers confirmed this. The training that teachers received on the curriculum reform prepared them mainly for teaching in monograde classrooms. This appeared as problematic because teachers reported that for the last three years they were not receiving sufficient teaching support at the national and regional level. As a result, teachers of multigrade classes were trying to manage multigrade classes on their own by using the trial and error

method. Based on this view, it can be seen that the multigrade teachers were at a disadvantage in two ways. Firstly, the majority were untrained and unqualified as teachers and secondly, none of them had any professional training to teach in a multigrade classroom. It was confirmed by teachers that they were ill-prepared to operate effectively in a multigrade classroom. As a result, teachers showed a negative attitude towards multigrade teaching.

The general feeling of the teachers was that it was always good if multigrade teachers were involved in the development of the curriculum, rather than monograde teachers doing it for them. From these findings teachers felt that there was a need to improve the situation. Hence, they suggested that in-service training on multigrade teaching be introduced.

The knowledge and skills (to teach in a multigrade classroom) gained from a NIED training three years back in 2015, encouraged and empowered some multigrade teachers to enter the multigrade classroom being more confident with the teaching methodology and to teach confidently and effectively. This sentiment was shared by Teacher-5 who mentioned that she applied what she learnt during the NIED workshop three years ago. Her quote illustrates this finding.

*The NIED officer shows us how to plan weekly lessons, how to develop scheme of work, how to differentiate activities of different grades in one class and how to manage multigrade classrooms.*

The most interesting trend which came out among all teachers was the dual opinion of teacher training and support that teachers felt they need as a priority. Teachers emphasised that in-service training was lacking and was necessary to keep the new developments in multigrade teaching on track. They thought that they should be trained on a regular basis rather than three days.

In the previous sub-section, the researcher alluded to the fact that participants indicated that teachers tried to leave the multigrade context as soon as a position at a monograde school became available. Collected data suggest that another possible reason for the above could be the fact that multigrade teachers were not being trained for teaching within this context but, equally important, workshops regarding curriculum changes were being experienced as extremely difficult because the training focused on the monograde context. Multigrade teachers felt that orientation and training with reference to the new curriculum, for example the National Curriculum for Basic Education Policy, did not cater for their realities. This became apparent during individual interviews when Teacher-5 said:

*We receive the training on the new curriculum, but that whole training was more for monograde teaching.*

This was affirmed during classroom observation when teachers developed their lessons, based on monograde lesson plan format and monograde syllabuses. The study found that multigrade teachers at the schools in the study were unsuccessful in modifying the monograde curriculum to the multigrade context. All the teachers in

the study admitted that teaching a monograde curriculum for different grades to learners in one class simultaneously was their greatest challenge. Teacher-1 raised a typical comment: *“The ministry should adjust the monograde curriculum to fit us in multigrade schools.”* Another teacher, Teacher-7 shared the same sentiments on the monograde curriculum: *“Adjust the curriculum, please.”*

The central point from teachers in this study was a call for a better understanding of how to adjust the curriculum to multigrade settings. All teachers acknowledged that the junior primary curriculum was not designed for a multigrade setting. This was a point on which all teachers agreed. The findings in this study also showed that multigrade teachers operate literally alone with little or no support to adapt the monograde curriculum to the multigrade setting. Teachers also indicated that multigrade teachers are treated in the same way as teachers in monograde classes, meaning, for example, that the same resources used in the monograde class are used in the multigrade class. The study further revealed that there was a need for support and training for multigrade teachers.

#### **4.7.3 Perceptions and Views of Teachers and Parents Regarding the Development of the Multigrade Training Programme**

The study sought teachers’ and parents’ understanding of the programme. It emerged from the study that all teachers understood the multigrade training programme. They had no problem providing the meaning of the multigrade programme. The parents

had narrow understanding of the programme. Teachers viewed multigrade programme as an important tool for assisting or supporting multigrade teachers. For example, teachers viewed the multigrade teaching programme as something to empower and support them. Teacher -6 had this to say: *“it is to support and empower us.”* Teacher-4 echoed similar sentiments: *“It is for multigrade teachers’ professional development.”* However, it also came out that some parents had no idea of what the multigrade programme was all about. Among them was a parent from focus group 3 at School C, another parent from focus group 6 at School F and a parent from focus group 7 at School G respectively. A parent from focus group 3 at School C said: *“I’m not sure.”* In the same vein, a parent from focus group 4 at School D added: *“I do not know anything.”* A parent from group 7 at School G said *“I know nothing”*.

One may say that five of the teachers had an understanding of the multigrade programme, except the two teachers and the three parents who did not have an in-depth understanding of the term intervention programme.

#### **a) Preferences of Teachers on how Multigrade Teaching Programme should be Implemented**

This section presents and analyses data on general preferences of teachers with regards to how multigrade teaching programme should be implemented to enhance effective teaching and learning classroom practices. The teachers’ views were

solicited on the venue, time/duration and form of recognition. The interviews held with teachers also supplemented the data on preferences, as teachers were asked to give their suggestions on how multigrade teaching programme should be implemented for multigrade teachers in the Kunene Region. The data on the preferences are discussed below.

The teachers involved in this study supported the introduction of the multigrade teaching programme. They believed that there was a need for a multigrade teaching programme in Namibia. These teachers believed that there was a need to select qualified people to facilitate the training of teachers in this programme. Teachers proposed that the facilitator should have the knowledge and skills to train multigrade teachers. Teachers were also aware of the shortages of experts in this type of skill hence they favoured the use of this programme to address this need.

*We need to be trained on a lot of issues such as lesson planning, multigrade options, how to manage time, how to manage the classroom and how to manage assessment. (Teacher -3)*

In other words, the objective of the programme was to train multigrade teachers on all challenges they face in multigrade classrooms in order to address this gap. One of the teachers, however, had a problem with the development of the programmes of this nature (developed in certain schools only). In this regard Teacher-4 suggested:

*I will suggest that the programme should be rolled out to all rural schools.*

The multigrade teachers involved in this study believed that programmes of this nature should ultimately be used to help teachers from rural and isolated areas to

implement multigrade teaching effectively. Teacher-6 said that the programme should be used to empower and equip multigrade teachers.

When asked on their views and perceptions about the development of the programme designed to assist multigrade teachers in teaching, teachers were excited about the programme. They all saw it as something helpful, useful and informative and they all suggested that the information had to be presented at an appropriate level for them to gain a better understanding of multigrade teaching. In order to gauge the views and perceptions of teachers and parents in this regard, they were asked the following question: What are your views and perceptions on an intervention programme for multigrade teachers? The results show that after sharing the intended benefits of the new intervention program for multigrade teachers, they welcomed it enthusiastically.

Teacher-7 indicated how she started with no knowledge of multigrade teaching and compared that with where she was at the time of the study when she knew better:

*“Hmm! I still remember when I started, I did not know anything but now I can do it. If only the programme can start and help me with classroom management.”*

Similarly, Teacher-1 again said: *“I was empowered through training at the regional office in Opuwo. Now I know how to do it. We need to support our teachers. I think the programme is a good idea.”*

In addition, Teacher 4 reasoned that the programme would equip teachers and learners in multigrade classrooms. This would further equip learners to benefit from

self-directed learning and be able to do things on their own: In this regard Teacher -4 further had this to say; *“Teachers will be skilled and even know how to develop self-directed learners who can work on their own. Again, learners can work in groups and help each other.”* Teacher-7 concurred with Teacher-4 when he said: *“The programme will enhance our self-confidence in teaching multigrade.”*

Another teacher, Teacher -3, was of the view that the Ministry of Education, Arts and Culture should support teachers by introducing a multigrade programme at UNAM.

*I think that the Ministry should empower multigrade teachers by introducing the multigrade teaching programme at UNAM or wherever and appoint principals at all these schools because currently we have one principal who should visit all the schools.*

The issue of modifying multigrade teaching materials was emphasised as well.

Teacher-5 supported: *“I think this programme development will make sure that we have modified materials for teachers from the national curriculum and the syllabus.”*

When these teachers were asked what they thought would be the implication of the multigrade programme on the classroom practice, Teacher-7 had this to say:

*Teachers will know how to keep all grades busy on different activities during the day from eight to twelve. This will help us as teachers to know how to use time on task. Time off task will be something of the past.*

Similarly, Teacher-3 added: *“The programme development will be good for the unqualified teachers like me. Some of us just have Grade 12 and did not go for further studies.”* Teacher -6 in support of this programme said: *“The programme will motivate us because sometimes you feel that you do damage to the learners. We are not trained to teach in multigrade classes. We just help.”* Teacher-6 further indicated

that the development of such a programme would change the negative attitude of multigrade teachers to a positive attitude. He had this to say [with confidence]: *“The programme is a good idea to me. If all multigrade teachers are trained then education will flourish and attitudes of teachers will be positive. In addition, the teachers would be happy and learners will be happy as well because their teachers will teach better.”* Teacher-1 believed that the programme was good in the sense that it would show them how to differentiate activities for two different grades with two different competencies. He stated:

*Wow! The programme development will be good for us. For example, I combine similar topics to save time but I do not know how to separate the activities. Sometimes I give all grades the same activities because I do not know how to separate them. Sometimes the topics are not the same then I really do not know how to teach. The programme will assist me how to do it correctly.*

Multigrade teachers were asked to suggest how the programme should be implemented. Participants suggested how the multigrade teaching programme should be implemented. Teachers suggested that multigrade teaching programme should be properly introduced to schools as well as to multigrade teachers. Multigrade teachers should be made aware of and be taken through all the necessary requirements of the programme. Moreover, 5 teachers stated that teachers should be properly trained on how to implement the programme in schools and again 5 recommended that the regional office and NIED should monitor and support the programme. Other suggestions included involvement of parents in the programme, and lastly, regular visits by the regional office and NIED were also suggested. The parents expressed

the same sentiments with teachers saying they wanted greater participation and involvement of the government in the implementation process of the programme.

#### **b) Preferred Form of Recognition for Attending the Training Programme**

As a source of motivation or incentive and recognition for attending multigrade teaching programme, the present study sought teachers' views on the form of recognition they would like to be offered after the training. They were not given options to choose from, but six opted for being given certificates of participation, while one wanted promotion to be the form of recognition after attending a multigrade teaching training. The findings revealed that teachers emphasised that the certificates should be of significance to them. Teacher-1 asserted:

*As a form of recognition, all multigrade teachers should be given certificates after the multigrade training. This will motivate us as multigrade teachers.*

It is evident from the teacher's responses that giving this recognition, teachers would be motivated and encouraged to tackle any multigrade teaching challenge. Thus, it will change teachers' attitudes in their classroom teaching.

#### **c) Preferred Time for a Training Programme**

The researcher also established from the teachers their preferred length of time for conducting the programme. Results from the study indicate that one teacher would prefer the programme to take place during the school weekdays. From their views, teachers explained that attending the training during the week provides them

opportunities to incorporate new knowledge and skills into their classroom practices immediately. Consequently, such change would result in improved classroom practice and better learning outcomes for the learners. Moreover, five teachers preferred training programme to be during holidays; one teacher preferred it to be during weekends. Teachers had mixed feelings on their preferred length of time and duration of the training programme. For example, Teacher-1 stated: *“This programme should train teachers twice a term from Monday to Friday and not three days as it is done currently.”* On the same question, Teacher-4 had a different view that the programme should not be conducted during the weekend but rather during the week days, from Monday to Friday. *“The programme should not be conducted over weekends. I mean on Saturdays; it can start from Monday to Friday.”* Again, Teacher-7 came up with a different suggestion that the duration of the programme should be longer from a year to two years in order to have a comprehensive multigrade intervention programme. Teacher-7 put it this way: *“We need to be trained for a longer period a year or two years because multigrade teaching has a lot of components such as lesson planning, time management, teaching strategies and classroom management.”* On the same question, Teacher-6 suggested a different preferred length of six months while Teacher-1 preferred three weeks. Teacher-6 indicated: *“This programme should be like a course which we can do for six months on all multigrade challenges especially time management.”* Teacher-1 had this to say: *“We need a workshop for three weeks not three days as it is currently done by NIED.”*

#### **d) Preferred Content of the Training Programme**

The teachers suggested that the training programme had to be suitable and able to address their multigrade teaching needs. Particularly, they mentioned challenges such as lesson planning, time management, timetabling options, teaching strategies and differentiation of activities to be covered very well during the training.

Teachers also requested the programme to be in their context and be at their levels.

Teacher-3 responded:

*If the [programme] can just train us how to make the syllabus suitable to multigrade classroom, I won't have a problem. One thing I want the programme to do is to reduce the curriculum or fix the time, one of the two.*

#### **e) Purpose and Relevance of the Programme**

The researcher found it necessary to further seek information from multigrade teachers regarding reasons for their preferred multigrade teaching training programme purpose and relevance. Their responses were that the main reason for the programme should be to empower them and train them. The purpose of the programme is to equip multigrade teachers with multigrade teaching skills and knowledge. Teachers also indicated that the programme should be relevant to what they do so that they can apply it in their daily classroom practice in their respective schools.

Teachers also felt that the information should be made clear before the programme starts to prevent confusion and misunderstandings. They further stated that the

purpose and objectives of the programme should be well explained to the multigrade teachers. Teacher-1 stated: *“The programme is necessary as long as everything is spelt out well at the onset of the programme development.”* On the same question, the Teacher-7 had this to say: *“The purpose and objectives of the programme should be well explained before the implementation of the programme. It should be well communicated to multigrade teachers.”* Similarly, Teacher-6 concurred with Teacher-7 regarding the usefulness of a programme to multigrade teaching classroom practices. This was his response. *“UNAM or NIED should go around and tell multigrade teachers about the importance or usefulness of the programme before they start implementing it.”*

One of the responses provided by the teachers for this question highlighted the importance of programme development for multigrade teachers. Teachers felt that they should be informed in advance of the topic to be discussed in the programme for them to prepare and develop more insight. This will give them confidence to participate because they felt that they had something to contribute during the training instead of the facilitator alone giving them all the information. This finding resonates with some teachers’ perceptions regarding how teachers learn. It is suggested that teachers can learn better by participating in activities and by sharing their experiences.

Teachers indicated that they needed more support from the Regional Office and NIED regarding multigrade teaching. It was revealed that they needed more support on multigrade issues such as how to plan lessons, how to differentiate activities between two grades, how to use teaching strategies to diverse learners, how to use the timetabling options, how to manage time and manage classrooms.

When it comes to planning lessons, teachers emphasised the value of preparing multigrade lessons. Teachers suggested that if they were lessons to plan during the training and then present them to the other groups they should be given time to go and relook at what they have done wrongly before they present the final version of their lesson plans. In other words, teachers preferred to present the first draft of their lesson plans and get general feedback from their colleagues during the training before they submitted the final version to the facilitator of the training for evaluation.

With reference to the lessons observed, only two out of seven teachers gave in their prepared lessons. During the interview sessions, one of the trained teachers who had prepared lessons stated that he planned lessons daily and passes the plan to a colleague for evaluation. This is probably a good strategy to motivate other teachers to plan their lessons and give the plan to their colleagues to give constructive comments. This is good for quality assurance. Similarly, untrained teachers expressed the same sentiments regarding feedback after receiving training. These teachers felt that they learned better if they first prepare lessons, present and revise

their work on their own once they receive comments/feedback from their colleagues and the facilitator. They suggested that they would have time to do corrections and then resubmit their revised plans to the facilitator for final evaluation. This process sounds like an ideal process; however, there is very limited time at the facilitator's disposal to follow that procedure for all the lessons prepared by teachers to be presented. Facilitators seem to be always pressurised to ensure they finish the workshop, having to cover all components, within three days. It is evident from the comments that multigrade teachers need more support from the Regional Office and NIED, in order to deliver multigrade teaching effectively.

Teachers advised that facilitators should make sure that they cover everything concerning multigrade teaching. They explained that they needed intensive training on multigrade challenges as this would make the training relevant to multigrade teachers. They stated that it would be a waste of time, energy and money if NIED trained them for three days only as it is done currently. Teachers further proposed that the Ministry of Education should introduce training for multigrade teachers and education officers who can specialise in multigrade teaching.

Multigrade teachers in this study also mentioned the importance of using someone who has sound knowledge on the challenges they face with regard to multigrade teaching. Teachers claimed that one aspect that can make them negative is sending people who do not know multigrade challenges teachers faced and without putting

the training in their context. This puts them off and they feel discouraged to continue listening to what facilitators communicate to them.

The teachers further recommended that facilitators should provide guidance to teachers on how to approach different multigrade teaching strategies because that would not only help them teach appropriately but also assist them to manage their time effectively.

#### **4.8 Teacher Training and Support**

Teacher training is critical in multigrade classrooms. However, teacher training is one of the major problems in the Namibian education system, not only for multigrade classes but also for monograde teaching in general. There are not enough teachers trained due to economic reasons.

The need for intensive teacher training came up strongly in interviews, although it was not discussed from exactly the same point of concern and was also not discussed at the same frequency by the seven groups. Newly appointed teachers and unqualified teachers mentioned the need for the training more as compared to the seasoned and qualified teachers. The study revealed that currently, multigrade teachers were expected to manage multigrade challenges on their own and this frustrated them. The teachers suggested that it was necessary for the Ministry of Education, Arts and Culture to appoint a Senior Education Officer responsible for

multigrade teaching at the regional level who can offer support and guidance to multigrade teachers in the Kunene Region.

Detailed interviews with teachers in the multigrade schools established that four of them were underqualified and were never trained in multigrade teaching. They expressed an urgent need for them to be trained, empowered and supported through this programme. They also stated that it was necessary for multigrade teachers to be inducted in multigrade teaching on how to use two different syllabuses for two different grades before starting with any lesson in any multigrade class. They suggested recognition of multigrade teaching and that the government should devise means to support multigrade teachers.

In terms of programme content, teacher training emerged as a dominant theme, however, the seven teachers did not reflect on this in the same manner. A question was asked in order to gauge the teachers' views or opinions regarding the content of the programme. The teachers indicated that the programme was relevant to their work in their multigrade classrooms. In this regard, Teacher-1 had this to say:

*The programme should make sure that lesson planning format for multigrade teaching is different from monograde teaching.*

Teacher-3 elaborated on the difficulty of a weekly overview:

*Weekly overview is a big concern, remove it or come and train us on how to do all these heavy workload. The programme can train us on weekly overview. Lesson planning is difficult because the format used was planned for monograde classroom. The programme should include the whole issue of lesson planning. Good idea any way.*

Teacher-7 showed frustrations and disappointment regarding lack of training:

*... Sometimes you lose hope. You feel demoralised but.... [Silence] the programme will change my attitude and encourage me.*

#### **4.9 Curriculum Adaptation**

The notion of a flexible curriculum came up through the discussions. The teachers also suggested that the curriculum needs to be adapted and adjusted to fit the multigrade context. They further indicated that it should be adapted according to their context. Teacher-2 also recommended a multigrade policy by saying:

*I think we need a multigrade policy or curriculum with our own time allocation and differentiated activities for different grades but the content can be similar with monograde. Maybe we need to see how other neighbouring countries do their programmes. I am just thinking.*

Teachers suggested that the development of the programme should focus on the aspects that would support and empower multigrade teachers in rural areas in the Kunene Region. They further suggested that the programme should be rolled out across all regions. These teachers also suggested that principals, heads of departments, education officers and all the multigrade schools should be part of this programme. It was also revealed by the findings of this study that the development of the programme should be on-going, sustainable and certified. From what the teachers said, it is clear that they wanted to learn what is useful to them especially that which is rooted in their context. They also wanted their needs to be considered. It was also revealed that teachers wanted the programme to be in their natural context and to be

run for a longer period of time. These teachers also appealed for everyone interested in education to support the multigrade education programme.

Another category of suggestions that emerged from this study was the lack of communication between teachers themselves and with the regional office. Teachers indicated that they were not exchanging ideas with other multigrade teachers. This idea was articulated well by Teacher-1 who lamented:

*NIED should come up with what we call platforms for multigrade teachers. Teachers will use this platform to exchange ideas, communicate, and collaborate on multigrade burning issues.*

Another suggestion came out during the interviews on the content of the programme for multigrade training, where all teachers suggested the need for a standardised training manual. One should note that training materials in this study referred to a Training Manual and a Teacher's Manual. The following was what was said by Teacher-3:

*We need multigrade teaching materials in order to use when teaching in the classroom. We need a book to help us when planning multigrade lessons.*

Teachers complained that NIED was not doing enough as far as multigrade material development and support was concerned. The overall impression from the teachers' responses was that they all welcomed the development of a multigrade teaching programme. All multigrade teachers were in general agreement that a programme should be developed because it would improve classroom teaching.

#### **4.10 Summary**

This chapter presented, analysed and interpreted the results of the study. This analysis was done in view of the research questions for this study. The results in this chapter revealed that a teacher training programme was needed for multigrade teachers in order to address the identified challenges multigrade teachers faced. The focus of the programme should be on empowering teachers in various multigrade skills such as lesson planning, time management, teaching and learning strategies, multigrade options and classroom management. It also became evident that knowledgeable facilitators should be appointed to implement the programme. The next chapter deals with the discussion of results.

## **CHAPTER 5**

### **DISCUSSION OF RESULTS**

#### **5.1 Introduction**

In Chapter 4, the researcher presented data gathered from exploring the perceptions of teachers, learners and parents at the seven multigrade primary schools in order to obtain answers to the research questions. Themes that emerged from the findings as presented in chapter 4 provide the basis for this chapter. This chapter presents and discusses the findings of the study. The chapter presents and discusses the perceptions and experiences of teachers, learners and parents regarding multigrade teaching. It further discusses the challenges hindering the implementing of multigrade teaching. It also presents and discusses the perceptions of teachers and parents regarding the development of an intervention programme and how this programme can assist multigrade teachers. This chapter is structured around the three major themes which were linked to the original research questions, as identified in data analysis.

#### **5.2 Research Questions and Themes**

The data collected was analysed in accordance with the four research questions and on the basis of the major themes that emerged from the study as outlined in Chapter 4 and as given in Table 5.

**Table 5: Research Questions and Themes**

RESEARCH QUESTIONS	THEMES AND SUB-THEMES
<p>1. What are Grade 2 and 3 teachers', learners' and parents' perceptions on multigrade teaching in Kunene Region?</p>	<p><b>5.3.1 Participants' perceptions regarding multigrade teaching (THEME 1)</b>            Sub-theme 1: <i>Attitudes of participants towards multigrade teaching</i></p> <p><b>5.3.2 Challenges hindering the implementation of multigrade teaching (THEME 2)</b></p> <p><i>Sub-theme 1: Management</i>            -Overloaded and irrelevant curriculum            -Curriculum adaptation            -Lesson planning workload            -Insufficient time            -Lack of classroom organisation and management</p> <p><i>Sub-theme 2: Teaching and learning strategies</i>            -Peer tutoring            -Whole class teaching            -Differentiation            -Timetabling options</p> <p><i>Sub-theme 3: Lack of resources</i>            -Insufficient teaching and learning materials            -Lack of physical facilities</p> <p><i>Sub-theme 4: Lack of support</i>            -Ministry of Education, Arts and Culture</p>
<p>2. What are the Grade 2 and 3 teachers' and parents' perceptions on the development of an intervention programme for multigrade teaching?</p> <p>3. How can an intervention programme assist multigrade teachers in terms of teaching and learning?</p>	<p><b>5.3.3 Perceptions of teachers and parents regarding multigrade programme development (THEME 3).</b></p> <p>Sub-theme 1: <i>Duration of the programme</i>            Sub-theme 2: <i>Programme relevance</i>            Sub-theme 3: <i>Programme materials</i></p>

### **5.3 Discussion of Findings According to the Research Questions and Themes**

The perceptions of multigrade teachers towards multigrade teaching were generally positive while parents and learners had mixed feelings. Although this study was done in a different environment and context to the other studies, the results of this study concur with the results of many of the other studies such as (Ames, 2004; Joubert, 2005; Haingura, 2014; Kapenda, 2010; Beukes, 2006; MoE, 2011b; Titus, 2004; Little, 2004; 2005).

The findings of this study revealed that diverse and numerous challenges were perceived as hindering the implementation of multigrade teaching. These challenges include attitudes of teachers, learners and parents, overloaded and irrelevant curriculum, planning workload and insufficient time to cover the syllabus, lack of multigrade teaching strategies, lack of skills in classroom organisation and management, timetabling of two different grades, insufficient teaching and learning materials, parental involvement and lack of teacher training (Kapenda, 2010; Haingura, 2014; MoE, 2011b; Titus, 2004). The findings of the MoE (2011b) study, indicates the complications of the language instruction as a challenge which in this study was not the case since Grades 2 and 3 were taught in mother tongue, Otjiherero.

The findings were presented in detail in order to determine whether they had responded to the research problem, the research purpose and research questions and

whether they were consistent with the existing literature. These findings were therefore discussed in detail in themes discussed in the following sections:

### **5.3.1 Participants' Perceptions Regarding Multigrade Teaching (Theme 1)**

One sub-theme that emerged from the concerns on this theme was the attitudes of participants towards multigrade teaching. This sub-theme was discussed in line of the views established in the literature review in Chapter 2.

#### *Sub-theme 1: Attitudes of Participants Towards Multigrade Teaching*

The study found that even though teachers, parents and learners recognised that multigrade teaching was imperative to achieve education for all, each participant had a slightly different perception. This was in line with the study conducted in Bhutan which revealed that teachers, educational leaders, students and parents recognised that multigrade teaching was a necessary strategy required in order for Bhutan to achieve its Universal Primary Education goals (Kucita, Kivunja & Maxwell et al., 2013). The evidence from this study however showed that multigrade teachers were more negative than positive towards multigrade teaching. The findings from this study were in line with (Haingura, 2014; Little, 2005; Mason & Burns, 1995; MoE, 2011b; Suzuki, 2004; Veenman, 1995; Vithanapathirana, 2006) who indicate that multigrade teachers in developing countries generally held negative attitudes towards multigrade teaching.

The findings of MoE (2011b) support this view through the results which revealed that teachers and learners did not like the concept of multigrade teaching. In contrast, a study conducted in Bhutan found that 53% multigrade teachers interviewed were positive about multigrade teaching while 47% were negative (Kucita et al., 2013). In Bhutan study, only one female teacher expressed strong doubts about multigrade teaching. According to extant literature in a study conducted in the Turks and Caicos Islands, multigrade teachers showed negative attitudes towards their professional tasks as multigrade teachers (Little, 2005). Little further indicates that teachers reserved their most negative comments for the burden of lesson planning imposed by the multigrade classroom for multigrade rural schools and restricted opportunities for in-service training. The MoE (2011b) findings that teachers perceived multigrade teaching as tiresome were as well consistent with the findings of this study. This study further found that the negative perception among teachers arose from the lack of training, teaching materials and physical facilities. This was consistent with the MoE (2011b) findings. The findings of this study further established that learners and parents had mixed feelings compared to teachers who had more negative attitudes towards multigrade teaching. The above is contrary, to the NIED research (MoE, 2011b) study which indicates that learners in multigrade classrooms were happy with multigrade teaching and that some learners felt that their teachers assisted and taught them well.

Eventually, there were some Grade 3 learners in this study who felt that they did not get proper attention from their teachers in multigrade classrooms. Reasons given

were that classrooms were too noisy and overcrowded; learners were sitting without doing anything while the teacher was busy with the other grade. This was also consistent with the MoE (2011b) study which found that the most crucial disciplinary problems that teachers experienced during teaching and learning were shouting, fighting, and noise making, standing and walking around as well as talking during lessons. These problems were experienced when the teacher concentrated on one grade and leaving the other with work (Haingura, 2004; MoE, 2011b). Similarly, it was also evident in this study that Grade 2 learners were running around, making noise while the teacher was busy with Grade 3.

Other issues that were perceived to cause negative attitudes among teachers in this study were aspects such as greater workload, insufficient time, lack of pedagogical skills, overcrowded classrooms, lack of classroom organisation and management skills, isolation, illiterate parents and parent support. This finding also supports views highlighted in extant literature, where it is noted that the isolated and isolating conditions of work and the poverty of the communities served by multigrade schools reinforce teachers' negative attitude to the school (Ames, 2004; Little, 2005; MoE, 2011b; Mulkeen & Higgins, 2009).

Similarly, it was also evident in this study that teachers' morale was very low and they had negative attitude due to less frequent supervision from the Ministry of Education, particularly NIED and Regional Office (MoE, 2011b). These findings

were in line with (Joubert, 2005; Titus, 2004) who state that in the available evidence on teachers' attitudes towards multigrade teaching in different parts of Africa, a generally negative perception prevails. In support of this, Brown (2010) finds that there was generally a negative attitude towards multigrade teaching among teachers and school leaders in South Africa. Ironically, the findings of this study also revealed that some teachers were of the opinion that multigrade teaching is one of the options that will allow access to education to all rural learners.

In agreement with available literature, teachers in this study felt unprepared to work in multigrade classrooms. They judge that multigrade learners did not 'get the same' support as in monograde classrooms, and report that they had insufficient teaching materials to support learning in the multigrade classrooms (Little, 2005). However, an action research study undertaken in Sri Lanka noticed a change among multigrade teachers from what was generally a negative perception to a more positive attitude. This could be attributed, in the main; to a realisation that there were strategies that can be used to improve learner achievement outcomes and lessen the teacher's burden of intensive lesson planning for several grades (Vithanapathirana, 2006). It however became evident from the data collected in this study that the isolation and lack of communication from the regional office had become a problem that impacted negatively on teaching and learning in multigrade schools in the Kunene Region (Haingura, MoE, 2011b). The question needed to be asked is whether it was fair for multigrade untrained teachers to work in multigrade

classrooms before they had been exposed to any form of training. The idea was not to have mushrooming multigrade schools but to have effective teaching in multigrade schools. The core of the matter was that, even if these teachers were trained for curriculum reform as junior primary school teachers, they still needed to be trained in multigrade teaching as multigrade teachers through continuous in-service programmes.

The study further revealed that some parents and teachers had a negative attitude in believing that multigrade teaching was inferior to monograde teaching. However, parents were excited that their children had a school to go to instead of sitting at home (Kucita et al., 2013). The negative attitude in the findings could be attributed to the fact that teachers perceive multigrade teaching as inferior and of low standards (Little, 2005). This was consistent with the opinion of MoE (2011b) that the parents opted for not being involved because of the notion that children were not getting enough support and attention from the multigrade teachers. It could happen that certain attitudes such as this existed in particular communities especially in rural areas where teachers and parents were not educated. In order to bring about change there was a need to educate the parents in an attempt to reduce this type of attitude that could be attributed to inferiority complex. By doing this, parents could change their attitudes in relation to multigrade teaching to a great extent. Another strategy which could be helpful was the one whereby parents could be encouraged or motivated to be full partners in the education of their children or in developing good

relations with the parents of these children. Support this finding was that multigrade teaching was inherently inferior to the monograde setting and that unless interventions were made learners would do less in this setting (Cornish, 2006; Titus, 2004; Little, 2005; MoE, 2011; Mason & Burns, 1997).

In line with existing literature, most parents viewed multigrade teaching as a 'waste of time' (MoE, 2011a; MoE, 2011b). In the same vein, multigrade teaching was viewed as low and poor type of schooling (MoE, 2011b; Little, 2005). Furthermore, and also in line with current literature, parents expressed concern for the future of their children studying in multigrade schools (MoE, 2011b). Mixing their children with learners of other grades raised concerns for the parents in this study about the quality of teaching (Bronfenbrenner, 2005). In relation to the above point, Cornish (2006) indicates that biased selection of teachers or learners for multigrade classes had both positive and negative effects. Parents perceived that, when better teachers were taken from monograde and placed in multigrade classes, the selection would have a positive effect on the multigrade class but a negative effect on the monograde classes because, for them, it meant that the 'best' teachers were redeployed from monograde to teach multigrade classes. But the study by Cornish (2006) found that, after realising how multigrade teaching was done, many parents had a change in attitudes, they reported more favourable attitudes after a positive experience with a multigrade class. However, it was important to note that in Cornish's study not all parents were prepared to indicate their support for multigrade classes. On the other

hand, in Titus' (2004) study conducted in //Kharas region in Namibia, it was established that the communities in which multigrade schools were located often did not see the value of education in general.

Another concern raised by the multigrade teachers in this study was that they perceived the Ministry of Education, Arts and Culture as not caring for the teachers needs such as skills in planning lessons for two different grades, managing 40 minutes time for two different grades, differentiating activities, managing two grades at the same time as well as addressing aspects that lead to a negative attitude towards multigrade teaching (Kapenda, 2011; MoE, 2011b). Brown (2010) supports this finding when he indicated that teachers described aspects of their teaching in which they felt unprepared to perform. Brown summarises these aspects under three themes namely, pedagogical needs, curriculum adaptation needs and multigrade classroom management needs. As a result, teachers who were provided with some multigrade training, and had developed some multigrade knowledge and skills, gradually moved to other schools in the region. This finding aligned is to a previous study conducted in Uganda in which it was found that teachers who were trained in multigrade teaching moved to better monograde schools because they could not perform effectively and could not handle the multigrade conditions as stated by Mulkeen and Huggins (2009). Worth mentioning was also the fact that teachers in this study tried their level best in their classrooms even though they were not trained or qualified to teach in multigrade classrooms. However, the lack of training might have impacted negatively on the attitude of teachers and learners towards multigrade teaching.

It furthermore appears that the great workload caused stress among multigrade teachers due to the demands of the monograde curriculum (Kapenda, 2010; MoE, 2011b). The expectations from a multigrade teacher were however the same as that from a monograde teacher; yet the contexts within which they worked were different. These expectations negatively impacted on the multigrade teachers' wellness. Evidence from some case studies indicated that multigrade teachers felt demotivated, stressed and discouraged because of inadequate preparation or training for teaching within the multigrade contexts. In addition, it can also be concluded that the workload was stressful to multigrade teachers and that leads to a feeling of burn-out.

Another finding was that qualified teachers were trained as monograde teachers only and they ended up teaching at multigrade schools where their only way to survive was to adapt to these unfamiliar settings. This is in line with the study conducted in Senegal that found that multigrade teaching was not included in pre-service teacher education courses (Mulkeen & Higgins, 2009). It was revealed that only two teachers attended a multigrade workshop organised by NIED some few years back and which was not effective due to the fact that it was held within a short duration of three days. These teachers further complained that the enormous amount of content that needed to be covered in the very limited timeframe of three days was not sufficient. Given a host of logistical challenges, including the one teacher at a school such as School E run by a single teacher, communication problems, remoteness of

rural schools, only a limited number of teachers managed to attend this multigrade training workshop. These two teachers were of the opinion that, if they received more adequate training, they would be better equipped to manage time, curriculum and multigrade classrooms. This was unlike the situation in Finland, for example, where (Brown, 2010) established that graduates already had a good appreciation of multigrade teaching by the time they were appointed to multigrade schools. The Namibian situation was also unlike the one in Sri Lanka, where student teachers were exposed to the concept of multigrade teaching as a generic training programme in multigrade settings (Vithanapathirana, 2006). In summary, this could be a concern which could hinder the implementation of multigrade teaching and also education in general.

In six classes observed, two teachers had received some multigrade training. Those that had received training generally expressed positive views on multigrade teaching. By contrast, teachers who had not received training tended to express negative views on multigrade teaching. In general, teachers believed that multigrade teaching was more demanding than monograde, in both preparation and delivery. This finding was substantiated in the findings of Little (2005) who indicates that "...for learners to learn effectively in a multigrade environment, teachers need to be well trained and supported, well-resourced and hold positive attitudes towards multigrade teaching (pp. 7-8)".

Comparing the responses given by the teachers, learners and parents, it can be deduced that multigrade teaching was a real challenge causing the negative attitudes among the participants. It must also be reiterated that the teachers interviewed revealed that they were not trained in multigrade teaching, had inadequate resources, poor infrastructure and felt that they were workloaded (Mulkeen & Higgins, 2009).

### **5.3.2: Challenges Hindering the Implementation of Multigrade Teaching**

A challenge in this study referred to any obstacle, problem, barrier or limitation that makes it difficult for multigrade teachers to implement multigrade teaching effectively (Shayi, 2016). The challenges were grouped into four sub-themes namely, Sub-theme 1: management; Sub-theme 2: teaching and learning strategies Sub-theme 3: lack of resources and Sub-theme 4: lack of support.

The findings of this study on the challenges of multigrade teaching were similar in many ways to the findings of previous studies in the same area in different countries (Birch & Lally, 1995; Haingura, 2014; Joubert, 2010; Kapenda, 2010; Little, 2005; MoE, 2011b; Titus, 2004). Research data revealed a range of perceived challenges hindering the implementation of multigrade teaching in the Kunene Region. These included overloaded and irrelevant curriculum, lack of lesson planning and lack of time management, lack of skills in teaching strategies, classroom organisation and management and lack of teacher training and support (Beukes, 2006; Haingura, 2014; Kapenda, 2010; Titus, 2014).

### **Sub-Theme 1: Management**

To manage is to supervise different elements within a school setting (Shayi, 2016). Management in this study referred to managing the lesson preparation and planning, managing the curriculum, time and classroom management which were obstacles to multigrade teachers in this study. It was evident in this study that all teachers found it difficult to manage two different grades in one classroom.

#### *Overloaded and Irrelevant Curriculum*

Findings from this study revealed that the curriculum used in multigrade classrooms was overloaded and it was irrelevant for multigrade teaching. This was consistent with the MoE (2011b) study which found that the use of monograde syllabus in multigrade setting posed challenges to teachers. This according to the study was intensified by the lack of training. The evidence from the individual interviews with teachers, classroom observations as well as document analysis showed that a ‘one size fits all’ curriculum was used (Taole & Mncube, 2012). In other words, a monograde curriculum was used within a multigrade context. Consistent with extant literature, multigrade teachers felt that it was extremely difficult to implement a curriculum they perceived as being designed for the monograde teaching, within the multigrade context (Haingura, 2014; Kapenda, 2010; Kivunja & Wood, 2012). This was confirmed in the study conducted by Haingura (2014) with multigrade teachers in Kavango region. This study revealed that the absence of a national multigrade

curriculum for multigrade teaching was one of the biggest challenges multigrade teachers faced (Haingura, 2014).

This was similar to other studies that indicate that the curriculum used in rural multigrade classrooms was the same as for monograde classrooms (Beukes, 2006; Haingura, 2014; Joubert, 2010; Joubert, 2007; Kapenda, 2010). The study conducted in South Africa found the same results that there was no multigrade curriculum but learners had to live within the confines of the national monograde curriculum (Taole & Mncube, 2012). In this study, during classroom observations, it was observed that teachers prepared two different lessons for both grades which required a lot of effort from the teacher. Again, teachers complained that they wasted a lot of their time to prepare two lessons for two different grades. The findings of MoE (2011b) revealed that some teachers combined the content of the combined grades at the time they developed the lesson plan, while other teachers planned individual grades separately. Commonly, teachers identified similar or common topics before planning the lessons.

In support of the above, evidence from other studies showed that such a curriculum was difficult for the multigrade teachers to use because they tended to require lesson plans to be written for each grade level separately (Juvane, 2005; Little, 2005).

Ames (2004) echoes similar findings which pointed to the fact that using a monograde curriculum in multigrade teaching was not only time consuming, but also

resulted in ineffective teaching. In addition, this confirmed studies by Brown (2008) who stipulates that the application of a monograde syllabus in the multigrade teaching situation created problems for multigrade teaching. He specifically indicates that it placed a heavier workload on teachers, was not structured for multigrade teachers and that it impeded on the capacity of multigrade teachers (Little, 2007). Similarly, Berry (2007) indicates that one of the main obstacles for this kind of teaching in many countries was that the curriculum used was originally designed for the monograde system. This to him entails that the teachers were the ones who adapted the material to fit the multigrade context in addition to their other responsibilities. He further indicated it also led to poor quality teaching, as well as negative attitudes towards multigrade teaching.

### *Curriculum Adaptation*

Teachers involved in this study experienced curriculum adaptation challenges that were not different from the challenges that multigrade teachers elsewhere in the world experienced (Little, 2005). Curriculum adaptation for multigrade teaching was found to be non-existent at the seven schools in the Kunene Region. The findings of MoE (2011b) indicates that teachers also requested the school management and curriculum developers to revise and provide the multigrade syllabus in such a way that different grades in a phase were combined and the basic competencies in the same theme or topic were displayed on one document concurrently instead of

completing the specific grade content and continue with the content of the next grade as it appears in the current syllabus content.

Teachers in this study complained that the curriculum was not adjusted to the needs of the multigrade teachers because they did not know how to do it. According to the MoE (2011b) study findings the current content used in schools was not suitable for multigrade environment and therefore suggested the curriculum to be adapted to suit the multigrade situation. The article prepared by the Education Policy Consortium (2011) supports this idea by stating that the absence of curriculum adaptation in multigrade schools in South Africa may have had something to do with the general lack of acknowledgement of the existence of multigrade teaching in the country, as well as the lack of training in multigrade teaching for teachers, Tsolakidis (2010). Little's (2005) findings echo the same sentiments that the curriculum used was not differentiated, adapted or adjusted to the needs of multigrade classes. Brown (2008) shares the same sentiments in his study in South Africa that multigrade teachers were unsuccessful in adjusting the monograde curriculum to the multigrade context.

Another concern raised by the teachers in this study was that they were isolated and ignored in rural schools with no support on how to adapt the curriculum. This finding is consistent with (Brown, 2010; Joubert, 2007) studies conducted in multigrade schools in South Africa that shows that multigrade teachers operate literally alone, with little or no support to adapt the monograde curriculum to the multigrade

context. Bonzaaier (2009) baseline study conducted in South Africa requested the adaptation of the curriculum to fit the needs of the multigrade school. According to Joubert (2010) no curriculum should be used without adaptation or adjustment. The question that one can put forward was: “How can teachers adjust a monograde curriculum if they were not trained or not supported to adapt it to a multigrade curriculum?.” Tsolakidis (2010) further indicates that teachers faced problems with the volume of work due to the monograde curriculum being used and with the distribution of teaching time. This had a negative impact on the implementation of multigrade teaching if teachers were not trained to adjust a curriculum to their context and the end result was poor rural education. It seemed that multigrade teachers in this study, particularly, Kunene Region, complied with the curriculum as set out by the Ministry of Education, Arts and Culture. It was clear that multigrade teachers used curriculum content which was not relevant to their needs and interests.

The results of this study suggested that policy formulators and curriculum developers should adapt the curriculum to be relevant, in consultation with multigrade teachers. This was in line with what (Brown, 2008; Kapenda, 2010; Little, 2001; Little, 2007) suggest that policy makers needed to plan the curriculum in collaboration with multigrade teachers. During interviews, multigrade teachers reported that policy makers only sent out policies such as the monograde curriculum to multigrade schools for teachers to implement them without providing guidelines on how to do it. Thus, multigrade teachers felt that curriculum developers were mainly concerned

with development of monograde curriculum materials such as syllabuses and ignored adaptation and the implementation in the multigrade classroom. Relevant literature suggested that multigrade teachers need to be taught how to plan across grade levels or how to adjust the monograde curriculum to make it more suitable for their multigrade setting (Kyne, 2005). Based on these findings one may argue that the absence of curriculum adaptation or adjustment was a clear indication that the ministry does not acknowledge multigrade teaching in Namibia.

As far as monograde curriculum implementation in multigrade contexts was concerned, teachers suggested that multigrade teachers needed continuous support. This suggestion was in line with what (Little, 2007) establishes when she indicated that many teachers identified the curriculum as a major constraint; therefore teachers should be continuously supported. Besides monograde curriculum implementation constraints, it seemed that multigrade teachers particularly, newly appointed teachers were not trained in multigrade teaching and that the teacher support structure introduced to improve multigrade teaching had little or no support on multigrade teaching practices. This was in line with Joubert's (2010) and Juvane's (2005) findings that point to the fact that multigrade teachers in South Africa and elsewhere were not prepared for their roles and they struggled with conditions of work.

Judging from the various responses given by teachers in this study, a concerted effort was needed for multigrade teachers to be empowered and trained on how to adjust

the curriculum. This finding was supported by Lingham's (2007) view that for multigrade teachers to be effective in their teaching tasks, they must be better trained. Little (2005, pp. 7-8) indicates that "... [f]or learners to learn effectively in a multigrade environment, teachers need to be well trained and supported, well-resourced and hold positive attitudes towards multigrade teaching". In the same vein, Chandra (2004) emphasises the need for on-going professional development for teachers to be at the forefront of pedagogical techniques.

Some of the responses given revealed that the teachers needed regular in-service training on multigrade teaching. One can deduce that multigrade teaching demands hard work when it comes to curriculum implementation (Little, 2005). But one can never ignore the fact that multigrade teachers were not professionally trained to adapt the curriculum and to teach in multigrade classrooms. It would therefore be better for higher institutions of learning to introduce a module on multigrade teaching in their curriculum. Worthy to mention, the two teachers who went through the NIED three days multigrade training had a better grasp of knowledge, pedagogy skills and classroom practices compared to the untrained teachers. Darling-Hammond (2005) reveals the same results in a study conducted in South Africa that trained teachers have a better grasp of knowledge, pedagogy and classroom practices than untrained teachers.

From the discussion of the collected data for this study, it can be deduced that the teachers viewed multigrade teaching as stressful and difficult and therefore perceived it negatively (Suzuki, 2004). This led to the teachers in this study feeling incompetent, unhappy, unable, hopeless, uninterested and worthless. Teachers in this study were of the opinion that they had not been adequately trained with regard to multigrade teaching curriculum adaptation, were all unqualified, and that too much was expected of them. This is consistent with Taole and Mncube (2012) who indicate that teachers in multigrade schools deal with challenges such as planning, adapting, organising and managing the curriculum. Teachers also stated that the curriculum being used was geared towards monograde teaching and therefore, suggested a multigrade curriculum. Pridmore (2007, p.561) supports that “curriculum materials should be developed with the needs of multigrade teaching in mind”. This was in line with the results of Kapenda (2010) who indicates that it was the responsibility of the curriculum developers and policy makers to ensure that the needs of multigrade teachers were met in full by the production of appropriate curriculum that acknowledges the needs of learners and teachers in multigrade classes. She further suggests that the system also needed to provide as much support and training as possible, which was lacking at the moment.

In addition, Pridmore (2007, p. 561) indicates that curriculum in multigrade schools can be adapted by using four models, namely “quasi-monograde curriculum, differentiated curriculum, multi-year cycles and learner and material centred

curriculum". In *Quasi monograde strategy*, Little (2005) points out that 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, or they may deliberately divide their time unequally, choosing subjects or tasks within subjects that require different levels of teacher contact. During classroom observations, it was evident that most multigrade Grades 2 and 3 teachers used this strategy. In *differentiated curriculum strategy*, the same general topic/theme was covered with all learners. In this arrangement, Vithanapathirana (2006) suggests that learners in each grade group engage in learning tasks appropriate to their level of learning. The findings of this study revealed that Grades 2 and 3 teachers observed found it difficult to use this strategy. Teachers in this study used one competency for both grades without considering the levels of activities for different grades. *Learner-and materials-centred*: The fourth strategy depends more on the learner and the learning materials than on teacher input (Little, 2005). The curriculum was translated into self-study graded learning guides. Learners work through these at their own speed with support from the teacher and structured assessment tasks (Little, 2005). This was not evident in the observed Grades 2 and 3 classes because there were no resources for multigrade teaching and teachers did not have the multigrade knowledge and skills to handle classroom or develop self-study materials from local materials in a cost-effective way. These could include, for example, flash cards, instructional materials and workbooks. An example of the successful use of self-study materials can be seen in the Escuela Nueva programme

in Colombia, where individual learner guides were developed for the six core subjects in their curriculum, and learners could use these guides for learning at their own pace (Little, 2005). Titus (2004) supports this model when he suggested that models for multigrade teaching (as in Colombia and Australia) could be developed with the assistance of UNESCO or the World Bank.

The suggestion by Mason and Burns (1997) takes it for granted that the multigrade teachers knew how to go about adapting the curriculum and planning lessons for effective multigrade teaching. But as observed in this study, it was not a given fact that teachers knew how to do these activities. The evidence from this study pointed out that in multigrade schools teachers operate alone in isolated conditions with little or without support to adapt the monograde curriculum to the multigrade setting (Brown, 2008; Joubert, 2007).

It was also evident during the study that multigrade teachers were treated in the same way as teachers in monograde classrooms, meaning, that the same teaching and learning materials used in the monograde classes were used in multigrade classrooms. These kinds of problems had been mentioned in various extant literatures. Veenman (as cited in Kyne, 2005) established that multigrade teachers tended to be poorly prepared to teach two or more grades at the same time. He went on to state that these teachers tended to use teaching strategies more suited to the

monograde context and that teaching and learning materials were not made available to them.

In Veenman's view, the best way to assist and support teachers in multigrade contexts was through training. This was similar to the view of Vinjevold and Schindler (1997) who point to the advantages of various forms of external support in providing effective multigrade teaching. Similarly, Titus (in Brown, 2010: 54) argues that multigrade teachers needed both internal support received by teachers within the school, and external support from outside the school. This argument concurred with the view of Vinjevold and Schindler (1997 p.18) who suggest that the types of support that were required include community support, national policy support, and support from school principals. It can be inferred from the data that support is very important if multigrade teachers were to implement multigrade teaching effectively.

An interesting dimension that emerged in this study was that teachers used trial and error to find solutions to the problems such as curriculum adaptation or adjustment. This concurred with Joubert and Jordaan (2010) who argue that multigrade teaching in South Africa was not recognised. They further indicated that teacher training programmes and curriculum support programmes have not been developed to support multigrade teachers. Similarly, in Iran, the curriculum used in multigrade schools was the same as for monograde classrooms (Kamel, 2010). This implied that multigrade teachers in Iran comply with the curriculum as set by the government.

### *Lesson Planning Workload*

Another area of contention was the issue of lesson planning workload. According to (Kapenda, 2010; MoE, 2011b) planning is a core element in the teaching of multigrade classes. Available literature suggests that multigrade teachers found planning and preparation for multigrade classes more difficult and time-consuming than that for monograde classes, given that they had to work on multiple plans (Little, 2007). The fact that there was no curriculum adjustment did not mean that there was no curriculum planning in visited schools. In some instances, lesson plans, timetables and schemes of work were some of the common curriculum planning tools used. Even though it was not done correctly, teachers could provide what they had. The evidence from the individual interviews, classroom observations and document analysis showed that lesson planning in multigrade classrooms was a challenge. It was clearly stated that teachers could spend hours or most of their time writing out lesson plans rather than teaching or doing some marking. A common thread running through all multigrade teachers in this study was that teachers expressed their concern that lesson planning had a heavy workload and was viewed as difficult and that multigrade teaching was perceived as a complex strategy to apply (Brown, 2010; Haingura, 2014; Kapenda, 2010; Little, 2005; Mason & Burns, 1997; Veenman, 1995).

Little (2001) supports the finding that a multigrade classroom was labour intensive and required more planning, collaboration, and professional development as

compared to monograde classroom. These results agreed with the views of Cushman (1993) who indicates that lesson planning requires more time and peer collaboration than monograde classroom planning. These findings were supported by the data collected in this study which revealed that multigrade teachers had more work in terms of lesson preparation and planning than their counterparts in monograde classrooms.

Various studies support this finding that multigrade teachers were required to plan more intensively than monograde teachers (Haingura, 2014; MoE, 2011b; Vithanapathirana, 2006). This also confirmed the view from Veenman (1995) who states that multigrade teaching places a greater workload on teachers and requires more preparation time. In the same vein the results of a study conducted by Mulryan-Kyne (2004) indicates similar findings that teachers complained about the excessive amount of preparation and the large amount of paperwork that was demanded of them. The same held true in this study. It was evident during document analysis that multigrade teachers had heavy workloads which hindered planning lessons for two different grades. This challenge was confirmed by the fact that the researcher also found that some teachers taught without lesson plans and could not provide lesson plans when they were asked to do so by the researcher but could only provide them at a later stage. One may deduce that this would actually lead to ineffective multigrade teaching. This may also suggest that the teachers may have developed the lesson plan particularly for the researcher as opposed to doing so for the lesson.

Berry (2007) argues that the fact that teachers do not always have lesson plans is an issue of concern for teaching practice in multigrade classes. One may argue that the lack of lesson plans put teachers in difficult positions when the researcher was around because one could see that the teachers did not teach effectively.

It came out clearly in this study that lesson planning was a problem because some teachers put together two different lesson plans while others produced one lesson plan for both grades. This is in line with MoE (2011b) findings that although some teachers preferred one lesson preparation for the combined grades some liked to have individual lesson plans for each grade so that they could be flexible in case the lesson for a specific grade was not completed. The main concern, however, was that those who put together one lesson plan for both grades only used competencies for one grade. This result is consistent with Kapenda's (2010) findings that multigrade teachers in Mathematics classrooms used the basic competencies for the lowest grade and extended these to cater for the higher grade. What also emerged from this finding was that some teachers did not have any lesson plan and this indicated that they did not know how to do it. The study also revealed that teachers of multigrade classes tended to be poorly prepared to teach two or more grades at the same time; which indicates a lack of preparedness of teachers for multigrade settings (Kyne, 2005; Lingam, 2007; Little, 2005). Evidence from this study indicated that lesson planning was demanding in terms of workload, strenuous and time consuming. The study indicated that lesson planning was not only time consuming but might also resulted

in ineffective teaching if it was not done well. This finding is consistent with Berry (2007) who says the absence of lesson planning can potentially lead to ineffective teaching.

### *Insufficient Time*

One of the challenges facing multigrade teachers was insufficient time allocated to teaching (MoE, 2011b). This is consistent with the findings of this study that 40 minutes' time allocation was not enough for a multigrade lesson because a teacher had two grades at the same time. The argument that needed to be advanced here was that it was unfair, unlike monograde lessons that had 40 minutes for one grade. One may also argue that due to this limited teaching time in multigrade settings, learners who struggled often received inadequate attention, resulting in inadequate acquisition of skills and knowledge. The concern on insufficient time in this study was supported by the MoE (2011a; 2011b) findings that indicate that there were strong concerns about the allocation of time to the multigrade lessons. The curriculum allocates 40 minutes a period and each subject was given a specific number of periods to be taught in each grade. In multigrade teaching 40 minutes were shared between two grades. The situation was worsened when teacher taught a combination of more than two grades. This had caused problems in completing the work for individual syllabus for each grade. In addition to that, teachers indicated the serious need for training on various issues pertaining to multigrade teaching (MoE, 2011b).

The findings of this study have also clearly shown that teachers did not have sufficient time to spend on each grade in each subject area at the same time (MoE, 2011b). Teaching two grades in the time allotted to monograde teachers that teach one grade, was considered as unfair treatment and a significant problem by all the multigrade teachers. Teachers found it difficult to deal with in depth subject content because of time pressures and curriculum overload with seven subjects to cover across two grades.

It was found that learners often had to work on their own for extended periods and did not have sufficient interaction with their teachers. Thus, learner support was not adequate in multigrade classrooms due to time constraints. This is in line with Little (2005) findings that there was less time for individual learner needs and for remediation. There was an attempt to use the reading period for learner support, which seemed a good idea. Teachers found it difficult to monitor the work of learners during independent work to give them assistance. This means, that providing support to learners who needed individual attention presented considerable difficulty to many multigrade teachers. Therefore, one teacher tended to use peer tutoring as a solution. Poor use of time by teachers was common during classroom observations. This referred to the numerous pauses, short periods of silence in which no communication at all could be observed by the researcher (Haingura, 2014).

### *Lack of Classroom Organisation and Management Skills*

Another challenge identified in this study had to do with the organisation and management of multigrade classrooms. Classroom organisation and management is the core element of multigrade teaching (Kapenda, 2010). The finding of this study revealed that discipline and classroom management were major challenges hindering multigrade classrooms. It became apparent during classroom observations that teachers were ill-equipped to handle two different grades in one classroom.

Similarly, in a study conducted in Gambia, Senegal and Uganda on multigrade teaching in Sub-Saharan Africa, it was established that multigrade teachers were untrained and had not received any specific training on multigrade teaching, particularly on classroom management (Brown, 2009; Mulkeen & Higgins, 2009; Haingura, 2014). This is in line with Kyne (2005) who indicates that a generally acknowledged point made by multigrade practitioners was that the multigrade classroom was more of a challenge than the monograde classroom. This was not surprising given that multigrade teachers in this study were unqualified and did not receive any professional training to manage multigrade classrooms. The results of this study were consistent with Juvane (2005) who believes that managing a multigrade classroom was difficult because there was more than one grade level in the classroom and that multigrade teachers were untrained and unqualified to teach in a multigrade classroom. He further indicates that a multigrade teacher must be skilled in managing teaching to reduce the amount of dead time during which learners were

not productively engaged on tasks. In other words, according to Kyne (2005) teachers should know the different ways of grouping learners in multigrade classrooms, the importance of independent study areas where learners can go when they have finished their work.

Time management was also observed to be one of the biggest challenges in managing multigrade classrooms. During classroom observation, it became evident that three of the teachers went beyond the prescribed forty minutes per lesson in order to have more time for teaching both grades. This had a negative impact for some subjects on the timetable, as it resulted in certain subjects not being allocated enough teaching time or taking time from those subjects considered to be less essential and certain subjects not being taught at all. This was evident during classroom observations in subjects such as Physical Education and Art. The results of this study were consistent with Haingura's (2014) findings in a study conducted in the Kavango region on an investigation on multigrade teaching that certain subjects were not allocated enough teaching time and that certain subjects were not taught at all.

Placing learners from several grades in one classroom does not; in itself create a successful multigrade classroom (MoE, 2011b; Bronfenbrenner, 2005). However, multigrade teaching requires spacious classrooms so that learners can move and interact freely without disturbing one another. The classroom should also be

protected from wind and rain. On the contrary, learners in this study were observed learning in small tents where the teacher could not move freely and where wind and rain could not be prevented from affecting learners (Haingura, 2014).

The common approach to teaching the curriculum in multigrade classes in many South African Primary schools was for teachers to teach each grade separately; a kind of quasi-monograde approach which involved the teacher hop-scotching between the grade groups (Brown, 2008). These findings were supported in the data collected in this study which revealed that teachers were teaching one grade at a time while the other grade was idling, wasting time and making noise (Kapenda, 2010; MoE, 2011b). From classroom observations, it was clear that almost all teachers used this strategy when they experienced pedagogical difficulties. This is consistent with the findings of the study conducted by Mulkeen and Higgins (2009) that the work assigned to the group the teacher was not working with was often inadequate or irrelevant.

It is clear that learners in multigrade schools did not get what they were supposed to get as compared to other learners in monograde schools. This could serve as an explanation of why learners were negative towards multigrade teaching. This justified what was highlighted in Joubert (2009) that, of the different curriculum adaptation strategies proposed in extant literature, the quasi-monograde was the least effective, as it involves a high degree of ‘dead time’, as a result of the grade-groups

‘switching’ by the teachers. It further justifies what was highlighted in Little (2005) that for multigrade teachers to teach effectively, they need to be well trained; well-resourced and feel positive towards multigrade teaching. It might be presumed that if the multigrade teachers received adequate training to teach in multigrade schools, they would have been in a better position to come up with appropriate strategies on how to handle the two different grades in one classroom (Kyne, 2005). On the other hand, research indicates that learners have lower time-on-task during independent seatwork than during active instruction by the teacher (Kyne, 2005) and suggests that at least some learners in multigrade classrooms may be unoccupied for much of the school day.

It was observed at one point that the two teachers could manage both grades simultaneously by giving them meaningful activities or enrichment activities. This observation was consistent with Kapenda’s findings (2010) that revealed that teachers have different ways of teaching Mathematics in multigrade classrooms. Some teachers seemed to have used “quasi-monograde”, (Little, 2004) because they alternated in teaching two grades. She further adds that this strategy may be used very effectively if it was carefully planned with all learners occupied meaningfully all the time with limited disturbances. Again, her study revealed that some teachers used the “whole class approach” (Birch & Lally, 1995) while others used a combination of “quasi-monograde” and whole class approach to handle their multigrade classes. Evidence from this study showed that the teachers were teaching

two levels separately, e.g. teaching one level and then moving to the other level. During this transition, the one group was supposed to either sit silently so that the other group could not be disturbed or they needed to be engaged in some silent reading activity. The next section discussed the second theme on teaching and learning strategies employed in multigrade classrooms.

### **Sub-theme 2: Teaching and Learning Strategies**

This sub-section focused on practices, particularly in relation to classroom and teaching and learning strategies.

#### *Peer Tutoring*

The study revealed that only two out of the six teachers observed could demonstrate teaching qualities which were associated with good teaching practices. For example, they used peer tutoring and the small group strategy where older learners assisted younger ones (Berry, 2007; MoE, 2011b). This finding seemed to suggest that multigrade teachers sometimes used peer tutoring in teaching practices in the classrooms. This finding resonated with Vygotsky theory (1978) which stipulates that learners learn through contact with other children with the aid of more competent peers. In Lingman's view, the implementation of pedagogical techniques such as peer tutoring, small group teaching and independent study helped multigrade learners to find learning meaningful. Although five teachers indicated that they always used peer tutoring in their classrooms, the classroom observations indicated

otherwise. Little (2005) supports this finding when she preferred peer tutoring and cooperative strategies in multigrade classrooms. Kyne (2005) found similar strategies to be important in a multigrade classroom, namely, peer teaching in which learners acted as teachers for each other, cooperative group work where learners were engaged in collaborative tasks and individualised learning which involve the learner in self-study. Effective multigrade teaching involves the use of a range of teaching strategies in the multigrade classroom, which the teacher must be prepared to use (Lingman, 2007, Little (2005)).

### *Whole Class Teaching*

Whole class teaching in this study emerged as the common strategy used by teachers during classroom practices. The findings agreed with the views of (Mason & Burns, 1996; Mulryan-Kyne, 2005) that indicate that whole class teaching was used primarily as an introduction to lessons or revision of work already covered which also supported previous findings. It was observed that one pattern was used when teachers asked learners to say words after him as a group (chorus) and this was repeated several times in all observed classrooms (Haingura, 2014). It was also observed that teachers used questioning techniques where the whole class gave the answer and teacher requested them to repeat the answer several times. One could see that learners did not know the correct answers to the questions and this to me limited their understanding. While whole class teaching was used to a much lesser degree than monograde teaching, it was used to a greater degree than the findings in studies

carried out by Kapenda (2010), who reported that multigrade teachers seldom used whole class teaching during Mathematics instruction.

### *Differentiation*

It became clear from the classroom observations that teachers except Teacher-1 at School A, were not skilled in differentiating activities based on the grade competencies as three teachers taught the same topics to all of the learners at the same time, without differentiating the level of activities to make them appropriate to the respective achievement levels of learners. The study interviews supported the classroom observation when it revealed that teachers found it difficult to teach two different grades, different topics and themes, basic competencies but rather teaching both grades at the same time and using the same pedagogical and methodological strategies for both grades. It was further observed that teachers were not able to use a variety of teaching strategies and resources to enhance learning.

One can conclude that the lack of teaching and learning strategies skills impede the implementation of multigrade teaching. The study conducted in South Africa (Joubert, 2010; Shayi, 2016) further support this finding. This was a clear indication that multigrade teachers lacked the skills of differentiated teaching strategies to teach in a multigrade classroom. This correlates with other studies that indicate, for example, that multigrade teachers in South Africa experienced difficulties in using differentiated teaching strategies to teach writing skills to the Grade 2 and Grade 3

learners and also to teach them separately (Joubert, 2009). In contrast, Teacher-1 at School A demonstrated a wealth of knowledge on how to teach by using differentiated teaching in a multigrade classroom. Teacher-1 further used a variety of pedagogical and methodological strategies to teach his learners Mathematics. However, he did not always introduce differentiated teaching activities. This was perhaps as a result of the limited classroom space. This meant that the teacher addressed Mathematics issues as a whole class activity rather than an individual or grade group.

Having the Grade 3 learners sit through lessons while idling and using information they had already covered in Grade 2 was viewed by the researcher as time wasting, but it appeared that the repetition of Grade 2 information benefited some of the Grade 3 learners (Kapenda, 2010). The researcher noticed two particular Grade 3 learners at School D who seemed to benefit in the Mathematics exercise which they were given to do. They were nodding their heads and silently repeated what the teacher said, indicating that this was a learning experience for these particular learners.

One can conclude that the newly appointed multigrade teachers used their monograde pedagogical knowledge to handle and control multigrade classes and that they did not receive any help on using the monograde syllabuses to plan and teach multigrade classes. This was possibly because none of the observed teachers were

trained or qualified to teach in a multigrade classroom. However, most of the teachers were able to identify the common topics in the syllabuses and teach them simultaneously without differentiating the activities according to their levels. The study conducted in Senegal supports this finding that teachers often had difficulties meeting the diverse needs of their learners (Mulkeen & Higgins, 2009).

### *Timetabling Options*

Classroom observations revealed that all teachers adopted the common timetable as the only option of teaching multigrade classes. This was consistent with the MoE (2011b) study that found that most teachers opted for one component of organisational approach namely, a common timetable during teaching because it was easy to teach one subject to all learners at the same time. The study further revealed teachers did not use subject staggering and subject grouping. The fact that they were not using other options which were available for use in teaching multigrade classes, such as the subject grouping, subject staggering (Kapenda, 2010; MoE, 2007; Little, 2004) indicate that they seemed not to know how effective these options were in multigrade classrooms or they were not aware of their existence. The study conducted by MoE (2011) recommended that multigrade training needed to reemphasise multigrade teaching with regard to teaching approaches, such as subject grouping, subject staggering, which teachers did not use during classroom observations, including how to assess learners in multigrade settings. Little (2001)

highlight three important approaches of timetabling as a common timetable, subject stagger option and subject grouping.

From observations, it became clear that some teachers demonstrated their ability to manage two grades at the same time and to keep both grades working on meaningful tasks. One could not see learners idling or witness dead time or wastage of time in these classrooms which was more visible in untrained and unqualified teachers' classrooms (MoE, 2011b). Classroom observation was consistent with what was revealed during the interviews that teachers did not know how to use the other multigrade options. The beginning of a lesson and its conclusion went well in some cases because it was done using the whole teaching approach. But in some cases, you could see that there was no introduction and conclusion for one grade. In some cases, the teacher moved from one grade to another but in other cases, the teacher stood in one position for that specific grade.

### **Sub-Theme 3: Lack of Resources**

#### *Insufficient Teaching and Learning Materials*

This sub-theme was divided into sub-categories as shown below. In this study, the word “resource” referred to the materials needed to facilitate and assist teaching in multigrade schools. Lack of resources was discussed on the basis of resource allocation, resource availability and resource suitability. In the context of this study, resource allocation referred to the distribution of physical facilities, equipment and

textbooks, including food as well as human and financial resources to multigrade schools. For example, from observations conducted, it became clear that all multigrade classrooms observed were not appealing because posters on the walls were hand-drawn and sometimes materials displayed were not suitable for a specific grade (Haingura, 2014; Kapenda, 2010). Data obtained from classroom observations were consistent with what was revealed during the interviews namely that sometimes unsuitable materials were delivered to schools. It is evident from this information that multigrade teachers lacked support in numerous areas. This was consistent with Mulryan-Kyne's (2007) conclusion that multigrade schools were poorly resourced and were generally perceived negatively by teachers, government officials, learners and parents.

Drawing from the findings of this study the researcher noticed that in all the visited multigrade schools there were insufficient teaching and learning materials such as textbooks, exercise books and workbooks for learners. This was consistent with the findings of the study conducted in Zambia that multigrade schools suffered from shortage of teaching and learning materials, desks, textbooks, chalkboards and even chalks (Kivunja & Wood, 2012). Document analysis also revealed similar findings in other studies carried out in other places (Haingura, 2014). In this study, it was clearly visible in the observed classrooms as not all learners were able to do their class activities or finish the given activity on time because they had to wait for others to finish so they could use the same pen or pencil. A similar challenge was raised in

different studies conducted on multigrade teaching. For example, Mulryan-Kyne (2004) also discovered that textbooks were inadequate in multigrade schools and that these materials did not cater for the needs of multigrade learners. This correlated with other studies that indicate that such materials were ineffective in multigrade teaching (Little, 2005). As part of the curriculum reform, materials for junior primary were developed and distributed, but these materials had not reached the rural multigrade schools in the Kunene Region at the time of this study. Haingura (2014) in his study conducted in Rundu multigrade schools in the Kavango region support this finding that Grade 2 learners shared an Environmental Studies textbook, three learners shared an English textbook, and three learners shared a Rumanyo textbook. The shortage of textbooks was also evident during classroom observations in this study where learners sat without books or six to ten learners shared one textbook. This meant that the learner-textbook ratio ranged from 1 textbook per 6 learners to 1 textbook per 10 learners. It appeared that the resourcing of multigrade schools was a great concern because resourcing in the multigrade schools cannot be similar to the resourcing of a monograde school (Haingura, 2014). In addition, the challenge in the shortages of desks and chairs including chalkboards and teachers' tables was also something that had to be dealt with. For example, it was revealed by a teacher in the study conducted by MoE (2011b) that the teacher divided the chalk board into two parts. During classroom observations, it was shocking and surprising to find some torn tents including small tents which could not accommodate the total number of

learners in the specific grades. The similar situation was found in Haingura's (2014) study that learners were sitting on poles in torn tent classrooms.

The availability of appropriate teaching and learning materials is important in all kinds of education settings. But in multigrade contexts, the importance of teaching and learning materials is even greater as learners spend most of their time working without direct teacher-instruction (Mulkeen & Huggins, 2009). Good and Brophy (2003) support this view when they suggest that when a multigrade teacher is engaged with a specific grade group, the remaining learners need resources to facilitate independent and productive work. This assertion was also noticed as being true in this study. It also became evident that the resourcing of multigrade schools was problematic because financial resourcing to these schools was done in a similar manner as to monograde schools. Equally important, teachers and learners felt neglected due to the fact that there was no proper provision of facilities for learners. This concurred with the sentiments of Jordaan and Joubert (2007) and Little (2006) pertaining to infrastructure and resources being problematic within the multigrade context and ineffective in a multigrade classroom. Given this scenario, Cornish (2006) concludes that it is problematic to retain teachers within the multigrade system due to the many challenges that have to be overcome such as provision of materials. It is interesting to note that, despite the challenges multigrade teachers face, most of these teachers tried their level best to make sure that teaching takes place in multigrade classrooms. Notwithstanding the fact that they experienced all

these mentioned challenges ranging from curriculum workload to poor physical facilities, some of these teachers were very creative and innovative.

### *Lack of Physical Facilities*

Another perceived challenge for multigrade teaching identified in this study was the severe lack of physical facilities such as classroom furniture and equipment. This was supported by the MoE (2011b) findings that indicate that there was evidence of shortage of classroom space and that teachers taught under the shade of trees. From the findings of this study, the lack of physical facilities featured strongly in the interviews with teachers and learners. This was evident during classroom observations because some classrooms did not have enough chairs, cupboards, notice boards and desks for learners. In some classrooms some chairs were broken; some learners shared poles, which they used to sit on (Haingura, 2014). Added to that, there were no tables for teachers, and small chalkboards for both grades were divided by drawing a line in between or chalkboards at School B which were used as desks for learners to write on. From the observations carried out in this study, it was realised that the insufficient physical facilities seemed to hinder the implementation of multigrade teaching. Most multigrade teaching classrooms were physically poor and overcrowded, with up to 41 learners in one combined class. For example, chalkboards used were not appropriate for multigrade classrooms. This was consistent with the findings of (Haingura, 2014; MoE, 2011a; MoE, 2011b) that found that there was evidence regarding the shortage of classroom space and that

teachers specifically in remote areas taught under the trees. The study also found that learners had limited space and could hardly move around since there was not enough space to support the teaching and learning process and accommodate reading corners.

This finding resonated with previous studies, which indicates that the lack of resources ranging from fixed seating and physical structures to basic health facilities such as toilets, were also experienced in schools under this study (Haingura, 2014; Kapenda, 2010). For example, the Kapenda study revealed that small chalkboards were used. It became clear from the classroom observations that teachers lacked classrooms; therefore, one could conclude that this led to some of the negative attitudes depicted amongst some teachers towards multigrade teaching. The chalkboards were used during the lessons to write summaries of the discussed topics and class activities. Teachers also asked the learners to practice by writing answers on the chalkboard which was an ineffective strategy for teaching multigrade classes. It was also observed that some teachers had very few sentences written on the chalkboard for example, Teacher 7 at School G only used the chalkboard when she was explaining but did not write a summary on it because the chalkboard was too small.

It was also observed that there was not enough time for learners to copy the short summaries on the chalkboard. One may argue that Grade 2 and 3 learners are very

young to learn from short summaries written on the chalkboard. The use of the traditional seating arrangement could be suitable in a multigrade class but learners did not have chairs to sit on, hence they all shared a single pole. It was also observed that the distribution of exercise books and collection of pencils and rulers from the teacher also wasted time and interrupted lessons (Haingura, 2014; Kapenda, 2010). From the interview responses one could infer that teachers were not interested and they were frustrated by the conditions within which they worked. One may deduce that these teachers used the same content for both grades in some classrooms because of shortages of chalkboards.

Teachers disclosed that rural multigrade schools were neglected in terms of resources and physical facilities as compared to rural monograde schools. Similarly, Joubert (2010) also reports on the problem of a lack of facilities and teaching materials, especially in rural areas in Western Cape in South Africa. The end result was a lack of interest and self-confidence of the teachers and their learners. But still, it cannot be used as an excuse for not improving the current deplorable situation.

#### **Sub-Theme 4: Lack of Support**

##### *Ministry of Education, Arts and Culture*

The matter of the lack support in relation to the schools in this study was discussed with the Ministry of Education, Arts and Culture including NIED, Kunene Education Ministry of Education, Arts and Culture including NIED Regional Office. This

support services was related to the allocation of resources such as teaching and learning materials, provision of teacher training, physical resources and infrastructure. This also included the lack of support from the regional office which was depicted as not assisting the newly appointed multigrade teachers. The position of NIED, and the lack of workshops from NIED and no apparent support from the government and in particular, the Ministry of Education, Arts and Culture was also discussed with these entities. The findings of the MoE (2011b) study revealed that there was a high demand of continuous development training in multigrade teaching and great emphasis on the inclusion of multigrade training during the pre-service teacher training. Teachers also requested the curriculum developers to revise and provide a multigrade syllabus in such a way that different grades in a phase were combined and the competencies on the same topic were displayed on one document concurrently instead of completing the specific grade content and continuing with the content of the next grade as it appears in the current syllabus (MoE, 2011b).

Drawing from the findings of this study, teachers felt, pedagogically ill-equipped to operate effectively in a multigrade teaching and learning environment due to lack of support (Haingura, 2014). These findings correlated with existing literature that several studies indicated as a tendency to ignore the needs of multigrade schools by government administrators at both regional and national level (Beukes, 2006, Joubert, 2009, Kapenda, 2010, Little, 2005). For example, Potgieter (2010) indicates that multigrade schools account for 30% of all primary schools in South Africa,

however, in most cases; the teachers at these schools were neither qualified nor able to provide quality education to their learners.

Multigrade teachers in this study perceived the lack of teaching support as one of the major challenges they faced since they lacked sufficient multigrade teaching pedagogical knowledge. This finding related to challenges picked up in some previous studies, which note that there was no provision of advisory services to multigrade teachers at the regional offices throughout Namibia (Haingura, 2014). He further indicates that this, in itself, was a disadvantage to the multigrade teachers (Haingura, 2014).

One of the concerns raised by teachers was the lack of multigrade policy. This was consistent with Haingura (2014) who indicated that there was need for a clear policy about multigrade schooling to enable the leadership and managers at all educational levels to cope with the quest for direction. This concern was consistent with the document analysis which showed the lack of policy for multigrade teaching.

Consistent with the findings of this study also was a study conducted in India by Blum and Diwan (2007) which revealed that there was no policy on small schools or multigrade teaching. In support of this, Joubert (2007) found that national governments in Africa required all teaching to follow the national curriculum but the application of a monograde teaching of national curriculum in the multigrade teaching situation, according to him, was creating problems for multigrade teachers.

This finding implied that multigrade teachers needed to be supported in ways to implement the programme effectively. In an article by Mulryan-Kyne (2007) it was stated that “education support to multigrade teachers was a necessity in multigrade schools, for effective quality education. The MoE (2011b) findings reveal that according to teachers’ views, they needed lesson demonstrations in a normal classroom setting where the best practice could be experienced. To them practical demonstration in a typical multigrade environment was better than theoretical presentations.

The findings of this study also revealed that the support needed by multigrade schools vary. The results of this study confirmed the findings discussed in the literature review above. In support of this, Aikman and Pridmore (2001) maintain that support for multigrade teachers must involve an initial teacher training programme, in-service training as well as continuous professional support. Pridmore (2007) further argue that teachers need to be given support to deal with everyday problems in their classrooms. Support should include networking whereby platforms are created for multigrade teachers to communicate and share ideas on pertinent multigrade teaching issues (Titus, 2004). The relevancy of this argument applied to this study because teachers in this study indicated that they did not only need physical and material support but also moral and emotional support and that they did not have any platform where they could share ideas or concerns with other multigrade teachers. Boonzaaier’s (2008) study proposes that attention must be given

to sustainable in-service training for teachers currently teaching at multigrade schools to enable them to cope with the challenges they are struggling with. He further suggests that training courses should address the knowledge, understanding and skills needed to teach successfully in a rural multigrade setting. The same should apply to the officials (including the principals) who have to support these schools and teachers to manage this challenge. One may deduce that the teachers' negative attitude towards multigrade teaching cannot only be attributed to the remoteness of the schools, but also to the lack of support, resources (physical and materials), isolation, and government attitudes towards multigrade teaching. It came out clearly that multigrade schools were ignored and neglected and therefore perceived negatively. This was evident during individual interviews when teachers indicated that they were isolated, frustrated and neglected (Haingura, 2014; Kapenda, 2010; Titus, 2014).

One can also argue that this support can also be provided by other institutions and NGO's in the form of the improvement of school infrastructure by way of building classrooms, digging boreholes, providing food to learners in support of school feeding programmes (Haingura, 2014). A similar argument was made by Brown (2010) that the success of multigrade teaching does not depend on teachers only, but also on the support of other role players such as curriculum advisers, circuit managers, and the regional office. Vinjevoll and Schindler (1997) make a similar observation when they maintained that the types of support that were required in

multigrade teaching include community support, local or regional government support, national policy support and support from school principals. According to Shayi (2016) this can be achieved by paying regular school visits to multigrade schools for quality assurance. Taole and Mncube (2012) argue that lack of support for the teachers was the main impediment to implement multigrade teaching effectively and successfully. They further stated that it was important for the government to provide support for multigrade teaching in order for the teachers to provide education which was relevant to multigrade schools. Put simply, if lack of support in multigrade schools persists then it is likely that parents will keep on sending their children to other better monograde schools. Consequently, the enrolment at the multigrade schools will drop and these schools will remain small with few learners.

According to a study conducted by Beukes (2006) on multigrade teaching in the Khomas region, it was established that educational stakeholders such as policy makers, planners and professional support staff had little knowledge about the needs of multigrade teaching. Consequently, when they develop curriculum and policies they did not consider multigrade teaching. This was consistent with Titus (2004) who reports that school leaders need to be trained as well.

It was evident from this study that learners also needed support and not only teachers. In support of this nature, Shayi (2006) states that there was a silence of

research on the support that could be provided to learners in multigrade schools. Shayi (2006) further indicates that learners in multigrade schools also needed to be provided with various forms of support. Shayi (2006) goes on to mention that learners could be provided with suitable workbooks, textbooks and self-help kits and libraries, as well as well-functioning equipment to suit the needs of multigrade classrooms. It also came out that the literacy levels of parents also made it difficult for them to assist or support their children and the teachers. According to the teachers, even if the parents were prepared to provide assistance to their children, their educational level made it difficult or impossible for them as parents to do so. Impressively, the parents in the Kunene Region were able to provide support to schools by donating bags of maize and meat through the conservancy. In view of this understanding Vinjevold and Schindler (1997) assert that local governments in Indonesia, for example, provide funds to encourage community participation in rural schools, and multigrade schools in India were encouraged to foster closer school community ties. In other words, communities in India realised that in order for multigrade schools to succeed they should offer their full support. These were done through providing funds, teaching materials and human resources to multigrade schools (Vinjevold & Schindler, 1997). Titus (2004) argues that the communities in which multigrade schools were located often did not see the value of education, and often speak a different language from the 'official' one of the school. For this reason, (Brown, 2010) recommends the involvement of the community in the affairs of the

school should be seen as a strategy to serve as a resource, or that the school might extend the curriculum out into the community.

In support of this, Star and White (2008, p. 3) state that “...principals in multigrade schools are expected to comply and respond in the same way as principals of monograde schools. One may also conclude that the way in which the cascade model has been used in multigrade schools, is affecting multigrade teaching negatively. This was consistent with what MoE (2011b) recommends that the NIED training model should deviate from traditional cascade training model to capacity building whereby school based practical training should be offered by a trained teacher or co-facilitated by NIED and advisory teachers. Trainers of trainers were trained with the hope of them going back and training others. But, due to transport, funds and commitment from the side of the teachers this was not happening or information was not transferred correctly. This means to say that through the cascade model, important information was diluted in the process as it was run down from one level to another or even misinterpreted by the trainers of trainers. During this process by the time it reached the classroom teachers it had lost some of its real value. This was contrary to Little’s (2005) suggestion that many of the in-service training programmes in multigrade teaching adopted a cascade model of dissemination and therefore were subject to many of the effectiveness issues that face the cascade training programmes in general.

It also appeared that curriculum reform training for junior primary phase from the ministry did not take the multigrade teachers' needs and context into consideration. This concurred with Little (2004), who maintains that there seems to be a lack of support worldwide for the multigrade teacher. Lastly, no support in the form of on-site school visits from the regional office seemed to be an important aspect that requires serious attention from the Ministry of Education, Arts and Culture. Multigrade teachers strongly recommended that they needed support from both the ministry and the regional office on how to implement multigrade teaching.

The findings of this study suggest that NIED should visit teachers regularly in order to observe how teachers implement multigrade teaching and offer support and advice where needed. This was consistent with the Kapenda's (2010); MoE's (2011) findings that multigrade teachers should be monitored continuously. The findings from the observations revealed that there was no evidence to show that there was a visit from the Education Regional Office for monitoring and support. The findings from the MoE (2011b) study insisted on training of the school managers on multigrade to enable them to effectively manage the multigrade school and teaching.

Birch and Lally (as cited in MoE, 2011b) argue that, despite the large numbers of multigrade teachers in the country, most teachers were left alone to find their way in terms of delivering the learning content to more than one grade at the same time. It seemed that the NIED once off-training provided to multigrade teachers in the

Kunene Region was not effective, and these teachers felt unconfident in their multigrade practices. It emerged from the results of the findings that multigrade teaching was not included in pre-service teacher education courses. For multigrade teachers to be effective in their teaching, they must be better trained (Lingam, 2007). These findings were supported by the data collected in this study which revealed that teachers needed training in order for them to implement multigrade effectively. This was supported by Chandra (2004) who emphasises the need for on-going professional development of teachers to enable them to teach effectively in their multigrade contexts.

Another pertinent issue reported in the study conducted in Greece by (Little, 2005; MoE, 2011b; Mulkeen & Higgins, 2009; Tsolakidis, et al., 2005;) was the lack of continuous training and support for teachers including the newly appointed teachers in multigrade schools who had the need for continuous professional development. This finding links up with the findings of this study where the teachers involved revealed that they were not trained and supported. Therefore, it was suggested that principals and school management teams be given more training on how to supervise and support teachers in respect of multigrade teaching. There was almost no on-going support and development when teachers returned to their schools. There were no support structures to help them deal with the burdens of multigrade classroom implementation, not even in the pre-service training. Consistent with the findings of this study, Little (2005) indicates that only a few examples of pre-service teacher

training courses that address multigrade teaching exist. Little (2005) established that in Finland multigrade teaching was embedded in the teacher education curriculum, while in England multigrade teachers expressed the desire for in-service training and curriculum support for the multigrade classes, but generally had to rely on their training in the principles of diversity and differentiation in coping with the demands of the multigrade class (Little, 2005). In support of this, Tsolakidis, et al. (2005) found the following common specific needs among multigrade teachers in Europe: insufficient or lack of teacher training and support, relevant curriculum for multigrade schools and lack of resources.

### **5.3.3 Perceptions of Teachers and Parents Regarding an Intervention Programme Development for Multigrade Teachers (Theme 3)**

This section focuses on the perceptions of teachers and parents with regard to the development of a programme to improve multigrade teaching. These results indicated that the teachers themselves had much to say about how they want the programme to be run, and the researcher found it important for their opinions and suggestions to be taken into account. Teachers highlighted some suggestions that they thought, if considered, would help in solving problems, challenges or difficulties hindering multigrade teaching. In this study “a training programme” referred to compiled learning activities that support multigrade teachers to implement multigrade teaching effectively and successfully. This description concurred with the Neshuku (2015) which defines a programme as an officially organised system or

series of activities or opportunities that help people to achieve something. It can be concluded that the researcher found that the multigrade teacher's initial reactions towards the programme were positive. One may admit that the teachers held positive attitudes towards the programme and were expecting the programme to help them improve their teaching skills in multigrade classrooms.

Multigrade teachers and parents saw the programme as important and advantageous for teaching and learning in multigrade classrooms. Interestingly, teachers and parents were all happy and excited to hear about the programme and therefore, all welcomed the programme wholeheartedly.

The teachers did not indicate a clear preference for the programme to be conducted in their own schools or in any of the local learning centers such as their Teacher Resource Centre (TRC). As a matter of fact, teachers indicated that they would not be likely to enter the programme if they had to pay for their transport costs. Another interesting finding of the study was that the teachers indicated that they would prefer a programme led by facilitators as opposed to one led by teachers themselves.

#### *Duration of the Programme*

Another factor identified by teachers was the duration of the training workshop. Multigrade teachers regarded three days as inadequate for training. Teachers, therefore, recommended that the NIED multigrade teaching workshops currently

provided and facilitated should be lengthened so that it can take longer than the 3 days. A request was made to increase the number days for the workshop from three (3) days to two weeks per year so that they can have comprehensive multigrade training. It also came out that there was a need to revise the NIED training manual and come up with a set of multigrade toolkits. This, according to them, will allow teachers more time to practice and to have the new knowledge embedded into practice. This is in line with the findings of Haingura (2014) who revealed that the NIED 3 days' workshop was inadequate to address the needs of multigrade teaching, and was only available to a limited number of teachers, which excluded teachers teaching at the most remote rural multigrade schools.

Teachers further demanded that the training programme should include face-to-face sessions. The timing of the programmes was also raised as a critical issue by these teachers. This is also consistent with the studies of Rakumako and LaugKsch (2010) who emphasise the role played by programme timing. They indicate two main points regarding programme time, namely, the significance of having appropriate time when presenting the programme for teachers and the need for providing enough time for the programme in order to allow teachers to interact practically with the trainer and the content during the programme. Teachers recommended that the programme should be run during school holidays to avoid violating teaching time. In other words, holding the programme during holiday time will ensure that there will be no disruption of teaching in multigrade classrooms.

### *Programme Relevance*

The findings of this study also point to the fact that generally teachers felt the need for professional development and are interested in participating in multigrade training programmes. Teachers, as indicated above, demand further training on multigrade teaching. The results related to the relevancy of the programme content indicated that all teachers and parents recognised the relevance and usefulness of the programme. Teachers regarded the intervention programme as useful in the sense that they will get to know; 1) how to adjust, organise and manage the curriculum, 2) how to prepare lessons appropriately for two grades, 3) how to integrate multigrade timetable options into a lesson, 4) how to differentiate activities between the two grades, 5) how to manage time and classroom, 6) how to use teaching and learning strategies appropriate for multigrade, 7) how to use ICT as an assisting tool to improve teaching and learning in multigrade classrooms and 8) how to decrease the assessment checklist workload.

Multigrade teachers stated that the content of the programme should be relevant to what they were teaching in their multigrade classrooms. In a nutshell, both teachers and parents expected the content of the programme to be in their context. An interesting point raised or suggested was the provision of professional facilitators who have the ability to encourage and improve multigrade teachers' knowledge, skills and attitudes in a professional way. That is similar to findings from different studies such as Rakumako and Laugksch (2010) that indicate that the programme

should improve trainees' skills, knowledge and attitudes. Almazkoo (2009) further indicates that clear programme goals or objectives should be shared in advance with the teachers so as to help them to understand what their tasks entailed and this would increase their awareness of the necessity to interact positively with the programme.

One may deduce that multigrade teachers in the Kunene Region are in need of support through a programme that will reduce the lack of confidence, frustrations, hopelessness and feelings of incompetence. The argument is that through programme development, teachers can build and enhance their confidence, and in this way, develop the courage and self-confidence to perform well and be able to cope in their multigrade classrooms, thereby minimising feelings of uncertainty and frustrations (Mothiba, 2012).

Results of this study also revealed that multigrade teachers perceived a successful programme development as one that will address their specific multigrade teaching needs. They reiterated that for a programme to have any positive impact on teaching practice, it had to be modified to the multigrade teachers' specific needs. It came out clearly that other programmes were unsuccessful because they were not adapted to their specific multigrade teaching needs. It could also be that the programmes were not pitched to their context.

The findings of this study also revealed that teachers suggested a practical or pragmatic and participatory multigrade teaching training workshop. This is a training workshop where all teachers participate and relate to real life-situations, experiences and is based on actual doing as opposed to being based on theories. In other words, the teachers felt that the lecture method should not be used because it limits their participation and is unable to maintain the teachers' interest. One may deduce that these teachers believed in applying theories into practical situations. Drawing from my own experience, multigrade teachers need a workshop with lesson demonstrations whereby the teacher's guide provides step by step instructions on how to develop a lesson for two or more grades in a multigrade classroom.

It is interesting to note that these multigrade teachers suggested the provision of incentives in a form of certificates as a motivational factor for them to be positive and for promotional purposes. It is true that people are motivated to do something especially when they know that there will be a reward upon completion. The provision of certificates or any other form of recognition or testimony that points to the fact that someone had attended and completed such a programme is therefore a worthwhile consideration which may yield positive results in the process of training and equipping multigrade teachers.

### *Programme Materials*

Teachers involved in this study further proposed that a suitable, relevant and interesting multigrade manual should be developed to convey the required multigrade knowledge and impart the skills identified in the training objectives.

Teachers further recommended that the materials should be made available to all multigrade schools in the country. This should be developed in compliance with the professional needs of teachers in order to achieve what would have been intended.

This is consistent with Kapenda's (2010) suggestion that multigrade teachers need training and a manual. In support of these findings, Boonzaaier (2009) indicates that development of teacher and learner guides as well as learning materials which are suitable for the rural multigrade challenges, should be considered seriously.

Similarly, Haingura (2004) recommends that appropriate and sufficient teaching and learning materials, such as self-instructional and self-learning materials should be provided, to schools offering multigrade teaching. A study conducted in Senegal on multigrade teaching support these findings that multigrade teaching booklets that outline a range of appropriate strategies for improving multigrade teaching could be produced (Mulkeen & Higgins, 2009). Multigrade teachers further, suggested that the manual should be translated into mother tongues which in the case of this study would be in Otjiherero so that it can be easy for teachers to understand. From this study, it became clear that it will be helpful to develop such a manual for multigrade teachers in order to stop this cycle of teachers who are initially trained to teach in a monograde and then end up in a rural multigrade setting.

Given the above discussion, one can conclude that positive attitudes will prevail towards multigrade teaching as long as these teachers are trained in multigrade teaching.

#### **5.4 Linkage of the Findings to the Theoretical Framework**

At this point, it is necessary to revisit the social constructivism framework, outlined in Chapter 2 in order to situate the findings of this study within the framework. The social constructivism framework assists the researcher to make sense of the perceptions of teachers, learners and parents regarding multigrade teaching. The theoretical framework provides a structure for the data analysis process. The MUSE programme, experiential learning theory, adult learning theory and the programme development theory assist the researcher in a programme development.

According to the underlying Vygotsky's Social Constructivist Theory (1978) referred to in Chapter 2 above, people are active learners and must construct knowledge for themselves. The theory further views teaching as a process rather than a product in terms of which knowledge is gained by active participation. All teaching and learning strategies used by teachers and learners in daily practice in multigrade classrooms require active participation from both. The occurrence of a constructivist stance in multigrade teaching is viable. The little knowledge and skills multigrade teachers applied in their classrooms and the findings from interviews are clear indications that teachers needed some form of scaffolding to assist them to succeed

in teaching in multigrade classes, which was not provided. It was found that teachers were not assisted or guided and supported or did not work collaboratively with other multigrade teachers, sharing ideas with others that could have enabled them to understand multigrade challenges such as planning lessons properly, using appropriate teaching and learning strategies effectively and managing their classrooms. Scaffolding in this study refers to the individual guidance, support, and assistance that a teacher or more capable peer provides to a learner that will enable him or her to understand the work that he/she are currently facing difficulties with (Vygotsky, 1978). In this study, multigrade teachers had limited knowledge of lesson planning, timetabling options, appropriate teaching and learning skills and classroom management skills and therefore found it difficult to transfer sufficient knowledge skills by implementing multigrade teaching effectively.

Vygotsky (1978) further suggests that in the construction of knowledge, new knowledge is built upon prior knowledge or the current knowledge the teachers have. In this study, the interaction with the more knowledgeable or the role of national and regional input in supporting the multigrade teachers' development to get to the next level was minimal (Raymond, 2000). National Institute for Educational Development (NIED) and the regional office were supposed to facilitate the teacher's ability to build on prior knowledge so that these teachers accomplish the tasks they could otherwise not complete, thus helping these teachers through the Zone of Proximal Development (Schunk, 2009). During classroom observations it was evident that

multigrade teachers did not use peer tutoring in their classrooms where learners help each other. It was only observed at two schools where learners were assisting each other. The teachers should work in the Zone of Proximal Development of learners (Vygotsky, 1978). It was found in this study that the multigrade teachers did not observe what the learners in Grade 2 were doing while they were busy with Grade 3 learners.

Vygotsky's theory stresses the idea that learning occurs in a social environment and cannot be understood apart from those settings (Mason, 1997). By sharing ideas with other teachers, teachers acquire knowledge, but due to lack of sharing of ideas with other teachers, lack of collaboration or interaction with others, teachers involved in this study did not learn from their colleagues in areas such as how to plan lessons properly, use appropriate teaching strategies and how to manage multigrade classrooms effectively.

### **5.5 Kolb's Theory**

Kolb's learning theory (1984) as an appropriate theory of learning in the programme allows multigrade teachers to learn by doing or learn from experience and reflection. It means the generation of knowledge through experience (Indongo, 2013). There are four stages of the experiential learning cycle, namely, 1) concrete experience, 2) observation and reflection, 3) formation of abstract concepts and generalisation and

4) active implementation. A short description on how these stages apply to the programme is discussed in detail in Chapter 6 on the development of the programme.

### **5.6 The Intention of the Researcher with Findings**

The researcher's intention with the research findings includes implementing the intervention programme in the Kunene Region and later on in the entire country. This can only be done with the support from the government or institutions of higher learning in order to support multigrade teachers in implementing multigrade teaching in their classrooms. This will be conducted through training for a period of two weeks. Secondly, the researcher will monitor multigrade teaching in rural schools and support teachers in the implementation of multigrade teaching in their classrooms. Thirdly, the researcher's intention is to establish the implementation of the programme in all multigrade teaching rural schools in order to establish the effectiveness of the programme.

In the final analysis, the purpose, and the results, of such interventions (the school-based monitoring and support) will be to replicate best practices of the programme from those rural schools that did very well after the two-weeks training to other struggling rural schools. Such best practices will be documented in the forms of video-recordings during the lesson presentations at visited rural schools. The "model lessons" so recorded will serve as another instrument for further training and teacher empowerment. If need be, many more lesson presentations will be recorded so that

teachers will have on-line access to all these examples of best practices for future referencing to further improve their own classroom practices.

### **5.7 Synthesis of Research Findings and Conclusions**

This study revealed that there is no curriculum specifically set for multigrade teaching in Namibia. The evidence from the seven case studies in this study shows that teachers lacked a curriculum that was geared towards multigrade teaching. One can make inferences from the responses made by teachers that multigrade teaching settings were not well structured and understood or that it was ignored by the curriculum planners and developers. Another lesson learnt from the study is that learners and teachers had to live within the confines of the national monograde curriculum.

Drawing on the findings from the seven case studies it was clear that there was little or no support on multigrade teachers' skills on how to prepare and plan multigrade lessons. The evidence from the seven case studies indicated that the function of Education Regional Office in terms of support remained unknown to most of the teachers. The Education Regional Office focused on delivering materials rather than teacher professional development activities such as support and capacity building. There was no evidence of teachers being supported through advisory teacher classroom visits. Teachers reported that they had been supported by the principal or head of department who come once in a while.

Teachers also perceived little or no support from NIED. Two of the teachers interviewed had received training from NIED within the previous three to four years. The evidence from those trained indicated that they were last trained by NIED in 2015. One can conclude that lesson planning is the roadmap of the teachers and if they are not trained on how to prepare or plan lessons or multigrade teaching strategies in general then it will not be implemented effectively and successfully. One can infer that teachers lacked sufficient pedagogical multigrade knowledge and skills.

Drawing from the seven case studies, only two out of six teachers observed, were trained in effective teaching of multigrade teaching. Four teachers claimed that they were not trained on how to use various multigrade teaching and learning strategies. They further claimed that they were not supported in pedagogical practice. This finding is in agreement with what Titus (2004) found in his study in //Kharas region in Namibia, that teachers received little pedagogical support. This finding is in agreement with the finding of this current study that found that some teachers claimed that they were practising multigrade teaching on their own without any support. One may conclude that little support or no support on different strategies was provided to multigrade teachers to enable them to teach effectively.

Collaboration, self-directed learning and peer tutoring are some of the underpinning strategies for successful multigrade teaching. Drawing on the data from the seven case studies, it was experienced that only one out of six teachers observed used

collaboration as a teaching strategy. Their teaching methodologies focused more on whole class teaching and question and answer method without realising that these are two different grades with different basic competencies.

Judging from the responses from the interviews, one can conclude that teacher training is one of the stumbling blocks in the implementation of the effective multigrade teaching. Vithanapathirana's (2006) findings showed that teachers' attitudes towards multigrade teaching become more positive once they realise that there are strategies that can be used to improve learner achievement outcomes and lessen the teacher's burden of intensive lesson planning for several grades.

Contrary to the positive attitudes discussed above, the findings of the study have provided some evidence that there were negative perceptions shown by teachers (Little, 2005; Joubert, 2005; MoE, 2011b; Titus 2004; Suzuki, 2004; Vithanapathirana, 2006). It was also apparent that there was not enough monitoring and support for the teachers. Analysis of documents revealed that teachers do not have adequate teaching and learning materials.

From the classroom observations, the teaching conditions in all seven schools seemed to be hindering the successful implementation of multigrade teaching. Only one school had a permanent building but without toilet facilities. Some classrooms did not have enough chairs for learners, or some were broken. As a result, most learners had to share desks and chairs or had to sit on the ground writing on their

laps. Most tents were overcrowded which could not allow teaching strategies such as group work. There were insufficient teaching and learning materials such as syllabus, textbooks, teacher's guide and chalkboards. It was also observed that out of the six case studies visited; only one school had two chalkboards for the two grades.

## **5.8 Conceptual Framework for the Multigrade Programme**

The conceptual framework was the focused in Chapter 6 on the development of the programme.

### *Conceptual Framework*

A conceptual framework essentially contains the concepts included in the study (Swart, 2004). The conceptual framework development was done based on Dickoff, James and Wiedenbach's (1968) reasoning map. The reasoning map's main concepts that frame this study were the six-survey lists which include the agent and recipients, context, procedure dynamics and terminus.

The conceptual framework guided the researcher in developing the programme to assist multigrade teachers during teaching and learning in multigrade classrooms. Through data analysis, certain concepts were identified that guided the researcher on the content of the programme. The Practice-Orientated Theory as described by Dickoff et al. (1968) was adopted as the conceptual guide for this research. These entail:

1. Agent-what or who performs the activity?
2. Recipient-what or who is the recipient of the activity?
3. Context-in what context is the activity performed? (classroom settings)
4. Procedure-what is the guiding procedure?
5. Dynamics-what is the energy source for the activity?
6. Terminus-what is the end point of the activity?

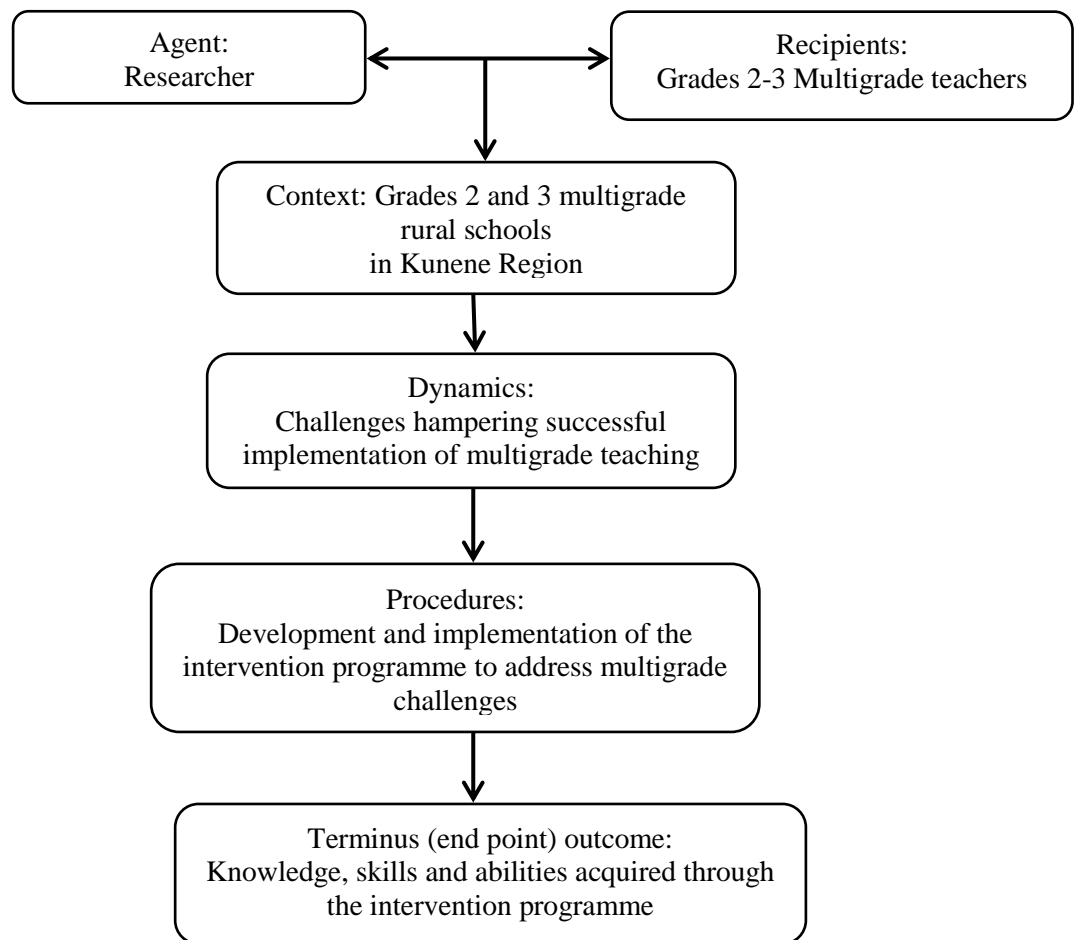


Figure 5.1: Survey list of Practice-Orientated Theory of Dickoff et al. (1968)

The justification for choosing the Dickoff, et al., theory was that it emphasised the development of programmes and was therefore appropriate to this study.

## **5.9 Practice-Orientated Theory**

The survey list of Practice-Orientated Theory of Dickoff et al. (1968) was adapted as a reasoning map in this study (Figure. 5.1) in order to serve as a conceptual framework for the findings of the study for the development of a multigrade teaching programme for multigrade teachers.

From the study, it was revealed that multigrade teachers experienced challenges in teaching and learning of multigrade in multigrade classrooms. This necessitated the development of a programme to support multigrade teachers in teaching and learning.

### **5.9.1 Agent**

An agent is defined as “an active and efficient cause, capable of producing a certain effect”, “a representative who acts on behalf of other persons” (Dickoff, et al., model (1968, p. 434).

In the context of this study, the agent was the researcher who developed the multigrade programme for multigrade teachers in order to improve multigrade teaching in classroom settings. This means that she should perform the activity

(namely, the programme) by demonstrating her knowledge and skills of multigrade teaching by empowering multigrade teachers to implement multigrade teaching effectively. The researcher is expected to assist, support, empower and guide multigrade teachers in their classroom setting.

### **5.9.2 Recipient**

According to the Dickoff, et al. (2006), the recipient is a person who receives something. The recipient was the beneficiary of the activities designed by the agent (researcher). Multigrade teachers in the Kunene Region were chosen to be the recipients of this programme.

### **5.9.3 Context**

The third activity in the practice-oriented theory described by Dickoff et al. (1968) is the context which refers to the environment in which the activity is undertaken. For the purposes of this study, the context of the programme implementation was the environment where multigrade teachers were implementing multigrade teaching in the Kunene Region. The researcher obtained data from multigrade teachers, learners and their parents in the Kunene Region. The programme was developed and described to support multigrade teachers in that same context.

#### **5.9.4 Dynamics**

The fourth activity of the practice-oriented theory described by Dickoff, et al. (1968) is the dynamics. Dynamics refers to the energy source or motivation for an activity (Dickoff, et al., 1968, p. 435). The dynamics that emerged from this study were similar to the themes and sub-themes in Chapter 4.

The dynamics were therefore the motivational factors that facilitated a positive outcome in this study and informed and produced knowledgeable and skilful multigrade teachers. For this study, “dynamics” referred to the themes and sub-themes that derived from the situational analyses of the interviews held with the multigrade teachers, learners and parents.

#### **5.9.5 Procedure**

Procedures are guiding rules, protocols, or techniques to be followed while activities are taking place (Dickoff, et. al., 1968). The procedure in the study was the facilitation of learning through implementation of activities during the training programme, whose only purpose is to provide support, and provision of knowledge and skills to the multigrade teachers. It referred to tasks or responsibilities of the researcher as an agent in supporting multigrade teachers, as well as activities that needed to be performed during the researcher’s interaction with multigrade teachers. These procedures were identified from the data analysis as the results of the

situational analysis namely, to enhance confidence of multigrade teachers to motivate and encourage positive attitudes and to provide information on multigrade teaching.

#### **5.9.6 Terminus**

“Terminus” refers to the last stage, the end point, or the finishing point (Dickoff, et al., 1968, p. 435). The terminus of this study was the ultimate goal of a programme that should be developed to support multigrade teachers by providing them with knowledge and skills they required during multigrade teaching.

The end result of this study focused on developing knowledgeable, committed, hardworking, skilled and competent multigrade teachers and it also referred to the improvement of the quality of multigrade teaching. The aim of the programme was to improve teaching and learning in multigrade classrooms in order to give better quality education to learners.

## **5.10 Summary**

This chapter presented, analysed and interpreted the data. The main findings of this study were discussed using the framework of the research questions, themes and theories that informed the study. The evidence from this showed that teachers portrayed a positive attitude towards multigrade teaching, even though they were not trained or did not receive support. One of the concerns raised by teachers was the lack of a multigrade policy and a multigrade curriculum. Three key themes emerged, namely, the perceptions of teachers, learners and parents regarding multigrade teaching, challenges of multigrade teaching and the perceptions of teachers and parents regarding the development of a programme. The next chapter discusses the intervention programme.

## CHAPTER 6

### DEVELOPMENT OF AN INTERVENTION PROGRAMME TO IMPROVE MULTIGRADE TEACHING IN THE KUNENE REGION

#### 6.1 Introduction

This chapter focuses on the development of an intervention programme based on the experiences, needs and perceptions of the multigrade teachers, learners and parents. Given this focus, the chapter is divided into two sections. The first section deals with the development of the programme while the second section comprises the implementation of the programme.

The main aim of this programme is to support multigrade teachers during the implementation of multigrade teaching in their daily classroom teaching in the Kunene Region of Namibia. This programme evolved from the information gathered for this study through individual interviews, focus group interviews, classroom observations and document analysis. As discussed in the previous chapter, the need to develop a programme that supports multigrade teaching came up strongly. A programme is defined as an officially organised system of a series of activities or opportunities that helps people to achieve something (Nelumbu, 2013). In this study, a programme referred to compiled learning activities that would support multigrade teachers with the aim of enabling them to implement multigrade teaching in their

classroom effectively. The activities were compiled based on the challenges identified during Phase 2 which is the situation analysis of the study.

## **6.2 Development of the Programme**

Program development constitute phase 3 of this study and is based on Dickoff, James & Wiedenbach's, (1968) reasoning map. The six survey components of Dickoff, et al., guided the researcher in this process (see Chapter 5). The programme was developed in line with the expectation that a programme should have a specific focus based on a situation analysis and findings (Watson, 2011). In other words, the situation analysis (Phase 2 in Chapter 1) provided a foundation for the development of this programme. The programme developed contains the purpose and relevance of the programme, programme objectives, programme structure, as well as activities and approaches.

### **6.2.1 Purpose and Relevance of the Programme**

Educational programmes are developed to serve a specific goal, based on a situation analysis (Watson, 2011). Therefore, the purpose of this programme was aimed at developing an in-service training programme that was designed to meet the needs of multigrade teachers in order to improve their performance in the multigrade classrooms. It was relevant in the sense that it will, in the end, empower, enhance, strengthen and equip multigrade teachers with knowledge and skills that will enable

them to implement multigrade teaching effectively, competently and successfully in their classrooms (Indongo, 2013).

Through the programme the researcher therefore endeavours to help mitigate the gaps identified during Phase 2 of the study.

### **6.2.2 Programme Objectives**

The objectives of the programme developed were to:

1. develop an in-service training programme for multigrade teachers that aims to meet the teachers' needs;
2. address the challenges identified as affecting teaching and learning in multigrade classrooms in order to provide support to multigrade teachers;
3. develop a programme that allows for the continuous training and support of the multigrade teachers;
4. make recommendations on multigrade teaching policy and practice in Namibia; and,
5. initiate the formation of a Kunene Region networking and exchanging of ideas between teachers, learners and facilitators on multigrade teaching.

### **6.2.3 Programme Description**

The programme is expected to enhance professional skills of multigrade teachers as well as develop their abilities to develop multigrade lesson plans which are in line with the curriculum reform. The programme provides multigrade teachers with continuous training and support, enhancing communication among remote multigrade school teaching environments and outside educational communities. A competent facilitator with multigrade teaching expertise with solid background in and knowledge of multigrade teaching works on-site and trains multigrade teachers. The facilitator is expected to be knowledgeable, possessing excellent communication skills, and being able to communicate at the level and in the language of the participants. In order to be effective, the facilitator should take into account the nature of the multigrade teachers, and their level of knowledge and skills.

### **6.2.4 Programme Structure**

The programme was developed on the basis that it has to be implemented in the form of a workshop running over a period of two weeks.

### **6.3 Educational Approaches**

Kolb's Experiential Learning (1984) Theory and Knowles's Adult Learning Theory guided the development of the programme.

## **6.4 Experiential Learning Theory**

Kolb's experiential learning theory (Kolb, 1984) defines learning as "the process whereby knowledge is created through the transformation of experience (Indongo, 2013). It is defined as learning by doing, rather than by listening to other people or reading about it. The researcher opted for this theory as an appropriate theory of learning in the programme because it allows multigrade teachers to learn by doing or learn from experience and reflection. It means the generation of knowledge through experience (Indongo, 2013). There are four stages of the experiential learning cycle, namely, 1) concrete experience, 2) reflective observation, 3) abstract conceptualisation and 4) active experimentation. A short description is given on how these stages apply to the programme.

### **6.4.1 Concrete Experience**

This first level is based on an inquiry concerning something which happened. It focuses on the identification of the problems of practice. Therefore, in this context multigrade teachers for example, involve themselves fully, openly and objectively in new experiences, to enrich their multigrade teaching knowledge. At this level, multigrade teachers experiencing personal challenges are involved deeply in thoughts about the specific challenges that they may be having. During discussions teachers are expected to comment and discuss how they can minimise the challenges they face in their classrooms. Discussion on concrete experiences should be encouraged in

order to empower multigrade teachers to generate ideas and align their thinking to solve practical problems in their multigrade settings regarding multigrade challenges.

#### **6.4.2 Reflective Observation**

This level refers to learning by perception and emphasises the understanding of ideas and situations by careful observation. Multigrade teachers in this study describe their experiences, then reflect on them and conclude on them. Reflection exists to provide guidance and help multigrade teachers to look back over challenges or events which happened, review them and change them into learning experiences. Teachers in this programme learn by watching and listening. Teachers reflect about what they are doing while they are doing it, trying to discover why things went wrong, considering what helped to make something go really well. It allows teachers to make the connection between theory and practice and to allow the principles learned in the workshop to be applied to their daily lives.

#### **6.4.3 Abstract Conceptualisation**

During the third stage of Kolb's experiential learning cycle, the focus is placed on the definition or description and classification of abstract ideas and concepts in order to have precise conceptual categories (Indongo, 2013; Nelumbu, 2013). This level encourages multigrade teachers to make an appropriate decision by using the concepts formed so that they can make a conclusion from past and present experiences. This involves the ability to construct a plan of action to address the

problems. After watching the role play, multigrade teachers discuss the feelings about being a good multigrade teacher and reflect on their own teaching style, make use of the information to understand their feelings and experiences. At this stage, for example, the teachers learn by thinking and analysing video clips on multigrade teaching. Multigrade teaching teachers solve problems and find practical solutions to the challenges they experience.

#### **6.4.4 Active Experimentation**

In the fourth and last stage of the experiential learning theory, multigrade teachers are now at the stage where they can plan and apply the new learning from their previous experiences. During this stage, multigrade teachers take part in the role play and share their experiences and feelings with their colleagues. The teachers use their understanding and conclusions drawn from it, to guide their decision-making and actions, to address the new experience (Indongo, 2013). Learning takes an active form, and the teachers learn by doing it either in group discussions or in a role play. During the practice, all teachers have an opportunity to repeat this cycle by doing a role play. The advantage of using a role play is that it has a spiral form and it is repeated many times, which improves the learning and teaching of communication skills.

## 6.5 Adult Learning Theory

According to the Knowles theory (1984), the application of adult learning emphasises that adult learners prefer to learn in situations whereby the following elements are considered and incorporated in the learning process, as follows: 1) adults need to know why they need to learn something, 2) adults need to learn experientially, 3) adults approach learning as a problem-solving activity, and 4) adults learn best when (they believe that) the topic is of immediate value to their daily life experiences. Teachers need to share their own experiences about challenges they had been confronted with during the classroom practice. Principles of learning need to be taken into account during the implementation of the programme.

According to Nangombe and Amukugo (2010), adults learn better in the following conditions:

1. Adults need to be respected and treated as people who have knowledge and experience;
2. Adults need information that is useful to them, in other words, information they can use in their personal lives or at work;
3. Adults need to be allowed to relate their own experiences and situations;
4. Adults need to be allowed to listen to suggestions and decide what is useful to them.

These principles are found to be appropriate in addressing the learning needs identified in the situation analysis of this study as indicated in Chapter 4.

## **6.6 Content of the Programme**

The content of the programme is based on information that was identified during data analysis and captured in the review of related literature. It includes activities that address multigrade challenges as identified to affect the effective implementation of multigrade teaching.

The programme content also contains classroom activities that focus on teaching and learning strategies, development of timetabling options, classroom organisation and management as well as activities that facilitate participation in lesson planning, time management, development of multigrade lesson plans and presentations. There is a wide-range of learning activities that can be added to the content of the training process. This includes case studies, role plays, interactive lectures, problem solving strategies, discussions and practical exercises. A detailed programme indicating time frame, topics and facilitator is disseminated to the participating teachers in advance. It is very important that the programme content is relevant to what the teachers are teaching in their multigrade classrooms. In other words, the programme should be contextual, and be at teachers' level.

## **6.7 Programme Implementation**

This section focuses on the implementation of the programme to support multigrade teachers in the Kunene Region during classroom practice.

In this study, the implementation phase is represented by the delivery of the content to the multigrade teachers. Programme implementation involves putting the designed programme into effect, or simply executing the planned activities (Mothiba, 2012). The programme implementation comprises theoretical and practical activities. A programme implementation schedule is compiled, and it guides the way the programme should be implemented. The facilitator implements the programme. Knowles' theory of adult learning (1984) and Kolb's experiential learning theory (1984) inform the implementation of the programme. Both theories assume that adults have the need to know why they are learning, that adults learn through doing, that adults are problem solvers and that adults learn best when the content is in their context or in their real-life situations (Nelumbu, 2013; Nangombe & Amukugo, 2010). Johnson, Sonson and Golden (2010) define experiential learning as the process whereby knowledge is created through the transformation of experience.

### **6.7.1 The Venue**

The venue for the workshop should be a suitably designed room with enough chairs and tables, enough space and light which contribute to the smooth running of the programme implementation.

### **6.7.2 Programme Schedule**

The programme schedule is divided into sessions distributed over two weeks. In this programme the facilitator should follow the programme schedule in terms of times and training activities. However, the facilitator should also be flexible and allow for changes to the programme activities in order to respond to the immediate needs of individual teachers and the group as those needs could arise during the course of the workshop.

### **6.7.3 Training Materials**

The researcher proposed training materials to support the implementation of the programme. The Teachers' manual will be written out in a manner that is easy to understand and easy to follow. Step-by-step instructions are written out for every activity.

Based on the identified multigrade classroom challenges in Chapter 4 of the study, a Webpage will be designed to improve multigrade classroom practice and improve quality education provision. The foundational idea of the page will be to provide practical hands on strategies to support multigrade teachers in addressing multigrade challenges they face in the teaching and learning in their classrooms. Therefore, the multigrade Webpage will come with guidelines, ideas and multigrade examples. This will be interconnected with actual classroom practices in the multigrade teaching

field. Table 7 shows the layout of the proposed multigrade teaching manual to be used in the programme.

**Table 6: Layout of the Multigrade Teaching Teacher’s Manual**

<b>MODULE 1: Methodological approaches of multigrade teaching</b>	
<b>Unit 1:</b>	Definition of multigrade teaching
<b>Unit 2:</b>	Why is there a need for multigrade teaching (Rationale)
<b>Unit 3:</b>	Advantages of multigrade teaching
<b>Unit 4:</b>	The challenges of multigrade teaching
<b>Unit 5:</b>	Timetabling options (demonstrations of lessons with multigrade teaching options) 5.1 Common time table 5.2 Subject grouping and 5.3 Subject staggering
<b>Unit 6:</b>	6.1 Curriculum reform in relation to multigrade teaching 6.2 Lesson planning and time management
<b>Unit 7:</b>	Teaching and learning strategies 7.1 Peer tutoring (demonstrations) 7.2 Self-directed learning (demonstrations) 7.3 Differentiated learning (demonstrations)
<b>Unit 8:</b>	Classroom organisation and management 8.1 Time on tasks (demonstrations) 8.2 Differentiated activities (demonstrations) 8.3 Quasi-monograde teaching (demonstrations)
<b>MODULE 2: The practice of using ICT in multigrade classrooms</b>	
<b>Unit 1:</b>	Online platform Video clips on best practices of multigrade teaching Development of multigrade lessons, timetables and schemes of work (demonstrations of multigrade lessons with options)

## **6.8 Process of the Programme Implementation**

In this study, programme implementation is carrying out the planned activities of the programme. To achieve the effectiveness of the programme implementation and its objectives; it is important to select an appropriate teaching methodology. The programme has a time frame that indicates the date and time when the programme starts and how long it will last. It also consists of a work plan for implementation that is drawn up to provide guidelines on the content that is implemented, as well as when, by whom, and how it is implemented (Watson, 2011).

The facilitator keeps detailed observational notes throughout the implementation of the programme. The implementation of each session is based on the specific objective activities of that session and it is expected to produce an outcome that would help the multigrade teachers during the execution of their multigrade duties. The implementation of each session is evaluated by the participants and the evaluation of the workshop is done at the end the workshop. The post-evaluation of the feasibility of the programme is done three months after the implementation.

## **6.9 Description of Phases of the Programme Implementation**

The programme is implemented in three phases namely, orientation, working and termination phases. The three mentioned phases are discussed in detail as follows.

### **6.9.1 Orientation Phase**

During the orientation phase, the facilitator invites multigrade teachers to participate in a workshop that takes place at a selected venue in the Kunene Region. This phase provides an introduction to the workshop where aspects related to the purpose and objectives of the training and logistical arrangements of the implementation of the programme are explained. The orientation is held in the morning of the first day of the workshop. The registration of participants is done prior to commencement of the training. The ground rules and set of objectives of the training are well explained in order to help teachers understand the reason why they are invited and to emphasise the importance or relevance of the workshop. The procedures and expectations of the programme are also to be discussed. The facilitator also uses some icebreaker activities at the beginning of each session when needed, in order to give teachers the opportunity to settle down and get comfortable with one another, as well as to lead them into the next session.

### **6.9.2 Working Phase**

The programme is based on the experiential learning approach and structured as the second phase of the workshop. The programme is set up to address the needs and interests identified during the data analysis in Phase 2 of the study. The working phase is centred on supporting multigrade teachers in order for them to effectively and confidently carry out their activities in their multigrade classrooms. This phase

enables the facilitator to elaborate on the training content of the programme. The implementation approach acknowledges Kolb's experiential learning theory.

The facilitator shares these challenges with teachers during a PowerPoint presentation on best practices of multigrade teaching. Another activity is in the form of a case study and it is performed by the teachers guided by the identified challenges. Group discussions are planned to be conducted after the case studies, then feedback from the different groups about strategies suggested in order to assist teachers to overcome the identified challenges shall be facilitated. This phase consists of theoretical and practical sessions.

The facilitator discusses the feelings of teachers related to multigrade challenges they encounter (reflective observation). Teachers share the new knowledge on multigrade teaching with the group. They also use the new information, knowledge and skills gained to plan lessons and to develop their classroom timetable (abstract conceptualisation). Teachers plan lessons and timetables individually and present to their colleagues and the facilitator supports them during presentations (active implementation). Information Communication and Technology is used based on the MUSE programme and Kopano Education Online Forum.

### **6.9.3 Termination Phase**

During this phase, all issues related to multigrade teachers' experiences during the implementation of the programme, are summarised and reflected upon. The facilitator closes the training as the final phase of the programme by way of asking the multigrade teachers to evaluate the activities that would have been provided for during the entire workshop and make suggestions for improvements on the future programmes.

### **6.10 Expected Outcomes of the Programme**

The expected outcomes of the programme are in line with the purpose of the programme and are expected to provide the anticipated results. This programme aims at empowering multigrade teachers to implement multigrade teaching effectively by empowering these teachers with the necessary competencies such as skills, knowledge and attitudes regarding multigrade teaching. The expected outcomes of the programme include that the teachers understand the objective of the programme, increase their multigrade teaching knowledge; acquire specific desired skills on multigrade teaching, demonstrate the multigrade teaching skills and knowledge acquired, change their attitudes towards multigrade teaching and strengthen their abilities to implement multigrade teaching.

## **6.11 Guidelines for the Implementation of the Programme**

The last phase of the study focuses on developing the guidelines for implementation of the multigrade programme. The purpose of this section is to draw up some guidelines for the implementation of the programme. Guidelines are important because they serve as a standard tool for directing the implementation of the programme activities (Newson, 2006). The guidelines are drawn up on the basis of the results of the data analysis of this study as suggested in Chapter 4 and therefore on the sessions presented in the programme.

Data gathered and analysed during the first phase of the study clearly indicates a need for the development of the programme. A programme and guidelines for implementation of the programme therefore need to be developed for this purpose. The guidelines for the implementation of this programme assist teachers in becoming more confident and competent through the process of the revitalisation of their competencies. The guidelines in this study were developed to direct the effective implementation of the programme. During this phase, guidelines were compiled, based on the conceptual framework, and aimed at putting the programme into practice in the multigrade schools.

### **6.11.1 Guidelines for the Ministry of Education, Arts and Culture**

It is important that the MoEAC follow the guidelines as compiled, to ensure the successful implementation of this programme. The guidelines were based on the

information gathered from the literature review in combination with the data from the research.

**Table 7: Guidelines for the Ministry of Education, Arts and Culture**

Guideline 1	Support programme facilitator in order to implement the programme effectively.
Guideline 2	The time and venue should be negotiated with the facilitator.
Guideline 3	The facilitator, venue and materials should be ready and available from the inception of the programme and right through the duration of the programme.

### 6.11.2 Guidelines for the Agent

The agent is viewed as a researcher in this study. During the implementation of the programme, the agent/researcher should follow the steps as suggested in Table 8:

**Table 8: Guidelines for the Researcher**

Guideline 1	Have the right multigrade teaching skills and knowledge to do the work effectively.
Guideline 2	Be familiar with the principles of adult education and experiential learning theories as described in Chapter 2 of the study.
Guideline 3	Orient teachers with regard to the objectives of the programme.
Guideline 4	Get a sense of participants' level of knowledge and expectations.
Guideline 5	Carry out multigrade demo lessons to teachers to enhance their classroom effectiveness.
Guideline 6	Be familiar with all recommended multigrade teaching online platforms and materials.
Guideline 7	Compile a report after the workshop and submit it to the MoEAC.

### 6.11.3 Guidelines for the Recipients

In this study, multigrade teachers are the recipients of the programme. During the implementation of this programme, the multigrade teachers should abide by and follow the suggestions as stipulated in Table 11:

**Table 9: Guidelines for the Multigrade Teachers**

Guideline 1	Familiarise themselves with the information, time and venue of the programme.
Guideline 2	Agree to rules of the programme.
Guideline 3	Ensure they are available for the whole programme and be committed.
Guideline 4	Feel autonomous and self-directed in learning situations.
Guideline 5	Actively participate in all activities to acquire the knowledge and skills required in multigrade classrooms.

## **6.12 Summary**

In this chapter, the development of a programme and the process towards supporting multigrade teachers in implementing multigrade teaching were discussed. The purpose of the programme, the approaches that will form the basis of the programme and a broad outline of the content of the programme were also discussed. The practical arrangements for the implementation of the programme were explained and the implementation of the programme was discussed. Guidelines to assist the facilitator with the implementation of the programme were also suggested and discussed. Two prominent theories were adapted in developing these guidelines, namely, Kolb's experiential learning theory and Knowles adult learning theory. The next chapter deals with conclusions and recommendations of the study.

## CHAPTER 7

### CONCLUSIONS AND RECOMMENDATIONS

#### 7.1 Introduction

In the previous chapter, the study focused on the development of an intervention programme for multigrade teaching. This chapter draws conclusions, discusses implications of developing and implementing a programme and makes recommendations to implement the programme for multigrade teachers in the Kunene Region of Namibia. Areas for further research are also indicated and briefly discussed before the final concluding remarks are made in the study. The conclusions are based on the findings of the study and help to answer research questions as stipulated in chapter 1. The research questions focused on:

1. The perceptions of the Grade 2 and 3 teachers, learners and parents on multigrade teaching.
2. The perceptions of the Grade 2 and 3 teachers and parents on the development of an intervention programme for multigrade teaching.
3. The implications of developing and implementing the intervention programme in Namibia.
4. How an intervention programme can assist multigrade teachers in terms of teaching and learning.

These conclusions made to establish whether the purpose and objectives of the study were achieved.

## **7.2 Conclusions of the Study**

### **7.2.1 Purpose of the Study**

The purpose of this study was to develop an intervention programme for multigrade teachers in the Kunene Region. It was done by firstly exploring and describing the experiences and perceptions of participants by conducting individual and focus group interview sessions, field notes, classroom observations and document analysis. The conceptual framework for the programme was described from the emerging themes and results of the study. The programme was developed and guidelines for programme implementation were described in Chapter 6, based on the conceptual framework which aimed at putting the programme into practice. The researcher succeeded in carrying out all the phases of the study. A preliminary literature review was conducted that confirmed the components of practice-oriented theory of Dickoff, et al. (1968).

The first phase of the study entailed carrying out a situational analysis to explore and describe the perceptions and experiences of teachers, learners and parents regarding multigrade teaching. This phase was implemented by conducting some in-depth individual interviews, focus group interviews, classroom observations and document analysis with seven Grades 2 and 3 multigrade teachers, learners from both combined grades and their parents, in the Kunene Region. The interviews proved to be a rich source of data, which were recorded and transcribed verbatim using the naturalistic method and analysed using Tesch's (1990) open-coding method. Three main themes

emerged during data analysis in Chapter 4. Data were contextualised and extant related literature was studied with a view to validate the findings of the study. The Guba's (Babbie & Mounton, 2001) model criteria were used to ensure the trustworthiness of the data (credibility, transferability, confirmability and dependability). From the reviewed data it became clear that multigrade teaching was not being implemented effectively since this was the storyline that emerged in all the transcripts. It was evident that there was a need for a training programme for multigrade teachers in order to improve teaching and learning in multigrade classrooms.

The second phase was to describe the experiences of the teachers and parents regarding the development of a programme. This phase comprised of the description of the experiences of participants as highlighted in existing relevant literature. To ensure that the meaning of the experiences was maintained, the participants' exact words were quoted before connections with extant relevant literature were made.

The conceptual framework derived from the themes and results of the situation analysis formed the basis for the development of the programme of multigrade teaching in the Kunene Region of Namibia. The survey list of Dickoff, et al. (1968) was used as a basis for the formulation of the conceptual framework. The conceptual framework addressed the survey list as described by Dickoff, et al. (1968). It

consisted of an agent, recipient, context, procedure, dynamics, and terminus. The researcher reflected on the survey list in Chapter 5.

The third phase had to do with the development of an intervention programme based on the situational analysis conducted in Phase 2. It was only through this phase that the programme could be developed exclusively for the multigrade teachers in this context. During this phase, a programme was developed which addressed the results of the data analysis in Phase 2. The purpose of this programme was to support multigrade teachers in teaching and learning in their multigrade classrooms.

The fourth phase involved developing guidelines for implementing the programme for multigrade teachers. Guidelines were then formulated and described to direct the effective implementation of the programme in Chapter 6 above. The guidelines were aimed at putting the programme into practice.

### **7.2.2 Research Design**

The study adopted a qualitative case study approach, aimed at exploring and describing in-depth experiences of multigrade teachers, learners and parents in the Kunene Region in Namibia.

### **7.3 Implications of the Study**

#### **7.3.1 Implications of Developing and Implementing an Intervention Programme**

This programme may provide opportunities to support the development of multigrade teachers' knowledge, skills and attitudes.

#### **7.3.2 Implications Relative to Prior Research and Theory**

The Ministry of Education, Arts and Culture should continue to develop distance education programmes as methods to bring multigrade teachers from different areas and regions together for professional development, reducing teacher travel and allowing teachers to participate in e-learning in such forums as the Kopano Education Forum. Such online learning opportunities may be one of the types of professional development activities readily accessible to teachers from small, geographically isolated programmes across the larger country. However, planners of professional development for teachers need to ensure that teacher collegiality can still be an essential feature of such distance professional development, "blended learning" (in which one part is face-to-face or conference call and the rest is online) hold promise for reaching multigrade teachers while still giving teachers a network of other multigrade teachers with whom they can solve problems and share ideas.

### **7.3.3 Implications Relative to Educational Practice**

In order to develop multigrade schools, this study attempted to suggest a range of practical implications which may assist multigrade teachers. Given the various responses from participants in this study, it would be impossible to cover everything under this section. Therefore, implications to be discussed below included curriculum, lesson planning, teaching and learning strategies, classroom management, teacher training and support.

In as much as the government of Namibia advocates for multigrade teaching as a way of achieving the goals of access and education for all learners, it was evident from the findings of this study that multigrade teaching in schools seemed not to reflect the recommendations of the policy guidelines and this may not improve the current situation of multigrade not to be recognised. This situation therefore shows that there is no link between policy and practice. It also shows that the interpretation of what multigrade teaching is, proves that adopting concepts without analysing local contexts (especially, the Kunene context) and perceptions, has had a negative impact on multigrade classes and the implication thereof is that teachers may not take multigrade as an important pedagogy. It is extremely crucial for policy makers to consider the findings of this study which revealed that teachers had difficulties in implementing multigrade teaching because the curriculum was irrelevant, overloaded and demanding and the implication could be that teachers may become more negative towards multigrade teaching.

Multigrade teachers also revealed that they wanted to take part in the development of a multigrade teaching curriculum and not only to be its implementers. This calls for policy makers and curriculum developers to realise that having input from multigrade teachers may improve multigrade classroom practices since it is these teachers who know and deal with the realities of multigrade classes on a daily basis.

When it comes to the teaching and learning process in multigrade classes, teachers seemed to be dominantly standing in front of the class and talking. This practice left learners being passive recipients rather than constructors of their knowledge. This did not allow learners to use their background experiences to enhance their learning. This practice was not in line with what Vygotsky's theory (1978) proposes when he suggests that learners should be involved in their learning experience and process. The Ministry of Education, Arts and Culture needs to recognise that the multigrade teachers are a vital resource when it comes to multigrade curriculum development. This does not imply that extra teachers have to be appointed but rather that the ministry should invest in improving the existing teachers' knowledge, skills and attitudes and other promising methods of teaching to manage teaching and learning more effectively in the multigrade classrooms.

It is important to note that teaching must be based on the local environment (context) that learners can associate with especially with the Ovahimba children. If multigrade teaching is to be a workable approach in Namibia, policy makers and curriculum

developers should start realising that multigrade teaching calls for a shared responsibility and a joint concern as opposed to an individual concern.

Multigrade teachers on their own, without the support of all the other stakeholders, may not be able to implement multigrade teaching. More so, the policy of education for all may not be achieved in multigrade schools. There is need for multigrade teachers to obtain the support they need, not only to implement multigrade teaching but also to understand the theories underlying the pedagogy. This necessitates further research which has to investigate into the effective ways of keeping dialogue between policy makers, curriculum developers and the implementers, in this case, multigrade teachers.

Suitable materials should be developed for multigrade schools including self-study materials, which might be in the form of workbooks with self-correction keys (Little & Pridmore, 2004). These two scholars proceed to suggest that there is a need to put into place some small classroom libraries that could be accessed independently by the learners. Be that as it may, one may recommend the provision of better chalkboards to multigrade schools for quality education. It is in this vein that one may argue that if multigrade teachers are not well supported or empowered, teaching and learning in multigrade classes would be affected negatively since multigrade teachers will not be well equipped.

#### **7.3.4 Implications for Multigrade Teaching Policy and Practice**

This study has immediate implications for multigrade teaching policy and practice. There is a need to revise policy formulation and implementation with regard to the provision of multigrade teaching service that meets the needs and aspirations of multigrade teachers. This is to say, policy and curriculum materials should be relevant to the multigrade teachers. A revised curriculum strategy ought to address the needs and aspirations of multigrade teachers.

The current curriculum offered is based on monograde teaching which does not cater for multigrade teaching. Learning and teaching materials which addresses the needs of multigrade teaching have not yet been developed. At national level, a diverse curriculum for multigrade teachers which addresses the needs of multigrade teaching would encourage teachers rather than the current curriculum that frustrates them. Teachers' needs and interests are not covered in the current curriculum. The intervention programme needs to highlight these limitations when training multigrade teachers. The current curriculum offered, if allowed to continue as it is, has the potential to prolong exclusion and unfairness which may eventually lead to stress, further frustration and isolation of multigrade teachers and learners.

The findings of this study also pointed to inadequate training of multigrade teachers. Training of multigrade teachers is central to the provision of quality teaching. If multigrade teachers had been adequately trained and supported, their competencies

would have been on par with their counterparts in monograde settings. Informed and knowledgeable multigrade teachers who have good teaching skills increase the quality of learning support and ensure that teachers and learners have confidence in the teaching and learning. It is imperative that a teacher's manual should be developed with clear guidelines in order to support multigrade teachers. Furthermore, financial and appropriate human resources should be mobilised to enhance learning support initiatives. In other words, the challenges faced by multigrade teachers require commitment from various education stakeholders.

Infrastructural development for ICT could contribute towards advancing a knowledge-based society. The current curriculum and policies do not recognise the uniqueness of multigrade teaching. This, therefore, calls for policy and curriculum changes targeting the improvement of multigrade teaching. Besides the development of a curriculum and a policy strategy, inadequacies in the delivery of multigrade teaching need to be addressed, hence the call for a practical strategy. For example, multigrade lessons need to be demonstrated to the multigrade teachers for them to understand it better.

In order to develop appropriate strategies, which enhance the best practices in the teaching of multigrade teaching, the following is recommended:

1. Political mobilisation, networking should be carried out targeting key stakeholders like representatives of marginalised and disadvantaged communities in the Kunene Region through the various media, in order to

plead for infrastructural development that support the provision of enhanced quality learning support services through appropriate media and technology. The researcher therefore recommends a learning support network strategy through the Kopano online platform.

### **7.3.5 Implications of Developing and Implementing the Programme**

This research question sought to address the implications of developing and implementing the intervention programme in the Kunene Region. From the responses received on this research question, the following analysis of the sub-themes emerged:

1. *Provide continuous training and support through an in-service training programme to meet the needs of multigrade teachers.*

It appears from the data, that there was a need for teacher training in order to assist multigrade teachers to implement multigrade teaching effectively in rural schools. More teachers were of the view that continuous training and support through an in-service training programme to meet the needs of teachers should be provided.

2. *Develop a platform for training, collaboration, networking and exchanging of ideas among multigrade teachers.*

The findings of this study further suggested that a platform for training should be developed for collaboration, networking and exchanging of ideas among teachers from different schools. It appears from the data obtained through classroom observation that there was lack of knowledge

and skills in implementing teaching strategies, managing classrooms, planning lessons and in differentiating activities according to learners' levels. The present teachers felt that they were not well-trained or equipped to assist in this regard. This perspective is consistent with the claim by Little (2005:7-8) that "... [f]or learners to learn effectively in a multigrade environment, teachers need to be well trained and supported, well-resourced and hold positive attitudes to multigrade teaching. These findings are in line with Veenman (1995) who argues that multigrade teachers lack appropriate training for the multigrade setting. Appropriate resources are lacking, and time for individualised work, including remediation, is severely limited.

3. *Enhance professional skills of multigrade teachers.*

The results agree with the views of Joubert (2007) who indicates that interviews with teacher training institutions confirmed a neglect of multigrade teaching in the initial teacher training education programmes. He further confirms that very few institutions give attention to multigrade issues. Joubert affirms that the Cape Peninsula University of Technology has been providing multigrade teaching programmes and is currently training multigrade teachers.

A few other institutions, such as the University of Venda and the University of KwaZulu-Natal, are beginning to look into the preparation of multigrade teachers. In

particular, the University of Venda has started infusing multigrade issues into teacher intervention programmes. However, more institutions need to look into the issue of training multigrade teachers, including the Namibian higher institutions of learning. Joubert (2007) suggests that all training institutions should make multigrade teaching part of their teacher training programmes.

Extant relevant literature in other countries emphasise that it is crucial that multigrade teachers are trained prior to taking on jobs as teachers, and that they continue to receive professional development during their professional life.

However, it is common for multigrade teaching to be excluded from teacher education programmes (Brown, 2009; Little, 1995). These findings are consistent with the findings and observations of this study in the Kunene Region. The message communicated here is that multigrade teaching is ignored by some higher education institutions and that the majority of the multigrade teachers are not trained. This shows that there is a need to train teachers in order to capacitate them to implement multigrade teaching. In the same vein, Joubert (2007) and Juvane (2005) argue that multigrade teachers in South Africa and elsewhere are under-prepared for their roles and struggle with the conditions of work.

It is in this vein that Titus (2004) recommends the involvement of the community in the life of multigrade schools as a strategy to build ties with the school. He goes on to suggest that parents can be asked to visit multigrade schools as a resource or the

school might extend the curriculum out into the community. While the need to train multigrade teachers in approaches that will help them develop relations between the school and the community is recognised (Titus, 2004), there is a lack of empirically tested models on which to base these actions. The results of this study were silent on the issue of parental involvement since teachers indicated that parents were illiterate and too poor to support schools. From the numerous research results available it became clear that multigrade teachers need training on a regular basis. What also emerged from this finding is that teachers are not happy with multigrade living conditions in multigrade schools and therefore they do not stay longer at these schools.

Drawing on the data from the seven case studies used in this study, one can conclude that there is a need for an intervention programme to assist multigrade teachers in teaching and learning to enhance their professional skills as multigrade teachers. The researcher is of the opinion that all new multigrade teachers should be trained before they enter any multigrade classroom.

A number of noteworthy implications for future research emerged from this study. One of the major implications of this qualitative study is that the intervention programme can serve as a practical framework from which to study multigrade teaching in a practical way.

The intervention programme may have implications for multigrade teachers in their classroom practices, learner learning and parental involvement, the Ministry of Education, Arts and Culture in particular, and the country in general. Some learners may perform well and change their negative attitude to positive because of teachers who could assist them in the classroom to realise their full potential. Thus, professionally, multigrade trained teachers may employ different teaching strategies; manage classrooms effectively to ensure that learners are active in participating and engaging in the learning process. The knowledge and skills of multigrade teachers in terms of lesson planning, managing time, using appropriate teaching strategies and classroom organisational and management skills may improve with the development of the proposed intervention programme. Another implication is that multigrade trained teachers will be exposed to different ways of handling diverse learners with different levels, age, grades, interests and abilities. This, in the end, will make a meaningful contribution to Namibia's education and training. It may lead to a positive attitude towards multigrade teaching and multigrade classrooms.

Therefore, it is of outmost importance to ensure that multigrade teachers are supported and trained to carry out their professional duties successfully. One of the best ways to support teachers of multigrade classes is through professional training. This is so because they will be well equipped with the knowledge and skills required to manage multigrade classes. Well trained multigrade teachers will result in better teaching, enhanced self-confidence and increased self-esteem in teaching, proper

lesson plans, good management skills and efficient use of teaching strategies in multigrade classrooms.

The institutions of higher learning that are still teacher training programmes that focus mainly on the monograde setting, leaving the teachers of multigrade classes to learn through practice, which has implications for teaching and learning should change their approach through the intervention programme. The multigrade intervention programme for teachers may help them acquire the necessary theoretical knowledge and teaching skills to be more effective in their classrooms.

On the other hand, sharing personal experience and professional experiences with other multigrade teachers may have a bigger impact on some multigrade teachers' attitudes towards multigrade teaching.

### **7.5 Contributions to Knowledge**

There is a gap in the existing knowledge pertaining to multigrade teaching and learning in the Kunene Region in Namibia. The gap is that multigrade teachers face challenges in their classrooms but there are no formal programmes to prepare them in terms of teaching and learning. This gap was addressed by the researcher working inductively to develop an intervention programme to assist multigrade teachers in implementing multigrade teaching. There is also a gap in terms of a lack of multigrade teaching materials for teachers. The researcher filled gap by developing a

facilitator's training manual, teacher's manual and a webpage to assist multigrade teachers through the implementation of the intervention programme.

The researcher identified potential contribution in terms of future research. The study can serve as a stepping-stone for follow-up studies requiring an in-depth understanding of multigrade teaching. This study has broadened the knowledge base on multigrade teachers' perceptions, experiences and needs in the context of multigrade teaching in Namibia. This knowledge can inform future training programmes for multigrade teachers, curriculum planners and developers to be aware of challenges that keep multigrade teachers from performing their daily activities effectively. Through this new knowledge, training institutions in Namibia can potentially make informed decisions regarding training programmes for multigrade teachers. In addition, this knowledge can provide insight for novice multigrade teachers emerging in this profession as teachers. The study can also be of value to scholars on a theoretical level, as it contributes to the information available on multigrade teaching in the Namibian context.

This study makes a contribution not only to the process of a building theory, but also to the practical multigrade setting. The finding of this study has practical value. The theoretical contribution of this study relates to its ability to make a contribution to the body of knowledge regarding the training needs of multigrade teachers in multigrade settings. New knowledge from this study can be applied when planning and implementing training programmes in emerging studies that are context specific to

multigrade teachers. The finding of this study can add to the body of knowledge on multigrade training needs for teachers or can also broaden the scope of information available regarding multigrade teaching in the Namibian context. The study has the potential to make planners and curriculum developers aware of the plight of multigrade teachers, what they do and what they need, since it addresses a gap existing in the body of knowledge in multigrade teaching and learning in Namibia. This study makes it possible for multigrade teachers to receive the much-needed information pertaining to the multigrade teaching and serves as a guiding and supporting tool for the multigrade teaching.

## **7.6 Recommendations from the Study**

Based on the results and conclusions drawn in this study, recommendations are made to the MoEAC, the facilitator, the multigrade teachers, the higher teacher training institutions and for future research or for researchers who wish to research this topic further.

### **7.6.1 Recommendations for the Ministry of Education, Arts, and Culture (MoEAC)**

MoEAC could consider the following recommendations:

1. The MoEAC should embark on a major awareness campaign to inform and educate the society on the existence of the multigrade teaching programme and to elaborate clearly on the objectives of the multigrade teaching

programme. The ministry should make all stakeholders in education aware of the implementation of a multigrade teaching programme and its importance to teachers' professional development.

2. Schools and all stakeholders should be consulted in the formulation of policy regarding a multigrade teaching programme so that they produce a multigrade teaching policy that is acceptable to all stakeholders. Involvement of all stakeholders will result in them developing a sense of ownership which would encourage the stakeholders to support the implementation of the multigrade programme.
3. There is need for the ministry, through the regional offices, to provide adequate transport to enable the officials to visit multigrade schools so that they can supervise and monitor the implementation process of a multigrade programme.
4. Since the study established that some education officers do not take responsibility timeously due to distances involved and tight schedules, it is recommended that multigrade schools should widen the communication-base through modern communication channels such as the Kopano Education Forum. This would facilitate communication between the school and regional education officers and curriculum developers at NIED. This will in turn encourage smooth communication which will enable teamwork for all stakeholders.

5. The Ministry of Education, Arts, and Culture should provide newly appointed multigrade teachers with adequate continuous regional training for teachers to be equipped with knowledge and skills.
6. It is also recommended that regular follow-up multigrade workshops or refresher courses be offered to provide regular feedback and support to the multigrade teachers.

### **7.6.2 Recommendations to the Facilitator**

The facilitator could consider the following recommendations:

1. The facilitator should be well prepared to facilitate and implement the proposed multigrade teaching programme and attain the objectives of the study.
2. The facilitator should be someone who is familiar with multigrade teaching and the Kopano Education Forum background and with sound knowledge of Multigrade teaching and ICT.
3. The facilitator should accept ownership of the programme and be an ambassador for the programme and facilitate the programme with the needs and interests of teachers as a priority.
4. The facilitator should be familiar with the recommended multigrade teaching websites and materials.

5. Make sure that after the programme an evaluation is done to establish if the programme was implemented as intended, or whether it has achieved its goals, objectives and effectiveness.

### **7.6.3 Recommendations to the Multigrade Teachers**

Multigrade teachers could consider the following recommendations:

1. Multigrade teachers should be prepared to attend the multigrade teaching training programme and to achieve the objectives as intended.
2. Multigrade teachers should know what is expected of them during the implementation of the programme.
3. Multigrade teachers should accept responsibility for their own learning.
4. All multigrade teachers should complete the evaluation form at the end of the programme to assess the effectiveness of the training programme.
5. The multigrade teachers have to come up with better strategies in order to find solutions to their classroom problems. This might be done during the training programme.

One may argue that multigrade teachers should not implement a curriculum as is, but should go through a process of joint curriculum adaptation with local schools whereby they work as a group or a team.

#### **7.6.4 Recommendations to Higher Education Teacher Training Institutions**

Higher education teacher training institutions could consider the following recommendations:

1. It is recommended that multigrade teaching needs to be embedded in the higher education institutional programmes at both pre-and in-service training.
2. Both pre-and in-service support programmes for teachers ought to devote more attention to multigrade teaching methodologies.
3. The intention of the researcher is thus to use the findings of the study to implement the programme in multigrade schools in the Kunene Region by using the developed materials and the multigrade webpage.
4. The researcher further intends to present the findings to the University of Namibia for consideration to be incorporated in the teacher education programme curriculum.
5. The researcher intends to share the findings with the Ministry of Education, Arts and Culture and NIED multigrade teaching committee for further action.
6. Finally, the researcher intends to seek for funding from NGOs so that all regions in Namibia can benefit from the multigrade intervention training programme.

### **7.6.5 Recommendations for Future Research**

To further confirm and complement the results obtained from this study, there are other related aspects of multigrade teaching pertaining to multigrade teaching and implementation that warrant additional research. The researcher, therefore, proposes the following as areas for further study in the area of multigrade teaching implementation:

1. There is a need for a national study that would cover the implementation of the intervention programme for all multigrade teachers in the entire country. The study would give a more holistic picture on how multigrade teaching is conducted in the country. Such a holistic picture could easily influence policy in multigrade teaching.
2. Another study using the same methodology used in this study needs to be carried out targeting the senior primary phase (Grades 4-7) in Namibia. Such a study would help complete the picture for multigrade teaching implementation in Namibia.
3. Future research could focus on the evaluation of the proposed multigrade intervention programme in the Kunene Region to determine whether any adjustments or additions are necessary.

The carrying out of these recommendations would undoubtedly improve the value of this multigrade teaching programme.

## **7.7 Concluding Remarks**

In conclusion it is important to reflect on whether this study has addressed the research questions, which relate to the challenges of multigrade teaching and the teaching and learning strategies adopted by multigrade teachers. The questions were addressed through an exploration of the literature from both an international and local perspective. While there are different definitions of multigrade classrooms and teaching across the world, the common understanding of a multigrade classroom in Namibia is that of a setting in which a single teacher teaches more than one grade at the same time, in one classroom. And, while teachers in other parts of the world might be trained and qualified as multigrade teachers, this is not the case in Namibia. Although multigrade teaching is a concern in Namibia; higher institutions of learning do not offer any formal multigrade training. As discussed, the only training available is the three-day workshop organised by the Ministry of Education, Arts and Culture spearheaded by NIED. This programme is inadequate to address the needs of multigrade teaching and is only available to a limited number of teachers, which excludes teachers in remote schools as was the case with the four teachers in this research. The study revealed that learners were taught as if they were in a monograde classroom which means that the teacher focused on one grade only while the other grade was idling. Therefore, in order to address the matter, a foundation was laid by developing an intervention programme for multigrade teachers in the junior primary phase. Then, teachers could make use of this programme to share ideas with other

teachers, collaborate and network together to ensure the consistent implementation of a Namibian multigrade curriculum.

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## APPENDICES

### Appendix A: Ethical Clearance Certificate



UNIVERSITY OF NAMIBIA  
Empowering minds and shaping the future

**ETHICAL CLEARANCE CERTIFICATE**

**Ethical Clearance Reference Number: SEC/Foe/37/2014** **Date: 20 June, 2014**

This Ethical Clearance Certificate is issued by the University of Namibia Research Ethics Committee (UREC) in accordance with the University of Namibia's **Research Ethics Policy and Guidelines**. Ethical approval is given in respect of undertakings contained in the Research Project outlined below. This Certificate is issued on the recommendations of the ethical evaluation done by the Faculty/Centre/Campus Research & Publications Committee sitting with the Postgraduate Studies Committee.

**Title of Project:** Multigrade Teaching: An Intervention Programme For Selected Multigrade Primary Schools in Kunene Region Namibia  
**Nature/Level of Project:** Doctorate

**Principal Researcher:** Gisela Siririka (Student Nr: 8919593)


**Host Department & Faculty:** Curriculum and Assessment Studies, Faculty of Education

**Supervisor :** C. Shaimemanya (Main) J. Kangira(Co)

Take note of the following:

- (a) Any significant changes in the conditions or undertakings outlined in the approved Proposal must be communicated to the UREC. An application to make amendments may be necessary.
- (b) Any breaches of ethical undertakings or practices that have an impact on ethical conduct of the research must be reported to the UREC.
- (c) The Principal Researcher must report issues of ethical compliance to the UREC (through the Chairperson of the Faculty/Centre/Campus Research & Publications Committee) at the end of the Project or as may be requested by UREC.
- (d) The UREC retains the right to:
  - (i). withdraw or amend this Ethical Clearance if any unethical practices (as outlined in the Research Ethics Policy) have been detected or suspected,
  - (ii). request for an ethical compliance report at any point during the course of the research.

UREC wishes you the best in your research.



Prof. I. Mapaure  
UNAM Research Coordinator  
ON BEHALF OF UREC

## Appendix B: Research Permission Letter

☎ (+264 61) 206 3111  
Website: [www.unam.na](http://www.unam.na)



340 Mandume Ndemulayo Avenue  
Private Bag 13301  
Windhoek  
NAMIBIA

— Inspiring minds & shaping the future —

**Date: 27<sup>th</sup> June 2014**

**TO WHOM IT MAY CONCERN**

### **RE: RESEARCH PERMISSION LETTER**

1. This letter serves to inform that student: Gisela Siririka (Student number: 8919593) is a registered student in the Department of Curriculum, Instruction and Assessment Studies at the University of Namibia. Her research proposal was reviewed and successfully met the University of Namibia requirements.
2. The purpose of this letter is to kindly notify you that the student has been granted permission to carry out postgraduate studies research. The School of Post-graduate Studies has approved the research to be carried out by the student for purposes of fulfilling the requirements of the degree being pursued.
3. The proposal adheres to ethical principles.

Thank you so much in advance and many regards.

Yours truly,

Name of Main Supervisor: **Dr. C. N.S. Shaimemanya**

Signed: \_\_\_\_\_  
*Shai*

**Dr. C. N.S. Shaimemanya**

Signed: \_\_\_\_\_  
*Shai*

**Director: School of Postgraduate Studies**  
Tel: 206 3523  
E-mail: [cshaimemanya@unam.na](mailto:cshaimemanya@unam.na)

## Appendix C: Letter of Support for Study Leave

University of Namibia, Private Bag 13301, Windhoek, Namibia  
340 Mandume Ndemufayo Avenue, Pioneers Park  
☎ +264 61 206 3111; URL: <http://www.unam.edu.na>



26 MAY 2016

### TO WHOM IT MAY CONCERN

Dear Sir/Madam

### LETTER OF SUPPORT: GISELA SIRIRIKA REQUEST FOR STUDY LEAVE TO CONDUCT RESEARCH IN THE KUNENE REGION

Gisela Siririka is a PhD student at the University of Namibia under my supervision and Prof Kangira. The title of the research project is: *An Intervention Programme for Multigrade Teachers in Kunene Region, Namibia*

Ms Siririka has made excellent progress so far. She has reached the stage where she now has to conduct fieldwork in multigrade schools in the Kunene Region. This will be mainly for data collection, transcription, translation and writing up. I strongly support her application for study leave. It will enable her to make even greater progress with her studies.

I trust that the application will receive your favourable consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Shai", written over the word "Sincerely".

Dr C.N.S. Shaimemanya

Senior Lecturer Educational Research/Main Supervisor

## Appendix D: Permission Letter to Conduct Research



REPUBLIC OF NAMIBIA

### MINISTRY OF EDUCATION

Enquiries: Mr C. Muchila  
E-mail: Cavin.Muchila@moe.gov.na  
Tel: +264 61 2933200  
Fax: +264 61 2933922

Private Bag 13186,  
WINDHOEK  
Namibia

File no: 11/1/1

**Date: 16 July 2014**

**To:** Ms Gisela Siririka  
Private Bag 2034  
Okahandja  
Namibia

**Dear:** Ms Siririka

**SUBJECT: PERMISSION TO CONDUCT A RESEARCH STUDY IN KUNENE REGION**

Your correspondence regarding the subject above, seeking permission to conduct a research study in the schools of Kunene Region has reference.

Kindly be informed that the Ministry does not have any objection to your request to conduct a research study at identified schools in the region concerned.

You are, however, kindly advised to contact the Regional Council Office, Directorate of Education, for authorisation to go into the schools and for proper information coordination.

Also take note that the research activities should not interfere with the normal school programmes. Participation by either teachers or learners should be on a voluntary basis. Should you involve minors in your research activities, consent for participation should first be obtained from the parents/guardians of the minor(s).

By copy of this letter the Regional Education Directors are made aware of your request.

Sincerely yours

  
.....  
Mr. Alfred Ilukena  
PERMANENT SECRETARY  
cc: Directors of Education: Kunene



All official correspondence must be addressed to the Permanent Secretary

## Appendix E: Permission to Conduct Research in the Kunene Region

24-APR-2009 16:17 From:

To: +264

P.1/1



REPUBLIC OF NAMIBIA  
KUNENE REGIONAL COUNCIL  
DIRECTORATE: EDUCATION  
THE DIRECTOR'S OFFICE



Tel: 09264 67 - 335000  
Fax: 09 264 67 - 332226  
Enquires: Mrs. J. Kharises

Private Bag 2007  
KHORIXAS  
03 October 2014


University of Namibia  
Private Bag 13301  
WINDHOEK

Dear Ms. G. Siririka

**RE: REQUEST FOR PERMISSION TO CONDUCT THE RESEARCH IN  
KUNENE REGION**

1. Your letter undated bears reference.
2. Permission is granted to carry out your research in the Primary Schools in Opuwo Circuit on the condition that the normal school activities are not disrupted and that you will inform the schools well in advance.
3. Thank-you for your understanding in this regard.

Yours faithfully,

  
MR. SIMON TSUSEB  
DIRECTOR OF EDUCATION  
KUNENE REGION  
Private Bag 2007, Khorixas  
Tel: 067 - 332226

Cc: Dr. Geremita Shaimemanya  
Cc: Prof. Jairus Kangira  
Cc: Mr. U. Tjivikua I/E: Opuwo Circuit

**Appendix F: Assent for to be Explained to Grade 2 and 3 Learners in Otjiherero**

My name is Ms Gisela Siririka here. I am a Student at the University of Namibia where students are trying to get answers to problems. If we want to find out more about something or know more about it, we carry out what we call research. This means that we go out to find answers or solutions to problems. My study will help us find ways to make it easier for you to learn better in multigrade classrooms. What I going to ask you or do here was explained to your parents and teacher. They all know why I am here and what I am doing and they all agreed that I should talk to you. You can decide to be part or you can tell me that you do not want. I will not be angry with you if you do not want to. I will use a Smartphone to record what you are telling me. I will also have some time to sit in your class without disturbing your lessons. I will sit in the corner and take notes and record the lesson with a video camera. You are free to ask me, your teacher any question you have. You may even do it after the study.

If you are happy to help me in this regard, please write your name below.

Signature \_\_\_\_\_ of \_\_\_\_\_  
learner.....Date.....

Signature \_\_\_\_\_ of \_\_\_\_\_  
researcher.....Date.....

## **Appendix G: Consent Letter for Parents**

Dear Parent

I am Gisela Siririka a student at the University of Namibia. I am conducting research on multigrade teaching. I am requesting permission to access information on your child from School .....

Participation in this study is voluntary. Your decision whether or not to allow your child to participate will not affect the services normally provided to your child by the school. Any information that is obtained in connection with this study will remain confidential and will only be disclosed with your permission.

Should you have any questions or need further information or clarification, I can be contacted at 0811696661

## Appendix H: Attendance of OSSREA Research Training Course

(+264 61) 206 3111  
Website: [www.unam.na](http://www.unam.na)



350 Mandume Ndemufayo Avenue  
Private bag 13301  
Windhoek  
NAMIBIA

Inspiring minds & shaping the future

1<sup>st</sup> June 2013

### To Whom It May Concern

This note serves to confirm that Ms Gisera Siririka had been attending the OSSREA Doctoral Research Training Course which was held from the 13th May 2013 to 1<sup>st</sup> June 2013 at the II.RC Auditorium of UNAM Library. The training course was organized by the School of Postgraduate Studies at the University of Namibia in conjunction with the Organization for Social Sciences Research in Eastern and Southern Africa (OSSREA) to build the capacity of doctoral students in terms of content pedagogy of research methodology courses.

For further questions about this course, please feel free to contact me or anyone in the Post Graduate Studies School.

Yours Sincerely

Cornelia Shimwooshili Shaimemanya, PhD.

Director School of Postgraduate Studies

University of Namibia

Tel: +264 61 206 3523; E-mail: [cshaimemanya@unam.na](mailto:cshaimemanya@unam.na)

## Appendix I: Letter from Professional Editor



Archford Musodza  
Academic Consulting Services  
Professional Copyeditor & Proofreader  
17 Sinclair Street  
Eros, Windhoek  
Mobile: +264 818 704 864  
Email: [archfordmusodza@gmail.com](mailto:archfordmusodza@gmail.com)

Gisela Siririka  
University of Namibia  
340 Mandume Ndemufayo Avenue  
Pioneers' Park,  
Windhoek,  
Mobile: 0811696661  
Email: [gsiririka@nied.edu.na](mailto:gsiririka@nied.edu.na)

25<sup>th</sup> October 2017

TO WHOM IT MAY CONCERN

**REF: COPYEDITING AND PROOFREADING OF GISELA SIRIRIKA'S THESIS FOR THE DOCTOR OF PHILOSOPHY DEGREE**

This letter serves to confirm that I copyedited and proofread GISELA SIRIRIKA's Thesis for the Doctor of Philosophy Degree titled: (MULTIGRADE TEACHING: DEVELOPMENT OF AN INTERVENTION PROGRAM FOR SELECTED MULTIGRADE SCHOOLS IN KUNENE REGION, NAMIBIA).

I declare that I professionally copyedited and proofread the thesis and removed mistakes and errors in spelling, grammar and punctuation. In some cases, I improved sentence construction without changing the content provided by the student. I also removed some typographical errors from the thesis. I also declare that I am a professional copyeditor & proofreader and that I have edited many Masters and Doctoral theses here in Namibia, Zimbabwe and South Africa.

It was a pleasure proofreading and copyediting your student's thesis.

Please contact me should you need some clarifications.

Yours Sincerely,

**Archford Musodza (LLB)(Ph.D.).**  
Academic Writing Consultant  
Copyeditor & Proofreader  
Blackford Centre (U.K.)

## Appendix J: Letter from Independent Coder



**Andrew Gororo**  
AW EdTech Solutions  
P.O Box 91354,  
Klein Windhoek  
Windhoek  
awedtechsolutions@gmail.com  
Cel: 081433 2201

**Gisela Siririka**  
University of Namibia,  
340 Mandume Ndemufayo Avenue  
Pionierspark  
Windhoek  
Email: gsiririka@gmail.com  
Cel: 0811696661

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TO WHOM IT MAY CONCERN

**REF: ACADEMIC ASSISTANCE - DATA ANALYSIS FOR THE DOCTOR OF PHILOSOPHY DEGREE**

This letter serves to confirm that I provided academic assistance on Data Analysis to Gisela Siririka's thesis for the Doctor of Philosophy Degree titled: **(MULTIGRADE TEACHING: AN INTERVENTION PROGRAMME FOR SELECTED MULTIGRADE PRIMARY SCHOOLS IN KUNENE REGION, NAMIBIA).**

I declare that I professionally assisted the student with Data analysis by ensuring that the student coded, categorised as well as draw academically sound themes, that form Chapter 4 of her thesis. I also declare that I am a professional Academic consultant and that I have consulted here in Namibia, Zimbabwe and South Africa.

It was a pleasure to provide academic assistance to your student.

Please contact me should you need some clarification.

Yours Sincerely,

**Andrew Gororo (MSc).**



Academic Writing Consultant