

**Preparing Grade R learners for formal Schooling in the multi-grade classroom
in Lesotho**

By

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**A Dissertation Submitted in Fulfilment of the Requirements for the Degree of
MASTER IN EDUCATION**

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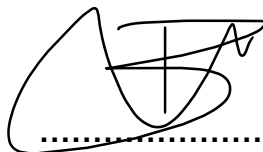
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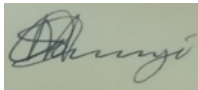
Supervisor: Dr B.N. Ndlovu



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DECLARATION

I, Makorina Pearl Ntsinyi, hereby declare that this dissertation, *Preparing Grade R Learners For Formal Schooling In The Multi-Grade Classroom In Lesotho*, submitted for the Master of Education in Early Childhood Development and Learning degree at the University of the Free State, is entirely my own work. It has never been submitted for an academic degree award or examination at this university or any other university. Additionally, I used reasonable care to guarantee that the work is original, does not violate copyright laws to the best of my knowledge, and has not been plagiarised. I also declare that all sources used are acknowledged through referencing, including all the ones I consulted.



M.P. Ntsinyi

Date: 30-10-2023

DEDICATION

I dedicate this work to my late parents, in particular my father, who worked very hard to educate our large family. When I had to stay over to continue my studies, my better half was always there to offer his entire support and endure hardships, thank you very much "Sebata". I can't forget my family's best friends who never failed to make me smile while I was working hard, my first-born son Machacha, who called me by the name of my supervisor whenever he saw me using my laptop, and my daughter, ausy Mama, who was always prepared with breakfast to give me more energy to get through my exhausting day. Lekhula, my last-born son, who was always asking, "My mother, are you okay?" All gratitude is also extended to my sisters, brothers and friends for their words of wisdom and encouragement.

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ABSTRACT

The transition from pre-school to formal schooling is a critical juncture in a child's educational journey. This study examined the challenges and strategies involved in preparing Grade R learners for formal schooling, particularly within the context of multi-grade classrooms in Lesotho. Most Early Childhood Education pre-schools in Lesotho practise multi-grade teaching, where one teacher teaches different ages and multiple grade levels in one classroom. Pre-school teachers in Lesotho are not equipped to teach in a multi-grade classroom, though it is a common practice in Lesotho pre-schools. This study aimed to investigate the lived experiences and challenges faced by pre-school teachers in preparing Grade R learners for school readiness in a multi-grade classroom. The study considered different teaching strategies such as planning, grouping, classroom organisation, classroom management and assessment, adopted by pre-school teachers. It also identified challenges including the lack of training and curriculum guidance. Four pre-school teachers from different schools within Maseru Urban participated in the study. The qualitative research approach located within the contours of the interpretivist paradigm were chosen for this study. Themes were developed through thematic analysis. They explore strategies and challenges of pre-school teachers in preparing Grade R learners for formal school readiness. Vygotsky's socio-cultural theory formed the theoretical framework underpinning this study. The findings revealed that pre-school teachers lacked sufficient training and curriculum advice in teaching multi-grade classrooms as they still used mono-grade curricula. The study also found that pre-school teachers adopted different teaching strategies they found essential and effective in preparing Grade R learners for formal school readiness. Training for multi-grade teaching needs to be prioritised as it is the popular teaching arrangement in Lesotho.

Keywords: multi-grade teaching, Grade R school readiness, formal schooling, transition, strategies, socio-cultural theory

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LIST OF ACRONYMS/ABBREVIATIONS

BELDS	Better Early Learning and Development at Scale
CECE	Certificate in Early Childhood Education
CEPD	Centre for Education Policy Development
DAP	Developmentally Appropriate Practice
ECCD	Early Childhood Care and Development
ECD	Early Childhood Development
ECE	Early Childhood Education
EFA	Education for All
EMIS	Education Management Information System
ESSP	Education Sector Strategic Plan
EYL	English for Young Learners
GOL	Government of Lesotho
GPE	Global Partnership and Education
IECCD	Integrated Early Childhood Care and Development
LCE	Lesotho College of Education
MoET	Ministry of Education and Training
UNICEF	United Nations Children's Fund
UNESCO	United Nations Educational, Scientific and Cultural Organization

CHAPTER ONE

CONTEXT AND BACKGROUND OF THE STUDY

1.1 Introduction

In Lesotho, the transition from pre-school to formal school can be a significant milestone for young learners, marking the beginning of their formal education journey. However, this transition can also be challenging, especially for those who may not have had the opportunity to develop essential skills and knowledge in pre-school settings. The multi-grade classroom, where students of different ages and abilities learn together, presents a unique set of challenges and opportunities for teachers and learners alike. This introduction sets the stage for exploring strategies and best practices for preparing pre-school learners for formal school in the multi-grade classroom in Lesotho, highlighting the importance of effective transition and the role of teachers in supporting this process.

The Early Childhood Education (ECE) phase of schooling is fundamental to learners' academic school readiness within the stipulated period of age zero to eight years (Nyland, 2020; Hall & Sambu, 2014; Berry, Dawes & Biersteker, 2013; Kibel, Lake, Pendlebury & Smith, 2010). According to Pedro, Miller and Bray (2012), the education of learners during early childhood is very important because of its long-lasting benefits since it contributes not only to better grades but also to the foundations of adult life. Feinstein, Duckworth and Sabates (2004) and Obiweluzor (2015) affirm that through ECE learners develop fully to adulthood. This study seeks to investigate how pre-school teachers prepare Grade R (Reception) learners for school readiness, especially a multi-grade classroom (Stewart, 2016)

Grade R in Lesotho is also called the 'Reception' class for learners of five years of age. In other countries like the United States, it is called kindergarten and also begins at age five. Norway also describes it as kindergarten, but it is attended by children from ages one to five (Engel, Barnett, Anders & Taguma, 2015). Grade R education marks the beginning of entry into formal Schooling (Ackerman & Barnett, 2005) and Early Childhood Development (ECD). According to the Education Sector Strategic

Plan (ESSP) (2005–2015) early childhood - the period between birth and the age of six – is the time of highest growth and development, when the brain develops the fastest.

This period includes the development of walking, speech, self-worth, worldview, and moral principles. It includes the development of life skills in learners and entails care both inside and outside the home, where various practices and activities are carried out in accordance with the various ages of the learners. It also includes early disability detection, which may call for early intervention. Therefore, for learners to receive quality care and stimulation, among others, there is a need for well-trained and qualified ECD teachers who can address the holistic needs of Grade R learners (Hatfield, Burchinal, Pianta & Sideris, 2016).

The government of Lesotho has a mandate to significantly expand the number of certified pre-primary teachers. This shows that the government of Lesotho understands the significance of employing qualified teachers to carry out the pre-primary education curriculum through the Ministry of Education and Training (MoET) in the Department of Early Childhood Care and Development (ECCD). Lesotho intended to integrate Reception (Grade R) classrooms into all of its primary schools (MoET, 2011) but this initiative has not yet reached all primary schools to date. This plan has compelled the MoET to develop guidelines that indicate what kind of content is to be covered in Grade R classes.

1.2 Background of the Study

According to Shofoyeke (2012), both teachers and learners must develop certain skills in teaching so that they can be effective teachers and learners. This calls for teachers to modify both their own behaviour and that of their learners positively. In South Africa, the understandings and practices of stakeholders involved in the transition of learners from pre-school or home to formal schooling were examined by Goble, Sandilos and Pianta (2019) and also by Margetts and Phatudi (2013). According to their findings, there is a need for a significant effort to be made to raise awareness about ECD. In addition, as multi-grade teaching occurs at the local level as well, the South African

government is pushed to go beyond universal accessibility to ensure quality ECD service provision.

Lesotho is among the several countries – China, Indonesia, Singapore, South Korea and Vietnam – which have become increasingly interested in the quality of early childhood programmes (Tan, 2016), as well as access to these programmes and teachers' effectiveness in this phase. In India, it is asserted that if learners spend adequate time in ECE settings, they perform better and succeed in their future academic endeavours (Kaul & Bhattacharjee, 2019). Early Childhood Education (ECE) in Lesotho is promulgated through the Education Act of 2010 through which schools or centres of this nature are obliged to register with the MoET. When women's groups were caring for children in their homes while their parents were at work in the 1970s, ECE began as a project backed by Bernard Van Leer and the United Nations Children's Fund (UNICEF).

Likewise, The Kyrgyz Republic, Ghana, Lesotho, Sao Tome and Principe came together under the umbrella of UNICEF, the World Bank, and Global Partnership and Education as donors to form a partnership for Better Early Learning and Development at Scale (BELDS) (Aboud & Proulx, 2019). The purpose of this partnership was to initiate quality implementation and effectiveness in ECE programmes or services. In addition, BELDS was intended to improve school readiness of learners so that they could start primary school ready to learn and succeed and have access to quality pre-primary education by 2030 (UNICEF, 2019; Zubairi & Rose, 2017).

This is in accordance with both the 2013 National Policy for Integrated Early Childhood Care and Development (IECCD Policy) and the 2013 National Strategic Plan for IECCD). Both documents offer a road map to how to enhance and broaden pre-school provisions (including home-based and Reception year programmes) for pre-schoolers between the ages of three and five, as well as how to strengthen their transition from home and pre-school to primary school. The IECCD policy also aims to support educational programmes and other policies aimed at enhancing and expanding Lesotho's pre-school education.

Holmes (2019) as well as Tan (2016) define the growth of school readiness as an organised system through which learners, teachers, parents, and other caregivers interact and transact. This happens in different surroundings like the home, the school, and other pre-school contexts, and further includes other bodies like communities, neighbourhoods, and governments. De Jager (2014) and Burgess and Ernest (2020) add that school readiness involves experiences, tasks, and different skills acquired by learners. This means that for Grade R learners to be prepared for School readiness they must also be ready to learn (Goble *et al.*, 2019; UNICEF, 2012).

Furthermore, the first acquisition of learners' competencies is influenced by people surrounding them, such as peers, parents and teachers as well as people encountered through social relationships (Janse van Rensburg, 2015). Consequently, the improvement of school readiness is done through the threefold relationship that is between parents and learners, parents and teachers and teachers and learners (Holmes, 2019; Tan, 2016). Van der Berg, Girdwood, Shepherd, Van Wyk, Kruger ... Ntaka (2013) note family support as a strong factor that helps learners to continue attending pre-school in order to be ready for formal schooling. School readiness remains significant as it provides for a smooth transition into formal schooling (Wolf, Aber, Behrman & Tsinigo, 2019; Parker, 2017).

Children who start primary school without being entirely ready are less likely to obtain high learning levels, and they are more likely to repeat grades or leave school altogether (Aguiar & Aguiar, 2020). It seems that schooling in the early years before formal schooling determines how learners will grow and realise their full learning capacity. Therefore, ECD's contribution is crucial to learners' holistic growth and development (Benegusenga, Ntawiha & Nzabaliirwa, 2017). Since everyone has a right to education (Universal Declaration of Human Rights released, 1948, Article 26), the link between excellent ECD programmes and the long-term advantages for young learners' optimal growth, development, and learning cannot be contested. According to Mulkeen and Higgins (2009), Joubert (2010), Baykan (2013) and Mortazavizadeh, Nili, Isfahani and Hassani (2017), multi-grade teaching refers to a state whereby a teacher teaches learners from two or more grade levels concurrently, in the same classroom. Msimanga (2019) and Alwi, Zaman, Ghaffar, Tabasum and Hasan (2021) similarly observed that a multi-age class is where a group of learners of

different ages are put together in a single classroom and taught by a single teacher. Researchers have discovered that it is advantageous to have a multi-grade class, as learners learn from those who are mature and interact well as they share experiences and develop together holistically.

Across the world, the multi-grade style of teaching is regarded as the origin of formal education (mono-grade) which dominated teaching around the 1800s. According to Mulkeen and Higgins (2009), multi-grade teaching was piloted in Uganda, Gambia, and Senegal in sub-Saharan Africa, with varying degrees of success in each country. It was noted that general patterns of teacher shortages and lack of support and planning emerged from these countries. However, learners' retention and school attendance slightly improved. Multi-grade teaching statistics in the world today are underestimated. In 1988 and 1996, the United Nations Educational, Scientific and Cultural Organization (UNESCO) published several case studies based in Burkina Faso, Australia, Lesotho, Korea, Mali, the Philippines and France which indicated that multi-grade classrooms remain widespread, particularly in remote areas in both developed and developing countries. In the same report, only 30% of classes were multi-grade in all these countries.

In Africa, specifically in Uganda, Senegal, and Gambia, multi-grade schooling has been offered although from different perspectives. For instance, In Uganda, one teacher was used to teach two grades and that was not a problem as teachers received specialised training. In this multi-grade teaching pilot, teachers were similarly equipped with additional teaching and learning materials (Mulkeen & Higgins, 2009). In Senegal, multi-grade teaching was piloted through one teacher with no training. In The Gambia, more than one teacher taught different grades. However, Lesotho is no exception to this practice although there is a lack of published research or government policy on this method of teaching at pre-schools. It is therefore significant to critically conduct this research in Lesotho to study these teaching methods and their challenges.

All things considered, preparing early childhood learners for school readiness appears to be a challenge, especially in situations where a multi-grade pedagogy has to be

applied. In Chaka and Weber (2011), and the Education Management Information System (EMIS) data analysis of 2005–2006 argued that multi-grade teaching is facing notable challenges in South Africa since teachers are not trained – including the principals who oversee the implementation of this type of teaching. In addition, workshops and training are seen to focus strongly on mono-grade teaching.

These few findings are also noticeable in Lesotho, especially because South Africa is its only neighbour and indirectly has an influence on its education system. As a result, the literature points out that multi-grade teachers need to be equipped with curriculum adaptation and strategies for planning for learner organisation. This should be done to reach the goals of Education for All (EFA) through multi-grade teaching which was implemented years ago by several countries around the globe (Thephavongsa, 2018). I, therefore, decided to investigate the challenges that pre-school teachers experience when preparing Grade R learners for school readiness in a multi-grade and multi-age classroom in Lesotho. As a practitioner and a lecturer, I have visited several centres and observed that most centres have classrooms where children of different ages and grades are placed in a single classroom and taught by one teacher. I observed and noted the following challenges: first, classroom management; second, lesson time management; third, learner cooperation; fourth, lesson planning and actual teaching; and last, teachers are compelled to engage children in group work according to this arrangement.

1.3 Problem Statement

Multi-grade and multi-age teaching was developed and implemented for several reasons such as in places where there is low population density. It is crucial to highlight the challenges that pre-school teachers in Lesotho experience while preparing Grade R learners for school readiness. In addition, the study explored challenges related to classroom management, lesson time management, learner cooperation, lesson planning and actual teaching, and lastly, the fact that teachers are compelled to engage children in group work according to this arrangement.

The MoET (2011) in Lesotho developed guidelines to help teachers teach in pre-school classes, not in multi-grade pre-school classes. Ever since this development, there has been a lack of research on how pre-School teachers prepare Grade R

learners for formal learning in a multi-grade and multi-age class, hence, exploration in this area is significant. Connors-Tadros and Daily (2018) emphasised that early childhood teachers' instructional practices are influenced by a strong professional development system leading to improved learner outcomes. It was, therefore, vital to further understand how all concerned help learners cope with instructional practices in multi-grade and multi-age classroom settings.

By contrasting the perspectives of pre-school teachers, primary school teachers, and parents regarding the success indicators and important factors in the transition to school, Correia and Marques-Pinto (2016) conducted a study that aimed to contribute to the knowledge of the adaptation process of learners to school transition (around age six) in Portugal. However, Lesotho has not placed a lot of attention on school transition through new educational policies or research on the processes of adaptation involved in the transfer from the Reception grade.

1.4 Rationale for the Study

This study was worth conducting because little is known about the experiences and challenges that pre-school teachers encounter when teaching learners in multi-grade and multi-age classrooms. There is limited research on the specific teaching strategies and approaches used by multi-grade Grade R teachers in Lesotho to prepare learners for formal schooling. The main focus was on how pre-school teachers teach Grade R learners in this setting for formal school readiness. The need for more research on the learning outcomes and school readiness of Grade R learners in multi-grade classrooms in Lesotho compared to mono-grade settings. Consequently, the stipulated arguments concur with the fact that further investigation should be done to influence the Lesotho government through the MoET – and involve stakeholders to equip and prepare pre-school teachers on how to prepare Grade R learners for formal learning in multi-grade and multi-age classrooms.

1.5 Aim of the Study

The primary aim of this study was to investigate the experiences and challenges that pre-school teachers face when preparing Grade R learners for formal school readiness in a multi-age and multi-grade classroom in Lesotho.

1.6 Specific Objectives

The objectives of this study are as discussed below.

- To examine how pre-school teachers prepare Grade R learners for formal learning in multi-grade classrooms.
- To examine how pre-school teachers ensure and enhance cooperation among learners in multi-grade classrooms.
- To identify challenges experienced by multi-grade pre-school teachers with the implementation of the curriculum.

1.7 Research Questions

This study was based on the main research question and the sub-questions on pre-school teachers' practices and their preparedness to prepare Grade R learners for formal learning in multi-grade classrooms.

1.7.1 Main research question

What are pre-school teachers' practices to prepare Grade R learners for formal school readiness in multi-grade classrooms in Lesotho?

1.7.2 Sub-questions

- a) How do pre-school teachers prepare Grade R learners for formal learning in multi-grade classrooms?
- b) How do pre-school teachers ensure and enhance cooperation among learners in multi-grade classrooms?
- c) What are the challenges experienced by multi-grade pre-school teachers in implementing the curriculum?

1.8 Limitations of the Study

The research examined how pre-school teachers' practice teaching in multi-grade classrooms, while conversely preparing Grade R learners for school readiness. Nonetheless, the study encountered possible limitations. The geographical demarcation was the main limitation and data collection was only done on pre-primary school teachers within the Maseru district. Therefore, the study results cannot be

generalised to environments with different contextual situations from those of the study. Language usage was also one of the restrictions in this research as the study was conducted using an interview guide written in English. Although the participants were permitted to respond in any appropriate language (since Sesotho and English are the two official languages in the country) the researcher might not have interpreted their responses precisely when translating the Sesotho answers to English, though they were member-checked to verify the answers (Koloti, 2020).

1.9 Scope of the Study

In Lesotho, learners in pre-schools range in age from three to six years old. One teacher oversees teaching learners of various grade levels in a pre-school classroom. The learners aged three to four are in a pre-school grade, while learners aged four to five are in Grade R. This is a multi-grade classroom because only one teacher is teaching all of these learners. The Grade R learners are in their last year of pre-school and await entry into formal schooling. The study, therefore, focused on how pre-school teachers prepare Grade R learners for formal school readiness in this context.

The study emphasises the strategies adopted by pre-school teachers and the challenges they face when preparing Grade R learners for the transition to formal schooling. The challenges included curriculum incongruity and lack of training. On the other hand, the strategies the pre-school teachers adopted to overcome such challenges are also stipulated. The study was conducted in pre-schools in the Maseru district (an urban area of Lesotho) and data was collected through semi-structured interviews, classroom observations and document review.

1.10 Significance of the Study

The research that has already been done on multi-grade teaching will benefit from this study. The study will enable curriculum developers, especially in Lesotho to identify the challenges in teaching multi-grade classes and explore possible solutions. If issues with multi-grade teaching were to be discovered and resolved, teaching and learning in multi-grade classes would improve. In addition, other researchers would become aware of and interested in this work, and it would make new fields of research possible.

This research may add value to the body of knowledge in Lesotho's MoET in the ECCD programme. Consequently, primary schools would deem it necessary to capacitate pre-school teachers to be well prepared in the teaching and learning of pre-school learners, at the same time taking into consideration the preparedness of Grade R learners in the multi-grade classroom. Most importantly, the study could create awareness in primary schools that the creation of more Reception classes in primary schools is essential to eliminate multi-grade teaching in pre-schools.

This research also contributes to the existing literature in Lesotho, in that information from the findings could contribute to management and governance models. This would particularly equip pre-school teachers with skills to be able to manage learners in a multi-grade classroom – at the same time taking into consideration preparing Grade R learners for formal school entrance. Consequently, this would result in a consistent standard of ECD and/or Grade R programmes in the Lesotho setting. The study indicates the importance of pre-primary teachers' understanding when preparing Grade R learners for formal learning in the multi-grade classroom. In addition, it will specify the opportunities and challenges faced by pre-school teachers when preparing Grade R learners for formal learning. Therefore, it is possible that this study could be beneficial to all parties involved in ECD.

1.11 Definition of Operational Concepts

Early Childhood Development (ECD) is the approach that promotes the well-being of the young learner through different characteristics of stakeholders involved in the development of the learner – the family, social environment, physical health, language, and community resources (Anderson, Shinn, Fullilove, Scrimshaw, Fielding, Normand & Carande-Kulis & Task Force on Community Preventive Services, 2003). In this study, the concern is the development of learners during teaching and learning using different teaching strategies.

Early Childhood Education (ECE) refers to the instruction students receive prior to starting elementary school. It is defined as the education provided to pre-schoolers between the ages of zero and eight in the study's environment, however, the focus of this investigation is on Grade R students in classrooms between the ages of five and six (MoET, 2013).

School readiness: A child's readiness is viewed holistically. That is, a child's well-being and all other aspects including competencies and general knowledge contribute to child growth and development (Holmes, 2019).

Multi-grade: According to Ramrathan and Mzimela (2016), multi-grade schools are common globally. Multi-grade teaching is explained in many ways by different countries – multi-groups, multi-classes or combination group teaching. “Multi-grade classes comprise more than one grade in one classroom where there is one teacher who is responsible for teaching learners who are in different grades” (Msimanga, 2020: 124).

Multi-age classroom: Godinez (2019) said that a multi-age classroom is a class merging learners of different ages and capabilities.

Grade R in Lesotho is also called the Reception class for learners from five years of age. In other countries like the United States, it is called kindergarten and begins at age five. It also marks the beginning of entry into formal schooling (Ackerman & Barnett, 2005).

Pre-primary education is the education intended for learners from three years of age to the beginning of formal schooling (Force, 2013).

1.12 Theoretical Framework

Multi-grade teaching is defined as the practice of having one teacher teaching learners of two or more grade levels in the same classroom setting (Badar & Mason, 2020; Hyry-Beihammer & Hascher, 2015; Pridmore, 2007). Mortazavizadeh *et al.* (2017) emphasised that multi-grade teaching has long been used in both developed and developing countries where locations and/or populations are not adequate to establish a mono-grade class. So, to further understand the challenges and all other factors affecting teachers placed in this area of practice, Vygotsky's socio-cultural theory is hereby selected to guide this research. Mahn and John-Steiner (2012) noted that sociocultural theory has effective ways to address learner variance in a multi-grade environment.

Daneshfar and Moharami (2018) and Lee (2015) stated that socio-cultural theory refers to a philosophy of teaching which is based on the premise that students learn effectively when teachers can accommodate the differences in their School readiness levels as well as their learning profiles. In their research, Naparan and Alinsug (2021), Amin (2020) and Saqlain (2015) observed the socio-cultural theory as one of the remarkable theories in education that requires teachers to change the traditional way of teaching. Vygotsky's sociocultural theory reflects the teachers' and learners' interactional relationship and stipulates that the teacher is responsible for developing the learner (Shabani, 2016; Vygotsky, 1978).

Vygotsky's sociocultural theory of learning viewed learners' interaction with peers as an effective way of developing skills (Polly, Alman, Castro & Norwood, 2017). In their research, Polly *et al.* (2017) and Wang, Bruce and Hughes (2011) argued that the socio-cultural theory of learning takes into greater consideration that social interactions play a critical role in the development of thinking skills and cognitive development. So, this theory guided the study to find out how teachers use social interaction in preparing Grade R learners for formal School readiness in the multi-grade classrooms in Lesotho.

Scott and Palincsar (2013) and Mason and Sinha (1992) forwarded that when teachers work with others, such as parents and others on a variety of tasks, a learner adopts socially shared experiences and fully understands the social and historical context of their environment. The socio-cultural perspective notes that learning takes place through interaction, negotiation, and collaboration in solving real-world problems while emphasising learning through experience, which is more than cooperative learning. Consequently, the researcher's greatest expectation was that teachers, upon presenting the challenges, would notice that they may be overcome through negotiation, collaboration, and interaction with other parties, particularly parents and learners.

Vygotsky's socio-cultural theory guides, supports, and creates active learning in the classrooms (Daneshfar & Moharami, 2018). Teachers can facilitate the learning to

include every learner at different levels of learning and at the same time prepare Grade R learners to transition from non-formal to formal learning appropriately. This theory was relevant to the study since it is a learning theory, and it guided the direction of this research as it is essentially an educational theory. Studies pointed out that this theory has also been applied in multi-grade classrooms. It also assisted in understanding the challenges teachers come across when teaching from the planning to the actual teaching.

Awang, Yakob, Hamzah and Talling (2020) explained that this theory can inform and broaden Developmentally Appropriate Practice (DAP) and highlights the importance of establishing effective working relationships between teachers, families, and other environments. Therefore, this theory guided the study in highlighting teachers' responsibilities, whereby teachers are mindful of significant contextual effects in a specific learner's life. For instance, family, socio-economic status, race, ethnicity, and culture are crucial influences and their relationship needs to be acknowledged as they contribute to the learner's development and learning as well as the teacher's professional practice.

1.13 Research Methodology

In this study, a qualitative approach was used since it allows an exploration of opinions from participants. The researcher believed that through interviews, pre-school teachers would be able to respond accordingly thereby, assisting effective and efficient data collection (Creswell & Creswell, 2018). This approach was selected over a quantitative method on the basis that Mertens (2019) declared that a quantitative method mostly deals with numbers and percentages. Vanderstoep and Johnson (2008) also noted that the information in a quantitative study is displayed in tables or charts which are intended to deliver a research message. The quantitative method deals with large numbers of people; however, a qualitative method was appropriate for this study since the study was conducted on a small population. This aspect allowed the researcher to have close contact with the participants, to get an individual experience first-hand and social interaction (Yin, 2015; Hatch, 2007).

Some situations compel researchers to apply mixed methods in their research. However, it would be inappropriate for this study as one method could influence the

other (Mertens, 2019). Consequently, the researcher opted for a qualitative approach as it would perfectly fit this study in examining how pre-school teachers prepare Grade R learners for formal learning in a multi-grade and multi-age classroom. The research methodology section consisted of the following subheadings: research paradigm, research approach, instruments for data collection and procedures, and data analysis.

1.13.1 Research paradigm

A worldview is another name for a research paradigm. A worldview is explained as a set of beliefs on which the researcher bases the study to shape the research direction (Kivunja & Kuyini, 2017). The interpretive paradigm formed the foundation of this research. Ryan (2018) argued that interpretivism reasons that truth and knowledge are subjective, and culturally and historically located through people's experiences and understanding. The interpretive paradigm allowed the researcher to discover how pre-school teachers prepare Grade R learners for teaching in a multi-grade and multi-age class. The paradigm further permitted the researcher to observe the actual classroom teaching and the interaction between learners and teachers, in order to gain a thorough understanding of the situation within a social environment (Maree, 2009).

1.13.2 Research approach

Investigating and understanding the meaning that individuals or groups give to a social or human situation is possible through qualitative research. Emerging questions and processes, data acquired in the participants' environment, inductive data analysis that builds from specifics to broad themes, and the researcher's interpretation of the data are all part of the research process (Savin-Baden & Major, 2010). The format of a final written report is adaptable. Individuals who use this type of inquiry are in favour of an approach to study that uses an inductive method, focuses on the meaning of each individual, and emphasises the significance of communicating the complexity of a situation (Creswell, 2014).

1.13.3 Instruments for data collection and procedures

The study used purposive sampling together with convenience sampling, to allow for a suitable selection of participants. Elfil and Negda (2017) noted the significance of choosing relevant individuals who are capable of responding to the intended study investigations. Purposive sampling depends on the researcher's judgement

concerning who could give the relevant information that aligns with the research objectives with the expectation that each participant will provide unique and valuable information (Taherdoost, 2016). Convenience sampling, on the other hand, involves selecting participants that are easily accessible and can be identified with minimal effort, participants are often individuals that are geographically close to the researchers. Researchers may start with a convenience sample to identify potential participants, and then use purposive sampling to select the most appropriate individuals from that group based on the study's objectives. For data collection, three data tools, namely semi-structured interviews, structured observations, and document analysis (Maree, 2009; Louis, Lawrence & Keith, 2018) such as the scheme of work and teachers' lesson plans were used to generate the required data.

Semi-structured interviews employ guided, open-ended questions and allow for probing of interviewees' responses for a thorough understanding and quality data collection (DeJonckheere & Vaughn, 2019). According to DeJonckheere and Vaughn (2019), semi-structured interviews allow interchanges between the researcher and the participant, and Kallio, Pietilä, Johnson and Kangasniemi (2016) added that with this method, the interviewer can conduct or make follow-up questions upon participants' responses.

Consequently, structured observation as a data collection method allowed the researcher to observe the participants from a distance, giving the participants the freedom to interact well with the learners. Data was collected from four participant teachers, from four pre-schools in the Maseru district. These teachers were selected for the study based on their availability and openness to participate in the study. Ultimately, it was convenient to work with them in this study. Permission to conduct interviews was requested from the school administration.

1.14 Data Analysis

The data collected were examined using content analysis. Firstly, data were organised, prepared and read through, then coded, summarised, and patterns formed from the data were categorised into themes, lastly, it was interpreted through thematic analysis. According to Clarke and Braun (2017), Cohen, Manion and Morrison (2018)

and Maguire and Delahunt (2017), finding significant patterns in the data and using them as themes to answer the research question are the goals of thematic analysis,

The collected data were organised into folders of observational data, semi-structured interview data, field notes as well as audio recordings. It was further sorted and arranged according to its common features and marked into similar components to make it easier to retrieve when required. Audio recordings were transcribed since “transcriptions can provide important detail and an accurate verbatim record of the interview” (Leavy, 2022). The transcription assisted in repeatedly listening to the audio recordings and re-reading the responses of the interviewees.

Fieldwork notes (reflective journal) were consulted from time to time to inform observed data and data collected by other means. The aim was to check the accuracy of the transcriptions, as well as to be familiar with the content of the collected data. The coding process was derived from the transcription and organisation of the data collected. Descriptive words were marked on the text analysed and assigned codes to the collected data that signified a particular segment to provide information and meaning to a reader. This assisted me to recognise codes that contrast each other.

The research questions in this study were considered when assigning codes to the collected data. During the coding process, a list of identified codes was gathered to generate themes. Themes were then refined, segmented into small parts, and grouped according to concurrence with an attempt to respond to the research questions. This was done to express the nature of each theme and its relevance to the data collected. The findings finally drew a comprehensive conclusion which interrelates with the research questions of the study (Maree, 2009).

1.15 Research Ethical Considerations

The study abided by the research ethical principles of the university and the country in which it will be conducted. The researcher formally inquired about authorisation from the university to conduct a study before its commencement. That is when the study title was approved, an application for ethical clearance from the research ethics committee (Creswell & Creswell, 2018) to follow procedural guidelines was made. This was done since a registration application for the study’s title and a letter of acceptance

authorising the researcher to conduct the study are legally binding documents. “See Appendix A (Page: 109) for more details”.

In addition, for this study to proceed, the researcher was obliged to acquire permission from the relevant authorities specifically the MoET and school boards. The researcher took note of voluntary participation, anonymity, and confidentiality (Daniel, 2016) and adhered to the principles of truthfulness, transparency, and professionalism while conducting this study.

Chapter 1: This chapter comprised the study introduction and background of the study, problem statement, theoretical framework, the rationale of the problem, research questions, aim and objectives, research design and methodology, research outline and summary.

Chapter 2: Entail a literature review with an introduction and an exploration of pre-school teachers’ challenges faced, and teaching strategies used while preparing Grade R learners for formal learning in multi-grade and multi-age classrooms in Lesotho. The literature review included relevant academic research reports, articles, and books. The theoretical framework which guided this study was also discussed in this chapter.

Chapter 3: This chapter discussed the research design and methodology. That is the research paradigm, sampling, ethical considerations, data collection and analysis methods, instruments, and techniques.

Chapter 4: This chapter presented an analysis of data and research findings from the qualitative datasets in relation to the research questions.

Chapter 5: This chapter provides the discussions, conclusion on the research findings, and recommendations drawn from the research.

1.16 Summary

This chapter reflected the following. The aim and the background of the study, the problem statement and the rationale of the study were explained. The aim and

objectives and research questions were discussed. The limitations, significance and operational concepts were set out and the theoretical framework – which included the research paradigm and approach were described. The instruments for data collection, data analysis and ethical considerations in the study were explained. Finally, the chapter layout of the thesis and a research summary were provided. The next chapter will focus on the literature review related to exploring pre-school teachers' challenges while preparing Grade R learners for formal learning in multi-grade and multi-age classrooms.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The previous chapter gave an introduction to the study with a discussion of the background, the statement of the problem and the rationale for the study. It also provided a layout of research questions and objectives that the study would address to answer the main research question. This chapter explored various settings worth of literature on the study topic. It assesses the strategies employed in preparing Grade R learners for formal school in the multi-grade classroom in Lesotho. At the beginning of the chapter, a definition of a multi-grade classroom is provided, along with an explanation of how it relates to the study in contrast to a mono-grade class. Strategies that can be implemented for fruitful teaching and learning of Grade R learners in a multi-grade classroom are discussed. The advantages of multi-grade teaching towards education are looked at. The use of instructional leadership as a technique for multi-grade teaching is also covered in this chapter. Also covered in detail are the challenges pre-school teachers encounter in multi-grade classrooms. Towards the end of the chapter, an account of a framework that underpinned the study is discussed. The chapter then concludes with a summary.

2.2 Multi-grade Classroom

One teacher instructing students of varying ages, grades, and skill levels in the same classroom is known as multi-grade teaching (Sampson & Cody, 2016). Some of the terms used in the literature to characterise multi-grade classrooms are multi-level, multiple-class, combination classes, composite classes, forced mixed-age classes, forced mixed grade classes, and unified classes (Sampson & Cody, 2016; Ramrathan & Mzimela, 2016; Kalender & Erdem, 2021). Due to the presence of learners from multi-grade classrooms, Ramrathan and Mzimela (2016) claim that multi-grade classrooms differ from the typical organisational structure of classrooms. Age and grade are often correlated in grading systems, so multi-grade teaching differs from mono-grade teaching, which assumes that learners in the same grade have similar ages and skill levels (Ramrathan & Ngubane, 2013). According to Thomas (2021), a

mono-grade classroom is one in which learners of the same age and grade are housed together and taught by one teacher.

Sampson and Cody (2016) argued that these classrooms often exist out of necessity, with reasons which include economic, social, and political or demographic circumstances. In the same view, Cornish (2014) stated that multi-grade classrooms in rural areas remain permanent for reasons that the population does not increase enough to form a mono-grade class. Whereas they are usually temporary in the urban areas because they exist due to uneven grade enrolment. Cornish and Taole (2021) attested that multi-grade classes often exist in semi-rural or rural areas due to low human settlements and the great distance for learners to travel to urban schools every day.

Moreover, Taole (2014a) ratified that multi-grade teaching is a necessity in rural and hard-to-reach places to address the small number of school enrolments and shortage of teachers. Cornish (2014) confirmed that a lot of farm schools have a shortage of teachers hence, a multi-grade classroom setting is suitable for such instances. For example, multi-grade classrooms are typical in rural areas and government-sponsored farm schools in South Africa and Zambia. (Taole, 2014a; Kivunja & Sims, 2015). Multi-grade schools are frequently implemented in elementary Schools located in remote and sparsely populated areas in the Philippines (Beleganio & Madrigal, 2022). Siririka (2018) added that many primary school teachers throughout the world are somehow involved in teaching multi-grade classrooms.

As a result, Siririka (2018) presents Little's (2006) statistical data on multi-grade teaching in primary Schools around the world, including England (25.4% in 2000), Norway (34% in 2000), Ireland (42% in 2001), and India (84% in 1986). Further statistical data from Haingura (2014) showed the popularity of multi-grade Schools in parts of Namibia with the Okavango region having the highest prevalence (19%), followed by Omasati (16%), Oshana (8%), Caprivi (4.8%), Omaheke (2%), and the Khomas region (0.6%). In addition, the EMIS report as quoted by Haingura (2014), showed the prevalence of multi-grade schools in South Africa as follows: Free State

(18.09%), Eastern Cape (26.88%), Gauteng (38.68%), KwaZulu-Natal (19.69%), and Limpopo (41.35%) and are the top five provinces.

Multi-grade teaching is popular in what Kivunja and Sims (2015) referred to as the “majority world”, meaning the eastern, southern, underdeveloped, and poor countries. As an example, consider the African nations of Nigeria, Ghana, Mauritania, Lesotho, Guinea, and Uganda (Kivunja, 2014). This contrasts with the “majority world”, or the wealthy, western, industrialised nations, where teaching and learning typically take place in classrooms with only one grade level. However, multi-grade teaching is still used in Canada, Greece, and the United Kingdom, proving that industrialised nations are not solely limited to mono-grade classrooms (Kivunja & Sims, 2015).

In addition, these classrooms, sometimes referred to as multi-grade schools domestically and internationally, provide a substantial contribution to the education of learners in isolated and difficult-to-reach places (Naparan & Castaneda, 2021; Taole, 2014b). According to Thaba-Nkadimene, Modiba and Molotja (2019), multi-grade schooling prevents learners from being deprived of educational possibilities. The Zambian government, for example, established teaching in a multi-grade classroom in the 1980s with the aim of eradicating illiteracy. This was accomplished through a project funded by the Swedish International Development Agency and the Zambian Ministry of General Education. The project targeted primary schools in rural areas where over 80% of the population live (Kivunja & Sims, 2015). Multi-grade teaching addresses the gap of lack of teachers and/or learners, particularly in rural areas. According to Ramrathan and Mzimela (2016), poor school enrollment and a teacher shortage in rural areas of the Philippines have made it necessary to combine multiple grade levels into a single classroom. According to Taole (2014b), multi-grade classrooms are common in South African rural and farm schools due to the small number of students that may be taught in separate classrooms. Such evidence confirms that schools found in rural areas engage in multi-grade teaching out of necessity and provide basic education for people living in rural areas (Naparan, Leigh & Castañeda, 2021; Kalender & Erdem, 2021).

2.3 Strategies on How Effectively Pre-School Teachers Teach Grade R in a Multi-grade Classroom

According to Korpershoek, Harms, de Boer, van Kuijk and Doolgaard (2016), classroom management is the actions taken by teachers to form an environment that supports the academic and socio-emotional learning of learners. Effective classroom management is essential in establishing a positive, quiet and calm classroom environment for learners to take part in substantial learning (Korpershoek *et al.*, 2016; Postholm, 2013). It also promotes learners' social and moral development (Postholm, 2013). Multi-grade teaching contributes positively to the maturity of learners, as such the study will find out the effectiveness of multi-grade teaching on learners chiefly on the behaviour they portray towards their environment.

If programmes lack the necessary resources and teachers are not adequately trained, learners' achievement in these environments may be sub-par (Ramrathan & Mzimela, 2016). However, multi-grade teachers are not constrained by their lack of training because they have a special form of knowledge known as tacit or personal knowledge. This knowledge comes from daily experiences like observation, experience in schools, lesson planning, and teaching (Cornish & Taole, 2021). The author goes on to say that knowledge of this kind, can direct one's activities just as effectively as knowledge gained through formal instruction and knowledge from texts.

Moreover, in a multi-grade classroom where learners are to be taught reading, regardless of context, teachers should teach them how to read using various strategies, as a vital solution to develop proficient reading skills in learners (Ramrathan & Mzimela, 2016). For instance, teachers could use visual teaching strategies to teach reading, such as flashcards and visuals that correspond to specific words and images in stories (Rule & Land, 2017). Again, they could use storytelling to enhance the integration of language skills, improve language capabilities and improve learners' listening skills (Sampson & Cody, 2016).

According to Taole (2014b), teachers need to consider appropriate methods to deliver a subject matter for effective teaching and learning when planning for a daily lesson. Literature has identified strategies that can be used in teaching and learning, which

(Ramrathan & Ngubane, 2013) described as methods or techniques used to improve teaching to aid effective learning. Kivunja and Sims (2015) mentioned that classroom organisation, classroom management, curriculum, instructional organisation, peer tutoring and grouping are some of the strategies that influence successful multi-grade teaching.

2.3.1 Play as a learning strategy for Grade R learners in a multi-grade classroom

Another way to prepare Grade R learners for school readiness is through play as it influences learning (Neha & Rule, 2018). The authors further suggested that play is central to child development and in the development of children's decision-making, which includes keeping information in mind, resisting distraction, preventing imprudent responses and switching goals. This is true in Finland because it emphasises structured play as part of pre-school learning (Naha & Rule). Play contributes to building children's physical strength and learning social skills such as sharing, understanding others' perspectives and patience (Neha & Rule, 2018; Whitebread, Basilio, Kuvajja & Verma, 2012).

According to Piaget (1973), there are three stages of play, which Setoromo and Hadebe-Ndlovu (2020) highlight. The first type of play is practice play, which tailors for learners in the early stage of development. At this stage, learners are interested in investigating physical activities. When learning is still in the preoperational stage, learners typically like the second stage, which is symbolic and construction play. The use of mental representation in socio-dramatic play is something that learners at this stage enjoy, pretend about, and fantasise about. The third type of play is through games with rules; this type tailors for learners who are at the concrete operational stage. This is where learners enjoy games with a set of rules to guide them.

While learners are learning through play, teachers are viewed as mediators, stage managers, participants, models of the rich possibilities in play, scribes, and documenters of learning from activities, while guiding learners through social and academic waters (Aronstam & Braund, 2015). Rule and Land (2017) noted that numerous learners in classrooms in South Africa, learn by remaining still, paying attention, and repeating; play is generally not included in the formal learning process.

A contributing factor to teachers' limited awareness of the pedagogy of play could be insufficient training about the benefits of play (Aronstam & Braund, 2015).

Planning is essential in this type of environment, choosing what, how, and when to teach is the most important skill that teachers must learn in order to promote teaching and learning (Ramrathan & Mzimela, 2016). They need to assist learners at various grade levels and manage their time well (Naparan *et al.*, 2021). However, the results of the study by Taole (2014a) indicated that management was an issue for them since learners were unruly; consequently, teachers spent more time reprimanding learners than they did teaching.

Teaching a multi-grade classroom requires attentiveness, and more focus to benefit from effective teaching strategies (Ramrathan & Mzimela, 2016). Naparan *et al.* (2021) mentioned that one of the coping strategies teachers can assume is time management; organising and planning how much time a teacher spends on a specific activity (Ramrathan & Mzimela, 2016). As a result, it is beneficial to manage their time efficiently. This can be accomplished if pre-school teachers have a repertoire of classroom management skills (Naparan *et al.*, 2021).

Furthermore, Ramrathan and Mzimela (2016) contend that it is the responsibility of teachers to establish a conducive environment for the process of teaching and learning; therefore, it does not matter where teaching takes place. According to Sampson and Cody (2016), "teachers in these classrooms need to be flexible in how they manage their time and the skills taught". According to Naparan *et al.* (2021), organising the learners into groups is a good strategy to handle multi-grade classes. Teachers can offer the material more quickly by arranging the learners. In addition, it gives the learners a chance to interact with each other and share their ideas.

2.3.2 Planning as a strategy adopted by pre-school teachers who teach Grade R learners in a multi-grade classroom

In planning, teachers can adopt reflective practice as it could give teachers new skills which support them in their current and future planning and implementation of lessons (Connelly, Shaik & Mosito, 2020). Teachers' professional development requires reflective practice, which can assist them in realising the obscurity of their unique lived

experiences and how their knowledge and abilities change over time (Kalchman, 2015; Playsted, 2019). This practice is characterised as a purposeful, deliberate step of analysis into one's own thoughts and actions (Kalchman, 2015).

According to El-Sayed, Zoghary and Alsaeed (2021), reflective teaching is the teacher's capability to note and reflect on the instructional plans, how to enforce them, gauge, identify their strengths and faults, propose options, and develop future visions for improvement. It helps teachers improve their professional development (Motallebzadeh, Ahmadi & Hosseini, 2018). Connelly *et al.* (2020) argued that reflective practice is very helpful in the first year of school since it exposes learners to formal education for the first time.

Furthermore, the information gathered through this practice can influence the teacher to make changes to the lessons by adapting them to suit the learners, encouraging them to be successful (Connelly *et al.*, 2020). Therefore, Kalchman (2015) confirmed that teachers' reflective process is associated with learner achievement and motivation and that teachers who practice reflective teaching show the ability to cope more regarding classroom management and meeting the demands of curriculum and accountability.

Teachers must employ teaching methods in addition to reflective practice, according to (Mortazavizadeh *et al.*, 2017). Teaching methods are a collection of standard procedures for directing activities to achieve instructional objectives. The teaching approach specifies the duties of the teacher and lays the groundwork for the activities that take place in the classroom with the learners. The aptitude, attitude, and circumstances of the teacher, all affect how effective the teaching strategies used in multigrade courses are (Mortazavizadeh *et al.*, 2017; Hyry-Beihammer & Hascher, 2015).

In peer teaching, teachers appoint more experienced learners to lead the class and assist younger learners in their grade group who require tutoring. This encourages learners to support one another and collaborate (Bobis & Bongala, 2020). In addition, according to Hyry-Beihammer and Hascher (2015), peer tutoring allows learners to

assist other learners in a similar grade. This means that learners can assist one another in the learning process, which is advantageous for teachers because it saves time and makes it simpler to organise classrooms.

2.3.3 Organisation as a strategy adopted by pre-school teachers who teach Grade R learners in a multi-grade classroom

According to Engin (2018), organising a classroom entails preparing both the physical environment and the teaching materials. This is in line with both individual and interactive learning to ensure that the learners have a successful learning experience. This fosters a conducive environment for learning and preparation for school readiness. De Witt, Du Toit and Franzsen (2020) added a combining word to this statement by stating that an adult's role in a child's life is to offer a child-friendly, child-care environment with a variety of resources that promote child-initiated exploration. In addition, classroom organisation entails the explanation of learning routines and schedules that assist learners in taking responsibility for their learning processes (Engin, 2018). The study intends to define the classroom management skills used by pre-schools teachers. It is important to learn how Grade R learners get introduced to their daily schedules and routines and how that helps them to prepare for formal schooling.

Setoromo and Hadebe-Ndlovu (2020) stated that if the classroom environment is not appealing and inviting, it must be modified because a classroom environment that fosters learning is filled with a range of objects and resources that heightens and ignites students' desire to study. Materials and objects such as carts, models, graphics, diagrams, illustrations, multi-media presentations and real objects (Ajoke, 2017; Patesan, Balagiu & Alibec, 2018) provide a much-needed sensory experience needed by the learners for an effective and meaningful learning experience (Ajoke, 2017).

A multi-grade classroom needs to have enough space for free movement. According to Phajane (2014), it is convenient for a multi-grade class to have furniture that is simple to move to allow for flexible movement. For instance, the teacher might teach one group of learners to position their desks towards the chalkboard at the back of the room so that there will be fewer interruptions and more time for independent learning.

However, according to a study on improving the lesson planning abilities of multi-grade teachers, it was unbelievable to teachers that organising the classroom would influence the learners' learning outcomes (Thephavongsa, 2018).

According to Setoromo and Hadebe-Ndlovu (2020), "learners in the preoperational stage learn by manipulating concrete items, hence, during the teaching and learning", teachers must set up their classrooms so that learners can do just that. Considering this, it is imperative for teachers to set up a conducive learning environment (Naparan & Alinsug, 2021), teachers can also employ specialised activities and set up learning areas (for reading, math, and the fine arts), and make use of tailored activities to add to learners' learning (Kartal & Demir, 2022).

2.3.4 Classroom management as a strategy adopted by teachers who teach Grade R learners in a multi-grade classroom

Classroom management is one of the challenges faced by pre-school teachers in multi-grade classrooms. Classroom management requires pre-school teachers to recognise the different characters and needs of learners and manage them accordingly to create a comfortable learning space for learners (Prawiro & Anggrarini, 2019). Learners cannot learn in a poorly managed classroom (Marzano & Marzano, 2003). Teachers need to manage their classrooms for effective learning by creating a balance between punishments for unacceptable behaviour and rewards for acceptable behaviour (Marzano & Marzano, 2003).

Just like any other children or humans, Grade R learners may display certain undesirable behaviours in the classroom. This is expected especially because there would be various ages and/or grade groups in one classroom. Pre-school teachers, therefore, have to take certain disciplinary measures as a precaution against such behaviour. As it is the teachers' responsibility to create a classroom environment that is favourable to teaching and learning and one that is free of disruptive behaviour (Taole, 2014). Discipline is a system of guidelines and/or classroom rules enforced by teachers to facilitate effective learning and minimise disruption (Valente, Monteiro & Lourenço, 2019). Vairamidou and Stravakou (2019) defined discipline as obedience to authority as a response to problematic behaviour which prevents the educational process.

Korpershoek et al. (2016) suggested that in order to achieve classroom management teachers need to (a) nurture caring and supportive interactions with and between learners; (b) organise and put in to use instruction in ways that enhance learners' access to learning; (c) inspire learners' commitment in educational tasks, which can be achieved through group management procedures; (d) support learners' development in areas of social skills and self-regulation that is, learners should take responsibility of their behaviour; and (e) enforce proper interventions to help learners regarding their behavioural problems.

Consequently, discipline should provide a sense of conformity to learners so that they feel loved and nurtured. Howard (1991) stated that methods of discipline should provide learners with a sense that they are in a loving and stable environment to develop a sense of personal worth. Teachers are not to instil harsh discipline measures on learners as it will lead to learners always feeling uneasy and afraid. Pre-school teachers are expected to build a relaxed atmosphere in the classroom as "building good atmosphere in the classroom condition for learners is necessary to involve them in learning activity" (Prawiro & Anggrarini, 2019: 341).

Moreover, discipline can take the form of rewards where learners are rewarded for their good behaviour or for abiding by the classroom rules. Partin (2009) provided six ways that can be used to reward learners; 1) tangible rewards such as gifts; 2) activity rewards like receiving no homework for the day; 3) assisting the teachers in the classroom activities for example, tutor other learners; 4) rental privileges such as being the first to choose playground toys; 5) recognition such as putting a star in front of the learner's name on the class list; 6) social rewards such as applauding the learner for good work. Prawiro and Anggrarini (2019) continued to state that social rewards occur during assessment. The teacher can direct the learner who performed best to stand up in the classroom for the rest of the class to see and clap their hand for them.

Prawiro and Anggrarini (2019) asserted that learners can be easily bored while learning especially learners at a young age. They, therefore, recommend that teachers support their learners by rewarding them as a way of motivating them to learn. Valente,

Monteiro & Lourenço (2019) stated that rewards have positive effects on learners' behaviour and they are liked by both teachers and learners.

2.3.5 Grouping as a strategy adopted by pre-school teachers who teach Grade R learners in a multi-grade classroom

According to Mortazavizadeh *et al.* (2017), grouping means groups formed within the multi-grade classroom, which varies in terms of content. Forming groups among learners is a great way to organise the classroom and is sufficient to be used all the time. Grouping the learners is an effective way to manage multi-grade classes in the sense that grouping learners and teachers can save time in teaching the lessons. It also enables effective interaction among learners and creates a platform to express collective commitment and cooperation with each other (Engin, 2018). In this way, learning will take place. Naparan and Castañeda (2021) and Beihammer and Hascher (2015) argue that grouping is fundamental in organising multi-grade classes.

Moreover, Mortazavizadeh *et al.* (2017) said that in order to accomplish the intended goals, multi-grade classrooms can employ a variety of teaching techniques, including peer teaching, cooperative teaching, group teaching, central teaching, and integrated teaching. According to Slavin (2010), group learning is a counterpart of a teacher's teaching. It gives learners the opportunity to discuss information and discuss skills assigned by the teacher. Ruiz (2020) mentions that grouping improves learners in areas of achievement, positive attitudes towards their lessons and critical thinking skills, as well as problem-solving skills.

Mortazavizadeh *et al.* (2017) further stated that selecting and organising activities by forming groups in a classroom are the attributes of good management of multi-grade classrooms. Cornish and Taole (2021) share the same sentiments that whenever learners are grouped with a mutual learning objective, genuine cooperative and collaborative learning occurs. Mortazavizadeh *et al.* (2017) then suggested that when grouping learners, teachers ought to have a clear idea of selecting suitable activities and how to divide learners based on diverse grades and age levels.

Proehl, Dougla, Elia, Johnson and Westsmith (2013) asserted that flexible groups in multi-grade teaching are significant, and they can effectively help learners learn to accept variances in capabilities and social behaviours. As such, learners can be put

in different groups depending on the teacher's discretion on what is to be achieved during and after the activity (Phajane, 2014). Groups can be discovered and applied to fit the age and maturity levels of learners. Mortazavizadeh *et al.* (2017) and Phajane (2014) also suggested that learners can be grouped according to the following criteria: same abilities in the same group, strong and weak in one group, confident learners in one group and another and grades and ages together.

Bobis and Bongala (2020: 231) added that

In same-ability grouping, the learners in each group may be categorised as 'advanced,' 'average' or 'low' ability. Mixed-ability grouping is composed of a variety of ages and abilities. In the same age/year group, learners of the same age and grade level are grouped, while in social grouping, learners are grouped according to compatibility.

Naparan and Alinsug (2021) argued that this is an effective strategy a teacher can implement to use the distinctive skills and talents, and the advanced abilities of other learners in assisting other classmates.

2.3.6 Teacher agency as a strategy adopted by pre-school teachers who teach Grade R learners in a multi-grade classroom

According to Priestley, Biesta and Robinson (2015), agency designates a class of the engagement of actors with temporal-relational contexts for action. Concerning teachers, they state that numerous aspects are contributing to teacher agency. Such aspects comprise; personal ability (skills and knowledge), beliefs (professional and personal) and values. According to Taole (2014b), educators must continuously improve their proficiency in teaching in the demanding context of the multi-grade classroom in addition to acquiring new knowledge and abilities.

Guoyuan (2020) also defined teacher agency as the ability of pre-school teachers to take constructive and intentional action to guide their professional development and to improve the quality of education. Consequently, to have any impact on learner learning, teachers must develop their competencies (Taole, 2014b) and "rely on their own agency to choose teaching strategies, lesson context, lesson activities, and teaching and learning resources" (Ramrathan & Mzimela, 2016: 2). Therefore, the agency includes personal attributes as determinants to continue in their quest to

facilitate learning, regardless of the hopeless the situation they face (Ramrathan & Mzimela, 2016).

Teaching ECD necessitates that pre-school teachers reflect critically both on their own teaching and the nature of the learner's knowledge and understanding, as well as on their own beliefs and the participation of the learners in the class (Shaik, 2016). According to Postholm (2013), the crucial aspects of the work on learning in schools are the personal qualities of the pre-school teachers and their relationships with the learners. Postholm (2013) continued to state that, learners who have a good sense of control over the classroom, and a teacher who cares about learners perform better academically and have a positive attitude toward learning.

In addition, both exterior and internal features should be present in the multigrade classroom; internal characteristics are those that relate to the teachers personally, such as their attitudes and beliefs about teaching (Setoromo & Hadebe-Ndlovu 2020). Phajane (2014) stated that the challenges surrounding multi-grade teaching could be overwhelming, for that reason teachers need to develop a "can do" attitude and a problem-solving, professional approach that concentrates on the welfare and development of the learner.

In the same manner, according to Shaik (2016), teachers' beliefs have a significant impact on their work since they direct and shape how they educate. Thus, a teacher's views influence how they organise and implement their teaching strategies. In their study on a collaborative approach in assessing the impact of multi-grade classrooms, Proehl *et al.* (2013) found out that teachers referred to their profession as a calling and are therefore keen to dedicate the time needed to learn about and enforce a multi-grade approach with the ultimate focus on the development of the learner.

2.3.7 Assessment as a strategy adopted by teachers who teach Grade R learners in a multi-grade classroom

Msimanga (2020) defined assessment as a technique used by teachers to determine the degree to which a learner possesses certain qualities to have an understanding of a learner's overall development. Nah and Kwak (2011) have identified three assessment methods commonly used in pre-schools 1) oral assessment - asking

learners questions about the topic; 2) observations - observations of daily activities such as play; 3) standardised tests – tests created by teachers and personal reports. Brassard and Boehm (2011) asserted that Grade R learners' readiness could be assessed in areas of physical, language, pre-reading and socio-emotional skill acquisition. The study's goal is to investigate how Grade R learners are assessed in Lesotho's multi-grade classes, given the variety of assessment methods used in pre-schools.

Pre-school teachers use assessment to identify specific areas where learners may seek interventions, or to monitor and identify emerging areas of development already possessed by a learner to determine a Grade R learner's readiness for formal schooling (Msimanga, 2020; Burgess, & Ernst, 2020). Furthermore, the assessment provides knowledge, understanding, interests and dispositions of learners that can be used by teachers to develop strategies that strengthen competencies to support the development of learners (Nah & Kwak, 2011). Again, assessment is useful to gain an understanding of how the learner is progressing (Msimanga, 2020).

Moreover, classroom assessment should be based on lesson goals, objectives and the developmental competencies that each learner is expected to have (Bagnato, 2007). Burgess & Ernst (2020) states that the methods, styles and materials used to assess Grade R learners must be agreed on and accepted by both curriculum advisers and teachers. A perfect example is the Kindergarten Curriculum Guidance document of South Korea which stipulates the purpose, methods, uses considerations and content related to learners' assessment (Nah & Kwak, 2011).

2.4 Instructional Leadership as a Necessity to Aid in Multi-grade Teaching and Learning

Thaba-Nkadimene, Modiba and Molotja (2019) and Aziz, Muda, Mansor and Ibrahim (2017) argue that due to their complexity, the practice of multi-grade teaching requires both school principals and teachers with instructional leadership. As a result, competencies and expertise are essential to improve the quality of teaching and learning. There are various definitions used to explain instructional leadership. Manaseh (2016) defined it as an educational leadership focused on teaching and learning as core responsibilities of a school. Such responsibilities are typically outlined

in the school's vision, mission statement, goals, and objectives, as well as in the sections on teaching, learning, and monitoring the progress of learners (Thaba-Nkadimene, Modiba & Molotja, 2019; Manaseh, 2016).

On the other hand, DeMatthews (2014) defined instructional leadership as activities related to teaching and learning. These functions include duties and responsibilities directed to the principal to support teachers and learners towards educational excellence. Naidoo and Petersen (2015) argued that to achieve educational excellence, principals need to create a safe environment to allow socially textured tasks for effective schooling to take place. Accordingly, instructional leadership is seen as an essential component for enhancing the performance of both schools and learners, especially in a multi-grade classroom (Thaba-Nkadimene *et al.*, 2019).

According to the research, multi-grade teaching is a challenging practice that calls for certain teaching abilities and assistance (Ronksley-Pavian, Barton & Pendergast, 2019) hence, instructional leaders are needed to support teachers in such situations. A similar belief that there are challenges in teaching in a multi-grade classroom is shared by Thaba-Nkadimene *et al.* (2019), as a result, it requires competent instructional leaders to spearhead the adoption of the mono-grade curriculum into multi-grade curriculum. To prepare Grade R learners for formal schooling, the study refers to school principals as instructional leaders who support the teaching and learning process.

Furthermore, Thaba-Nkadimene *et al.* (2019) stipulated that the principals' role in multi-grade teaching is to improve the best instructional practices and learners' learning to re-think the curriculum management improvement; re-creation of a conducive learning environment; and re-motivation of teachers and learners. Naidoo and Petersen (2015) affirmed that principals' role is to direct the teaching and learning process and to support teachers as well as learners to attain educational excellence. Manaseh (2016) stated that the Tanzanian Secondary Education Development Programme II document stipulated that the supervision of teaching programmes is the responsibility of heads of secondary schools which ensures the provision of high-

quality teaching and learning and provides an environment that is suitable for teaching and learning.

Supportive learning environments are essential for the development of both teachers and learners (Ronksley-Paviam *et al.*, 2019), because of this, learning is improved when instructional leadership is focused and situated close to the classroom (Manaseh, 2016). Therefore, instructional leadership as an approach, may have the potential towards school improvement. The schools' improvement could be manifested through observation of classes, monitoring and professional dialogue (Bush & Glover, 2016). Bush (2013) stated that monitoring entails analysing learners' progress and outcome data that is done through assessments and classroom visits for observing teachers at work and providing feedback thereof.

Thaba-Nkadimene *et al.* (2019) argued that the greatest instructional practices, particularly in multi-grade classrooms lead to excellent performance of learners. This is true because it emphasises fundamental school activities like teaching and learning and helps in learners' growth (Bush, 2013). For instance, Manaseh (2016) showed that instructional leadership has instilled a hard-working spirit in learners and teachers towards their work in countries such as Uganda, Nikandiwe and Galabawa. Thaba-Nkadimene *et al.* (2019) underline that if schools have rigorous instructional leaders who guide and support teachers, the practice of multi-grade teaching could cease to be a burden.

School principals must collaborate with all stakeholders to hone ideas that will enhance learning and promote teaching, to guarantee the successful teaching of multi-grade classes (Bafadal, Nurabadi & Gunawan, 2018; Ramrathan & Ngube, 2013). Proehl *et al.* (2013) argued that education professionals are aware that external factors including parents, pre-school programmes, and the Grade R teachers all have a significant impact on learners' preparedness for formal school. In reality, the study looks more closely at the roles that each instructional leader plays in preparing Grade R learners for formal schooling.

According to De Witt *et al.* (2020), ensuring that learners are prepared for school should be seen as a shared obligation between schools, teachers, principals, and colleagues, as well as parental and caregiver assistance. This will help to ensure that learners successfully enter formal school and succeed. Naha and Rule (2018) added that parents and caregivers play a crucial role in learners' emergent literacy. Additionally, a positive principal-teacher relationship is necessary for learners to achieve well academically. A positive working relationship with teachers helps to strike a balance with the requirement to monitor the teachers' performance (Shaked, 2021). Consequently, the collaboration among principals, teachers, and the local community can create an environment that is safe and conducive for learning (Aziz *et al.*, 2017). School principals should engage in instructional leadership for the improvement of the quality of teaching and learning. They must also execute good academic management to enable teachers to teach successfully (Aziz *et al.*, 2017). According to Bafadal *et al.* (2018), providing instructional leadership includes fostering a supportive learning environment, inspiring teachers and learners, and efficiently managing resources to improve the best instructional practices.

The literature gathered by Aziz *et al.* (2017) revealed that with instructional leadership, there is a positive relationship and significant contribution to the teaching competencies of teachers, as well as an improvement in learners' learning. The research shows that there is a correlation between effective instructional leadership and better school outcomes, such as enhanced teacher practices and increased learners' achievement (Shaked, 2021). Conversely, the implication is that where there are multi-grade classes, yet instructional leadership is missing, teachers deployed to handle mono-grade classes are likely to pull hard (Phuangrod *et al.*, 2017).

2.5 Contributions of Multi-grade Teaching in Education

The importance of multi-grade teaching is to provide access to EFA, which can enable many countries to reach the EFA targets, Millennium Development Goals, and national targets, according to Thephavongsa (2018). Belleza and Feliciano (2018) add that multi-grade education is specifically reaffirmed as a tool to attain the 2015 EFA goals. To reach the EFA target, the Philippine educational system incorporated a multi-grade classroom setup. This was done with the belief that it could raise the literacy and achievement rate in rural areas (Belleza & Feliciano, 2018).

Additionally, the establishment of multi-grade schools in rural and remote areas is an essential and appropriate way to assist countries in reaching the intentionally mandated EFA targets (Cornish & Taole, 2021). According to Ruiz (2020), developing countries have recorded positive results in terms of multi-grade learner achievement for instance, multi-grade schools in Colombia attained higher achievement levels in comparison to mono-grade schools in Math and Spanish. This demonstrates the importance of multi-grade teaching in the education of learners. The purpose of the study is to investigate how teachers prepare Grade R learners for formal schooling in a multi-grade classroom to achieve quality education, as evidenced by the literature.

According to Hyry-Beihammer and Hasche (2015), multi-grade practice allows for flexible school entry and does not emphasise differences in learner's developmental stages because learners who absorb information more quickly can be accommodated with the activities of higher grades with ease so that the learner is not held back (Phajane, 2014). Kivunja (2014) shared the same sentiments that multi-grade teaching can be beneficial to learners who attend the same class as the older ones in the sense that the younger learn from the older. Again, the support that the younger learners receive from the older learners helps them to view school as a less intimidating experience.

Multi-grade classrooms also allow learners with variant age groups and grade levels to learn effectively (Thephavongsa, 2018) to improve learner performance, as it addresses challenges in education as well as provides high-quality and efficient education (Kartal & Demir, 2022). Kalender and Erdem (2021) stated that according to Little (2006), multi-grade learners in the Turks and Caicos Islands performed better in reading compared to mono-grade learners. Ultimately, the literature suggests that during group work, some learners may develop leadership skills giving them an opportunity to interact and guide other younger or older learners in class (Taole, 2014a).

Proehl *et al.* (2013) built on the assumption that multi-grade and multi-age classrooms are individualised to meet the developmental needs of learners, as exponents of multi-

age education assert that learners benefit academically, emotionally, and socially by being in a multi-grade classroom. Among the benefits of a multi-grade class include peer tutoring, latent learning from upper or lower classes, increased respect for one another, teamwork among students, and the development of self-regulated learning skills (Hyry-Beihammer & Hasche, 2015).

This method of teaching many grades intends to give learners access to universal primary education and help them advance to further and tertiary education (Taole, 2014a). Learners from remote and rural areas now have access to basic education because of multi-grade classrooms (Napanan & Alinsug, 2021; Kalender & Erdem, 2021). Learners who enrol in school later are typically those who live in remote areas. Younger children are more likely to start school later than their urban peers since they have a longer walk to school. Multi-grade schools, on the other hand, lessen the likelihood of late enrolment by giving the option to build schools close to rural areas (Mulkeen & Higgins, 2009).

Similarly, multi-grade teaching has had an impact in urban schools. Learners were found to be more likely to support one another, take on the spirit of working together, and exercise leadership in both the classroom and at home, as well as to have fewer disciplinary incidents and treat their classmates with more respect (Bobis & Bongala, 2020). “Multi-grade teaching enhances the quality of education by examining three outcomes”, claims Ruiz (2020). These outcomes are a) the enhancement of critical thinking skills; b) the encouragement of learners to be self-directed and take responsibility for their learning; and c) the empowerment of teachers to become educational leaders (Ruiz, 2020).

2.6 Challenges Faced by Pre-School Teachers Teaching Grade R Learners in a Multi-grade Classroom

Multi-grade schools contribute significantly to the educational needs of learners, and they appear to achieve desired results comparable to similar mono-grade schools (Mulkeen & Higgins, 2009). However, multi-grade teachers face a lot of challenges as they have to teach more than one age group at the same time, with the possibility of teaching more than one subject in the same class (Taole, 2014a). The study explores

the challenges faced by multi-grade teaching, some of which may impede learners' progression into formal schools.

According to Brown (2010), multi-grade teaching is faced with more challenges such as human, material and structural problems, compared to the conventional single-grade classroom. Brown (2010) stated that these challenges include curriculum content planned for a one-year group only; the scarcity of self-instructional materials; and the lack of teacher training in the specific skills required. In addition, in Africa, Turkey and the Netherlands, transportation issues, illiteracy of parents, disadvantaged economic backgrounds, extreme effort of the teacher, lack of time, language barriers and the general challenges in the actual teaching and learning process are some of the challenges that multi-grade teachers experience (Brown, 2010; Naparan & Alinsug, 2021).

2.6.1 Lack of training and curricula suited for multi-grade teaching

Multi-grade teaching, according to Naparan *et al.* (2021) comprises a school environment full of obstacles and issues as such, challenges that teachers face should not be disregarded because they will serve as the foundation for developing growth and promoting high-quality education. One of the major challenges the multi-grade teachers experience is that they are not equipped to teach in such settings. Engin (2018) portrayed that the inability to reach the objectives in the curriculum and not receiving sufficient education for teaching in multi-grade classrooms are some of the bigger problems for teachers. This problem is much experienced by teachers in Africa because multi-grade training is not expounded on in teacher training programmes in most African countries (Brown, 2010).

Cornish and Taole (2021) mentioned that teachers in multi-grade classrooms go through major challenges because they must teach two or more age groups together with the possibility of teaching more than one curriculum subject. Moreover, the curriculum includes learning abilities specifically designed for normal classrooms. As a result, multi-grade teachers are faced with the difficulty of making the content meaningful to multi-grade learners (Taole, 2014b), and they find it challenging to hone the skills of learners (Napanan *et al.*, 2021).

Moreover, Ramrathan and Mzimela (2016) emphasised that teachers face the reality of challenges while they teach in a multi-grade class. Such challenges include teaching learners using several strategies as per the curriculum policy, yet they are not provided with special modifications for such contexts. The education system in countries which practice multi-grade teaching needs to develop a curriculum which incorporates multi-grade teaching, just like in Finland where multi-grade teaching is included in teacher education curricula. Again, some of the countries in Asia like Vietnam, train multi-grade teachers on how to teach different lessons to different grade-level learners simultaneously (Brown, 2010).

Among the challenges that multi-grade teachers face, the unavailability of multi-grade curricula is of greater concern for the teachers. Ramrathan and Mzimela (2016) asserted that across the globe, multi-grade teaching does not have special curricula, this has led to teachers' struggle in teaching in such a setting because they also get minimal assistance and guidance from educational officials. Naparan *et al.* (2021) added that the most common problem in multi-grade classrooms in the Philippines is preparing and planning daily lessons, the shortage of teaching materials and supervision regarding classroom management.

According to Ramrathan and Ngube (2013), the curriculum consists of the lowest learning competencies specific to behavioural objectives. The expectation is that teachers must achieve those objectives with each grade level. It is, however, difficult for multi-grade teachers to attain the set goals due to the lack of a curriculum designed for multi-grade teaching as they still use the mono-grade curriculum. However, according to Ronksley-Paviam *et al.* (2019), multi-grade teaching does not always focus on the curriculum but rather on creating experiences that acknowledge and respond to each learner as an individual. In this instance, the emphasis in the classroom is on recognising each individual, and learning preferences are taken into consideration.

Additionally, the learning competencies of most countries are assigned to ordinary schools, rather than multi-grade Schools. Accordingly, teachers face a challenge to make the content meaningful to learners (Taole, 2014a). Kivunja (2014) mentioned

that even though multi-grade teaching was introduced in Zambia for over 30 years, there is still no curriculum developed for multi-grade teaching. Similarly, in Lesotho just like the neighbouring country South Africa, there is an acknowledgement of multi-grade classrooms, but there is no curriculum designed for multi-grade teaching as teachers still use mono-grade curriculum (Taole, 2014a).

In addition to shortages in curriculum, some other barriers are contributing to the attainment of effective education by learners in a multi-grade classroom, such as unqualified teachers to teach in multi-grade settings, shortage of resources, insufficient pre and in-service training of teachers in specific skills related to multi-grade teaching (Naparan *et al.*, 2021). In the study conducted by Taole (2014b), the results confirmed that the education system has weaknesses regarding the provision of training and professional support to multi-grade teachers. As a result, Taole (2014b) confirms that teachers are probable to investigate, explore, acquire and learn multi-grade teaching pedagogies by themselves.

In Africa, multi-grade teachers experience a lot of problems when it comes to teaching multi-grade classes as a result of a lack of training. For instance, in Uganda and Zambia, teachers are not trained for multi-grade teaching because mono-grade is assumed as a norm (Kivunja, 2014). As a result, Taole (2014b) emphasised that multi-grade teachers need to be trained to carry out tasks effectively. The study therefore wanted to find out how multi-grade teachers in Lesotho are provided training and the challenges accompanied by such training.

Taole (2017) supported that teachers needed to be well-trained and knowledgeable for learners to learn competently in a multi-grade setting (Ramrathan & Mzimela, 2016). Proehl *et al.* (2013) confirmed that capacity building through in-service training is an essential factor in the adoption of new pedagogies. However, Ramrathan and Ngubane (2013) stated that there are no specific training programmes for multi-grade teaching in South Africa. Teachers in these situations depend on their own initiative with little or no assistance from the Department of Basic Education.

Furthermore, research indicates that teachers teaching multiple grades are unable to modify a single-grade curriculum for use in a multi-grade setting. This greatly adds to the contextual difficulties that educators encounter (Ramrathan & Mzimela, 2016). As a result of curriculum adjustments and limited teacher development opportunities, some educators desired not to work in multi-grade classrooms (Naparan *et al.*, 2021). Du Plessis and Subramanian (2014) concluded that it is evident that inadequate training or preparation for teaching in multi-grade environments is a barrier.

Furthermore, Thaba-Nkadimene *et al.* (2019) found out that there is little, or no training provided for multi-grade teachers, the teachers are inadequately trained, they are often isolated with limited resources for curriculum development, and most of them are part-timer teachers who are less committed to their work (Proehl *et al.*, 2013). The lack of commitment and poor performance is attributed to the fact that the teachers appointed by school governing bodies are paid lower salaries than teachers appointed by the department and have no benefits (medical or pension) (van Rensburg, 2015). According to Belleza and Feliciano (2018), multi-grade teachers are not provided with enough skills which they require to manage and teach multi-grade classes. Furthermore, multi-grade teachers are not fully equipped to teach two or more grades at the same time since their approaches are reflective of methods more suited for single-grade contexts. In the same manner, Bobis and Bongala (2020) asserted that in Burdur, Turkey, multi-grade teachers are offered in-service multi-grade training programmes but they do not operate effectively. This is due to the lack of applicable pedagogical training and materials, experienced because of the contradiction of mono-grade and multi-grade teaching.

Naparan and Alinsug (2021) also stated that teachers in the Philippines, experience a lack of training and scarce resources, and findings to teach elementary schools effectively. According to data provided by Bobis and Bongala (2020), 88.05% of multi-grade instructors in the Philippines have had training in multi-grade instruction; nonetheless, there has been insufficient training on contextualising teaching and learning materials. The study examined how Grade R students in a multi-grade classroom are prepared for entry into formal schooling in Lesotho because teaching in several grades presents many problems.

Therefore, Engin (2018) suggested that to effectively teach in multi-grade classrooms. Teacher training programmes for multi-grade teaching should focus on effective teaching practices such as peer tutoring, self-regulated learning, teacher preparation, organised environment and evaluation, and feedback skills. In her study, van Rensburg (2015) asserted that training is vital to the achievement of school and learning readiness for all learners. Consequently, Thaba-Nkadimene *et al.* (2019) argued that workshops or any other means of capacity building are necessary at the workplace for the workers to capacitate and empower the teachers.

2.6.2 Workload experienced by multi-grade teachers

Due to the nature of a multi-grade setting, teachers are often overwhelmed by the workload causing stress. Göksoy, Arican and Eris (2015) asserted that one of the most imperative reasons for stress multi-grade teacher's encounter is organisational stress which includes, problems associated with the curriculum, difficulties linked to the usage of resources and the time, and complications emanating from administrative measures. Taole (2014b) indicated that teachers are overwhelmed by many learners in their classes hence, they fail to organise their classrooms accordingly, especially the classes with Grade R learners.

Moreover, it seems that the great workload is a contributing factor to stress among multi-grade teachers due to the demands of the curriculum (du Plessis & Subramanian, 2014). The authors state that multi-grade teachers have similar demands as mono-grade teachers, even though the contexts are very different. These expectations impact negatively on the multi-grade related aspects which result in feelings and emotions of despair and consequently, possible demotivation (du Plessis & Subramanien, 2014).

Multi-grade teaching is comparable to having two teachers work on the same project, according to Naparan *et al.* (2021), who also state that teachers find their workload especially challenging due to their added responsibilities and numerous school functions. Multi-grade teachers also perform maintenance and administrative tasks at the school, in addition to teaching learners in a challenging learning environment, according to Kalender and Erdem (2021). This puts teachers under a lot of stress,

which is likely to lower the quality of their teaching (Kivunja & Sims, 2015). Multiple occurrences at the place of employment may have a psychological impact on people's performance, as stated by Cahapay (2020).

According to Proehl *et al.* (2013), multi-grade teachers may not have received sufficient training in effective teaching strategies and expressed concern about an increased workload thereof. The work in multi-grade courses is consequently more demanding and stressful due to the reports, school activities, and extracurricular activities, according to Naparan *et al.* (2021). For the teachers, this has turned into a taxing experience because it is clear that the workload contributes to stress and burnout (du Plessis & Subramanian, 2014). In addition, Cornish (2014) also argued that multi-grade classrooms demand more workload, effort and dedication from the teachers than the mono-grade classrooms hence the teachers experience burnout.

In addition, Ruiz (2020) asserted that multi-grade teachers work under a lot of pressure which affects their physical and mental well-being. Literature indicates that more than 50% of teachers experience mental problems such as fatigue, memory and concentration, and muscular-skeletal disorders. Postholm (2013) emphasised that behavioural issues in the classroom are one of the major reasons making teachers uncomfortable in their work. Moreover, the greatest frustration teachers' face is the inability to develop good relations with their learners.

In addition, multi-grade teaching requires one teacher to teach many learners in more than one grade level and age. Teachers are expected to follow lesson plans and implement the curriculum which can be challenging and time-consuming (Msimsnga, 2019). According to Rotas (2020), multi-grade teachers are expected to use learning resources and conduct lessons two times as frequently as mono-grade teachers. As a result, teachers must adopt alternative teaching strategies, which have proven to be difficult and a source of stress for them. According to Cahapay (2020), teachers experience stress when trying to manage responsibilities like using non-traditional assessment techniques and interpreting them to improve teaching and learning.

Multi-grade teachers teach a variety of learners; from various family backgrounds and ethnicities and they are used to different methods of discipline. As a result, it is challenging for multi-grade teachers to manage diverse learners especially those with behavioural problems (Cahapay, 2020). Phajane (2014) suggests that a remedy for such a situation is for the teacher to be strict. This implies that the learners should know that the teacher means it when they are demanded to behave accordingly. The study wanted to find out the different disciplinary methods used among Grade R learners while preparing them for formal schools in Lesotho.

2.7 Theoretical Framework

Multi-grade teaching is the practice of one instructor training students from many grade levels in the same classroom (Badar & Mason, 2020; Hry-Beihammer & Hascher, 2015; Pridmore, 2007). Mortazavizadeh *et al.* (2017) state that multi-grade teaching has been used for a long time in both developed and developing nations when the topography or population density prevents the creation of a mono-grade class. The socio-cultural theory developed by Vygotsky is therefore selected to guide this research's theoretical framework, to better understand the difficulties and other elements impacting teachers working in this field. According to Mahn and John-Steiner (2012), socio-cultural theory offers practical solutions for dealing with learner diversity in a multi-grade setting.

Daneshfar and Moharami (2018) and Lee (2015) stated that socio-cultural theory refers to a philosophy of teaching which is based on the premise that learners learn effectively when teachers can accommodate the differences in their school readiness levels as well as their learning profiles. In their research, Naparan and Alinsug (2021), Amin (2020) and Saqlain (2015) observed the socio-cultural theory as one of the remarkable theories in education that requires teachers to change the traditional way of teaching. Vygotsky's socio-cultural theory reflects the teachers' and learners' interactional relationship, and the teacher is responsible for developing the learner (Shabani, 2016; Vygotsky, 1978). This theory emphasises the role of social interaction and cultural context in cognitive development. To understand culture within Vygotsky's theory, one must consider how cultural elements, such as language, social practices, and shared knowledge, interact with the individual's cognitive development and how these cultural factors are transmitted and internalised through social interactions.

Vygotsky's sociocultural theory of learning viewed learners' interaction with peers as an effective way of developing skills (Polly, Alman, Castro & Norwood, 2017). In their research, Polly *et al.* (2017) and Wang, Bruce and Hughes (2011) argued that the socio-cultural theory of learning takes into greater consideration that social interactions play a vital role in the development of thinking skills and cognitive development. So, this theory guided this study to find out how teachers use social interaction in preparing Grade R learners for formal school readiness in the multi-grade classrooms in Lesotho.

Scott and Palincsar (2013) and Mason and Sinha (1992) forwarded that when teachers work with others, such as parents and others on different tasks, a learner assumes socially shared experiences and fully understands the social and historical context of their environment. The socio-cultural perspective notes that learning takes place through interaction, negotiation, and collaboration in solving authentic problems while emphasising learning from experience, which is more than cooperative learning (Scott & Palincsar, 2013). It is, therefore, my strongest anticipation that when the challenges have been presented, teachers will note that their challenges in a multi-grade classroom can be solved through negotiation, collaboration, and interaction with others, especially parents and learners.

Vygotsky's socio-cultural theory guides supports, and creates active learning classrooms (Daneshfar & Moharami, 2018). Teachers can facilitate the learning to include every learner at different levels of learning and at the same time prepare Grade R learners to transition from non-formal to formal learning appropriately. This theory was relevant to my study since it is a learning theory, and guided the direction of this research as it is essentially educational theory. This theory has also been applied in multi-grade classrooms. It also assisted in understanding the challenges teachers experience when executing their teaching from the planning to the actual teaching. Awang *et al.* (2020) explained that this theory can inform and broaden DAP and emphasises the importance of ensuring a good working relationship between teachers, families, and other environments. Therefore, this theory will guide this study to highlight teachers' responsibilities whereby teachers are mindful of foremost

contextual inspirations in a specific learner's life. For instance, family, socio-economic status, race, ethnicity, and culture are crucial influences and their relationship needs to be acknowledged as they contribute to the learner's development and learning as well as the teacher's professional practice.

Culture

In the socio-cultural theory of development, culture plays a central role in shaping and influencing an individual's cognitive and socio-emotional development. Culture, in this context, refers to the shared beliefs, values, customs, practices, and knowledge that are transmitted from one generation to another within a particular society or social group (Kudryavstev, 2016). It encompasses the social norms, language, traditions, rituals, and artefacts that define a group's way of life.

Vygotsky emphasised that culture is not merely an external backdrop but an integral part of the cognitive development process. He proposed that cognitive development is a socially mediated process, meaning that individuals acquire cognitive skills and knowledge through interaction with their cultural environment (Vygotsky, 1986), which includes interactions with more knowledgeable individuals and engagement in culturally relevant activities (Rubtsov, 2016). The theory emphasises the importance of social interactions in learning and development. These interactions occur within a cultural context and involve communication with more knowledgeable individuals, such as parents, teachers, and peers. Cultural norms and practices are transmitted through these interactions.

2.8 Summary

To address the study on preparing Grade R learners for formal school in the multi-grade classroom in Lesotho, the chapter gathered evidence from numerous literature on multi-grade classrooms. The chapter gave different concepts that are used to define multi-grade classrooms. It addressed how multi-grade teaching is carried out in diverse contexts, and different countries, including rural and urban settings. The strategies on how to effectively tackle multi-grade challenges and teach Grade R learners in a multi-grade classroom are portrayed clearly. The teaching strategies fit for this study include, playing, planning, grouping, organisation, classroom management, assessment and teacher agency. Instructional leadership as a support

to assist in multi-grade teaching is also emphasised in the chapter. The multi-grade contributions towards education and challenges are discussed in the chapter. The framework that guides this study also formed the last part of the chapter. The chapter that follows discusses the methodology used to gather and analyse data for the study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The previous chapter explored the definition of multi-grade classrooms, different strategies used by pre-school teachers and the challenges that pre-school teachers face in multi-grade classrooms from the various reviewed literature. The chapter also discussed Vygotsky's theory as the theoretical framework adopted for the study and then concluded with a summary.

The purpose of the study was to investigate the experiences and challenges faced by pre-school teachers when preparing Grade R learners for school readiness in a multi-grade classroom in Lesotho. In South Africa, Grade R is explained as the years from five to six years old in pre-school before transiting to Grade 1 which is formal schooling (Janse van Rensburg, 2015), whereas in Lesotho, Grade R is called the Reception class. A qualitative research approach was employed to collect thorough and high-quality data for this study. Semi-structured interviews, classroom observations and documents were used in the study to gather first-hand accounts from pre-school teachers. Content analysis was used to analyse and draw conclusions from the data gathered. This process is explained through the research paradigm, research approach, research design, demarcation/delimitation of the study, sampling procedure and sample size, instruments for data collection tools and data analysis. Finally, issues of trustworthiness, ethical considerations and the limitations of the study are also covered.

3.2 Research Paradigm

A research paradigm refers to a set of beliefs and practices that guide research methodologies and approaches. It involves the theoretical framework and assumptions that shape how research is conducted and interpreted. A worldview is another name for a research paradigm. According to Kivunja and Kuyini (2017), a worldview is defined as a set of assumptions upon which the researcher based their research to determine its course. The interpretive paradigm formed the foundation of this investigation. According to Ryan (2018), interpretivism holds that truth and

knowledge are based on one's experiences and understanding and are situated culturally and historically. Furthermore, according to Thanh and Thanh (2015), an interpretive paradigm does not employ objective methodologies; rather, it observes the world through various personal lenses and selects real-world players' these are people who own their experiences and have their own interpretations of reality.

According to Thanh and Thanh (2015), the interpretive paradigm presents a socially constructed, intricate and dynamic world. It thus enabled the study to ascertain how pre-school teachers prepare Grade R learners for formal school in the multi-grade classroom through their everyday experiences. The paradigm also made it possible for the researcher to watch how learners and teachers interacted in a real classroom setting. This was the case since this paradigm enabled the researcher to fully comprehend the circumstances inside the social environment (Graue, 2015).

3.3 Research Approach

A qualitative approach is a process that seeks an in-depth understanding of the phenomena through collecting, analysing and interpreting non-numeric data (Tuffour, 2017). This study used a qualitative approach to facilitate interactions with the participants rigorously, through discussions and observations in the teachers' real-life situations. The qualitative approach uses face-to-face interaction and involves people's perspectives to learn more about what is already known and people's experiences in life (Creswell & Poth, 2016; Johnson & Christensen, 2019). Using this approach, the researcher was able to observe the teachers as they guide learners through the teaching and learning process throughout visits to the respective Schools. It also made it possible to have official discussions to gather opinions from teachers.

Qualitative approaches are also approachable ways to look at reality (Thanh & Thanh, 2015). As this approach allowed for a full and in-depth overview of the phenomenon being studied through the collection of data, a qualitative technique was the appropriate methodology for this study (Naderifar, Tafreshi, Ilkhani & Kavousi 2017). In order to gain a thorough knowledge of how Grade R teachers foster cooperation among their learners, data collection methods included observation and interviews, which put the researcher in close contact with the Grade R teachers.

The qualitative technique is the ideal approach to use in educational research to elicit understandings and experiences from a group of students or teachers in their perceived context (Thanh & Thanh, 2015). The researcher in this study was thereafter able to take on an interactive role to understand the meanings, concepts, context, descriptions and settings of the participants (Fairbrother, 2014) unlike quantitative studies, which mostly rely on statistical analysis and numerical data for their generalisations.

3.4 Research Design

Research design refers to the overall strategy that outlines the methods and procedures for conducting a study to address research questions effectively. In the context of the study on Grade R teachers in Lesotho, a case study design was employed. A case study is a qualitative inquiry that aims to comprehend and clarify the significance of the experiences of involved individuals, according to Harrison, Briks, Franklin and Mills (2017). A case study is a method used to explore in-depth information or explanations regarding a particular group or case, such as a person, a classroom, a firm, or an entity (Gunbayi & Sorm, 2018). In addition, case studies are typically undertaken in close collaboration with participants and are based on theoretical, rather than statistical, methods of data gathering (Breznik & Lahovnik, 2016).

This afforded the researcher an opportunity to investigate first-hand accounts from pre-school teachers. Since the study involved more than one teacher in different settings, the case study was more suitable to use as it involved the collection of numerous types of data (Heale & Twycross, 2018). In addition, it was also appropriate for this study to describe, explain and interpret (Hatch & Coleman-King, 2015) the perceptions of the challenges faced by pre-school teachers teaching in multi-grade classrooms. Additionally, the case study design facilitated a detailed examination of the specific context of Grade R classrooms, offering a nuanced view of the complexities involved in preparing learners for formal schooling in a multi-grade classroom setting

3.5 Demarcation/Delimitation of the Study

The sample size for the study was derived from the population by including all qualified teachers who at the time of the study were teaching Grade R in multi-grade classrooms. The schools selected for this study are in an urban area within the Maseru district of Lesotho. The study did not include unqualified teachers or those who were not teaching Grade R at that time. The pre-school teachers who taught in rural areas and the other nine districts of Lesotho did not form part of the study.

3.6 Location of the Study

The study was conducted in Maseru, the capital city of Lesotho, situated in the district of Maseru. Lesotho, a mountainous country also known as the Mountain Kingdom, is about 30.355 square kilometres in size. The Republic of South Africa surrounds Lesotho. Lesotho is divided into four ecological zones: the highlands, lowlands, foothills and the Senqu River Valley (IECCD Strategic Plan, 2013). Maseru is found in the lowlands of Lesotho. Lesotho has ECCD programmes for providing care and education for children's development. Enrollment in pre-schools has improved significantly from 2000 to 2020 with children aged three to five years old attending early learning programmes which helps to promote a successful transition to primary school (ECCD Curriculum Guide, 2021).

3.7 Sampling Procedure and Sample Size

The study adopted two sampling procedures, purposive sampling and convenience sampling, because together they allowed for the suitable selection of participants. According to Elfil and Negda (2017), purposive sampling denotes the significance of choosing relevant individuals who can respond to the intended study investigations. Purposive sampling depends on the researcher's judgement concerning who could give the relevant information that aligns with the research objectives (Taherdoost, 2016). The actual selection of participants is done randomly (Sarantakos, 2005). Purposive sampling was used to select four pre-School teachers who were more suitable to the study, to share their experiences of teaching in multi-grade classrooms.

Convenience sampling is a non-probability sampling procedure used for this study. Representativeness is not guaranteed by a non-probability sampling method

(Sarantakos, 2005). Instead, it entails a practical selection of participants who are close to the research's target audience geographically and are readily available and ready to engage (Sedgwick, 2013; Etikan, Musa & Alkassim, 2016). According to a probability sampling method, which was used to pick this technique (Patton, 2002), each participant has an equal chance of being chosen for the study. As a result, the four pre-school teachers teaching in multi-grade classrooms in the Maseru district were selected as the study's participants. The participants were near the researcher's place of work, making them easily reachable. The participants were selected on the basis that they were accessible and willing to participate in the study. Ultimately, it was convenient to work with them in this study.

Convenience sampling, on the other hand, involves selecting participants that are easily accessible and can be identified with minimal effort, participants are often individuals that are geographically close to the researchers. Researchers may start with a convenience sample to identify potential participants, and then use purposive sampling to select the most appropriate individuals from that group based on the study's objectives.

3.8 Instruments for Data Collection

Lesson plans and other documentation were used in conjunction with semi-structured interviews and observations to obtain the essential data (Graue, 2015; Louis et al., 2018).

3.8.1 Semi-structured interviews

Semi-structured interviews employ guided, open-ended questions. Although they adhere to a format of questions and a guide, they enable the researcher to delve deeply into the interviewees' responses to gather high-quality data as the study's conversation progresses (DeJonckheere & Vaughn, 2019; Magaldi & Berler, 2020). Semi-structured interviews, according to DeJonckheere and Vaughn (2019), permit discussions between the participants and the researcher. This methodology of conducting qualitative interviews is the most effective one and helps to lessen prejudice (Sewell, 2008).

According to Kallio et al. (2016), the interviewer can ask or create follow-up questions based on the participants' responses using this method. The interviews were conducted at the participants' workplace; this provided a comfortable and relaxed environment as the researcher and the participants could converse face-to-face (Tuffour, 2017). Clarifications and explanations were given during the interview in the form of probing questions meant to elicit factual facts. By closely observing the participants' facial expressions and body language, the interviewer was also able to get more information. All the interviews were recorded using a digital device with the participants' consent and knowledge.

3.8.2 Classroom observations

Marshal and Rossman (1989: 79) defined observation as “the systematic description of the events, behaviour, and artefacts of a social setting”. To understand how the lessons are delivered, the study used direct observations which allowed the researcher to actively observe the teachers and learners from a distance without interacting with them (Kawulich, 2012; LaDonna, Hatala, Lingard, Voyer & Watling, 2017). This method was suitable for the researcher to get information about teacher-learner interaction and behaviour in a multi-grade classroom. (Kawulich, 2012). As a result, the researcher was able to compile information on how learners interact with each other and their teachers. In addition, it provided the researcher with first-hand knowledge of how pre-school teachers involve Grade R learners during teaching and learning in multi-grade classrooms.

The researcher observed teachers and carefully recorded everything they said and did during the teaching and learning of learners in multi-grade classrooms (Hatch & Coleman-King, 2015). According to Fry, Curtis, Considine and Shaban (2017), the researcher employed structured observations to record only the specific planned events and activities, such as how teaching tactics are implemented (groupings, singing), how the learning materials are distributed and how learners are disciplined. It is important to use direct observation in a classroom to get rich, detailed descriptions of what the classroom looks like, the seating arrangement of the learners and their interactions (Kawulich, 2012). The researcher used field notes to record observational data regarding how pre-school teachers prepared Grade R learners for formal schooling.

3.8.3 Classroom documentation

The researcher made use of lesson plans provided by participants as a tool for gathering data. A document in research can be defined as a written symbolic representation of an event not produced by the researcher, which can be recorded and retrieved for analysis (Altheide & Schneider, 1996; Syvertsen, 2004). The lesson plans were used as a primary source of data in this study as the active participants of the study (pre-School teachers) produced them to guide them with lesson activities and outcomes (Karppinen & Moe, 2012). The researcher used these records to get a full description of how pre-School teachers prepare their lessons when preparing Grade R learners for formal school readiness.

By using these records, the investigator was able to verify and validate the conclusions drawn from the information gathered via semi-structured interviews and observations (Bowen, 2009). Document analysis was also essential for this study to avoid biases. During semi-structured interviews and classroom observations, the researcher might have influenced the responses of participants, hence, document analysis reduced biases as it provided pre-existing data that were unaffected (Morgan, 2022).

3.9 Data Analysis

The collected data was analysed using content analysis. Cloete (2007) and Babbie and Mouton (2001) define content analysis as the process of classifying verbal or behavioural data in order to perform tabulation, summarisation, and classification. This is where themes were formed from participants' responses for interpretation and discussion. Data were organised, prepared and read through. The collected data was organised into folders of observational data, semi-structured interview data, field notes and audio recordings. It was further sorted and arranged according to its common features and marked into similar components to make it easier to retrieve when required. Interviews were transcribed since "transcriptions can provide important detail and an accurate verbatim record of the interview" (Leavy, 2022). The transcriptions made it easier for the researcher to listen to the audio recordings and re-read the interviewees' responses again and again.

The researcher constantly consulted the fieldwork notes (reflective journal) to make sure of the observed data and data collected by other means. This was done to verify the reliability and accuracy of the transcriptions and to become familiar with the content of the collected data. The coding process was derived from the transcriptions and organisation of the data collected. Data were examined and then organised according to the presence and recurrence of the themes. For additional examination, every topic found in a particular data set that surfaced frequently in every interview was determined (Jason & Glenwick, 2016). The connections between the themes were looked at to produce clear, reliable information about how pre-school teachers prepare Grade R learners for formal schooling.

The research questions in this study were considered when assigning themes to the collected data. During the coding process, the generated themes were refined; data were segmented into smaller chunks and grouped according to common themes in an attempt to respond to the research questions. This was done to express the nature of each theme and its relevance to the collected data. The themes that surfaced from the data established a framework for narratives and interpretation, providing structured data. The researcher finally drew a comprehensive conclusion which interrelated with the research questions of this study (Graue, 2015) to answer the main research question: What are pre-school teachers' practices to prepare Grade R learners for formal school readiness in multi-grade classrooms in Lesotho?

3.10 Ensuring Trustworthiness

3.10.1 Credibility

According to Hatch and Coleman-King (2015), credibility shows the validity of the information provided by participants in the study and the researcher's acknowledgement of the participants' contribution to the data. Each participant received a detailed summary of what they had said to the interviewer during the process and any overarching conclusions that were drawn from the data that was obtained. All of the interviews provided themes that were used to analyse the study's findings. The research guaranteed that the participants – qualified early childhood educators – gave information that was reasonable, credible, and supported (Mandal,

2018). All the participants were teaching Grade R learners in multi-grade classrooms, so they provided accurate information that allowed the study's findings to be drawn.

In addition, to further ensure credibility the study used three methods of data collection – semi-structured interviews, observations and document review, to provide a more comprehensive understanding of the issue. The process of using different data collection methods is called triangulation. This approach can help to increase the credibility of the findings by providing a more detailed and nuanced view of the situation. With triangulation, the researcher drew on multiple sources of data to seek convergence and corroboration to reduce the chances of biasness that could exist with the use of a single method of data collection (Bowen, 2009). This process ensured the validity of all the data collected. The use of specific data analysis techniques, such as coding and categorisation, can help to increase the credibility of the findings by providing a systematic and transparent approach to data analysis.

3.10.2 Confirmability

Confirmability means the procedure the researcher takes to present the findings from the data and not the researcher's own predispositions (Kalu & Bwalya, 2017). After data collection, to prevent biases, the interviews were independently transcribed and coded. In order to proceed to the analysis stage, the themes and categories that emerged from the data's coding were compared. Even though research cannot be conducted with perfect objectivity, the study's conclusions were only derived from information provided by research participants in the form of transcripts of their interviews. Every piece of information that was initially provided came from the study's sample of pre-school instructors.

3.10.3 Dependability

Dependability is the extent to which the study's methods can be used again in another setting with the possibility of having the same conclusions (Stenfers, Kajamaa & Bennett, 2020). Reliability was guaranteed in this study by maintaining meticulous documentation at every stage of the investigation. Upon request from the supervisor, the choices made about the data analysis, interview notes, and study participant selection were made available. I will examine my own assumptions, biases, and influence on the research process. This self-reflection enhances the dependability of

the study by acknowledging researcher's role in the research. There was enough data in the study to determine how Grade R learners in multi-grade classrooms are ready for formal instruction.

3.10.4 Transferability

In qualitative research, transferability refers to the extent to which findings can be applied or transferred to other contexts or settings. When considering the transferability of a study like "Preparing Grade R Learners for Formal Schooling in the Multi-Grade Classroom in Lesotho," several factors contribute to enhancing trustworthiness in qualitative data analysis techniques.

Transferability provides enough contextual data for future researchers to access and use the study in their own settings (Hatch & Coleman-King, 2015). For this study, the researcher intended to find out how pre-school teachers prepare Grade R learners for formal schooling in multi-grade classrooms. This provided insights into and understanding of the research question, while also providing descriptions that could be used in the future in different settings such as other districts and countries.

By incorporating mentioned strategies to enhance credibility, confirmability, dependability, and transferability in qualitative data analysis, I will strengthen the trustworthiness of this research findings and ensure the validity and reliability of my conclusions

3.11 Ethical Considerations

This study abided by the research ethical principles of the university and the country in which it was conducted. The researcher formally sought authorisation from the university to conduct the study before its commencement. Following the study's approval, the researcher applied to the research ethics committee for ethical clearance to adhere to the protocol (Creswell & Creswell, 2018). Legal requirements include submitting an application for the study's title to be registered and receiving an acceptance letter that permits the researcher to carry out the investigation. "See Appendix A (Page: 109) for more details".

In addition, for this study to proceed, the researcher acquired permission from the relevant authorities specifically the MoET and School boards. The participants of the study were ensured that participation was voluntary, anonymous and confidential (Daniel, 2016) and the researcher adhered to the principles of truthfulness, transparency and professionalism. The participants had access to an informed consent form that covered topics such as privacy, flexibility to participate, and the ability to withdraw from the study at any point if needed. "See Appendix C (Page: 111 & Appendix F (Page: 115) for more details".

No harm of any kind was sustained during or following the research project. To ensure that participants were at ease during the interviews, the researcher promised not to ask about any delicate or personal topics. The participants were told that the interviews would be videotaped and that, for credibility and verification, they would get summaries of the interviews after they were finished.

On the researcher's laptop, the acquired data was kept in soft copy and secured with a password that only the researcher knew. The letter asking for their involvement told the participants that the research data was being used for a master's degree research study. Without any deception, the research is presented for what it is and the purpose it serves.

3.12 Limitations

The limitations of this study were that data collection was only done with four pre-school teachers who were from four different pre-schools in the Maseru district and excluded other districts and teachers who may have had different experiences.

3.13 Summary

The purpose of this chapter was to outline the qualitative research method that the study adopted to guide the researcher in answering the research questions. The study was based on a case study research design. The benefits of a case study are also discussed in this chapter. Even though this is a broad topic, the study participants were pre-school teachers within the district of Maseru. The sampling strategy, data gathering tools and techniques described the study's methodology. Themes were coded to create categories, which were then compared and examined for analysis. A

discussion of trustworthiness and ethical considerations to protect the researcher and participants also formed the final part of the chapter. The following chapter presents the analysis and interpretation of the data gathered through semi-structured interviews, classroom observations and document review.

CHAPTER FOUR

RESEARCH RESULTS

4.1 Introduction

The previous chapter discussed the methodology of the study. It accentuated the research paradigm, research approach, participants, and methods of data collection, data analysis procedure and ethical considerations in accomplishing this study. This chapter presents the analysis and interpretation of the study findings. The findings were drawn from the research questions to answer the main research question: *What are pre-school teachers' practices in preparing Grade R learners' readiness for formal schooling in multi-grade classrooms in Lesotho?* The results are presented according to the themes that emerged in the data generated from pre-school teachers when responding to the research sub-questions which are presented in Table 4.2. Table 4.1 presents the demographic information of participants. Concerning data presentation and analysis, the chapter first presents data from the semi-structured interviews presented to address the following sub-questions.

- a) How do pre-school teachers prepare Grade R learners for formal learning in the multi-grade classroom?
- b) How do pre-school teachers ensure and enhance cooperation among learners in the multi-grade classroom?
- c) What are the challenges experienced by multi-grade pre-school teachers in implementing the curriculum?

Secondly, data are presented from the classroom observations, followed by the presentation of documents obtained from the pre-school teachers. The documentation is also presented in the form of a table. Finally, the chapter concludes with a summary.

4.2 Demographic Information of Participants

To ensure confidentiality, participants' names and the identities of the schools were kept secret by using pseudonyms (Akaranga & Makau, 2016). This study used four participants residing in an urban area of Lesotho, the Maseru district. According to the

MoET (2013), people who work in early childhood services in Lesotho are referred to as pre-school teachers; however, this differs from country to country, for example in South Africa, they are referred to as practitioners (Shaik, Martin & Moodley, 2023). However, all the participants' demographic data showed that they were qualified to teach young learners as these pre-school teachers enrolled at the Lesotho College of Education for a Certificate in Early Childhood Education (CECE) which is intended for pre-school teachers.

The participants were: *Ms Mamitah, Ms Sebu, Ms Tumza and Ms Lolo* in order from Participant 1 to Participant 4. The participants' schools are identified using these four-letter initials *A–D: School A, School B, School C, and School D*. The demographic information of participants is presented in Table 4.1.

Table 4.1: Demographic details of participants

Research Participants	Gender	Age	Teaching Experience	Educational Qualification
Ms Mamitah, School A	Female	30–39	12 years	CECE
Ms Sebu, School B	Female	30–39	6 years	CECE
Ms Tumza, School C	Female	40–49	14 years	CECE
Ms Lolo, School D	Female	30–39	11 years	CECE

4.3 Data Interpretation and Analysis from the Semi-structured Interviews

This section presents data collected in the form of semi-structured interviews with the four participants in this study. The responses from the respondents are included in this study report just as they were transcribed without any editing. Data presentation and analysis are presented through the themes generated from the data collected. The themes were further refined to form sub-themes for data analysis. Table 4.2 presents the themes that emerged from the study.

Table 4.2: Themes that emerged from the study

Preparing Grade R learners for formal School in the multi-grade classroom in Lesotho	
THEMES	SUB-THEMES
4.3.1 Preparing Grade R learners for formal learning in the multi-grade classroom	4.3.1.1 Lesson planning 4.3.1.2 Singing 4.3.1.3 Discussions 4.3.1.4 Grouping
4.3.2 Enhancing cooperation among learners in the multi-grade classroom	4.3.2.1 Sharing of material according to age 4.3.2.2 Discipline 4.3.2.3 Oral assessment 4.3.2.4 Written assessment
4.3.3 Challenges experienced by multi-grade pre-school teachers with the implementation of the curriculum	4.3.3.1 Lack of training for pre-school teachers 4.3.3.2 Lack of support from curriculum advisers 4.3.3.3 Monotony 4.3.3.4 Lack of concentration 4.3.3.5 Divided attention

4.3.1 Strategies for preparing Grade R learners for formal learning in the multi-grade classroom

Teaching a multi-grade classroom is different from teaching in a mono-grade classroom. The teacher must engage with different grade levels at the same time ensuring that every learner is attentive, cooperative and able to grasp what is being taught during the lesson. For a lesson to be effective, there must be a lot of planning before teaching (Bjørn, 2023; Asimaki, Georgakopoulou, Koustourakis & Lagiou, 2023; Kardas Isler, 2022). Therefore, the participants were asked how they prepare for lessons in a multi-grade classroom for teaching and learning.

4.3.1.1 Lesson planning

The participants showed that they always plan their lessons, learning activities and different teaching methods that teachers use in their daily lesson plans. The participants identified the following.

Ms Sebu, School B: In my lesson plan I show that ages five to six will do a certain activity and ages three to four will do a certain activity.

Ms Tumza, School C: I always do a lesson plan. I also prepared all the materials and posters I would need before the start of the lesson.

Ms Lolo, School D: As I plan my lesson, I specify that a certain activity is for the four-year-old learners this activity is for the five-year-olds and the other activity is for the six-year-olds.

The findings from the statements above revealed that planning lessons simplifies the teachers' work. The findings revealed that teachers group learners by their different ages, and then allocate different activities to the learners to make the work easier in the specified time frame. The findings further revealed that planning in advance gives teachers an opportunity to prepare and allocate the relevant learning materials for specific age groups per activity in correspondence as Ms Tumza, School C indicated above.

The findings of the current study correspond with Nesari and Heidari (2014) who asserted that the lesson plan provides a process of methods to be used for the proper allocation of materials and scheduled times for each lesson and its learning activities. It is important that teachers prepare the lesson plans well in advance and work tirelessly to teach and support learners in their educational needs.

The pre-school teachers were asked to lay out their strategies when teaching Grade R learners in the multi-grade class. They expressed a high level of difficulty when it comes to teaching multi-grade learners and mentioned that it was difficult to teach three, four, five and six-year-olds simultaneously in one classroom. However, they adopted strategies that made teaching manageable. These teaching strategies were also clearly indicated in their lesson plans. Singing, discussions, and grouping were the teaching strategies specified by the pre-school teachers. The teachers mentioned these strategies as a response to the question on the teaching strategies they used in the classroom.

4.3.1.2 Singing

The pre-school teachers used singing as part of their lessons and daily activities. The learners sing pre-school rhymes to keep them focused on the lesson at hand. The participants noted the following.

Ms Mamitah, School A: I always make sure that they do all the activities in the corners that are specifically reserved for activities. We also sing a song of the day that goes with the activities. The song helps them with the activities.

Ms Tumza, School C: I use the songs for learning. I also use oral questions and imitation, where they will imitate what I say.

Ms Mamitah, School A and Ms Tumza, School C used singing as part of their lessons. They also recited songs with their learners at the beginning of their daily activities. The songs are always about the lesson they are engaged in. When the lesson is about domestic animals, they would recite a song about domestic animals so that the learners could relate well to the lesson. This could be because songs provide a sense of belonging and can improve a learner's academic achievement in language (Obeng, 2022).

4.3.1.3 Discussion

Discussions were in the form of demonstrations, where the pre-school teacher would show the learners an object and ask them to describe it. The learners are also given an opportunity to ask and answer questions relating to the lesson. The participants explained how they used this strategy.

Ms Mamitah, School A: When I prepare my lesson plan, I include all the activities and methods we are going to use for the lesson. I ask them questions while doing activities so that they can understand what we are doing. Have discussions where I allow every learner to ask and talk about everything they understood during the activity.

Ms Sebu, School B: When it comes to my daily work, I prepare questions that are general to all learners. For example, I can show them a picture of a cat and ask them what it is. Some will say 'it's a cat' while some will say 'it's a hairy creature', they all have different views on what they see. I can even ask them how many legs a cat in the picture has.

Some will say '1, 2, 3, 4, 5, 6...' That clearly shows me that some do not know how to count.

The participants indicated that they have a section in their lesson plan where they have discussions with the learners about the activity and lesson they are busy with. Two of the participants indicated that there are times when they have class discussions with all learners in their respective classes. They do this in the form of look-and-say as in the case with Ms Sebu, School B and in the form of question-and-answer as Ms Mamitah, School A indicated.

The learners also give a summary or narration about the activity they completed. The discussions in the classroom imply that learners are free to communicate with their teachers and peers, therefore, they gain more knowledge about the lesson.

4.3.1.4 Grouping

Since the learners are in multi-grade classrooms, they are organised in different groups so that the teacher can reach all of them at the same time. In their different groups, they perform different activities according to their ages and grades. The participants explained how they dealt with this in their classrooms.

Ms Mamitah, School A: I teach the same thing at the same time. I start with a group of small learners first then when I come to the older ones, I try to make activities a little bit harder for them compared to the small ones.

Ms Tumza, School C: Every time when I start the topic, I start with them all. I introduce the topic to them at the same time. Then when it is time for an activity, I group them in their age groups. For instance, the middle class in one group and the graduates in one group. I call the four-year-olds middle-aged learners and the five-to-six-year-olds graduates.

Ms Lolo, School D: Suppose I want to teach a certain concept in the classroom, when it comes to activities, I group the age mates together. I do this because I do not expect a four-year-old to do the same activity as a five-year-old. So, I group them according to their ages and they do different activities.

The study found that Ms Tumza, School C and Ms Lolo, School D group their learners while teaching. They teach them the same topic while the activities differ according to

their age groups. The five-to-six-year-olds are the Grade R learners whom Ms Tumza, School C refers to as graduates. The reason for such a strategy is that activities differ in their level of difficulty as Ms Mamitah, School A showed. The effect of forming groups in a classroom could be that it motivates learners to develop their skills and identity and encourages social interaction (Tuan & Neomy, 2007; Taqi & Al-Nouh, 2014). It also improves their self-confidence as interactions with learners of the same age group take place in a relaxed manner instead of feeling intimidated by learners of different ages (Tuan & Neomy, 2007).

Ms Sebu, School B: When I teach multi-grade learners, I teach them the same thing at the same time. The difference is when they are grouped in their different areas. Some will draw while others will colour. For example, when teaching about domestic animals, let's say a cat. I will instruct the older ones to draw a cat, while I will give the younger ones a drawing of a cat and ask them to colour it.

Ms Tumza, School C: I divide them into groups, the young ones together, and the older ones together. When teaching them about shapes, the older ones will draw the shapes, for example, a square. For the young ones, I draw a square and they will just colour it.

It seems like grouping learners according to their age groups is essential for teachers to reach all the learners at the same time. It also helps the learners to do activities without confusion. This is where the younger learners learn from their older peers. The five-year-olds learn from the more experienced six-year-olds through social interaction that guides them towards higher levels of competency (Tzuriel, 2012). This was evidenced by Ms Tumza, School C when she stated that groups help the four-year-olds to learn from the older ones.

4.3.2 Enhancing cooperation among learners in the multi-grade classroom

Teaching in a multi-grade classroom can be stressful to teachers in terms of managing the learners in the classroom. The study sought to find the ways in which pre-school teachers manage the learners in their classrooms for effective teaching and learning.

4.3.2.1 Sharing of material according to age

The learners do not entirely depend on the teacher when it comes to lessons and activities, other teaching supplements are used in the process of teaching and

learning. The study found that teachers use learning materials in the form of charts, books and pictures to assist them in activities. Since the study was based on multi-grade teaching, the allocation of the learning materials was a concern, therefore, the teachers were asked how they shared the learning materials among their learners.

Ms Mamitah, School A: When the materials are there in the class, I first inspect them to see which ones will be suitable for the younger and older learners, so that they will be allocated among the learners during activities. For example, when teaching numeracy, I write down the numbers on the board for the young ones to count together. I give the older learners number charts and instruct them to count the numbers in groups.

Ms Lolo, School D: I give a certain group the materials that are required for them to do activities. Suppose I said we are writing; I give the three-to-four-year-olds coloured pencils and I give the five-to-six-year-olds pencils to write with.

Ms Mamitah, School A and Ms Lolo, School D expressed that they allocate the learning materials according to the age groups in the classroom. The charts and coloured pencils are colourful to trigger a young learner's imagination and are a fun way to learn. The colourful charts keep the learners motivated so that they do not get bored with boring numbers and words. Pictures facilitate learning, increase motivation to learn and contribute to focusing attention on the current lesson (Carney & Levin, 2002). The pre-school teachers enhance cooperation in the classroom as each learner uses the materials, they are given to avoid sharing which could cause fights and chaos among the learners.

4.3.2.2 Discipline measures taken by pre-school teachers

The pre-school teachers were asked how they manage and control the learners when they display undesirable behaviour.

Ms Sebu, School B: It is very hard to share the learning material because the older learners do not want the younger ones to use the material, they want to keep them all to themselves. When this happens, I frequently remind them of the rules on 'what we do' and 'what we do not do' in the classroom.

Ms Tumza, School C: Sometimes when they see me pulling a box of the learning material or when I introduce the new material, they get so excited and make a lot of noise. When they are noisy and want them to keep quiet, I use signs like clapping of

hands or beating a drum in a manner that they know what it means. When they hear the beat, they know that it is time for them to keep quiet.

Ms Sebu, School B showed the difficulty of using learning materials for her learners. She expressed that the learners tend to display selfish behaviour when they do not want to share with their younger counterparts. Ms Tumza, School C agreed that when it comes to the use of learning materials, her learners usually display uncontrollable behaviour as they become over-excited and very noisy. Both teachers explained that they use signs such as clapping of hands and constantly reminding them of classroom rules. The teachers use rulemaking to maintain an orderly learning environment (Soydan, Piroir, Samur & Angin, 2018). The teachers respond this way to discipline their learners when they display such behaviour.

4.3.2.3 Oral assessment

The process of teaching and learning is not only based on learning something new every day for the learners but also on assessment. Assessment helps teachers to understand the level at which the learners can grasp what they are taught. It is also a way to find out how prepared the learners are for the transition to formal school. The pre-school teachers were asked how they assess their learners and indicated that they assess their learners through oral assessment.

Ms Mamitah, School A: We do the assessment in different ways. Sometimes when I assess them, I ask questions to the learners about what they have learnt. Some of them would tell me that they have forgotten. When this happens, I just sing a song about the activities, and they would sing along. After a song, I would repeat the question and they answer.

Ms Sebu, School B: After every step, after introducing the theme and completing the lesson, I assess them by asking them questions. They would answer by raising up their hands and answering the questions one by one. I would take about five learners to answer.

After every lesson, the learners are assessed through a series of questions. Ms Mamitah, School A and Ms Sebu, School B assess their learners orally through a series of questions and answers. In these classrooms, oral assessment is conducted through the spoken word (Joughin, 2010), as learners answer the questions asked by

their teachers. They raise their hands to answer questions individually. In this way, the learners interact directly with the teacher's instruction which produces cognitive outcomes (Andiema & Kisilu, 2016). The assessment process in these classrooms takes place in a focused and orderly manner. Answering the questions after the lesson could imply that the learners paid attention to what they were taught and did not forget what they learnt. However, some learners seemed to quickly forget, and teachers used songs as an easier way to remind them.

4.3.2.4 Written assessment

Besides oral assessment, the pre-school teachers indicated that they also assess their learners by giving them a chance to draw or write what they learnt during the lessons.

Ms Sebu, School B: After completing an activity that was not oral, like drawing, colouring or matching, I give them other papers and ask them to draw and match one by one. I will ask the younger ones to colour and the older ones to draw or match. When they are still doing what I asked, I go around to see how they are doing and give them a star when they have finished. The older ones can see which letter is supposed to match which letter and which drawing matches the drawing. This is how I assess them.

Ms Lolo, School D: Suppose I am focusing on writing, where I ask them to write their names. When assessing a four-year-old even when they have just scribbled, I will be fine because their age does not allow them to write. When I get to the five-year-olds I look thoroughly to see if I can see the letters. When I get to the six-year-olds I expect to see that the name is written clearly, even if the name is not fully written, the letters should be clear so that I can see that this is 'a', this is 'b' and so on. So far, the learners are able to write to write their names.

The learners are also assessed in the form of written assessment. Ms Sebu, School B and Ms Lolo, School D indicated that they give each learner an opportunity to write, colour or draw as a way of assessing them. While learners are doing their assigned activities, the teacher circulates them to check their progress. Taqi and Al-Nouh's (2014) findings also indicated that in their respective groups, the teachers observed the learners while they were solving tasks. This could be done to determine the learner's strengths and weaknesses when it comes to conveying what they learnt in the form of writing and drawing. This gives every learner a chance to reflect on the lesson. The Grade R learners (five-to-six-year-olds) are expected to write the letters

of the alphabet clearly. Both teachers showed that the learners in Grade R have the potential to write and match objects according to different properties – this implies that they can read and write.

4.3.3 Challenges experienced by multi-grade pre-school teachers in implementing the curriculum

4.3.3.1 Lack of training for pre-school teachers

The education sector like any other profession requires training. The education system trains student teachers to prepare them for the teaching profession. On top of the training that is done in colleges, teachers attend workshops to update them with any curriculum changes. Multi-grade teaching is a unique type of teaching, hence, the study wanted to find out what types of support or training pre-school teachers undergo when preparing learners for formal school readiness.

The participants were asked if they received any type of training concerning multi-grade teaching.

Ms Sebu, School B said: We are not offered any training or workshops on how to teach multi-grade classrooms. All I can say is that in college we were taught how to teach different ages in different classes not in the same classroom. So as a person, I have to use the knowledge I obtained from School to address multi-grade teaching.

Ms Lolo, School D shared the same sentiments and said, “At school, we are not trained, we are only taught how to prepare activities for certain ages. We only use our knowledge; we are not trained to teach such a class”. When giving a response to the same question Ms Mamitah, School A stated:

I have done it myself, I trained myself. I have experience from a day-care I used to run, where there were children of different ages zero to three years old. I learnt that when teaching them about colours, I have to give them different colours so that so that they can see and touch them.

The overall findings from the sample of participants in this study revealed that Grade R multi-grade teachers do not receive any type of training regarding multi-grade teaching. Ms Mamitah, School A showed that multi-grade teachers do not attend training or workshops. As a result, she is only able to handle teaching different age

groups in one setting from previous day-care experience. Ms Sebu, School B and Ms Lolo, School D indicated that they are able to teach because they use the knowledge they obtained from college to teach learners of different ages, though in separate classrooms. Since pre-school teachers are not offered any training on multi-grade teaching, they rely on their experience of teaching and the knowledge they gained in college on how to teach different age groups, even though that training was for separate classes. This could imply that teaching in these classrooms is of a low standard. Condy and Blease (2014) also assert that teachers need training to enable them to teach in multi-grade classrooms effectively.

4.3.3.2 Lack of support from curriculum advisors

Besides training, the participants were asked whether they received any type of support, especially from curriculum advisors.

Ms Mamitah, School A responded: No support at all, I do the research myself. Sometimes I use Google, sometimes I talk with Grade 1 teachers because some of them have multi-grade learners and they tell me how they work with them.

Ms Lolo, School D said: In our curriculum, we have no such. When we go to workshops, they only focus on what is in the curriculum, so if multi-grade teaching is not in the curriculum which is the case, it would not be mentioned during the workshop. I do a lot of reading on my own and I talk to other teachers who teach multi-grade and share information on how to go about it.

From the findings above, it was clear that multi-grade teachers do not get support from curriculum advisors. They instead do their own consultations from the internet, as Ms Mamitah, School A indicated that she consults the internet to learn and adopt the skills on how to teach in a multi-grade classroom. In addition, both Ms Mamitah, School A and Ms Lolo, School D pointed out that they consult other teachers who also teach multi-grade classrooms in different grades. This is because curriculum support programmes are not developed to support multi-grade teaching (Green, Paker, Deacon & Hali, 2011).

The teachers were further asked about other challenges they experienced in the classroom pertaining to the teaching and learning process besides training and curriculum challenges.

4.3.3.3 Learners experience monotony

Some participants expressed that the learners become bored which a problem was.

Ms Mamitah, School A stated: I have noticed that the older ones become bored because they have to share a classroom with the younger ones. I think it is wasting time for the older ones because they are learning the same thing over and over for the sake of the young learners.

Ms Sebu, School B said: Some learners are really quiet while teaching. Because the older ones already have a glue of what is being taught, they understand quicker than the younger ones. The younger ones lag behind to the extent that I have to repeat the lesson again to make them understand.

Ms Lolo, School D added: It is hard to teach in a multi-grade classroom because others will say I am boring while others will be eager to learn. This happens a lot when I teach the young learners things that the older ones already know.

It was evident that the Grade R learners get bored when they are taught the same things they learnt from the previous year. As a result, they do not find lessons challenging. In addition, the teachers have to repeat the lesson or some critical points in the lesson for the younger learners to understand. This, however, is perceived as a waste of time by Grade R learners because they already know what is being taught.

4.3.3.4 Lack of concentration among learners

Another issue was the lack of concentration among learners.

Ms Mamitah, School A said: Some of them do not listen, I will find them playing with the ones next to them. This is mostly done by the younger ones. Sometimes when I am teaching, the young ones will be running around, even when I am standing in front of them, but I always tell them to sit down and give them an activity to do.

Ms Tumza, School C noted: Most of the time other learners like to pull others and cause them to lose focus on what we are doing. Others will make noise while some cry without reason. These are the most challenges I face.

Ms Mamitah, School A and Ms Tumza, School C revealed that the younger learners in the classroom have a short attention span hence they start to play around with others or cry to demand attention. In order for a lesson to continue, the pre-school teachers have to calm the crying and reprimand the playful ones by assigning them an activity as Ms Mamitah, School A mentioned. This takes time and turns the focus of the teacher towards these learners while the Grade R learners suffer. Because the Grade R learners are still young themselves, they lose concentration on the activity they are doing due to the noise caused by the younger learners.

4.3.3.5 Teachers' divided attention among learners

The participants found that dividing their attention between the different ages was challenging.

Ms Tumza, School C: It is challenging because I would be focusing more on the five-to-six-year-old learners who are about to graduate and tend to forget about the three-to-four-year-olds. I sometimes feel like they could be separated.

Ms Lolo, School D: I can say that those that are five to six years old are suffering more when they are taught with the four-year-olds. I have to focus more on the five-to-six-year-olds because they are going to Grade 1. They are supposed to be given more attention because of the transition. I say this because it is their time to be taught and given attention, but we waste time trying to teach others, so I think they suffer according to my experience.

The participants expressed that one teacher cannot give enough attention to all learners in a multi-grade classroom. Ms Tumza, School C places more focus on the five-to-six-year-old learners, while Ms Lolo, School D concentrates more on the five-to-six-year-olds at the expense of the three-to-four-year-olds. The teachers showed that the main challenge they encounter in multi-grade teaching is the lack of attention given to each age group during the process of teaching and learning. The teachers' divided attention does not guarantee effective teaching. Puttonen, Lerkkanen,

Poikkeus and Siekkinen (2012) state that learners need teachers who are sensitive in their initiatives and who are supportive of all learners to ensure high-quality education.

4.4 Data Presentation and Analysis from Classroom Observations

This section presents data collected in the form of classroom observations. The observations took place in four different pre-schools. All the pre-schools had multi-grade classrooms, composed of pre-school learners and Grade R learners. The observation schedule was used to scrutinise the following: the number of grades combined in a classroom, subjects taught, classroom environment, the teaching strategies used and methods of assessment. Each participant is introduced in the section below.

4.4.1 Ms Mamitah, School A

The name of the school of the first participant was school A. At the start of the observation day, I introduced myself to the teacher and explained the purpose of the study as I entered the classroom. The teacher explained that there were 15 learners aged between four and five years, and 27 learners aged between five and six years. This made a total of 42 learners in the classroom. The learners were all sitting randomly on the floor.

Ms Mamitah referred to her lesson plan to guide her on which subject to teach and how to go about the activities she had planned. The subject Ms Mamitah had prepared for learners was Life Skills. She introduced the topic which was 'domestic animals' and had a live cat for demonstration.

Ms Mamitah used discussions, question-and-answer, and look-and-say while teaching about the cat. By bringing a cat into the classroom, the learners were able to familiarise themselves with the cat and have a visual of what they were learning about. Ms Mamitah asked the pre-school learners about the number of legs a cat has; some of the learners raised their hands to answer the question while others shouted out the answer. The teacher held the cat up and appointed five learners to point at the eyes, ears, legs, nose and whiskers, while the other learners named the body parts they were pointing to. In this way, the teacher was able to reach all learners in both age

groups and even rephrased the questions by acting out the function (senses) of the body parts.

Even though the learners were participating well, the cat brought excitement to the classroom to the point that some of the learners lost attention and started making a noise. However, as a way of disciplining, Ms Mamitah called out the name of a learner who was misbehaving and suddenly restored order. Sometimes the teacher spoke in a very soft low voice; this intrigued the children making a noise and they were eager to see and listen to why their teacher was not talking loudly as usual. During teaching and learning, Ms Mamitah assessed her learners by asking questions about what they had learnt and waited for the learners to answer before continuing. The class lesson took 30 minutes overall.

4.4.2 Ms Sebu, School B

School B pre-school was the name of the school of the second participant of the study. When I entered the classroom at the beginning of the day, I introduced myself to the teacher and explained the purpose of the study. As I entered the classroom, the teacher explained that there were 10 learners aged between four and five years, and 23 learners aged between five and six years. This made a total of 33 learners in a classroom. The learners were sitting on their chairs in an arch/shoe-horse arrangement. Ms Sebu too used her lesson plan and was teaching according to it. She introduced the lesson on Life Skills where they were learning about domestic animals, the cow in particular. She used picture charts with drawings of cows on them for demonstration. She even took the learners outside to see live cows as some cows were grazing outside the schoolyard.

Ms Sebu used discussions and question-and-answer as strategies for teaching about the cow. P2 interacted well with her learners during the lesson. After the cow observation, the learners formed a straight line and went to their classroom and sat on their respective chairs. Ms Sebu stood at the centre of the arch where the learners were sitting holding a picture of a cow. She then began to ask them questions such as a) How many legs does a cow have? b) What does a cow eat? and then asked them to make the sound of a cow. The learners were applauded upon giving the correct answers as this was a question-and-answer lesson.

All the multi-aged learners were included in the lesson. They all participated in answering the questions which they answered in a chorus. During the lesson, most of the learners were paying attention except for a few who were playing and talking among themselves. Some of the learners were even fighting while some cried during the lesson. The teacher broke up the fight but paid no attention to those who were crying. Mrs Sebu called out the names of those who were talking and playing and reminded them to concentrate as the lesson was still in progress. The teacher also asked questions of those who were playing during the lesson so that they could pay attention. These were all the measures the teacher took to discipline her learners. The learners were assessed orally by asking them questions about what they were taught and saw outside the classroom. The Life Skills lesson took 25–30 minutes.

4.4.3 Ms Tumza, School C

The name of the school that the third participant of the study taught at was School C. When I entered the classroom at the beginning of the day, I introduced myself to the teacher and explained the purpose of the study. As I entered the classroom, the teacher explained that there were three learners aged two, seven learners aged between four and five years, and 13 learners aged between five and six years. This made a total of 23 learners in a classroom. The learners were seated on their chairs in rows.

Ms Tumza, School C used and followed her lesson plan which she had planned for the day. The lesson was on numeracy (addition and counting numbers). After the introduction of the lesson, Ms Tumza, School C divided her learners into groups according to their ages. This made a total of two groups in the classroom. Group A was composed of the two- and four-to-five-year-olds seated on the side of the classroom, and Group B was composed of the five-to-six-year-olds seated on the other side of the classroom. Ms Tumza, School C then wrote the numbers 1–10 on the chalkboard and distributed paper numbers to Group A and writing sheets to Group B.

Ms Tumza, School C used look-and-say, question-and-answer, demonstration and discussion for effective teaching and learning. Different activities were given to learners in both groups and the activities differed according to the ages. Group A

counted the numbers loudly as the teacher was pointing at them on the chalkboard. They were also pointing at the numbers in front of them while the teacher was moving from one learner to another. The Group B learners wrote the numbers on their sheets and the sums of the few equations they were given. The teacher also moved around the Group B learners. The teacher involved all the learners in the lesson and also interacted well with them by providing them with activities where the learners interacted with each other.

Some learners were disruptive during the lesson. They played with each other and chatted. The teacher kept reprimanding them by constantly telling them to keep quiet. The teacher isolated one child who was noisier from the others as a way to discipline him. There was one autistic child in the classroom who kept on making noises and crying all the time. This child disturbed other learners and took much of the teacher's attention while trying to calm him down. When assessing them, Ms Tumza, School C asked them questions about what they had learnt, and they answered in chorus. She then selected some of them to come to the front of the class to demonstrate what they had learnt. The lesson took 30 minutes.

4.4.4 Ms Lolo, School D

The name of the school of the fourth participant was School D as stated in the introduction. When I arrived in the classroom, I introduced myself to the teacher and explained the purpose of the study. As I entered the classroom, the teacher explained that there were eight learners aged between three and four years, and 22 learners aged between five and six years. This made a total of 30 learners in the classroom. The learners were all seated on cushions on the floor, in a circle.

Ms Lolo, School D used the planned lesson plan to conduct the lesson. The subject Ms Lolo, School D had prepared for learners was on literacy. She introduced the topic and handed the teaching material to the learners. The material included different pictures of objects on pieces of paper and cut letters of the alphabet.

Ms Lolo, School D used learning through play, question-and-answer, and singing when brainstorming. Ms Lolo, School D interacted well with her learners during the lesson. The teacher was able to include every learner in both grades as their seating

arrangements allowed her to go around every learner to observe what they were doing. The three-to-four-year-olds were singing and naming the letters of the alphabet, while the five-to-six-year-olds were matching the letters and words to the pictures. The teacher gave all learners an equal opportunity to participate in the lesson. They were assessed by answering questions as they raised their hands to be picked. The learners were given a chance to answer one by one but there were still those that made a noise and paid less attention. For them, the teacher called out their names to reprimand them. They were also reminded of the class rules that no one was allowed to talk while another person was talking. Similarly, they were rewarded with cards for good behaviour. The lesson took 30 minutes.

4.5 Data Presentation and Analysis from Documents

This section presents data collected through the review of documents. The documents used by the researcher were the lesson plans prepared by each participant prior to their lessons in the classroom. The researcher obtained the lesson plans from the teachers at the same time as the classroom observations. The lesson plans stipulate the theme of the lesson, lesson objectives, the learning material used for the lesson, lesson activities and the assessment procedure. It must be noted that only the components that fit the study's interest are represented in the tables below. The data is presented in the form of tables (tables 4.3–4.6 below).

Table 4.3: Components of Ms Mamitah, School A lesson plan

Theme	Objectives	Learning material	Teaching methods	Activities	Assessment
Life Skills (domestic animals).	Identify cats from other animals. Pronounce letter sound "C". Count from 1-5.	Bottle tops. Charts. Ropes. Our body parts. Pencil. Coloured pencils. Papers.	Question-and-answer. Look-and-say. Singing.	Introduction through a song (old McDonald had a farm). Learners tell what the song is about. Learners will tell me the names of domestic animals. Teacher shows them a live cat in the classroom. Learners will tell me what they see on the cat. Learners count the legs of a cat. Learners will touch the skin of a cat.	Oral assessment. Teachers ask the following questions: What is the name of the domestic animal we talked about? How many legs does this animal have? How many eyes, nose and mouth does this animal have?

Table 4.4: Components of Ms Sebu, School B lesson plan

Theme	Objectives	Learning material	Teaching methods	Activities	Assessment
Life Skills (domestic animals).	Identify a cow from other domestic animals. Pronounce the letter sound "M" correctly. Recognise the shape rectangle among other shapes.	Poster. Pencil. Papers. Bottle tops. Shapes. Belt. Milk.	Question-and-answer. Discussion. Demonstration.	Teacher introduces the theme. Discussion of domestic animals. Learners will count the number of legs and eyes of a cow. Learners will demonstrate how a cow walks. Learners will go outside to point at cows in the neighbour's compound.	Oral assessment. Teachers ask the following questions: What are domestic animals? How many legs and eyes does it have? What do you get from a cow? Demonstrate the sound made by a cow.

Table 4.5: Components of Ms Tumza, School C lesson plan

Theme	Objectives	Learning material	Teaching methods	Activities	Assessment
Numeracy content	Collect and analyse data using different objects.	Abacus. Disposable mugs. Pencil. Rubber.	Singing. Grouping Look-and-say. Question-and-answer.	Introduction through a song. Teacher will put the abacus on the table in front of learners. One learner will put the beads of the same colour in one column. Other learners will stand in front of others, sort the coloured disposable mugs according to colour in one line. One learner will stand in front of others, put the same colour of chairs together (blue, yellow, and green). Another learner will pack the blocks of the same shapes together.	Oral assessment. Learners will be asked to tell what is meant by collecting and analysing objects. Learners will be asked to tell the colours they observed during the activity. Learners will sing a song.

Table 4.6: Components of Ms Lolo, School D lesson plan

Theme	Objectives	Learning material	Teaching methods	Activities	Assessment
Literacy content. (Storytelling).	Listening to the story and answering questions about it. Pronounce and write the letter sound "M" correctly.	Storybook. Flashcard. Pencil. Rubber. Paper.	Singing. Grouping. Look-and-say. Question-and-answer.	Introduction through a song. Teacher tells a story about a School trip to Thaba-Bosiu. Teacher will show a flash card with letter sound "M" to the learners. Learners form the letter sound "M" with their heads.	Oral and written assessment. Learners will be asked what the letter sound they learnt was. Learners will be asked to write letter count "M" on papers individually. Learners will be asked which names

				Learners will write the letter sound “M” in the air. Learners will write the letter sound “M” on piece of paper.	they know that start with letter sound “M”. Learners whose names start with the letter sound “M” will be asked to stand up.
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The tables above presented the components in the pre-school teachers’ lesson plans. The lesson plans are used by pre-school teachers as a guide in the classroom for an effective teaching and learning process. All the lesson plans were written in a similar format and comprised similar components. The lesson plans clearly stipulate the theme of the lessons, thus, Life skills, Numeracy content and Literacy content as shown in Table 4.1, Table 4.2, Table 4.3 and Table 4.4 respectively. The themes are the names of the lessons that were taught by Grade R learners. According to the ECCD Curriculum Guide (2021), themes support learners’ growth and learning across six domains: 1) cognitive; 2) emotional; 3) language and communication; 4) physical; 5) social; and 6) spiritual. The objectives of the lessons are the outcomes that teachers plan to achieve after the lessons, and they are specific to each lesson. The lesson plans also show the learning materials which will be used during the lesson as the pre-school teachers have stated during the interviews that they distribute and share the material among the learners.

Moreover, from the lesson plan, it was clear that the teachers use question-and-answer, look-and-say, singing and grouping as teaching strategies to prepare Grade R learners for formal school readiness in the multi-grade class. The lesson plans show a component that entails a list of activities carried out during the lesson. The activities in this sense are the teaching and learning procedures that both teachers and learners actively participate in. Finally, the assessment criteria used in assessing learners are shown in the lesson plans. Oral and written assessment is used to assess the learners in their classrooms.

4.6 Summary

The chapter presented the analysis of the data collected using semi-structured interviews and classroom observations from four participants. The analysis addressed

the three research questions that conveniently answered the main research question. The research questions are as follows: How do pre-school teachers prepare Grade R learners for formal learning in the multi-grade classroom? What are the challenges experienced by multi-grade pre-school teachers? How do pre-school teachers ensure and enhance cooperation among learners in the multi-grade classroom? Data obtained from the classroom observations and documentation was presented in the order it was conducted: Ms Mamitah, School A, Ms Sebu, School B, Ms Tumza, School C and Ms Lolo, School D. The demographic information of participants together with documented data were presented in the form of tables. The findings were presented in line with the themes that emerged from the data. The following chapter presents a discussion of the findings, limitations and recommendations that arose from the study's findings.

CHAPTER FIVE

DISCUSSIONS AND CONCLUSIONS

5.1 Introduction

The study's results were introduced in the preceding chapter, along with an analysis and interpretation of the data from semi-structured interviews, classroom observations, and documents that pre-school teachers use in their instruction. The current chapter offers a discussion and conclusions based on the research questions and responds to the main research question: What are pre-school teachers' practices to prepare Grade R learners for formal school readiness in a multi-grade classroom in Lesotho? This chapter first discusses the interpretation and implications of the findings together with the relevant literature. Secondly, it provides the outputs and contributions of the study. Thirdly, it outlines the limitations encountered during the study. Fourthly, it discusses the recommendations based on the findings. Lastly, it provides a summary of the chapter.

5.2 Data Interpretation from Semi-structured Interviews, Classroom Observations and Documentation

5.2.1 Preparing Grade R learners for formal learning in the multi-grade classroom

Every lesson starts with preparation. This enables the process of teaching and learning to be carried out with ease. Teaching is viewed as a psychological experiment which aims to improve the learner's level of development (Tzuriel, 2001) which means it has to be given special attention and proper planning. The study findings revealed that the pre-school teachers used and adhered to each step in the lesson plans, enabling them to adjust and focus on the ongoing activity. The steps in the lesson plans allowed the learners to comprehend the lessons properly instead of overwhelming them with a lot of information altogether. These findings are compatible with Nesari and Heidari (2014) that the use of a lesson plan in a classroom is important in increasing the quality of education. The observation findings revealed that the pre-school teachers referred to their lesson plans before and during the lesson to get assistance on how to present the lesson to the learners. Again, the lesson plans

indicated the duration of the lesson. The lessons in all the observed classrooms were conducted within 30 minutes. This indicates that pre-school teachers used the lesson plan to manage their time.

Although the teachers expressed that they do not receive any type of training on how to teach multi-grade learners they, however, they have a similar approach to teaching. They first introduce the topic of the lesson, and then assign activities to the learners according to their age groups. This shows that the teachers have an understanding that their learners are of different ages and, therefore, have different levels of grasping the lesson at once. As a result, the teachers use different techniques to reach their learners at the same time as a way of making them ready for formal schooling.

Grouping provides a sense of organisation, thus, in each group, the learners performed one activity, and they know what to do and when to do it without interrupting others. Three types of group formation can be used in a classroom; random teacher assigning; student selection; or a mixture of the two types. In this study, the pre-school teachers used student selection grouping where they grouped learners according to their age (Hassanier, 2007). Grouping learners according to their age groups ensures that all age groups perform all activities to their best capability. As a result, teachers are required to include activities that predominate in each age group because learners differ in their level of development and maturity to understand and perform given activities (Tzuriel, 2001).

Singing is an easier way of learning especially for kids because songs are easily remembered. Songs are logical, they refresh the minds of learners and the words in a song are always fresh in the mind hence, they could be used for years to come. The study conducted by (Andiema & Kisilu, 2016) also revealed that the use of songs in learning introduces learners to cultural information and characteristics hence, they help learners develop and strengthen oral and reading skills. The Grade R learners can use the songs they learnt in pre-school in the future years of their formal learning. For instance, reciting the alphabet can help the learners remember all the letters of the alphabet in their chronological order. Music can support young children's success in reading, which could be a long-life skill (Obeng, 2022).

The discussions took place in the form of look-and-say and question-and-answer methods. The look-and-say method teaches learners to give a description of objects they observed. This method was used by pre-school teachers to teach learners how to count by showing them pictures of items in which the learners indicated the number of items they saw. Discussions keep the minds of learners fresh. It keeps them focused on the current activity as learners of their age can be easily distracted. Learners gain a thorough knowledge of the lesson by asking questions and/or answering questions during the lesson. This is supported by Yazedjian and Kolkhorst (2007) in their study on perceptions of the effect of group work activities in developing active learning found that discussions honed the learners' understanding of the topic.

Furthermore, the classroom observations showed that the teachers used live animals to enhance the understanding of learners; this is where the learners learn about things that they can relate to in their everyday lives. From the observations, the sitting arrangements in this classroom offered flexibility and freedom so that there could be ease of interaction among the teacher and the learners; and among the learners themselves. Vygotsky's perspective argues that social interaction and scaffolding learning experiences received by learners from early schooling affect the learners' development (van Rensburg, 2015). The question-and-answer sessions during discussions assist learners in their activities and contribute to the learning development of Grade R learners.

5.2.2 Enhancing cooperation amongst learners in the multi-grade classroom

To enhance cooperation among the learners, teachers use a set of rules in a classroom for the learners to follow. The rules are mostly about cleanliness, movement and peer relationships (Soydan *et al.*, 2018). From the observations, it was found that the learners sat in their respective seats to restrict, either on the chairs or on the floor to control unwanted movement that may disturb others. Again, the learners moved in a straight line to view a cow while learning about domestic animals outside. The pre-school teachers found it constructive to have classroom rules, which they always use to control the undesirable behaviour displayed by learners such as refusal to share the learning material with others and noise making. This study's findings concur with the

findings by Elbla (2012) that verbal reprimand such as reminding the learners of classroom rules is a means to maintain discipline in some schools in Sudan.

As a way of keeping order in the classroom, the pre-school teachers used signs that both teacher and learners knew its meaning. The beating of the drum in a certain rhythm was used by the pre-school teachers to maintain order when the learners were noisy in the classroom. Certain signs can be used to correct learners' misbehaviours and help the teacher control the classroom (Elbla, 2012). The interviewed pre-school teachers use such disciplinary strategies as a way to maintain effective classroom management which enables effective teaching and learning. Soydan *et al.* (2018) stated that effective management is one of the traits and skills teachers should possess to transfer the knowledge they have to the learners as they prepare them for formal school readiness.

In addition, the pre-school teachers also enhance cooperation among learners in the form of assessment. In this case, the pre-teachers test whether learners paid attention to the lessons and given activities. Dynamic assessment in Vygotsky's theory argues that the measurement of an individual's potential for development is as crucial as the actual level of development (Tzuriel, 2012). The theory depicts that teachers use assessment as a measure of the learners' readiness for formal school entry.

Pre-school teachers use oral assessment in their classrooms as a way to establish the level at which learners have understood the lesson. Oral assessment is a face-to-face interaction between a learner and a teacher therefore, it allows for clarification of the questions and answers. However, Chambers and Richards (1993) in their study found that teachers perceived oral assessment as being unfair as it rests on how teachers address their questions. Nonetheless, oral assessment is important in learning because teachers can use follow-up questions to determine the limits of the learner's understanding (Joughin, 2010).

In written assessment, teachers give their learners an opportunity to write on their own. The study revealed that teachers give their learners a chance to write their names as a way to assess how well they can write the letters. The Grade R learners showed that they could write all the letters correctly though they were excused if they did not write

their names in full. The findings relate to Andiema and Kisilu's (2016) findings which revealed that most learners in pre-school had higher abilities to write letters of the alphabet correctly. The learners show that they can transition to formal school when they are able to write all the letters of the alphabet clearly and correctly. It guarantees that they will become proficient in reading and writing.

5.2.3 Challenges experienced by multi-grade pre-school teachers with the implementation of the curriculum

Teachers do not receive training on multi-grade teaching. Most of these teachers carry out the process of teaching multi-grade learners from their experience of teaching different age groups in their line of work. These findings are on par with (van Rensburg, 2015) findings on the school readiness performance of a group of Grade R learners that, teachers attained low levels of training. The author further suggests that training is a key determinant to the attainment of formal school readiness by Grade R learners therefore, teachers' training in multi-grade teaching should be a priority in Lesotho. Pre-school teachers prepare Grade R learners for formal school readiness hence, teacher training is essential as it enables teachers to create scaffolding learning experiences that will help learners' transition to formal schooling (van Rensburg, 2015).

Among the challenges that pre-school teachers mentioned is the lack of knowledge on how to incorporate the mono-grade curriculum into multi-grade teaching. This subsequently means that pre-school teachers still use mono-grade curricula to teach in a multi-grade classroom. The findings relate to Aghazadeh's (2010) findings that Iranian multi-grade teachers employ the urban mono-grade curriculum for teaching multi-grade classrooms in rural areas. In addition, multi-grade teachers in Lesotho do not get support from the MoET either in the form of training or advice on how to effectively teach in a multi-grade classroom using a mono-grade curriculum. There are no updates on the curriculum which address multi-grade teaching. Yet, teachers have to be retrained and equipped with skills in multi-grade teaching (Andiema & Kisilu, 2016).

Even though there is a lack of support from curriculum advisors when it comes to multi-grade teaching, the teachers themselves have shown a remarkable sense of solidarity.

This is evident as they rely on each other for advice and skills sharing when it comes to multi-grade teaching. This indicates that the multi-grade teachers support each other.

Teachers tend to be overwhelmed by teaching multiple age groups at the same time to the extent that they fail to attend to the learners similarly. The study findings indicate that pre-school teachers struggle to give each grade/age group the same attention while teaching. Grade R learners are about to graduate into formal schooling hence, the pre-school teachers put focus on them and less on other grades while teaching. As a reaction to this, the younger learners feel neglected and resort to mischievous behaviour like playing with other learners or making noise in the middle of a lesson to demand attention from the teacher.

5.3 Research Outputs and Main Contributions of the Study

The study addressed the significance of teaching strategies in multi-grade classrooms for effective learning of Grade R learners. The early years before formal school are of great importance in the developmental progress and growth of learners (Melhuish, Sammons, Blatchford & Taggart, 2004). Effective learning during the pre-school level guarantees the learners a successful educational journey. Consequently, the study addressed the strategies which pre-school teachers use to prepare Grade R school readiness for formal schooling. Previous studies showed that multi-grade teaching is practised all over the world with each country exploring approaches to teaching in a multi-grade classroom and facing its challenges. This study also explored strategies, management, planning, learner cooperation and challenges pre-school teachers are faced with while teaching a multi-grade classroom in Lesotho.

Based on the experience of pre-school teachers, the findings of the study showed that pre-school teachers are effective in time management as they plan their lessons and activities and their duration. There are various strategies that pre-school teachers use in the classroom such as grouping of learners in the. This is done to enhance cooperation among learners and is also a way of teaching them social interaction. Social interaction in the form of singing and discussions, is essential for the development and growth of learners. Through them, they learn cultural concepts, linguistics and ideas pertaining to their development.

In contrast, pre-school teachers are still faced with appalling challenges when it comes to teaching in a multi-grade classroom. The study found pre-school teachers still use the mono-grade curriculum and are not offered any kind of training on how to use the mono-grade curriculum to suit multi-grade teaching. Despite the curriculum, the study revealed that some learners portray undesirable behaviour which disrupts the process of teaching and learning. This is because learners of this grade are still at a tender age which demands a lot of attention from an adult which is their teacher. The pre-school teachers however have the ability to deal with such challenges as they have thorough experience in teaching pre-school learners. The teachers also support each other through communicating their challenges and seeking/providing advice.

The study addressed three gaps in the existing literature, the first gap addressed are the strategies teachers used to prepare learners for formal school readiness in Lesotho. Therefore, it was essential to research the strategies applied to prepare Grade R learners in a multi-grade for school readiness. The second gap is to address multi-grade teaching in Lesotho pre-schools, most studies are on multi-grade teaching in primary and secondary levels of countries like Australia, Finland, and South Africa (Hyry-Beihammer & Hascher, 2015; Thaba-Nkadimene, Modiba & Molotja, 2019). Little is known about multi-grade teaching in Lesotho. The last gap it explored is the practice of teaching multi-grade classrooms in urban areas. Most studies are based on multi-grade teaching in the rural areas, of rural Pakistan, the Philippines and South Africa (Badar & Mason, 2020; Bobis & Bongala, 2020; Amin, 2020; du Plessis & Subramanien, 2014). As a result, the study provides research done on multi-grade teaching in different settings.

The theory was applied to determine the strategies used by pre-school teachers in preparing Grade R readiness for formal schooling. The theory depicts that the social environment influences learning. The pre-school teachers fully used their environment to enhance learning among their learners with the use of materials and objects that they can relate to in their everyday lives. The theory portrays that the developmental state of learners improves with guidance from more knowledgeable others (Lantolf, Thorne & Poehner, 2015). The findings of the study were provided by qualified

experienced pre-school teachers who fit the criteria of the knowledgeable other. Moreover, Vygotsky's theory stresses that learners should be assessed on what they can do rather than on what they know, this can be done through group work and interactive interviews (Taber, 2020). Vygotsky's ideas framed a critical part of the study because the way pre-school teachers prepared Grade R learners for formal schooling aligns with the theory in areas of teaching strategies, social interaction and assessment.

The findings of the study were from real pre-school teachers who provided data on their lived experiences. As a result, the findings can be used in the real world by teachers, principals, parents and MoET. The teachers can benefit from the strategies to adopt while teaching in a multi-classroom. The results further provide insight into how to tackle some of the challenges teachers face in their classroom such as methods used in terms of discipline. Where there is a lack of support from various stakeholders within the education sectors, teachers would learn that social interaction with other pre-school teachers is an excellent strategy to use when it comes to sharing information and advice. Principals can use the experiences of the teachers to provide a conducive learning environment at their schools.

The parents of the learners learn that they also need to assist their children when it comes to their schoolwork. The parents would have an implacable insight into how essential social interaction is for their children and would encourage their children to interact with their environment. Although pre-school teachers in Lesotho are qualified to teach at the ECD level, they do not have sufficient knowledge and skills to teach in a multi-grade classroom. Consequently, they find it exceptionally difficult to teach learners of different ages and grades in one classroom. The MoET can use the findings of the study to review, monitor and formulate ECD policies to include multi-grade teaching. Curriculum advisors would also review the curriculum to accommodate multi-grade practices. Moreover, the MoET could encourage the teaching training institutes in Lesotho to train their student teachers in multi-grade teaching and support them with relevant experience.

5.4 Limitations of the Study

Data was obtained from the four pre-schools in the Maseru district. This could limit the study findings as little is known about the practices pre-school teachers use to prepare Grade R learners for formal school readiness in the other nine districts of Lesotho. Therefore, the study cannot provide a generalisation of other contexts.

The study was conducted in an urban area, providing little or no data for the rural areas. The teaching strategies and curriculum used in both urban and rural areas are similar as such, relevant data which the study did not address would have been gathered from the rural areas.

The last limitation of the study was the lapse of time since data was collected at the time of the winter school holidays. The data process took place two weeks before the pre-schools could break for the winter holidays. This gave the researcher limited time for classroom observations and interviews with the pre-school teachers as it would be difficult to track them while on holiday.

5.5 Recommendations for Further Research

To increase the scale of the study, further research can be conducted in the other nine districts of Lesotho. Studies can be conducted on a larger scale to include other districts of Lesotho other than Maseru. This would generate more data; on the strategies pre-school teachers use in the classroom and the challenges they face with multi-grade teaching and provide a way forward with regard to policymaking in ECD education.

The second recommendation is regarding the study limitations which indicated that there is no information pertaining to pre-school teachers in rural areas. Although there are more pre-schools in the urban areas than the rural areas, based on the high population density in urban areas compared to the low population density in the rural areas, further studies can be conducted in the rural areas to get the perception of pre-school teachers teaching in multi-grade classrooms.

The last recommendation for future research is that a longitudinal study could be done. The process of teaching and learners in pre-schools can be researched over a long period. It can be carried out from the beginning of the school year until the graduation day of Grade R. This would yield more information on how pre-school teachers prepare Grade R learners' readiness for formal schooling.

5.6 Summary

This chapter presented the discussions, implications and conclusions from the findings. The chapter discussed the interpretation and implications of the findings together with the relevant literature to answer the research questions. The first research question was on how pre-school teachers prepared Grade R learners for formal learning in the multi-grade classroom. Followed by how pre-school teachers ensure and enhance cooperation amongst learners in the multi-grade classroom. Lastly, challenges experienced by multi-grade pre-school teachers with the implementation of the curriculum were also discussed.

The chapter further outlined the outputs and contributions of the study. This is the application of the theory was made in relevance to the study and the study's application to the real world was stipulated. The limitations encountered by the study followed in the discussion. Discussions on the recommendations for further research based on the findings and limitations of the study also formed part of the chapter. The chapter concludes by giving a summary of the whole of the chapter.

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APPENDICES

Appendix A: Ethics Approval



GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

13-Apr-2023

Dear Mrs Makorina Ntsinyi

Application Approved

Research Project Title:

Preparing Grade R learners for formal school in the multi-grade classroom in Lesotho.

Ethical Clearance number:

UFS-HSD2022/1193/23

We are pleased to inform you that your application for ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted to the ethics office to ensure ethical transparency. Furthermore, you are requested to submit the final report of your study/research project to the ethics office. Should you require more time to complete this research, please apply for an extension. Thank you for submitting your proposal for ethical clearance; we wish you the best of luck and success with your research.

Yours sincerely

Dr Adri Du Plessis

Chairperson: General/Human Research Ethics Committee

Adri
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Appendix B: Similarity Report

The screenshot shows a Turnitin similarity report for a document titled "Preparing Grade R learners for formal school in the multi-grade classroom in Lesotho". The report is displayed in a web browser window. The document is 99 pages long, and the current page is 108. The similarity index is 9%. The report is broken down into four categories: Internet Sources (7%), Publications (3%), and Student Papers (2%). The primary sources are listed as follows:

Rank	Source	Similarity
1	hdl.handle.net (Internet Source)	2%
2	uir.unisa.ac.za (Internet Source)	1%
3	www.researchgate.net (Internet Source)	<1%
4	ulspace.ul.ac.za (Internet Source)	<1%
5	repository.tml.nu.lis	<1%

The Windows taskbar at the bottom shows the system time as 6:05 PM on 10/25/2023, with a temperature of 78°F and a sunny weather forecast.

Appendix C: Permission from Ministry of Education



THE KINGDOM OF LESOTHO MINISTRY OF EDUCATION AND TRAINING

30th September, 2022

REF: ED/X/2

Ms. 'Makorina Pearl Ntšinyi
P.O. Box 11627
Maseru, Lesotho

Dear Madam,

RE: REQUEST FOR PERMISSION TO CARRY OUT A RESEARCH

Your letter dated 22nd September, 2022 on the above subject bears reference.

The Ministry of Education and Training has no objection to you conducting research on *"Preparing Grade R learners for formal school in multi-grade classroom in Lesotho"* in the area of Ha Tsosane, Ha Leqele and Naleli as requested. Please liaise with the District Education Manager – Maseru for guidance.

Thank you.

Yours sincerely

Thuto Ntšekhe-Mokhehle (Ms)
Chief Education Officer – Primary

Cc. District Education Manager – Maseru
Manager - ECCD
Regional Inspector – Central

P.O. BOX 47 MASERU 100 LESOTHO TEL.: (+266) 22 324369 ceo1.moet@gmail.com

Appendix D: Letter of Permission to the Principal to Carry out Research in school

Qoaling Ha Seoli
P.O Box 11627
Maseru 100
07 November 2022

The Principal

.....

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN THE SCHOOL

I am 'Makorina Pearl Ntšinyi, a Master of education degree student in Early Childhood Development and Learning at the University of The Free State in South Africa.

I hereby seek permission to conduct research in your school. My research study topic is: ***Preparing Grade R learners for formal Schooling in the multi-grade classroom in Lesotho.*** Kindly may you fill in the attached declaration and consent form which acknowledges the permission granted to undertake the study in your school. I also guarantee that the information gathered through research will only be used for the purposes of this research.

For further information on this research you may contact my supervisor, Doc. Blanche Ntombizodwa Ndlovu, [NdlovuBN@ufs.ac.za/](mailto:NdlovuBN@ufs.ac.za) (0027) 051 401 2639 as well as 'Makorina Pearl Ntšinyi, 2003013923@ufs4life.ac.za/26658555734.

Your cooperation to this regard will be highly appreciated.

Yours sincerely

.....

DECLARATION

As the principal of the school, I understand that I am not being forced to grant 'Makorina Pearl Ntšinyi the permission to undertake her research in my school.

.....

Signature

Date

Appendix E: Invitation Letter to Participants

Qoaling Ha Seoli
P.O Box 11627
Maseru 100

.....
.....

Pre-school class teacher

.....
.....

RE: INVITATION TO PARTICIPATE IN THE RESEARCH

I hereby invite you to participate in my research. I am 'Makorina Pearl Ntšinyi, a Master of education degree student in Early Childhood Development and Learning at the University of The Free State in South Africa. The title of my study is: ***Preparing Grade R learners for formal Schooling in the multi-grade classroom in Lesotho.*** This study is intended to benefit all the teachers, particularly pre-school teachers, education departments and curriculum developers. This is because the purpose of my study is to investigate the challenges that pre-school teachers experience while preparing Grade R learners for formal school in a multi-age and multi-grade classroom in Lesotho

My study requires me to do observation during the teaching of learners, carry out interview and do document analyses (examine curriculum guidelines and lesson plans). I ask to do video and audio recordings for information gathering during observation and interview. You have a right to or not to allow me to use any of these research instruments. My plan is to conduct this research in three months' time at the beginning of year 2023. I am intending to avoid causing any commotion during lessons. For example, I will not interact with the learners during teaching or move around in the class.

If you agree to participate in this study you are asked to:

1. Provide the researcher with the curriculum guide for teaching pre-school learners, copies of timetable, and prepared lesson plan for the lesson that you will teach.
2. Be interviewed for about an hour on the lesson you will prepare for teaching (interview based on documents). Interview will be before you teach. There will be two interviews. This will be done on every two visits to your class.
3. Be observed for 30 minutes (30 minutes per class observation per period). This means you will be observed two times when you are teaching pre-school learners.
4. Be interviewed for about an hour at your convenient time after teaching a lesson (for example at lunch or after school) for the two visits. The visits in your class will be expected to start from the year 2023 as soon as the schools re-open.

I will abide by the principles of confidentiality. Your name and the name of the school will not appear in the reports of this study. Please fill in the consent form attached to acknowledge that you have accepted my invitation to participate in my study. You are welcome to make a decision to or not to participate. You will not have any problem with the decision you make and no grudge will be held against you.

Thank you in advance for your kind consideration of my request.

For more information please contact my supervisor Doc. Blanche Ntombizodwa Ndlovu, NdlovuBN@ufs.ac.za/ (0027) 051 401 2639 as well as 'Makorina Pearl Ntšinyi, 2003013923@ufs4life.ac.za/26658555734.

Yours sincerely

.....

'Makorina Pearl Ntšinyi

Appendix F: Participant Consent Form

Please feel free to sign this consent form in order to show that you agree to participate in the research study entitled:

Preparing Grade R learners for formal schooling in the multi-grade classroom in Lesotho. It does not mean that because you have signed this form you cannot withdraw from participating in this study whenever you want to do so. Thank you for the decision that you made.

Please complete this consent form

I..... agree to participate in Mrs. 'Makorina Pearl Ntšinyi's research study in my pre-school classroom. I have received a letter that invited me to participate in her research in my pre-school class. I understand that the purpose of the research is to investigate the challenges that pre-school teachers experience while preparing Grade R learners for formal school in a multi-age and multi-grade classroom in Lesotho. I am aware that I have a right not to accept Mrs Ntšinyi's request to conduct a study in my class. I accept the researcher's invitation and give her permission to make use of all the resources such as audio and video recorders that will help her to collect information for research purposes only.

.....

Participant's signature

.....

Date

.....

Researcher's signature

.....

Date

Appendix G: Lesson Observation Sheet for Preparing/Teaching Grade R Learners in The Multi-Grade Classroom

Semi-structured interviews Questions	Pedagogical style – Teaching strategies	Theories/ concepts of the teachers focused on	Classroom arrangements	Resources and Assessments
1. What is your understanding of the concept of multi-grade teaching?	The nature of the educator/learner interaction	Vygotsky's Socio-cultural Theory- social interaction	Number of learners per grade	Worksheets/ and classwork
2. Can you briefly explain how you group your learners in your classrooms?	Is the teacher able to involve learners in both grades in the lesson	Horizontal and vertical knowledge	Sitting arrangement	Learners working using different types of resources
3. How do you plan your lessons?	Which teaching strategies does the educator use?	Social interaction	Availability of learning materials	Reflection on the previous lessons
4. Which teaching methods do you use in your classroom?	How are learners assessed?	Socio-cultural and Pedagogical Devise	Grade of textbooks used	Games, quiz, story-books in the classrooms
5. Which learning materials do you use?	Does the educator teach according to the lesson plan?			Annual Assessment results/ tests
6. Can you please explain how you assess pre-school learners in your classroom?	How is learner discipline maintained in the classroom?			
7. What challenges do you experience in the multi-grade teaching context?				

8. Are you trained to teach pre-school learners in a multi-grade classroom?				
9. How often are you supported by curriculum advisors in multi-grade teaching?				
10. How effective is multi-grade teaching in the education of pre-school learners?				
11. What do you think should be done to ensure the effectiveness of teaching and learning in your classes?				

Appendix H: Individual Teachers' Interview Schedule

What are pre-school teachers' practices in preparing Grade R learners' readiness in a multi-grade classroom in Lesotho?

1.6.2 Sub-questions

- d) What are the challenges experienced by multi-grade pre-school teachers in implementing the curriculum?
- e) How do pre-school teachers prepare Grade R learners for formal learning in the multi-grade classroom?
- f) How do pre-school teachers ensure and enhance cooperation amongst learners in the multi-grade classroom?

INDIVIDUAL TEACHERS' INTERVIEW SCHEDULE

SECTION A: BIOGRAPHICAL INFORMATION OF THE TEACHER

1. Gender (Indicate with an "x")

Male	
Female	

2. Age in Years (Indicate with an "x")

20-29	
30-39	
40-49	
50+	

3. Position you Hold

--

4. Qualifications

Professional	
Academic	

5. Teaching Experience

Total years of Teaching	

6. Grades Combined

--

SECTION B: INTERVIEW QUESTIONS FOR PRE-SCHOOL TEACHERS' ON PRACTICES IN PREPARING GRADE R LEARNERS' READINESS IN A MULTI-GRADE CLASSROOM IN LESOTHO

1. What is your understanding of the concept of multi-grade teaching?
2. Can you briefly explain how you group your learners in your classrooms?
3. How do you plan your lessons?
4. Which teaching methods do you use in your classroom?
5. How do you share the learning materials in the classroom of multi-grade?
6. Can you please explain how you assess pre-school learners in your classroom?
7. What challenges do you experience in the multi-grade teaching context?
8. Are you trained to teach pre-school learners in a multi-grade classroom?
9. How often are you supported by curriculum advisors in multi-grade teaching?
10. How effective is multi-grade teaching in the education of pre-school learners?
11. What do you think should be done to ensure the effectiveness of teaching and learning in your classes?

LESSON OBSERVATION SHEET

1. GENERAL INFORMATION

1.1 School:

1.2 Grades combined:

1.3 Subject:

1.4 Date:

1.5 Duration of lesson:

2. CLASSROOM ENVIRONMENT

2.1 Number of learners per grade:

.....

2.2 Sitting arrangement:

.....

2.3 Availability of learning materials:

.....

2.4 Grade of textbooks used.

.....

3. CLASSROOM INTERACTION

3.1 The nature of the educator/learner interaction.

.....

3.2 Is the teacher able to involve learners in both grades in the lesson?

.....

3.3 Which teaching strategies does the educator use?

.....

.....

3.4 How are learners assessed?

.....

3.5 Does the educator teach according to the lesson plan?

.....

.....

3.6 How is learner discipline maintained in the classroom?

.....

Appendix I: Editor's Letter

Nikki Watkins
Editing/proofreading services
Cell: 072 060 2354 E-mail: nikki.watkins.pe@gmail.com

24 October 2023

To whom it may concern

This letter confirms that I have language edited and proofread the master's thesis

**Preparing Grade R learners for formal school in the multi-grade classroom in
Lesotho**

by

MAKORINA PEARL NTSINYI



Promoting excellence in editing

Nikki Watkins
Associate Member

Membership number: WAT003
Membership year: March 2023 to February 2024

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SA Writers College Certificate of Copy-Editing and Proofreading

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