

Provision of quality Grade R education in Dwaalboom circuit: Limpopo

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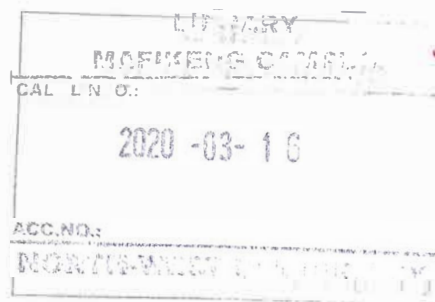
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degree *Doctor of Philosophy in Education Management* at
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DECLARATION

I declare that **Provision of quality Grade R education in Dwaalboom circuit: Limpopo** is my own work and that it contains no material published elsewhere or extracted in whole or in part from a thesis by which I have qualified or have been awarded another degree or diploma in any institution of higher learning. All sources that I have used or quoted have been indicated and acknowledged by means of complete references.



Molatlhwane Charity Mojafi

DEDICATION

I dedicate this piece of work to my late father, Mr Lekgetho Nehemiah Sekgaphane, who sadly passed away in 1981 in December when I was doing my matric. It has been his wish that I complete my studies and graduate as a Doctor. Growing up from a poor family background, he encouraged us to study hard; he would continuously remind us that *Ke tsoga ke sule banaka, le tlo tshegwa ke bankane ba lona, Basotho ke lona*. [I will pass on and your friends will look down on you, and you will become their servants if you do not work hard.]

My husband, Robby, my three boys, Lekgetho, Mpho and Pontsho, who shared all their resources and who were always there for me when I needed them to ensure that I succeed. My two brothers and my three sisters with whom I share all the challenges and successes. Family, I will always be proud of you. My late grandmother, Nkgolo Laura, who was always proud of me and would always say, “Charity, *o phaka thuto*” [you are taking everything, leave something for others]. I miss those comments.

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All the teachers, principals, curriculum specialists of Dwaalboom circuit, Waterberg District who have the responsibility of laying a strong educational foundation for a better teaching and learning environment in small rural and farm schools. You are well loved.

“To God be the glory, who fulfils the secret petitions of my heart, he can do it again.”

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ABSTRACT

Provision of quality Grade R education in South Africa is based on the 2015 United Nations commitment to access quality education for all. In addition, the National Development Plan (2011) indicates the government's intention to address access to and quality of Grade R education. Although South Africa has made strides with access to Grade R and has prioritised the provision of quality education for Grade R, there is still a need for consensus regarding the nature and specifics of what constitutes quality Grade R education. This study examines how quality can be assured for the educational experience of Grade R learners. The theoretical framework of the study integrates invitational theory (Purkey & Novak, 2015) with Bronfenbrenner's ecological model (1979), Vygotskian theory of mediation (1978), and Piaget's approach (1952) as the critical lens to use for understanding quality. The study used an environmental scan within an ethnographic approach to collect data on the cultural patterns and activities of four selected primary schools of the Dwaalboom circuit in Limpopo province. The important aspects of quality in Grade R were guided by the domains of invitational theory (Purkey & Novak, 2015) which are people, place, policy, programmes and processes. Observations of the school environment, individual and focus group interviews as well as reflexive notes were used to capture information from seven Grade R teachers, seven members of the school management teams and one foundation phase curriculum specialist. Findings within the invitational theory framework addressed the teachers, management and all role players involved in the provision of quality education, the learning environment with language use and resource provisioning, as well as policy that guides the programmes and processes. Results indicated an overall lack in several important aspects of quality provision, which include specialisation in early childhood education, a shortage of resources and of teaching and learning activities, and the overall absence of an inviting environment which is required for the provision of quality in Grade R education.

Keywords: curriculum, daily programme, developmentally appropriate practice, early childhood development, Grade R, quality education, South Africa, teaching and learning

KEY CONCEPTS

Curriculum

Curriculum is a framework of guidelines or standards used to guide the content of and approach to learning and teaching (Lawton, 2012).

Daily programme

In the Grade R year the timetable is called the daily programme and it comprises three main components, namely teacher-guided activities, routines and child-initiated activities or free play (CAPS HL, 2011).

Developmentally appropriate practice (DAP)

This is a framework for the best practice of teaching, based upon research of how young children develop and learn, and in what is known about effective early education. The approach is designed to promote young children's optimal learning and development (Gestwicki, 2013).

Early childhood development (ECD)

"Early childhood" is an umbrella term that applies to the processes by which children from birth to at least nine years grow and thrive physically, mentally, emotionally, spiritually, morally and socially. Consistent with Education White Paper 1 on Education and Training (1995) and the Interim Policy for Early Childhood Development (1996), it is a comprehensive approach which requires active participation of the child's parents and caregivers with the purpose of protecting the child's rights to develop his or her full cognitive, emotional, social and physical potential (DoE, 1996).

Grade R

Grade R is the year before learners in South Africa start formal schooling and has been part of the South African General Education Training Band since 1998 (Janse van Rensburg, 2015).

Quality education

A delivery agreement for the Basic Education sector (2010) defines quality education in terms of four measurable outputs, which are improvement of the quality of teaching and

learning, the undertaking of regular assessments to track progress, ensuring credible outcomes-focused planning, and having an accountability system. The focus is on preparing the youth of the country to read, write, think critically, and solve numerical problems (Delors, 2013).

South Africa

Officially the Republic of South Africa, a nation at the southern tip of the African continent. It is bordered by Namibia, Botswana, and Zimbabwe to the north, and Mozambique to the northeast (Comprehensive atlas of the world, 1999).

Teaching and learning

Teaching is the process and creation of an environment in which students acquire skills, knowledge and values; a central idea is that teaching is a means. Learning, on the other hand, entails undertaking of certain tasks to impart skills and knowledge with the intention to induce learning, which is an end (Ellis, 2017).

ABBREVIATIONS AND ACRONYMS

CAPS	Curriculum Assessment Policy Statement
CEPD	Centre of Education Policy Development
CPD	Continuous professional development
DAP	Developmentally appropriate practice
DoE	National Department of Education
DBE	Department of Basic Education
DPME	Department of Planning, Monitoring and Evaluation
ECD	Early childhood development
ECEC	Early childhood education and care
EFAL	English as a first additional language
HOD	Head of department
HSRC	Human Sciences Research Council
NAEYC	National Association for the Education of Young Children
NEEDU	National Education Evaluation and Development Unit
NSNP	National School Nutrition Programme
NNSSF	National Norms and Standards for School Funding
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
WITS	University of the Witwatersrand
ZPD	Zone of proximal development

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CHAPTER 1: PROBLEM AND THE PURPOSE OF THE STUDY

1.1 INTRODUCTION

Internationally as well as in South Africa, access to quality education is viewed as a key area of concern (United Nations Educational, Scientific and Cultural Organization [UNICEF], 2015; South African Constitution, 1996). Although provision of quality Grade R education is a priority in this country (Beckmann & Phatudi, 2012), the concept of quality early childhood education is still not well developed. Literature suggests that quality, as a concept, is difficult to define and that its definition must be open to change, based on a changing context (Matakala, 2018). With this in mind, there is a need to define quality education in the pre-school reception year, known as Grade R, in preparation for lifelong education.

The purpose of this study is to investigate and understand the provision of quality teaching and learning in Grade R, in the Dwaalboom circuit: Limpopo. Although this is a small-scale study, the researcher intends to recommend that it be taken to scale to build on the current body of knowledge about the provision of quality in early childhood education (ECE). In this chapter, the concept of quality education at local and international level is described, the theories that underpin the study are identified, and the research design and methodology are introduced.

1.2 RATIONALE AND PROBLEM STATEMENT

South Africa's journey to improve pre-school education began after 1994 when democracy was established and apartheid education policies were replaced. The aim was to prioritise inclusive access to education, including ECE. White Paper 1 on Education and Training (Department of Education [DoE], 1995) introduced compulsory education for the first 10 years, which would include Grade R. In South Africa, Grade R refers to the year before learners start formal schooling and has been part of the General Education Training Band (GET) since 1998 (Janse van Rensburg, 2015). By 2000, access to pre-school education had improved and the enrolment started to reflect the different ethnic groupings in the country, of whom 74% were black African, 10% were of mixed race, 2% were Indian and 14% were white (Atmore, 2012). As access improved, Grade R enrolment rose (DoE, 2011), and 99,7% of learners attended Grade R in primary schools or other institutions by 2013 (Spaull, 2013). Despite this

achievement, there are still concerns about the quality of Grade R education, specifically with regard to the implementation of the Grade R curriculum and a lack of resources (Samuels, Taylor, Shepherd, Van der Berg, Jacob, Deliwe, & Mabogoane, 2015).

South Africa also struggles to provide all learners with quality Grade R education, in that learners in largely urban provinces such as Gauteng and the Western Cape seem to receive better education than their counterparts in rural areas (Spaull, 2013). If performance is taken as an indicator of how well schools teach, it can be agreed that not all learners receive the same quality of education. Learners from urban provinces continue to perform better than learners from rural provinces in annual assessments. Reports from the Annual National Assessments given in Grades 1–9 illustrate this point (Department of Basic Education [DBE], 2014, pp. 46–47).

In 2014, the Grade 1 learners in urban provinces outshone the Grade 1 learners in rural provinces in both literacy and numeracy as shown in Tables 1.1 and 1.2 (DBE, 2014, pp. 46–47). This rural–urban difference in learner performance goes beyond provinces and grades. It can be observed within schools in the same district, between same grades, and even between students at universities.

Table 1.1: National averages in Grade 1 Mathematics per province 2012–2014

PROVINCE	AVERAGE MARK (%)		
	2012	2013	2014
Eastern Cape	65.2	56.2	64.5
Free State	70.2	58.9	71.1
Gauteng	74.1	65.0	73.9
KwaZulu-Natal	69.1	61.8	69.3
Limpopo	64.7	55.7	62.8
Mpumalanga	65.9	56.2	67.4
Northern Cape	63.5	55.1	65.9
North West	63.3	54.7	64.4
Western Cape	70.1	61.1	71.9
National	68.1	59.6	68.4

Source: DBE (2014, p. 46)

Table 1.1 displaying national averages in Grade 1 Mathematics shows a drop in percentages for 2013 in all the provinces, and an increase in percentages for 2014 in all the provinces with Limpopo having the lowest average of 62,8%. The table further depicts rural–urban differences with Western Cape and Gauteng performing above 70% while rural provinces

such as North West, Mpumalanga, Eastern Cape and Limpopo perform below 70%. A similar situation with Languages over the same period is shown in Table 1.2.

Table 1.2: National averages in Grade 1 Language per province 2012–2014

PROVINCE	AVERAGE MARK (%)		
	2012	2013	2014
Eastern Cape	55.0	54.8	59.7
Free State	59.8	61.4	65.4
Gauteng	62.7	65.4	67.2
KwaZulu-Natal	58.4	61.6	64.5
Limpopo	54.6	57.9	58.3
Mpumalanga	54.1	57.1	60.9
Northern Cape	52.4	56.8	60.6
North West	53.1	56.6	59.7
Western Cape	60.1	64.5	68.4
National	57.5	60.4	63.2

Source: DBE (2014, p. 47)

The point is demonstrated once again in Table 1.3, showing the 2014 Annual National Assessment Mathematics and Languages results for Grade 3 learners in the Dwaalboom circuit. Of the 13 primary schools of the Dwaalboom circuit with Grade 3 learners, two primary schools did not have Grade 3 learners and only 11 primary schools wrote the Annual National Assessment in 2014. Table 1.3 indicates that, of the 11 primary schools that wrote the assessment across the quintiles, four achieved above 50% in Grade 3 Mathematics assessment, and seven scored below 50%. In Home Languages, of the 11 primary schools that wrote the assessment, seven achieved above 50% and four rural primary schools achieved less than 50%.

Table 1.3: Circuit averages in Grade 3 Mathematics and Home Languages per school in 2014

SCHOOLS	AVERAGE MARK % MATHEMATICS	AVERAGE MARK % LANGUAGES
A	54	85
B	31	67
C	69	100
D	66	51
E	42	64
F	31	37
G	40	51
H	64	74
I	33	29
J	13	30
K	23	46
Total circuit average %	42.3	57.6

Source: Data-driven dashboard (DBE, 2014).

Improving the quality of Grade R education to accommodate the socio-economic and cultural needs of individual learners remains a concern (Van der Berg, Girdwood, Shepherd, Van Wyk, Kruger, Viljoen, Ezeobi & Ntaka, 2013). A report by the Eastern Cape DoE (2008), described the standard of learning and teaching in 250 Grade R classrooms and concluded that teaching programmes had been of poor quality. Additional challenges such as lack of resources, minimal funding and poor quality teacher training were identified (DBE, Department of Social Development [DSD] & UNICEF, 2010). Several interventions have resulted in improvement of the qualification of Grade R teachers. The new Integrated Strategic Planning Framework for Teacher Education and Development in South Africa 2011–2025 puts forward improved and expanded teacher education and development opportunities in order to improve the quality of teaching and learning in schools.

Since 99,7% of learners have access to Grade R (DBE, 2013) and the qualification of Grade R teachers has improved, the importance of the provision of quality Grade R education in both urban and rural areas ought to be a priority. Therefore this study attempts to understand what constitutes quality in Grade R.

1.2.1 Research questions

Against this background, the primary research question explored in this study is:

How can quality be assured for the educational experience of Grade R learners?

This question gives rise to the following secondary questions:

- Which framework can be used to define quality Grade R education for the diverse context of South Africa?
- What key aspects should be considered by Grade R teachers to develop guidelines on improving the quality teaching and learning in Grade R education in the Dwaalboom circuit of Limpopo?

1.2.2 Research aims and objectives

The aim of the study is to determine:

- How quality can be assured for the educational experience of Grade R learners.
- A framework that can be used to define quality Grade R education in the diverse context of South Africa.
- Key aspects to be considered by Grade R teachers to develop guidelines on improving the quality of teaching and learning in Grade R in the Dwaalboom circuit of Limpopo.

Objectives of the study are:

- To establish how quality educational experience can be assured for Grade R learners.
- To explore which frameworks can be used to define quality Grade R education for the diverse context of South Africa.
- To find out the key aspects that should be considered by Grade R teachers to develop guidelines on improving the quality of teaching and learning in Grade R education in the Dwaalboom circuit of Limpopo.

1.3 DEFINITION OF QUALITY

Quality is of crucial importance in every organisation and is dependent on a number of dimensions which are possible, yet challenging, to measure (Krause, 2012). Quality in Grade R

includes quality curriculum, quality teaching and quality response to development needs (Van der Berg, Girdwood, Shepherd, Van Wyk, Kruger, Viljoen, Ezeobi & Ntaka, 2013). A delivery agreement for the Basic Education sector defines quality education in terms of the four measurable outputs, namely improved quality of teaching and learning, regular assessments to track progress, credible outcomes-focused planning, and engagement in accountability processes. These measurable outputs are linked to activities with targets that address key challenges faced by the sector (DoE, 2010).

Measuring the quality of teaching and learning in Grade R is problematic, because developmentally appropriate assessment for younger learners does not include formal, written assessment, as is the case with the Annual National Assessment in higher grades. Thus, it becomes even more important to clearly define what constitutes quality in Grade R as well as establishing a framework to assess quality teaching and learning.

The National Association for the Education of Young Children (NAEYC, 2009) describes a high quality programme as providing a safe, nurturing environment that promotes the holistic development of young children, while responding to the needs of the families. According to NAEYC, such a programme includes developmentally appropriate teaching and learning activities, adequate teacher training, a safe environment, small group size, a low adult-to-child ratio, as well as parent-teacher communication with family engagement (NAEYC, 2009). The current study, being guided by the same standards, focuses on the following key aspects: place, policy, people, programme, and processes (Purkey & Novak, 2015) to assure quality in Grade R.

1.3.1 Aspects of quality in Grade R education

Early lack of consensus in defining quality in the field of ECE led to a reliance on the Early Childhood Environment Rating Scale (ECERS-R), which was developed as a measurement tool in 1998, for quality of education in early childhood (Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2010). This quality scale has six subscales defining a programme's specific features, including spacing and furnishing, basic care routines, language development, social development, learning activities and professional development (adult needs). The observation schedule (see Appendix D) and interview instruments (see Appendices A and B) used in this study, were developed guided by the quality scale to gather information from the participants and to guide observations.

1.3.2 International and national perspectives on Grade R

The United Nations (UN) conferences have laid a solid foundation in shaping the Grade R agenda. At the fourth African International Early Childhood Conference (AIECC) in 2009, strategies were developed to expand from access to provision of quality early childhood programmes. The objective of the World Education Forum (WEF, 2000) was to encourage African countries to “meet the basic learning needs of all” by improving and expanding integrated early childhood development (ECD) services for holistic child development, and to reduce illiteracy.

The National Integrated Early Childhood Policy for South Africa (DSD, 2015) aims at providing a better start in life for all children in South Africa by laying a good foundation for the holistic development of the child. This notion of quality early childhood education for all is supported by the Constitution of South Africa (1996) and the National Development Plan Vision 2030 (National Planning Commission, 2011). This indicates government’s intention to address the two-fold challenge of achieving total access to education, as well as focusing on the quality of education, in line with the National Education Action Plan 2007–2009 and the Education Strategic Framework, 2007–2015. The policy statement and guidelines received from the DBE’s National Education Infrastructure Management System Report (DBE, 2011) for a minimum amount of funding per learner were set with the aim to support and improve on equitable access to education for all children and students to basic education, senior secondary education and rural training centres (National Education Action Plan, 2012; National Development Plan, 2011).

1.3.3 Theories that support the study

This study seeks to conceptualise principles of quality in Grade R education and is mainly underpinned by the invitational theory of Purkey and Novak (Purkey & Novak, 1988; 1994; 2015), in combination with three other theories pertaining to ECD. These are the ecological systems theory (Bronfenbrenner, 1977), together with social constructivism including mediation (Vygotsky, 1978), and Piaget’s cognitive development theory (1896–1980). Each of these theories is relevant in creating an inviting learning environment in Grade R, as well as in child development, because they correlate well with play-based learning and developmentally appropriate practices (DAPs).

The above-mentioned invitational theory (Purkey & Novak, 1994, 2015) is a model of invitational education. This theory's five domains (place, policies, programmes, processes and people) inform the study. The ecological systems theory (Bronfenbrenner, 1977) provides a multi-dimensional model of human development (Donald, Lazarus & Lolwana, 2010) and suggests that there are layers of interacting systems (micro, meso and macro systems) that the child is in contact with (Houston, 2017). The theory of social constructivism (Vygotsky, 1978) views knowledge as being constructed by individuals, groups and society and is not simply transferred. Piaget's theory of cognitive development (1896–1980) views four stages of cognitive development as important for a transition from the concrete to the formal stage when the child interacts with the physical and social environment.

Accordingly, young children acquire social knowledge through interaction with others, and engage in constructing meaning through shared experiences. The relationship of the three key theories with invitational theory is critical to this study because their combination strengthens the importance of interaction and mediation at micro level, which has a strong impact on child development. Thus, education in Grade R is characterised by the social interaction (Vygotsky, 1978) between the different systems (Bronfenbrenner, 1977), which invites (Purkey & Novak, 1994) all role players to contribute towards quality in Grade R.

1.4 RESEARCH DESIGN AND METHODOLOGY

1.4.1 Philosophical orientation

This study is situated within an interpretivist paradigm which, according to Wortham (2010), allows for interpretive and descriptive analysis of the symbolic and contextual meanings that inform the routine practices of everyday life (see 4.1.1). In terms of this paradigm, information is collected in order to gain an understanding of the life and world of the Grade R teachers and managers, and of how they negotiate and make meaning through social and historical constructions. The intention was to conduct an in-depth investigation, which included observation of the school environment, using an observation schedule, individual and focus group interviews, as well as a reflexive journal to examine the critical components of a school, people, place, policy, programme and processes, as identified in the invitational theory of Purkey and Novak (1994, 2015).

1.4.2 Methodology and design

After identifying the paradigm, the qualitative research method was found to be the most appropriate method for this study. The study utilised an environmental scan within an ethnographic approach. The approach was used to see quality through the eyes of people studied (Du Plooy-Cilliers, Davis & Bezuidenhout, 2014). The strategy covered observation of the learning environment, including outdoor play area, toilets, kitchen and classrooms. Observations and interactions with Grade R teachers and managers were mainly done outside contact time during hours convenient to the participants. These observations and interactions were carried out continuously over a period of more than a year. They took place in the morning before the schooling started, during free play outside when teachers interacted with learners, and after school when the teachers were free to engage with the researcher as approved by the Limpopo DoE. The intention was to obtain the views of Grade R teachers, school managers and the foundation phase curriculum specialist on how quality can be assured for the educational experience of Grade R learners.

Interviews are valuable tools for collecting data in a qualitative research. Interviews give the most direct and straightforward approach to gathering detailed and rich data regarding a particular phenomenon (Barret & Twycross, 2018). Individual, semi-structured interviews were conducted with seven Grade R teachers, four school principals and one foundation phase specialist; focus group interviews were conducted with four Grade R teachers and seven members of the school management team with the intention of eliciting views and opinions from the participants (Creswell, 2014). These interviews were conducted to explore the participants' understanding of place, policies, people, programmes and the processes of teaching and learning in Grade R. Information collected from the observation schedules, reflexive journal of the researcher, and from individuals as well as focus group interviews, was analysed and triangulated to ensure validity.

1.4.3 Participants

The following 15 participants were selected for the study: seven Grade R teachers, seven members of the school management teams (SMTs), and one foundation phase curriculum specialist. All the selected participants gave voluntary, informed consent (see Appendices C1 to C4) to take part in the study.

1.4.4 Site selection

The DBE grades schools into quintiles, based on their equipment and resources, as well as on the socio-economic area in which the school is situated. Quintile 5 is the highest, where schools are well equipped, and quintile 1 the lowest on the scale (DBE, 2011). Schools in Dwaalboom circuit fall into either quintile 1 or 5. Four primary schools from the two different quintiles in Dwaalboom circuit were sampled. Two of the sampled primary schools are classified as quintile 5 in an urban area; they admit learners from the local mining town and from farms. The other two primary schools are quintile 1, both located in a rural farming area of the circuit and they admit learners from local villages and farms.

1.4.5 Limitations and implications

The Waterberg district of the DoE restricted the researcher from conducting observation of teaching and learning in the classroom. This limitation was dealt with when the researcher included questions about teaching and learning activities in the individual and focus group interviews. In addition, the environmental scan provided information on the conditions which enhance or limit quality teaching and learning in Grade R.

1.4.6 Ethical considerations

Ethical considerations involve obtaining participants' permission to participate in the study, maintaining respect, and ensuring confidentiality. Ethnographic research work requires negotiating environments so as to earn trust, assurance and acceptance of the participants in order to conduct research (Wasserman & Jeffrey, 2007). Participants could withdraw at any time if they felt their rights were not protected. Ethical Clearance (NWU-00404-16-A9) was obtained from the Ethics Committee of the North West University to conduct the research.

1.5 DATA COLLECTION STRATEGIES

Ethnography makes use of a multiple technique approach or triangulation to collect data from participants (Creswell & Plano Clark, 2011). For this study, information was gathered using an observation schedule, individual interviews, focus group interviews and reflexive notes.

1.5.1 Observation

The observation schedule was guided by the ECERS-R (Harms, Clifford & Cryer, 2014), which assisted the researcher in gaining knowledge about aspects of quality according to the five domains of the invitational theory (Purkey & Novak, 1994, 2015) specifically focusing on available basic services, buildings, furniture, classroom organisation, cleanliness and safety, and learning and teaching material inside and outside the classroom. These were critical to the study and provided insight into the main research question: How can quality be assured for the educational experience of Grade R learners?

1.5.2 Individual interviews

According to Creswell (2014), interviewing is a valuable method for exploring the construction and negotiation of meanings in a natural setting. Alshenqeeti (2014) cites Berg's (2007) explanation that interviews allow interviewees to speak in their own voice and express their thoughts and feelings. In this study, semi-structured individual interviews were conducted to allow the researcher to obtain information about the quality of education in Grade R. The theoretical framework and the literature review of this study informed the structure of the interview guide (see Appendix A). Participants provided information regarding the place or learning environment, people involved in teaching and learning in Grade R, policies that the schools implement to deliver and manage curriculum processes, as well as the programmes that are provided.

1.5.3 Focus group interviews

Two focus group interviews were conducted: the first was with seven members of the school management team, and the second with four representatives of Grade R teachers from the four sampled schools. This focus group was sampled specifically to interact with Grade R teachers (see Appendix B1) and with school managers on key issues of quality as outlined in the instrument prepared for managers (see Appendix B2). During the interviews, the researcher had a list of ideas and pre-designed questions that needed participants to provide information regarding management of the Grade R daily programme, monitoring and support functions as key points relevant to teachers and managers to ensure that schools were managed according to the prescribed policies, to ensure quality. The interaction allowed for analysis and detailed

discussion of the topic at the level of management. The interview instrument allowed participants to share opinions, feelings and knowledge concerning teaching and learning in Grade R.

1.5.4 Reflexive journal

Reflection is an important aspect of a qualitative research study, to enable the researcher and participants to talk about how they engage themselves in the study. According to Ybema, Yanow, Wels and Kamsteeg (2010), reflection involves choices and actions during the research process. The researcher kept a handwritten journal of her experiences and of the way in which she chose to represent her views about what was gathered during the study (Merriam, 2009). The reflexive notes allowed the researcher to reflect on what was observed during the study.

1.6 DATA ANALYSIS

Qualitative research, as an interpretive study of a specified phenomenon or problem, aims to explore and to discover issues about the problem at hand. The researcher is central to the analysis of data, and the data analysis involves sustained experience with participants (Locke, Spirduso & Silverman, 2013). Data collected through interviews was recorded and transcribed. Thereafter, content analysis was used to analyse and interpret the data. This was done by utilising “coding”, which refers to the grouping of data into identifiable themes (Creswell, 2013) and unique labels. Labels were then grouped and contrasted with one another. Data was categorised into patterns as the primary basis for organising and reporting on results.

1.6.1 Trustworthiness

Trustworthiness in qualitative research supports the argument that the inquiry’s findings are “worth paying attention to” (Creswell, 2013, p. 45). This qualitative study employed Schreier’s (2012) approach to trustworthiness, which proposes credibility, transferability, dependability and confirmability. Credibility was assured by purposive sampling of individuals to serve as informants, the use of iterative questioning, the integrity of the researcher and the development of an early familiarity with the culture of participating social groups before the first data collection took place.

Transferability (Polit & Beck, 2012; Schreier, 2012) refers to the extent to which the researcher’s findings of the study can be applied to other situations. In this study, only 15

participants involved with the teaching and learning of Grade R learners in primary schools contributed to the data. The results of this study can be used in other studies to help highlight the understanding of important issues regarding quality applicable to Grade R classes at primary schools. Accordingly, if the study had to be repeated in a similar context, it could assist by providing a detailed description or more information on the findings that are in keeping with or support the previous research, and not generalise beyond the participants in the study (Purkey & Novak, 2015).

Dependability (Polit & Beck, 2012) refers to stability of data over time, over conditions and over varying occasions. It is one of the criteria used to establish trustworthiness. In this case, the researcher submitted collected data to two researchers for official examination and to assess whether it was correct.

Confirmability (Schreier, 2012) entails the reduction of the effect of investigator bias, as well as admission of the researcher's beliefs and assumptions such as the researcher's preferences. To assure confirmability, colleagues in the field were consulted to provide feedback on the summary of the findings to the schools that were visited during the research project.

1.6.2 Researcher's role

There were various roles played by the researcher from the beginning to the end of the scheduled period of the study. The researcher was an observer of the activities of the setting under study (Creswell, 2014). For this study, after site selection, permission was sought to conduct the research and consent was obtained from the selected schools and participants. This included announcing and explaining the purposes and intentions of the study to the participants.

The researcher participated through reflection and analysis as an ethnographer. She described and interpreted the subject of the study. Observation was planned and conducted to determine the researcher's main goals as an ethnographer, which were not only to notice interesting features of the culture under study, but also to detect patterns in the events, and to explain those patterns and their importance to readers. While taking field notes, the researcher was an anthropological ethnographer who participated for a period of a year, observing and interpreting the culture studied through a critical lens or paradigm.

1.7 STRUCTURE OF THE STUDY

This research study has been divided into various chapters. The introductory chapter states the problem and the purpose of the study, which is to examine the provision of quality Grade R education in the Dwaalboom circuit of Limpopo. Chapter 2 presents a literature review of the definition of quality, importance of early childhood education which includes similar studies, both national and international and the aspects of quality. Chapter 3 presents the conceptual and theoretical framework of the study, together with a proposed model for the provision of quality Grade R education. Chapter 4 highlights the research methodology and research design. Chapter 5 presents the analyses of findings and their implications, while in Chapter 6, the researcher's conclusion and recommendations are provided in detail.

1.8 SUMMARY

Chapter 1 stated the problem, the purpose of the study, and the research process to be followed to investigate quality in Grade R teaching and learning. In the next chapter, the literature study is presented. The importance of Grade R is discussed and a framework is provided for understanding quality education in South Africa and internationally, in terms of the critical components of a school, people, place, policy, programme and processes, as identified in the invitational theory of Purkey and Novak (1994, 2015).

CHAPTER 2: DEFINITION OF QUALITY AND THE IMPORTANCE OF EARLY CHILDHOOD EDUCATION

2.1 INTRODUCTION

This chapter provides an overview of literature regarding the importance of quality in Grade R, as well as the definition of quality education in Grade R. Then follows a review of international and national studies conducted on the provision of quality in ECD, to position the study within the field. Information collected from other studies assisted the researcher to design observation schedules and interview instruments used to collect information on the provision of quality education in Grade R.

2.2 DEFINING QUALITY EDUCATION IN GRADE R

There is no single, universally accepted definition of quality education (Jain & Prasad, 2018). Internationally, scholars have interpreted the concept in different ways. According to Jain and Prasad (2018), UNICEF defines quality using the following five dimensions: learners, environment, context, processes and outcomes. UNESCO's definition of quality education emphasises lifelong learning and relevance based on four pillars: learning to know, learning to focus on the practical application of what is learnt, learning to live together where all have equal opportunity to develop, and learning to emphasise skills needed for individuals to develop their full potential (Delors, 2013).

According to the Education for All 2014 report, one of the challenges facing the education system in India is the quality-related deficiencies at each stage of the education system, resulting in unsatisfactory levels of student learning (Jain & Prasad, 2014). A study conducted by Gustafsson-Wright, Smith and Gardiner (2016) on the standardised ECD costing tool, indicated that poor and neglected children benefit disproportionately from ECD programmes. The authors conclude that quality ECE is an important tool to fight poverty and reduce inequality. Local and international studies indicate the importance of these "quality constructs" in relation to ECD and child learning theories. They also reflect an overlap between different aspects of quality in relation to teacher training, curriculum and programmes.

Literature indicates how scholars approach quality using different criteria. In South African literature, there are many schools of thought about what quality Grade R education entails. First, Atmore (2012) states that ECE is negatively affected by a range of social and economic inequalities inherited from the apartheid era. The statement by Atmore (2012) focuses on ways of closing the gap to address inequalities by looking at the significance of the socio-culturally and socio-economically relevant curricula that respond to the diverse needs of learners.

Scholars such as Excell and Linington (2011) add value to re-examining the principle of quality in Grade R. They suggest that quality should be underpinned by understanding how young children learn, because in Grade R, curriculum and ECD pedagogy are closely related. According to Excell and Linington (2011), high quality Grade R programmes require capable and competent teachers who have a layered understanding to ensure implementation of appropriate and purposeful play-based programmes. Programmes should be implemented and assessed in appropriate environments with rich language usage, which are safe and sensitive to contextual factors (see 2.4.1.2). In addition, class size has an effect on quality and therefore attention should be given to the size of the classroom and the learner–teacher ratio (Excell & Linington, 2011). This notion is supported by UNESCO (2012) indicating that teachers are not able to cope with the workload when classes are overcrowded.

International studies that have examined the same concept, show that there is a need for a distinction to be drawn between child-initiated play and adult-initiated activities, describing the objectives and specific pedagogies associated with them. This according to Leong and Bodrova (2010) as well as Wong, Wang and Cheng (2011) may help to avoid confusion that leads to certain curricula being labelled as “play-based” when in reality they leave no time for children to initiate play on their own (Leong & Bodrova, 2010). The findings of the study conducted by Wong, Wang & Cheng (2011) on play-based curricula in pre-primary education in Hong Kong – in which five- to six-year-olds and six- to seven-year-olds participated – showed that both groups of children regarded “play” as joyful activities, and “non-play” as something related to work or tasks. The results also demonstrated the significant role of cultural context in influencing children’s interests and hence their play. This finding highlights the need for teachers to implement more play-based curricula in which play is more child-initiated and self-motivated (see 2.4.5).

Second, Spaul (2013), in his report on the quality of education in South Africa (1994 – 2011), defines quality Grade R education by focusing on curriculum and teacher professional development. Spaul's report on a variety of independently conducted assessments of pupils' achievements showed that, with the exception of a wealthy minority, most of the South African pupils cannot read, write or compute at grade-appropriate levels, with large proportions of learners being functionally illiterate or innumerate. The challenge raised by Spaul's 2013 report is in line with the objectives of this study and identifies practical strategies such as the need for continuous support for teachers to implement the Curriculum Assessment Policy Statement (CAPS, 2011). Increased in-service training should provide teachers with practical strategies to support the implementation of learning programmes that respond to teaching young children from poorer areas (see 2.4.1.2).

The report also focuses on policy as being critical in determining quality. According to Spaul (2013), policy influences a curriculum that is specific about *what* should be taught and about *how* a teacher should teach the specific content in Grade R (Spaul, 2013). Findings of the report recommend implementation of well-intentioned policies, increased accountability, implementation of nationwide systems of diagnostic teacher testing and training, providing a clear articulation of who is responsible to whom, for ensuring pupil learning, and with clear consequences for non-performance. These recommendations are important as guidelines for the provision of quality education.

The third school of thought is led by Hoadley (2013), who encourages laying a strong foundation for formal schooling. The research shows the influence of family background on the child's ability to learn, and the difference that early intervention can bring to the child's later chances in life. According to Hoadley (2013), serious attention has to be given to developing foundation phase teachers' content knowledge in Mathematics and Language, assisting these teachers in how to teach reading, writing and calculating. This will also help teachers to understand and manage the relationship between Grade R, prior learning and formal schooling. Hoadley (2013), like Atmore (2012) and Spaul (2013), focuses on the social, economic and cognitive aspects of ECE which are critical to quality service delivery. The current study therefore attempts to define quality by using an integrated model of quality improvement that addresses critical aspects of child development that will meet the needs of the vulnerable and

those from low socio-economic environments. The intention is to ensure the development of the maximum potential of all children.

In response to broad definitions of quality, some researchers (such as Slot, Lerkkanen, & Leseman, 2015) have conceptualised ECE quality in global terms with two primary components: *structural quality*, which includes regulated aspects of classrooms and programmes, and *process quality*, which includes human interactions occurring in the classrooms such as teacher–child and peer-to-peer interactions. Structural characteristics determined by policy and legislation are a precondition to process quality. These two primary components that jointly influence children’s development, well-being and learning are critical because they reflect key aspects of quality which form the basis of the conceptual organisation of this study (see Chapter 3).

2.3 THE IMPORTANCE OF EARLY CHILDHOOD EDUCATION (ECE)

The most significant development in South African education since the establishment of democratic government in 1994 is the growth in numbers enrolled. However, recent government-commissioned studies on the improvement of education quality in South Africa by Spaul (2013) and the Department of Performance Monitoring and Evaluation [DPME] (2015) have raised concerns regarding the quality of Grade R in South Africa. The implication is that the nature of the current Grade R does not ensure progress in the delivery of the envisaged quality education (see 2.2). Findings of the study conducted by Excell (2011) on Grade R teachers’ perceptions of ECD and their impact on classroom practice indicated that the majority of ECD practitioners were teaching as they had probably been taught (in a teacher-controlled way). According to Excell (2011) this impacts badly on achieving the main objective of the holistic development of the child.

Although South Africa has shown interest in the delivery of quality education, the precise meaning of quality in education and the path to improving quality are often left unexplained. This gap in understanding includes knowledge of how to measure progress made in achieving quality education, using the relevant tools and scales which are used in other countries. Internationally, progress has been made in this area. In particular, 22 states of the United States of America (US) have scales to measure progress made in achievement of quality education, such as the Tiered Quality Rating and Improvement Systems (National Association of Child Care Resource & Referral Agencies [NACCRRRA], 2009). This scale, which has been used

widely by developed countries, can still be used in South Africa to measure practices and child development goals. The observation schedule used in the current study to collect information on the school environment also includes items of the ECERS-R (1998).

The Early Learning Outcome Measure (2015) piloted in South Africa and funded by Ilifa Labantwana through Innovation Edge was intended to provide all types of early learning programmes with a psychometric instrument that was used to provide a fair assessment of young children. This instrument can be used across the cultural and socio-economic spectrum to determine the level of development of young learners (Pisani, Borisova & Dowd, 2015). This early learning programme provides standards for five developmental domains: gross motor development, fine motor coordination and visual motor integration, emergent numeracy and mathematics, cognition and executive functioning, as well as emergent literacy and language (Kirsten, 2017). These are domains which underpin the South African early learning curriculum and are important to this study because they also occur in various settings that are outlined by Bronfenbrenner's (1979) approach in the theoretical framework of this study (see Chapter 3).

2.3.1 International perspectives on quality early childhood development (ECD)

International early education initiatives that contributed to the achievement of quality in education include Project Follow Through (1968), HighScope Perry Preschool Project (1962), the Head Start (1965) and the Chicago Child-Parent Centre programmes (1967) in the US. Similar projects were also conducted in the United Kingdom (UK) and Europe. The literature describes them as “kindergarten” programmes that originated from concern for children of poor families and provided educational opportunities and services to more than ten million American children and their families (Janse van Rensburg, 2015).

The HighScope Perry Preschool Project (1962–1968) drew extensively from Piaget's (1962) research on child development in being based on active participatory learning through play. The approach was also influenced by the work of Vygotsky (1978). Like constructivists, one of the fundamental points made by the HighScope approach is that children are encouraged to be active in their learning through supportive adult interactions. The HighScope approach (Janse van Rensburg, 2015) is a high-quality education intervention programme for children and young people in the US responding to persistent failures of high school students from the poorest neighbourhoods. These programmes found their way to South Africa through the Training and

Resources in Early Education (TREE) in what was then known as the province of Natal (1984), and Grassroots (1972) in the Western Cape because of their focus on “deprived” children. Both the TREE and Grassroots programmes explored planned learning environments that encourage children to work independently, a component of high quality ECE.

Independent working is cited in other robust studies, such as the Effective Provision of Pre-School Education (EPPE) project, the first major European longitudinal study of a national sample of young children’s development between the ages of three and seven years, conducted to investigate the effects of pre-school education in the UK. Findings of the EPPE project indicated that pre-school can play an important part in combating social exclusion and promoting inclusion by offering disadvantaged children a better start to primary school (Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2010).

The Head Start programme (1965) was designed to close the gap in readiness to learn between poor children and their more economically advantaged peers, and focused on the effectiveness of the prevention of developmental delay. Developmental milestones can be assessed and contribute to the reduction in grade retention and placement in special education (Davids, Samuels, September, Moeng, Richter & Mabogoane, 2015). The results of studies conducted on the effectiveness of Head Start in urban and rural communities indicated stronger impacts on language and literacy outcomes for children who come from socio-economically at-risk families, Spanish-speaking households, and environments with moderate levels of parental pre-academic stimulation (Bloom & Weiland, 2015; Cooper & Lanza, 2014; Miller, Farkas, Vandell, & Duncan, 2014).

The Chicago Child-Parent Centre programme started in 1967, as the second oldest (after Head Start) federally funded pre-school programme in the US. It was the oldest extended early childhood intervention which provided pre-school education and comprehensive family support to children from low income families. The programme aimed to improve their cognitive skills, socio-emotional development, kindergarten readiness, and reading and mathematics skills, while reducing grade retention and special education usage (Mersky, Topitzes & Reynolds, 2011). According to these authors, the Chicago Child-Parent Centres increased parental engagement during and after programme completion, but also reduced child maltreatment and neglect. Thus, the participants’ health behaviours and overall physical health improved.

The *Sesame Street* television programme, initially part of the Head Start programme, was first broadcast in the US in 1969, but has since been widely broadcast in other countries as well, including South Africa (Anderson & Kirkorian, 2015). This programme provides ECE in a centre-based setting for one or two years prior to school entry. Kearney and Levine (2015) conducted a study to investigate whether children exposed to this programme from its inception experienced improved education and labour market outcomes. The results suggested that the programme had substantial and immediate impact on test scores comparable in size to those observed in early Head Start evaluations. The *Sesame Street* programme was arguably the first in the country to explicitly focus on educational content using a research-based curriculum.

All these programmes demonstrate a sizeable benefit by their contribution in the different domains of quality by focusing on key aspects that can inform ECD programmes in South Africa: cognition and academic achievement, behavioural and emotional competencies, education progression and attainment, child maltreatment, health delinquency and crime, social welfare programme use and labour market success (see 2.4.3).

2.3.2 The importance of Grade R in South Africa

An evaluation report by the Presidency on the impact of the Grade R programme (DPME, 2015) confirmed that many South African children arrive in formal school with their developmental potential considerably compromised, and may consequently not be able to benefit much from education in poor quality schools (South African Institute for Distance Education [SAIDE], 2010). The study reported that the impact was only discernible for children studying in quintile 5 schools and to a lesser extent quintile 4 schools (Van der Berg, et al., 2013). Monitoring and evaluation reports (2013) indicated that only a small percentage of improved quality Grade R programmes could be found in the country. According to the report, instead of reducing inequalities, Grade R further extends the advantage of more affluent schools (Hoadley, 2013). In addition, Janse van Rensburg (2015) observed that in most school-based Grade R classes, teachers prefer to use an “instructional” approach. Learners are found seated at tables doing very formal activities, much like Grade 1 learners (Janse van Rensburg, 2015).

With regard to the provision of qualified teachers in Grade R, several policy initiatives exist to deal with the recruitment challenges. These include Action Plan to 2019 (Department of Basic Education [DBE], 2015) and the Education Human Resource Planning Framework (2011),

which aims to guide efforts to provide the right quality and quantity of teachers and support staff, with the right qualifications and competencies, in the right positions, at the right time. Several specific supply-side interventions such as the Teacher Rural Incentive Scheme (2008), the Funza Lushaka Bursary Programme (2007) and the Strengthening Foundation Phase Teacher Education Programme (2011) seek to tackle the problem by supporting teachers and students with funding and increasing research in the field.

President Cyril Ramaphosa's State of the Nation Address (2019) and the National Development Plan Vision 2030 (2012) call for access to two years of ECD prior to entering Grade R, indicating the importance of laying the foundation for a successful academic path, especially for those learners living in underprivileged circumstances (UNICEF, 2009). Even though there is a widespread call for universal pre-grade R classes, scholars such as Kotze (2015) specify constraints that might prevent the delivery of a high quality, well-functioning pre-grade R. According to Kotze (2015) the challenges identified suggest that there is still a need for a systematic quantitative overview of the ECD sector in the South African context based on the current and projected participation trends of four-year-olds, in order to reach the vision of universal access, the quality of supply of ECD services and the challenges of implementing a universally accessible pre-grade R.

This is also emphasised by MacEwan (2013), who states that investing in quality early education experiences for young children results not only in major societal benefits, but also in long-term improved cognitive and social development. According to Education White Paper 5 on Early Childhood Education (2001), the purpose of Grade R policies and programmes is to strengthen the child's democratic right to develop his or her cognitive, emotional, social and physical potential. These developmental domains contribute to learners' school success.

The study conducted on the school readiness of a group of Grade R learners in primary schools in Gauteng province (Janse van Rensburg, 2015) concludes that school and learning readiness gradually develops over a period of six to seven years. Lally (2010) as cited by Janse van Rensburg (2015) states that if learners are not school-ready, they may suffer from learning problems in formal education. If learners receive the appropriate stimulation and support to engage in discovery during free play and certain learning activities during the early years, they may acquire the necessary cognitive and other skills to render them school-ready (Janse van Rensburg, 2015). The difficulty is that since 2004, many South African primary schools enrol

Grade 1 learners if they turn six before the end of June of the year that they enter Grade 1, even if they have not attended a Grade R class and are under-prepared for formal schooling. This practice complicates the task of Grade 1 teachers when the age at which learners are admitted is not appropriate and not according to what the admission policy stipulates.

South Africa, like any other country, needs well-qualified teachers (Sayed & McDonald, 2017). There is a huge demand for qualified teachers who are expected to lay a firm foundation for future learning success and this contributes to the bridging of the existing achievement gap to ensure quality teaching and learning (Atmore, 2012). The Grade R programme's overall aim is to ensure the holistic development of the young learners, preparing them for Grade 1, while at the same time considering developing a quality teacher workforce to help improve the quality of education in South Africa. The policy space in which the ECD sector currently finds itself does not reflect the readiness of the teacher workforce in terms of the delivery of high quality education. This is indicated by Atmore's (2012) study on the challenges facing the ECD sector in South Africa.

2.4 STUDIES ABOUT THE ASPECTS OF QUALITY GRADE R EDUCATION

The importance of quality in Grade R has been emphasised in the previous paragraphs. Detail from the following studies provide a theoretical foundation to define the aspects of quality in Grade R. These are: Role players in education, school readiness of the Grade R learner, the school environment, the policies involved, early childhood programmes as well as instructional approaches.

2.4.1 Role players in Education

Preparing quality teachers is a global issue. South Africa needs well-trained Grade R teachers, but also government officials such as circuit managers, and curriculum specialists who understand what play-based learning and stimulation is all about. Findings by Kirsten (2017) reveal that early childhood centres in rural areas that were not registered with the Department of Social Development (DSD) struggled to provide quality because they lacked qualified practitioners who did not use quality programmes and lacked sufficient quality resources or financial support. According to Kirsten (2017), these unqualified practitioners not only affect the child in the long term, but will also have a negative impact on the economic growth of South

Africa. There is a need for support from the Education Department, and from NGOs who can work locally and contextually – hopefully with community colleges – to promote ECD. South African teachers can benefit from this school–university partnership through excellent teacher preparation programmes (Gravett, Petersen & Ramsaroop, 2018).

Findings of studies conducted at a Gauteng university and an affiliated teaching school working in partnership to develop professional practice knowledge for teaching (Gravett, Petersen & Ramsaroop, 2018), showed that a teaching school, if integrated into the programme design and delivery, provides a rich practice learning site for student teachers. Preparation of teachers with strong professional practice knowledge requires attention to four interrelated aspects of programme design, namely programme identity, organisational structures, curriculum, and teacher education pedagogy. These aspects cannot be addressed in an integrated manner without working closely with one or more partnership schools (Gravett, Petersen & Ramsaroop, 2018).

2.4.1.1 Grade R teacher qualifications

A national audit of ECD commissioned by the National DoE undertaken in 2000 (Atmore, 2012) revealed that of the 54,503 education practitioners working with learners at early learning sites, only 12% were qualified, 88% required additional training and 23% had no training at all. The draft findings of the Human Sciences Research Council Teacher Qualification Survey (DBE, 2009) also provided insights into the qualification status of Grade R teachers. The survey reflected that of the 7,380 Grade R teachers who completed their questionnaire, only 425 had a professional teaching qualification and only 12% had a specialisation in pre-primary teaching (DBE, 2009). The study on foundation phase teacher provision by public higher education institutions in South Africa confirmed perceptions that the number of new foundation phase teachers being produced by the public higher education institutions falls short of national and provincial needs, and that the provision of African language foundation phase teachers is particularly problematic, especially in the context of mother-tongue instruction in the foundation phase (Green, 2011).

A study by Van der Berg et al. (2013) revealed a challenging situation where 39% of Grade R teachers in schools still had only a diploma, 11% had a degree or postgraduate diploma, 13% had ECD Level 4, and 15% had ECD Level 5 qualifications. This situation was also found

to extend to remuneration inconsistencies by funders in various provinces. Attention to these inequities should allow South Africa to provide a quality of education that will bear positive outcomes, as provided in other countries.

At a 2010 educational seminar hosted by Umalusi (an education quality control council), the Centre of Education Policy Development and the University of Witwatersrand, much was said about qualified teachers offering quality service. One of the views expressed was that having a qualification is not the only determinant for teachers to do things that are expected of them; there are other factors such as designing effective learning programmes and using appropriate teaching and learning methodologies (Samuels et al., 2015). To improve the quality of education, teachers have to implement quality programmes in Grade R; the country needs qualified teachers who are properly registered, properly paid and who have the pride in their profession (Drew, 2010).

The literature lacks clarity on what qualification a Grade R teacher is expected to have, although there appears to be some consensus that a Bachelor of Education should be a goal for all Grade R teachers. The McKinsey Report (2007) on successful education systems concludes that the quality of a school system cannot exceed the quality of its teaching force. Low teacher effort, insufficient teaching time, content gaps and weak pedagogical skills have been observed and reported as key factors behind the under-performance of the South African schooling system (Van der Berg, Taylor, Gustafsson, Spaull, & Armstrong, 2011). This idea is supported by Reddy, Prinsloo, Netshitangani, Moletsane, Juan and Janse van Rensburg (2010) after conducting a study on teacher absenteeism, which concluded that 11% of teaching time is lost due to teacher absenteeism.

2.4.1.2 Teacher development providers (DBE, TVET and NGOs)

Kirsten's (2017) study of ECD provision in the rural and urban context in the North West province defines teacher development as the inner change and growth of practitioners to become the best educators they can be. Constructivist thinking, as espoused by seminal educationalists such as Piaget (1972) and Vygotsky (1978), views the role of the teacher as building knowledge by providing personally meaningful activities that will ensure social interaction. According to Perry (2013), by working collaboratively, students and teachers determine what assistance is needed to move towards increasing social interaction to support diversity.

Teacher development plays a key role in child development and the provision of quality education. After an audit was conducted by the South African DSD (2013), certain recommendations were presented to the Council of Education Ministers. In response, in order to improve the quality of ECD provisioning in the country, the DSD together with the Departments of Health and Basic Education and other stakeholders developed a process of consultation “South African Integrated Programme of Action – Moving Ahead” (2013). Specifically, requirements for Grade R practitioners’ qualifications were improved, in that no practitioner with qualification below ECD Level 6 would be accepted in 2019. This qualification should not be viewed as a foundation phase qualification, as it only applies to teaching in Grade R. The Grade R Diploma Practices specifically designed by the North West University for Early Learning Centres and Grade R teachers across the province is part of this initiative to improve teacher qualifications. When Grade R teachers are appropriately qualified, they will lay a good foundation for all learners proceeding to Grade 1.

In line with international calls for improving the quality of teachers, recent education policy developments in South Africa have called for increased attention to continuous professional development of teachers to improve the quality of education in South Africa (DoE, 2011). The successful implementation of quality Grade R programmes demands that qualified specialists be appointed at all levels of support in the DoE. The challenge that many teachers face in achieving quality is that some school principals do not spend the majority of their time on aspects of instructional leadership. However, when their performance is assessed in terms of the Integrated Quality Management System (IQMS) agreed to in 2003 (Education Labour Research Council, 2003), they attain good ratings. This, according to the literature, impedes the ability of the IQMS system to introduce the level of accountability initially intended (Wills, 2015). It is against this background that the second international summit on the teaching profession was held (2012) to help government effectively address the issue of placing teachers and school leaders at the centre of improvement efforts (Schleicher, 2012).

Government recognises the role played by NGOs in the development of capacity and in the implementation of services of the ECD sector (DSD: ECD policy, 2015). The intention of this mutual partnership is to reach and support marginalised children in the low-income context

on a large scale, to provide them with overall care and development (Essa, 2012). Examples of such NGOs are briefly discussed in the next paragraph.

Ilifa Labantwana and the South African ECD programme (2009), through their “social franchising model”, deliver services such as early learning playgroups (Ilifa Insights, 2015; Ilifa interview, 2015). Their goal is to enable children up to the age of five years to access quality ECD through an early learning subsidy (Kirsten, 2017). The Ntataise NGO provides various training programmes on effective parenting skills, toy-making, resources, nutrition and play-based learning to develop practitioners in local contexts (Ntataise, 2015). BRIDGE is another entity that has created a community of practice as an attempt to improve collaboration and coordination in the ECD centre. BRIDGE also acts as a watchdog in monitoring and commenting on draft policies or new proposed qualifications. Its intention is to explore the involvement of parents in ECD activities through communities of practice (Education Training and Development Partnership-SETA, 2019–2020). Cotlands Early Playgroups programme, piloted in Gauteng province in 2013 is now in operation in the six provinces of South Africa (Gauteng, Western Cape, Eastern Cape, Mpumalanga, KwaZulu-Natal and North West) and it targets communities where there are no other early learning opportunities available to young children. The programme provides early learning programmes and access to educational toys and resources to prepare the children for Grade 1 (Van Niekerk, Cooper & Atmore, 2017). Other programmes providing services to marginalised communities include Grassroots Group in the Western Cape and the TREE in KwaZulu-Natal (see 2.3.1).

All of these programmes offer better learning opportunities for young children, teachers and community members. An evaluation report conducted on the impact of these programmes (Dawes, Biersteker & Hendricks, 2012) indicated that these programmes can effect improvement in the quality of ECD in quite a short time. One of the impacts of the training and enrichment in cognitive, numeracy and language skills was to promote readiness to learn in Grade R. The overall evidence from the Sobambisana Initiative also supports international experience, in that the involvement of management, training and equipment enhances the practitioner’s ability to offer a quality programme, including a range of activities, improved interaction, language and reasoning mediation (Dawes et al., 2012).

Table 2.1 shows that there are 50 TVET colleges in South Africa. Even though South Africa has 50 Training and Vocational Education Training (TVET) colleges, Kirsten (2017) points out that only 32 of these colleges offer ECD qualifications.

The Western Cape and Eastern Cape offer the highest number of TVET colleges compared to North West, Mpumalanga and Limpopo which have only two colleges each. The Western Cape and the Free State are the only provinces where all TVET colleges offer an ECD qualification. According to Kirsten (2017), Limpopo has seven colleges, but only two of these colleges offer ECD qualification. Gauteng has eight colleges, with only three of these offering ECD qualification (Murray & Biersteker, 2014).

Table 2.1: Number of technical and vocational education and training (TVET) colleges offering ECD qualification per province

PROVINCES OF SOUTH AFRICA	NUMBER OF TVET COLLEGES OFFERING ECD QUALIFICATIONS	TOTAL NUMBER OF TVET COLLEGES
Eastern Cape	5	8
Free State	4	4
Gauteng	3	8
KwaZulu-Natal	5	9
Limpopo	2	7
Mpumalanga	2	3
Northern Cape	3	2
North-West	2	3
Western Cape	6	6
TOTAL	32	50

Source: Murray and Biersteker (2014)

The above table regarding TVET colleges adds to information on current capacity and requirements for improved accredited provisioning of training for ECD practitioners, which is

one of the areas for development laid out in the Integrated ECD Programme of Action (2013-2018).

Implementation of continuous quality improvement programmes with the involvement of all key role players such as departmental officials, school managers, school governing bodies and stakeholders, will assist in monitoring and support of the implementation of quality Grade R programmes.

CAPS (DBE, 2011) also demands that the child achieves certain assessment standards by the end of the Grade R year. Research on early cognitive development indicates that by the time learners enter formal schooling, considerable gaps in cognitive ability are evident on the basis of socio-economic status (Van der Berg et al., 2011). If the identified assessment standards are not achieved, there will be an urgent need for appropriate support, proper assessment and close teacher–learner interaction to close the gap and not disadvantage the learner. According to Hoadley (2013), these gaps are worsened in situations where learners come from disadvantaged communities where parents have poor parenting skills. In addition, the age at which the learner enters Grade 1 will impact on school readiness. When learners are underage, it is actually detrimental to start school too soon, as they are still at a stage where they want to play. Not only do classes become too full, denying them individual attention, but underage children are often being challenged beyond their abilities to achieve learning outcomes (Hoadley, 2013; Janse van Rensburg, 2015). Quality ECE programmes give children access to the opportunities that promote school readiness and ensure that the school experience will be successful.

2.4.1.3 Support in education

Parents and teachers have a huge responsibility in ensuring that young learners meet educational demands. This can be done when parents provide a warm, caring and supportive home environment through day-to-day activities at home, while teachers enhance motivation of learners by acting in loco parentis, thus improving learners' beliefs in their ability to succeed and to persevere in their efforts.

Nel, Engelbrecht, Nel and Tlale (2016) consider it important for educators, families, and other support personnel to work together for the implementation of high quality curriculum for learners. Scholars such as Ceka and Murati (2016) believe that parents are the prime educators of the children until the children start schooling. For example, Kernan (2012, p. 6) states that

“robust evidence links the home learning environment, including parenting behaviors and attitudes, to learners’ learning outcomes”. In addition, Goodall and Montgomery (2014) consider parental engagement as active and meaningful involvement in children’s learning. Such learning can take place in a variety of settings, such as parents supporting their learners’ schooling by attending school functions and responding to school obligations.

This suggests that there is a complex interaction and relationship between parental involvement and the child’s achievement at school. In Grade R, teachers should educate parents about the importance of developmentally appropriate activities, which include opportunities for choice, hands-on learning, promotion of collaboration between learners, use of a variety of teaching strategies and learner assessment methods, individualisation and self-regulation. This supports the view that the use of developmentally appropriate practice (DAP) in ECD/Grade R positively impacts on child outcomes and supports the development of young learners.

Parental involvement is a fundamental aspect of ensuring quality in Grade R. The study conducted by Janse van Rensburg (2015) on school readiness performance of a group of Grade R learners in primary schools in the Gauteng province of South Africa reflects the impact of the inequality that exists between previously advantaged learners and learners from disadvantaged backgrounds on their achievements before starting formal schooling. This situation is worsened by the fact that learners’ parents from low socio-economic backgrounds often have poor parenting skills, which results in poor involvement in their children’s development and learning. Findings of the study conducted by Hadebe (2015) on an exploration of foundation phase teachers’ experience in using play as teaching strategy in Grade R recommends that it is essential for parents of young learners to provide enough physical and mental space for learners to play with ideas and materials in ways that are most meaningful to the learners level of development, and not to force their own ideas onto learners’ play. All these components are determined by the child’s previous education and history, motivation and aspirations and the relationships with others.

2.4.2 The holistic development and school readiness of the Grade R learner

Access to inclusive and quality ECD practices is a basic human right that has short- and long-term benefits of ECD learning, which contribute to the optimal and holistic development of the child. There is a need for stimulation and development of specific capabilities during this

critical period in the child's life to help to avoid deficits later on. Findings of studies conducted on the impact of the introduction of Grade R on learning outcomes indicates that good ECE programmes can also help children to develop physical, socio-emotional, language and cognitive skills by providing a stimulating positive interaction with the environment, adults, and other children (Van der Berg et al., 2013).

2.4.3 Inside and outside school environment

In Grade R, the school environment involves both outdoors and indoors. It also includes facilities, equipment and materials to facilitate child and staff learning and development (NAEYC, 2006). Local studies conducted on the readiness of the South African education system for pre-Grade R year indicate that the largest prohibitive factor to full registration of ECD centres in South Africa is lack of adequate infrastructure and equipment (Kotze, 2015).

International studies of learning environments utilise environment rating scales which outline the outdoor time requirement, quality of space and the number of learning areas (Cooper, 2015). NAEYC (2006), for instance, identifies important factors for outside play. These are a safe and healthy physical environment which allows staff supervision by sight and sound, relevant equipment appropriate for children's ages, skills and abilities, first-aid kits, fire extinguishers, fire alarms, and a fence that prevents access to streets and other hazards.

Purkey and Novak (1994) believe that a clean, safe and inviting classroom characterises quality because of its impacts on individuals' perception of their well-being. However, what happens in most rural South African Grade R classes differs from Purkey and Novak's (1994) idea of school transformation, and differs from Goal 4 of the 2030 Agenda for Sustainable Development (UNESCO, 2016). Meier (2014) speaks of this challenge, referring to the issue of class sizes (high learner-teacher ratio) and lack of adequate resources in most disadvantaged rural communities of South Africa. Regardless of facilities, experienced quality teachers can provide a learning environment in which the child can develop optimally in a holistic manner.

The current study therefore encourages the use of outside free-play-based learning, where teachers can integrate play with activities that can develop learners' gross motor skills to close the gap in which teachers are denied the opportunity to set up the classroom environment with individual themed areas that learners can choose from. A well-planned physical environment for

play-based learning varies according to the age of learners, their unique needs and interests, number of learners and the size of the playroom.

Overcrowded classrooms disadvantage learners as they are unable to experience and benefit from self-initiated and self-directed activities to select information for themselves and to actively construct new knowledge by playing with concrete objects as suggested by Piaget's theory (Excell & Linington, 2011; Meier, 2014; Mulaudzi, 2016). According to CAPS, learning takes place more easily when children play (DBE, 2011). CAPS curriculum caters for all these activities in creative arts to develop learners as creative, imaginative individuals, for whom activities such as singing foster positive social, physical and mental well-being. This can only happen if teachers take note of the guidelines, and in an environment where regular monitoring takes place to ensure policy implementation.

Only a few studies of outdoor education for pre-school children have been conducted to determine opinions, attitudes and practices of pre-school teachers concerning outdoor education. Findings of one of these studies, conducted by Alat, Akgümüş and Cavali (2012) in Turkey, suggest that, although the teachers have a positive attitude towards outdoor education, they do not spend enough time on outdoor activities owing to poor physical conditions and insufficient security precautions on school campuses. Sevimli-Celik (2018) conducted a study to determine the quality of outdoor play spaces of nine pre-schools. The study concluded that outdoor spaces were not used effectively, and were not safe and suitable for children to play in, and that the physical arrangement of these spaces was neglected. Studies indicate that it is necessary to create an atmosphere which is anxiety-free and natural to children through interesting activities.

Kirsten's (2017) findings on the impact of the environment on the physical development of the learners in the six ECD centres revealed that the centres had well-equipped playgrounds; however, some were not being maintained which made them dangerous for children. According to early childhood regulations, all sandpits should be covered at the end of the day and should be inspected for dangerous objects before the session begins. Well-equipped playgrounds encourages learners to use their bodies and minds, exploring and developing skills through body movements, aural awareness and improvisation. They learn these skills in groups and develop cooperation skills.

In terms of Vygotsky's (1978) theory, the first stage of development is being social. Lack of play denies children an open area of communication to negotiate ideas that contribute to their

understanding of each other. Lack of outdoor play also denies teachers the opportunity to observe important aspects of child development, which include the children's social interactions, cognitive and language abilities, motor skills, and emotional development. In searching for ways to improve the quality of education, the present study addresses similar challenges experienced in South African schools.

According to the National Development Plan Vision 2030 (2012), all schools should have high quality infrastructure by 2030. The situation in South African schools still indicates acute shortages in poor communities, where learners are at a significant disadvantage. Although the education budget for the Limpopo DoE increased by over 7% to R27.2 billion in 2016, the province failed to improve its state of education. The outcome of the Infrastructure Norms and Standards Report (2016) indicated a serious backlog of infrastructure maintenance and shortage of facilities in Limpopo province which includes Dwaalboom circuit. The reason given for the inadequate and dangerous infrastructure was that the allocated budget was insufficient to address serious infrastructure failures in ECD centres and in schools with Grade R classes. This amounted to a shortage of 41 000 toilets (of which 34 000 were pit latrines), a shortage of 6 000 classrooms, and a further shortage of 4 600 Grade R classrooms. The situation demands that guidelines for planning school infrastructure be legislated to ensure adherence to the plan for improvement of school infrastructure.

For quality education to be provided in line with the 2030 Agenda (UNESCO, 2016), namely to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, educational facilities that are inclusive, gender-sensitive, safe and crime-free should be established and maintained for all learners.

While all learners can flourish outdoors, research shows that learners with high physical abilities (often boys) benefit in particular from quality outdoor activities. The gross and fine motor skills contribute to physical development, and children learn these skills when they play games and engage in activities such as dancing, jumping or throwing a ball. Outdoor environment stimulates all types of play. A well-planned Grade R daily programme should assist learners with outside play, which is as important as inside play-based learning activities. Teachers in rural areas can encourage parents to bring old items that are not used at home such as old baths, sacks, tyres, trays, balls and any items that can assist with outside play activities. In terms of safety, Grade R teachers know that the outdoor play area should be thoroughly checked

before learners are invited to play outside. According to Kirsten (2017) most injuries take place during outdoor play, therefore it is important for practitioners to follow guidelines during their daily programme to make sure that equipment is safe for children to play with. Guidelines include advance planning, establishing rules, safety education and careful supervision.

The individual play areas, such as the sandpit, jungle gyms, water play and swings, which learners can choose from allow them to converse, pretend, and explore their physical environment which benefits all areas of literacy instruction (Wessels, 2011). The environment sparks curiosity, allowing learners to practise not only fine and gross motor skills, but also oral language, and even achieve mastery in many areas. Through this type of self-exploratory play, objects and materials become real-world manipulatives where children can develop their own sense of the world and their learning styles.

In response to action taken by the state to ensure universal access to and provision of education, in 2015, the DBE delivered resource kits to public primary schools. The contents of these resource kits included 20 theme posters, four charts, “big” books, a lesson plan and an assessment book, a teacher guide book, and a DVD with songs and video clips. The resource kits provide learning and teaching support material to assist in ensuring that all learners were well cared for from an early age and received appropriate emotional and cognitive development stimulation (DBE, 2015).

Mulaudzi (2016) conducted a study on the role of Grade R teachers in creating a conducive environment for learning numeracy in the Vhembe district of Limpopo province. Results indicated that the DoE still has to do more to train teachers on how to utilise these learning and teaching resources for the development of learners (see 2.4.2). Teachers in Mulaudzi’s (2016) study found it difficult to make these resources (visual and physical) accessible to the learners. The resource kit and big books were kept in the principal’s office (resource room) because of lack of space to display them, and to prevent learners from taking them home. Study respondents suggested that further studies of teachers’ views on the effective use of these resources should be conducted (Mulaudzi, 2016).

Research conducted by Onyango (2014) on the effect of teaching and learning resources on pre-school learners’ transition to Class 1 found that teaching and learning materials – when appropriately acquired, used and stored – increase the transition rate of pre-school learners. Therefore, teaching and learning materials should be provided by the parties responsible and

used in teaching pre-school children to enhance their holistic development. If quality education is to be attained, it remains the responsibility of supervisors to ensure that teachers take the leading role in the acquisition, appropriate use and storage of the teaching and learning materials to help improve the academic potential of the child.

2.4.4 Policies that guide Grade R

This section deals with important ECD policies and the related studies on how these policies are implemented. The DBE has a number of child-friendly policies in place as informed by the Constitution (South Africa, 1996). These policies are: the South African Schools Act No. 84 of 1996, which creates opportunities for every school-going child to learn in a safe and secure school environment; the Draft National Policy for the Provision and Management of Learning and Teaching Support Material (DBE, 2014) to ensure that all learners have access to quality learning materials; the No-Fee School Policy (DBE, 2006) which aims to exempt poor parents from payment of school fees and increasingly making them beneficiaries of government funding; the National School Safety Framework (DBE, 2015) to create and maintain safe school spaces; and the Integrated School Health Policy (DBE, 2012) which aims to address learners' health problems and nutritional needs; and finally the National Integrated ECD policy for South Africa (DSD ECD policy, 2015) which aims at providing the best quality start in life for children by building an excellent foundation. These policies meet the demands of the four essential propositions of the invitational model of practice, which are trust, respect, optimism and intentionality, as espoused by Purkey and Novak (2015).

Studies conducted by Luggya, Tyilo and Mdaka (2017) on the challenges faced by educators in the implementation of ECD policies reveal the fragmented nature of structures in the implementation of ECD provisioning. The findings reveal that various government departments – the DoE, Department of Health, and the DSD – render uncoordinated service for ECD implementation. This results in challenges for educators implementing ECD policies. Atmore's (2012) studies of the situation since the end of apartheid reveal that, regardless of progress made in accessing the Grade R year, major gaps in ECD provision of infrastructure, nutrition, ECD programmes, teacher training, institutional capacity and funding are still identified. These gaps in policy implementation demonstrate the need for a quality ECD programme which is comprehensively age- and developmental-stage-appropriate.

CAPS was initiated during 2012 to take the place of outcomes-based education which included Grade R, and which is part of the ECD directorate in the General Education and Training Band in the DBE since 1988. The content of the CAPS document is an amendment of the National Curriculum Statement (Pinnock, 2011). This new CAPS (2011) demands that certain learning outcomes and milestones should be achieved by the end of the Grade R year. It is during this phase that learners are expected to be physically, cognitively, affectively, normatively, socio-culturally and linguistically ready for a solid start to their school career. The DBE's foundation phase includes Grade R, which is compulsory, but not all primary schools offer Grade R.

CAPS for Grade R focuses on play-based learning, through which integration into other key areas of child development is expected to occur. During these play-based activities, incidental learning opportunities are expected to be facilitated by the teacher. Thus, incidental as well as teacher-planned and coordinated learning opportunities are expected to enhance literacy learning (DBE, 2011a). Given the challenges experienced with outcomes-based education (Janks, 2014), the curriculum incorporated into the CAPS (DBE, 2011) is intended to offer structured guidelines on what has to be taught in terms of Languages, Mathematics and Life Skills in Grade R (which became part of the DBE from 2009). It is believed that minimal attention was given to Grade R teaching prior to 2012.

The CAPS Assessment Guidelines for Foundation Phase Grades R–3 (DBE, 2011, pp. 11–12) which were introduced in 2013, cater for the individual learner's ability. In pursuit of quality education, the system must first ensure better provision for learners' different learning needs and their unique abilities, before assessments can be conducted. The intention is to make certain that every individual learner's potential and intrinsic worth is promoted, protected and respected to the best of the system's capacity.

The DoE's White Paper 6 "Special Needs Education: Building an Inclusive Education and Training System" (2001) also impacts on Grade R. This policy commits itself to establishing district-based support teams as a central part of the overall strengthening of education support services in South Africa. These teams should work jointly with other units in the DoE to strengthen the support of school-based teams. The intention is to identify and address the needs of the learners. The National Strategy on Screening, Identification, Assessment and Support (DBE, 2014), can be used for the orientation of teachers, district and provincial officials and can

guide the development of school self-evaluation programmes that lead to well-developed school improvement plans. Some provinces and districts lack commitment in ensuring that schools receive coordinated support that will respond to the needs of learners, particularly learners in farms, rural and historically disadvantaged communities.

Studies conducted on the support structures for the implementation of inclusive education in South Africa reveal that even though teachers believed that they were able to support the learners on a one-to-one basis, they were prevented from doing so by the demands of CAPS , lack of transport, poor socio-economic environment that the learners come from, lack of parental involvement, limited space and resources, teachers' workload and lack of collegial support for teachers starting their careers (Nel, et al., 2016).

The National Integrated ECD policy for South Africa (DSD ECD policy, 2015) aims to provide the best quality start in life for children by building an excellent foundation for emotional, social, physical, linguistic and cognitive development. It is one of the most significant commitments of the South African government to provide quality ECD services to all infants and young children. This policy further provides a monitoring and evaluation framework to ensure that it is effectively implemented for all children irrespective of race, gender or religion. The policy requires clear delineation of roles and responsibilities of different government departments, national, provincial and local spheres to ensure a delivery system that will advance the rights of infants and young children.

Despite the progress made since 1994, the ECD sector is still facing serious challenges. Studies conducted by Atmore et al. (2012) on challenges facing ECD sector indicate that the majority of children in South Africa are negatively affected by a range of social and economic equalities. The studies reflect on key priorities that influence basic rights as reflected in the National Integrated Early Childhood Development policy (2015). Child support grants paid to caregivers of eligible children are still far too small, ECD facilities are still faced with absence of equipment, lack of qualified teachers, lack of basic services, inadequate security and unventilated pit latrines (DoBE, DoSD & UNICEF, 2010). During interviews and observation of the school environment in the current study, these challenges were evident. This indicates that the national government still has a long way to go to effectively implement its policies and standards to meet the needs of the majority of learners.

2.4.5 Programmes that influence teaching and learning in Grade R

2.4.5.1 International approaches

The international literature reviewed in this study presents alternative educational movements in teaching and learning, which assisted the researcher's response to the primary research question: how can quality be assured for the educational experience of Grade R learners? The intention in this study was to develop a framework to ensure quality in Grade R, which will assist South African educators in serving the needs of the child, understanding how teaching and learning in Grade R should be provided in a creative way that will help children's holistic development in a supportive and enriched environment. The theories of Piaget and Vygotsky will be discussed in this regard in Chapter 3.

Reggio Emilia approach

The Reggio Emilia approach (1963) differs from that of Piaget, in viewing child development as largely internal and occurring in stages. The approach is more in line with Vygotsky's views that social learning precedes cognitive development, emphasising that much of what occurs in the classroom reflects a constructivist approach to early education, to the child's ability to interact in the peer group as the maker of meaning and knowledge. Reggio Emilia is important to this study because it shares the perspective of invitational theory, focusing on respect and trust as elements that put human interaction at the centre of its philosophy which is critical to this study (Brewer, 2007).

Studies conducted by Santn and Toruella (2017) on Reggio Emilia as an essential tool to develop critical thinking in early childhood, demonstrate the importance of the learning environment as the third teacher. This implies that the teacher organises an environment in a way that is inviting for play and inquiry, for children to explore ideas, experiment and investigate. The present study highlights the use of a daily programme as a plan used to engage learners in various activities that assist them to share and construct basic knowledge (see 2.4.4.2). In order to meet the needs of the learners, a balanced daily programme must have a variety of activities, such as indoor and outdoor free play where learners can play and work individually making independent discoveries, balanced with group activities under direct teacher guidance, structured activities, active and quiet activities. Time allocated to these activities must also be balanced according to the needs of the learners.

Montessori education method

The Montessori education method developed by Maria Montessori (1870–1952) highlights two important aspects of this study, namely the use of learning materials, and the “prepared environment”, which refers to the way in which the teacher designs the environment to promote children’s self-directed engagement with those materials (Marshall, 2017). In a US longitudinal study by Lillard, Heisie, Richey, Tong, Hart and Bray (2017), it was found that a sample of Montessori-educated pre-schoolers fared better on a variety of cognitive and socio-emotional measures of academic achievement over three years than did the control sample. The control sample was tracked from 71 different schools, 30 of which were publicly funded and the remaining 41 being private schools. Findings suggested that Montessori pre-schooling has the potential to elevate and equalise important outcomes (Lillard et al., 2017).

Even though the education method offered by the Montessori movement differs from the current South African model in terms of multi-age classroom environment, availability of student mentors and absence of testing and grades, the approach supports the idea of a collaborative environment through small group instruction in academic and social skills, which is similar to Vygotsky’s (1978) idea of a zone of proximal development which forms the conceptual framework of this study.

Waldorf education

Proponents of Waldorf education originating with Rudolf Steiner (1861–1925) focus on ensuring the provision of an optimal environment for healthy development of the child through cultivating trust, openness and gratitude. This is done by taking into consideration the age-specific developmental needs of the child (Angus, 2011). This approach adds value to the current study as it focuses on the vital role of educators in role-modelling and scaffolding a child’s natural urge to explore and experiment. This lays a foundation for later learning and healthy development, including lifelong physical, social, emotional, intellectual, and spiritual growth. Waldorf programmes are relevantly placed to support the building of new bodies of knowledge for transformational education because they cater for inclusivity. Programmes in Waldorf education may differ according to geography, culture, group size, age range, and individual

teaching approaches, but they allow community interaction and they value child development activity as part of a worldwide cultural impulse (Hickman, 2014).

2.4.5.2 The daily programme

The Grade R daily programme in the CAPS document (DBE, 2011) centres on three main subject areas – Language, Mathematics and Life Skills – which are presented in an integrated manner. In addition, the programme caters for the holistic development of the young learners, with ample time for free play outside. Looking carefully at the daily programme, one notices the careful variation between teacher-guided activities (when learners are expected to sit down quietly) and free play activities (when learners can move around without restrictions). The interview instrument used in this study covered items in the daily programme that inform integration of critical activities that will assist teachers to manage the link from pre-school education to the formal schooling system (see Appendix A).

Even though there has been support for changes in curriculum development that lead to a transition from National Curriculum Statement (NCS) to the National Curriculum Statement (CAPS), there has also been criticism of various aspects of its implementation. Findings of a study concerning reflections by foundation phase teachers on this transition indicate challenges manifesting in different interpretations between schools and provinces which lead to confusion among teachers. Increase in workload for both learners and teachers which also includes major changes in the foundation phase (instructional time and an additional language), and the fact that the curriculum focus is mainly on fast learners (Du Plessis & Marais, 2015) are additional challenges. These suggest that further research on the implementation of CAPS should continue to assist the country in closing the gaps identified with regard to how curriculum is structured and implemented to address the diverse needs of learners.

In Grade R, the timetable is called “the daily programme”. This programme for Grade R comprises three main components: teacher-guided activities, routine activities, and child-initiated activities or free play. One big challenge for the Department was the introduction and implementation of CAPS to improve the quality of teaching and learning without developing clear dissemination, training and support guidelines (Du Plessis & Marais, 2015). This brought disparities between understanding of ECD policy and its implementation in the classroom (Excel, 2011). Findings of a study conducted on the perceptions of teachers on the

implementation of CAPS (Ramabulana, 2015) indicate these as challenges that could have resulted in low morale among teachers. Teachers also emphasised that large classes and lack of appropriate resources restrain effective implementation. This was evident from interviews and observation that was conducted in the current study.

Language development

The South African Schools Act (1996) and Norms and Standards Regarding Language Policy in Education in Public Schools (DoE, 1997) give school governing bodies powers to decide on the language for teaching and learning. However, some provinces such as Limpopo, still struggle to supply learners with sufficient and appropriate teaching and learning material in their home languages. English or Afrikaans is used, not only because of shortage of material, but in some cases also because parents demand the use of these languages because they are perceived to be the languages of access to work and qualification.

The National Education Evaluation and Development Unit (NEEDU) report (2012) to the DBE discovered this decrease in the use of learners' primary language, especially in the foundation phase. The discoveries made in the NEEDU report (2012) led to the recommendation that South Africa, like other countries, should propose interim reading norms for learners. The Early Grade Reading Assessment pilot projects currently taking place are an intervention that will assist the country to help learners in the foundation phase to acquire skills and knowledge. This includes phonological awareness and vocabulary acquired through hearing stories and seeing letters (DoE, 2002).

In emergent literacy, the four language systems are integrated to include listening, speaking, reading or viewing, writing, thinking and reasoning, language structure and use. The aim is to develop listening, speaking and communication skills. At this stage the child is naturally exposed to pre-reading skills through integrated programmes throughout the day. Early childhood professionals who employ a literacy-engaging atmosphere where DAP is used, have thriving and successful learners (Wessels, 2011). DAP, as cited in the literature (see 2.5.5.3), supports the learning theories that form the conceptual framework for this study, in that knowledge of learners is constructed through their interaction with the environment around them that stimulates and challenges their thinking (Helm & Katz, 2016).

Moodley, Kritzinger and Vinck (2016) conducted a study with 175 Grade R learners who were taught English as a first additional language (EFAL) and 10 teachers from isiNdebele, isiZulu, Sepedi, siSwati and Xitsonga first language backgrounds. They wanted to determine the variables that could contribute to improved EFAL acquisition in Grade R learners from rural schools in Mpumalanga, in order to improve EFAL learning as preparation for Grade 1. Results indicated that Grade R teachers who were younger than 35, with an ECD qualification, produced better learner performance scores in both play-based and formal classrooms. These teachers were better qualified than older Grade R teachers, and were implementing the formal-based method.

A study was conducted by Wessels (2011) on phonological awareness (the ability to focus on and use the smallest units of the spoken language) as an important component of literacy learning in Grade R with 13 Grade R teachers. Results suggested that teachers' knowledge, their preparedness to teach, teaching activities and perceptions regarding phonological awareness can change after a teacher training programme focusing on phonological awareness. In addition, the study indicated that the results are interrelated and are a prerequisite for success in teaching phonological awareness in Grade R. The curriculum is clear about foundations for literacy, in that opportunities for emergent literacy development come through exposure to reading, pictures and mediated explanations of text.

CAPS demands that Grade R learners master listening and speaking skills in their home language; they must be able to listen to stories and act them out, listen and respond to simple questions, listen to and repeat rhythmic patterns, and be able to listen to and recall simple words. According to Edwards (2013), this can be reinforced when children are allowed to tell stories because story-telling is a fun outlet for self-expression and interpersonal connection, and it has a strong impact on academic success. Additionally, school-age children who read for pleasure perform better in all subjects, even in Mathematics (Sullivan & Brown, 2013). Reading for enjoyment develops grammar, spelling, vocabulary and writing style.

Emergent numeracy

In Grade R, learners are exposed to emergent numeracy which includes counting, number knowledge, estimation, and number pattern facility. The foundation laid in Grade R predicts later mathematical competence (Welsh, Nix, Blair, Bierman & Nelson, 2010). To cover the content, the teacher must organise resources relevant to the needs of the learners. The suggested

allocation of time should cater for focused Mathematics episodes and interwoven informal activities (DBE, 2011). What is important at this stage are the teaching strategies that teachers employ in the classroom to teach these aspects, and whether teachers are able to apply proper strategies to guide learners.

A recent study of the perceptions of Grade R teachers on strategies for the implementation of Mathematics by Barnard and Braund (2016) raises concerns about the quality of teaching and learning of Mathematics in Grade R, compared with the actual classroom practices in the Eastern Cape. In the aforementioned study, 16 teachers who took part in a focus group meeting indicated that their observed practices did not match how they perceived and valued Grade R teaching. In South Africa, findings from the Baseline Study Report on ECD (2008) stressed that “the quality of learning and teaching in 250 reception year classrooms ... [is] exceptionally low” (Eastern Cape DoE, 2008, p. 89, 96). The report highlighted the use of traditional teacher-tell methods with passive, quiet learners. The findings were confirmed by the Department of Performance Monitoring and Evaluation (2012, p. 4) that learning outcomes in Grade R Mathematics are limited, especially in the poorer provinces of South Africa. The same gap was identified during the interviews, causing teachers to resort to using commercially available programmes.

These studies indicate that the DoE still has more to do to provide teachers with training on how to plan the learning environment using relevant educational toys and equipment that will encourage more hands-on mathematical activities. Learners must not play listlessly without learning; they must be observed and guided. This will help learners to better understand mathematical concepts (Eastern Cape DoE, 2008). The need for continuous training and support was also evident when one of the participating teachers from a public school in a township appealed for guidance and support regarding planning and presentation of hands-on mathematical activities (Barnard & Braund, 2016).

Life Skills in Grade R

CAPS divides the subject of Life Skills in the foundation phase (Grades R to 3) into four study areas, namely beginning knowledge, personal and social well-being, creative arts, and physical education. The rationale behind the organisation according to these study areas is to ensure that the foundational skills, values and concepts of ECD and of the subjects offered in

Grades 4 to 12 are taught and developed at an early stage of learning in Grade R. The Grade R teacher must provide routine, structured free play activities which are enjoyable and manageable with a range of resources (such as blankets and cushions). All the planned activities must take place in a well-managed, child-friendly accessible environment (with toys, chairs and tables suitable for Grade R). Interviews were used in the current study to measure if Grade R teachers and managers had an understanding of integrating the subjects in the daily programme.

Research conducted on the effect of a classroom-based visual perceptual skills programme on Grade R (Chedzey, 2016) indicates that development of visual perceptual skills in Grade R should take place in all the subjects taught in Grade R as this lays foundations for all future development and learning. In Grade R, attention is paid to the development of visual memory, visual discrimination and visual perception. This includes everything that has to do with what the eyes can see, interpret, and remember, that will enable the learner to read and write. Auditory perception, auditory discrimination and auditory memory deal with everything that the ear can acquire, hear, remember and interpret. Body images, hand-to-eye coordination activities and laterality (dominance of one side of the brain in controlling a particular function) assist the learners to understand their bodies, especially when they perform movements such as throwing a ball.

Findings of the research conducted on the effect of classroom-based visual perceptual skills programme on Grade R children from a disadvantaged school in KwaZulu-Natal recommends a high-quality play-based approach with specific interpretation of CAPS (2012) which takes into account developmental needs and the way children learn, first experiencing concepts kinaesthetically through movement three-dimensionally by using concrete apparatus, and finally through pencil and paper tasks (Chedzey, 2016). The study further indicates the need to include visual perception activities that will require special stimulation with high repetition over a long period of time in Grade R. Intervention through ECD centres would be ideal to bridge the gap for school readiness by Grade 1.

2.4.5.3 Monitoring

Assessment is a critical part of a high-quality, early childhood programme. Assessment in Grade R should be in line with learning milestones, in terms of what the teacher is supposed to teach and what the learners should demonstrate. This will give evidence of the child's

development every term. Assessment is important because it provides important feedback about the teaching methodology, how learning is taking place, and information regarding what the learners know. Where teachers use a combination of child-focused teaching strategies, learning becomes interesting and appropriate, helping the teacher to adapt teaching to match the learner's needs.

Daily monitoring of learner progress should be done through observation, involving practical demonstration. The teacher can keep an observation checklist in Mathematics to assess learners. Keeping an observation checklist will assist the teacher in monitoring learner progress and in giving feedback. This is important as it informs planning, and cognisance should be taken of what is being assessed.

The DoE defines assessment as a continuous planned process of identifying, gathering and interpreting information about the performance of learners, using various forms. It involves generating and collecting evidence of achievement, evaluating, recording the findings and using the information to assist learner development in order to improve the process of learning and teaching (DBE, 2011). In the case of Grade R, assessment should mainly be oral and practical. It is important that the formal programme of assessment is presented to the school management team and must also be given to parents, especially in the first week of the new school term.

Teachers must be able to vary assessment according to skills and concepts for different age groups. Formal assessment in Mathematics in the foundation phase takes more than 50% of the notional time that includes numbers, operations and relationships. In Grade R, the approach to learning Mathematics should be based on the principle of integrated and play-based learning (DBE, 2011). Assessment activities should be informal and can contain counting sequences, reading and writing numbers and counting, and it can be done in a group and should not be seen as a single event.

The National Protocol for Assessment Grades R–12 (DBE, 2011) standardises the recording and reporting processes for these grades within the framework of the National Curriculum Statement for Grades R–12. Feedback should be provided to learners after assessment. An exploratory study conducted by Kanjee and Mthembu (2015) on assessment literacy of foundation phase teachers indicates that since the advent of the new education dispensation (1994), the issue of assessment has been an area of neglect and debate in the South African schooling system. According to this research (Kanjee & Mthembu, 2015), most teachers

have limited knowledge and expertise in this area, and lack appropriate guidance and support on how to effectively use assessment for addressing the learning needs of all children. As a result, it is highly unlikely for teachers to use assessment information to improve their own teaching practice (Kanjee & Sayed, 2013). Findings from these studies call for an ongoing debate to enhance effective models for implementation of both in-service and pre-service professional development programmes for teachers in the conceptualisation of assessment literacy and its relevance to the South African context.

Learner performance can be reported in a number of ways that include report cards, parents' meetings, school visitation days, letters and class or school newsletters. A report card is an official document that is used to give feedback to parents on the achievement of learners. The language in which recording and reporting is done should be in accordance with the language of learning and teaching as informed by the Language in Education Policy of 1997 (DoE, 1997). Recording and reporting in Grade R should be in line with the national codes and their achievement description.

2.4.6 Instructional processes

2.4.6.1 Teaching and learning activities

Teaching and learning in South African public schools is guided by the CAPS document in Grade R. The curriculum statement includes provision for the teaching of three subjects, namely: Language, Mathematics and Life Skills. For the envisaged quality teaching and learning to be achieved, it must show a direct link with the quality of teachers, curriculum, methods applied, assessment, policies, planning, management and administration. Quality teaching and learning cannot be achieved in isolation; there must be a smooth transition from Grade R to Grade 1. In a report by The Eastern Cape DoE (2008), concern was raised over the standard of learning and teaching in 250 reception-year classrooms, because teaching programmes had been found to be of poor quality. The report details that South African teachers had interpreted the curriculum possibilities inherent in the NCS in a limited manner (Wits School of Education WSoE] 2009). Combined with parental pressures, these limitations lead to a sense of frustration and lack of agency on the part of teachers. This affects the learners because the teacher's role as co-constructor is often undermined (Aronstam & Braund, 2015).

Grade R is a programme based on teaching and learning opportunities (through play) that are carefully planned. Grade R should not at any stage be a formal Grade 1 class. Excell and Linington's (2011) research explores the contested nature of Grade R and the aims that align with Grade R approaches. Their research suggests misunderstanding of what the Grade R programme entails in terms of meeting quality requirements in South Africa. Shaik and Ebrahim's (2015) investigation of teachers' beliefs about child participation in Grade R demonstrates that teachers who hold relativistic beliefs often subscribe to constructivist practices; they develop active teaching and learning, forming a partnership with learners that involves the construction of meaning. It is consequently of the greatest importance that teachers conceive of teaching and learning as facilitating knowledge construction rather than transmitting knowledge.

Hoadley and Reed (2012) share the view that curriculum can be understood as "a plan or prescription"; they go further in suggesting that a planned, prescribed curriculum might undergo some changes as it is implemented in the classroom. According to the two scholars, there is a difference between a "planned (intended) curriculum ... [and a] curriculum-as-practice (enacted curriculum)". Hoadley and Reed (2012, p.5) are of the opinion that:

[the] intended curriculum contains both the ideal curriculum (the vision or basic philosophy underlying a curriculum) and the formal/written curriculum (intentions as specified in curriculum documents and/or materials). Thus, an implemented curriculum contains both the perceived curriculum (interpretations by users, particularly teachers, and the operational curriculum (as enacted in the classroom).

Different understandings of the curriculum are expressed in "conscious (and sometimes thoughtful) actions by the teacher or as a result of unconscious, thoughtless actions" (Hoadley & Reed, 2012, p. 38). According to these researchers, other factors such as the availability of resources, large numbers of learners in a classroom and the understanding of the teacher regarding the knowledge, skills and values of how young learners learn, also play significant roles. For the country to achieve quality education, what is needed is a quality curriculum, a quality teacher and a quality response to developmental needs (Excell & Linington, 2011). School-based pre-school programmes that encourage child participation and are responsive to cultural variation, languages and norms benefit all the children, no matter their economic background.

Outcomes of quality education are that learners gain literacy, numeracy, and life skills. Learners gain creative and emotional skills in addition to values (UNESCO, 2004). All of these outcomes are supposed to be linked to the national education goals of each country (UNICEF, 2000). The achievement of outcomes will then depend on the understanding of how young learners learn. This is especially true for Grade R, where curriculum and pedagogy are closely related, and where what children learn is as important as how children learn (Excell & Linington, 2011).

2.4.6.2 Play-based learning

Play is a major medium of living and developing for all children (Aronstam & Braund, 2015). In a similar way, Van der Berg and Burger (2010) find that training and support, and knowledge of how learners learn and how to facilitate learning to achieve Grade R learning outcomes are important quality issues for teachers. Teachers should understand the curriculum and have practical guidelines about the implementation of the play-based activities. In the present study the understanding of quality was conceptualised guided by theories of child play as propounded by Piaget and Vygotsky. Observation of outdoor facilities and classroom organisation that was done before and after contact time gave me an understanding of how the school environment contributed to enhance quality (see Appendix D). Data collected from interviews with participants was used to gather information about teachers' understandings of how play-based learning activities can be used.

2.4.6.3 Developmentally appropriate practices (DAPs)

Principles of DAP are based on several prominent theories that view intellectual development from a constructivist, interactive perspective (NAEYC, 2009). NAEYC (2009, p. 10) defines DAP as ways of teaching that engage learners' interests and adapt for their age, experience, and ability to help them meet challenging and achievable learning goals. The definition is based on the NAEYC statement on DAP (2005) which requires that teachers should be appropriately trained to make decisions daily based on their knowledge of child development, taking into consideration individual learning differences, social and cultural influences. Some scholars question whether what is known as DAP, as described by NAEYC, should be classified as a curriculum model, because it does not meet all the criteria of a curriculum model. It was

created not as a fully developed curriculum, but rather as a tool to help practitioners and policymakers distinguish between appropriate and inappropriate teaching practices with young learners, regardless of the curriculum approach under review. The curriculum statement includes the teaching of Language, Mathematics and Life Skills.

Current literature in the area of DAP is theory-driven as it gives recommendations for implementation and theories about what a classroom should look like (Shipley, 2012). If quality education has to be provided for young learners, classrooms should be DAP-aligned and learners should have direct hands-on interaction, using relevant materials and activities that lead to different kinds of knowledge (Beaty, 2013). This will also allow educators to choose teaching strategies that best fit learners.

In a study conducted in India (Mumbai) on teachers' perceptions of the benefit of implementing DAP (Shipley, 2012), data was collected from six early childhood teachers who had early childhood degrees and at least two years' experience teaching young learners, and who had the knowledge and ability to use DAP. The participants were able to provide a comprehensive description of their experiences with DAP. Data analysis was conducted, showing that the teachers' perceptions, collaboration and professional development helped them to learn new ways to incorporate DAP so that learners succeed, want to succeed, and experience their success.

2.5 SUMMARY

Most literature on quality ECE reflects the UNICEF perspective that programmes must encompass a broader definition involving learners, context, processes, inviting environments and outcomes. For quality education to be provided, there is a need for evidence-based practices in an early childhood, inviting learning environment appropriate to the child's age and developmental stage. This chapter provided an overview of recent research and literature to explain aspects of quality within the framework of invitational theory and also reviewed scholars' international and local experiences. The intention was to develop an integrated approach that will address the diverse needs of all learners regarding quality education.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1 INTRODUCTION

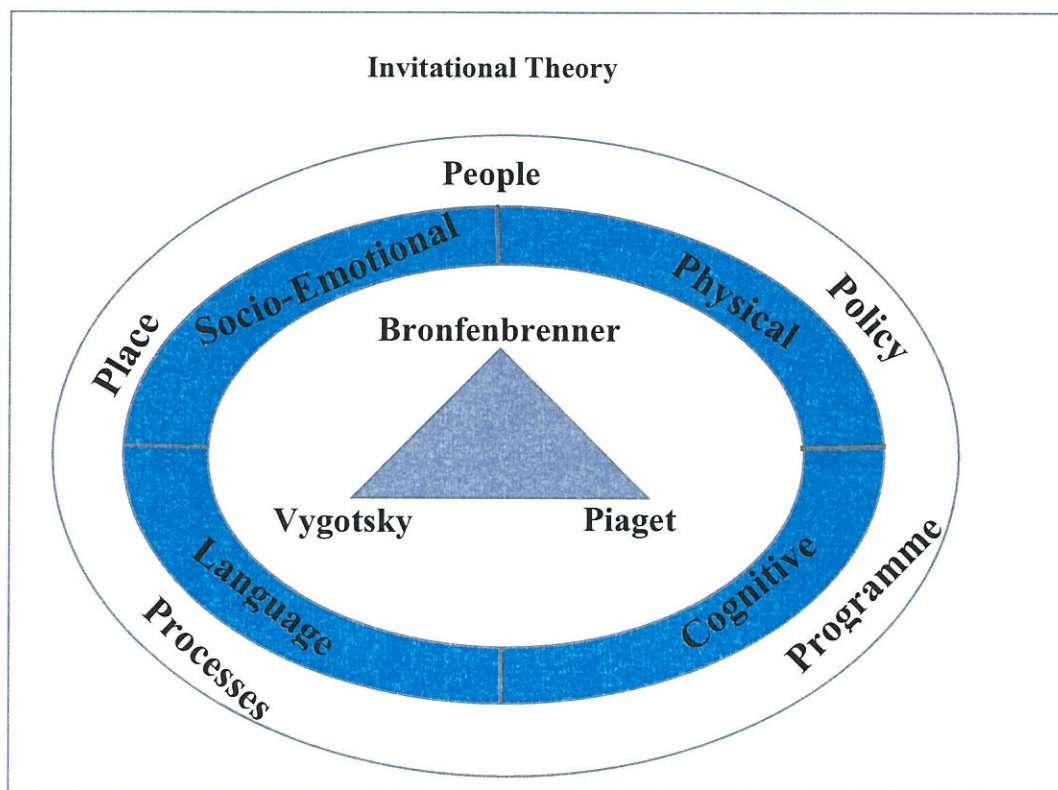
This section of the study adds to the body of knowledge that re-examines the concept of quality in Grade R education, in order to develop a conceptual framework that can be used to define quality Grade R education for the diverse context of South Africa. An integration of invitational theory (Purkey & Novak, 2015) with Bronfenbrenner's ecological model (1979), Vygotskian theory of mediation (1978), and Piaget's (1952) theory of cognitive development has been selected as the critical lens to use for understanding quality. This chapter presents the theoretical framework and later explains the important aspects of quality in Grade R, guided by the domains of invitational theory (Purkey & Novak, 2015) which are people, place, policy, programmes and processes. Although these different aspects are discussed individually, it is important to remember that this study integrates them with other child development theories because they are interactively dependent on each other. For example, programmes and place are guided by the policy, and the teacher's personal philosophy also impacts on the activities the teacher chooses, as well as the resources used (see Figure 3.1). All these elements are relevant to the provision of quality Grade R education in the diverse context of South Africa.

3.2 FRAMEWORK OF INTEGRATED THEORIES FOR QUALITY IN EARLY CHILDHOOD EDUCATION (ECD)

This section focuses on the theoretical framework which identifies and explains key theories that will assist in the interpretation of quality. Invitational theory (2015) which is the foundational theory, outlines the "5 Ps" which are the key aspects of quality (people, place, policy, programmes and processes) that form the basis of this study. Bronfenbrenner's ecological model (1979) indicates the influence of context on the provision of quality. The Vygotskian socio-cultural theory of mediation (1978) and Piaget's cognitive development theory (1952) have also been selected as theories for the critical lens to lead to the understanding quality. This chapter presents the theoretical framework and later explains the important aspects of quality in Grade R, guided by the domains of invitational theory (Purkey & Novak, 2015). Although these different aspects are discussed individually, it is important to remember that this study integrates them with other child development theories because they interact. For example, programmes and

place are guided by the policy, and the teacher's personal philosophy also impacts on the activities the teacher chooses, as well as the resources used (see Figure 3.1). All these elements are relevant to the provision of quality Grade R education in the diverse context of South Africa.

Figure 3.1 Theoretical framework for the study



The theoretical framework for the study is grounded on invitational theory (Purkey & Novak, 2015) which argues that learning is enhanced when learners are positively encouraged or invited into the educational experience. Arising from perceptual and self-concept theory, invitational pedagogy is constructed on the following four principles (Purkey & Novak, 2015):

Respect: The state must respect, protect, promote and fulfil the rights of all the people as enshrined in the Bill of Rights of the Constitution (South Africa, 1996). Invitational educators believe that people are able, valuable and should be treated with respect.

Trust: Invitational educators believe in allowing learners to work together. They also encourage effort and collaboration among learners to establish trustworthy interaction.

Optimism: Invitational educators believe that all learners have untapped potential which can be discovered through the development of socio-emotional, physical, intellectual and linguistic skills by all responsible for their development.

Intentionality is at the heart of invitational education and brings the other three principles together to invite development.

Apart from these principles, invitational theory focuses on people, places, policies, programmes and processes that transmit messages promoting human potential (see 3.4). Its main contributions address the psycho-geography and the constructive alignment of learning environments and the training of teachers and counsellors. The four principles and the “5 Ps” are important aspects that should be considered when investigating and understanding a positive total learning environment that can meet the requirements for the provision of quality education. These key aspects also respond to the research question: What key aspects should be considered by Grade R teachers when developing guidelines to improve the quality of teaching and learning in Grade R in the Dwaalboom circuit of Limpopo?

Interview instruments and observation schedules developed for this study focused on these aspects. The intention is to establish whether the participating Grade R teachers, heads of department, principals and the foundation phase curriculum specialist are aware of and adhere to the requirements as highlighted by these theories, in order to ensure provision of quality education in Grade R. The invitational model of practice (Purkey & Novak, 2015) involves and encourages continuous interaction among and between human beings, the purpose being that people should realize their boundless potential.

This model connects well with Bronfenbrenner’s ecological theory (1977, 1979, 1986, 2006) which encompasses the importance of multiple settings and has an influence on learners’ development. Family and school partnerships are beneficial to the attainment of quality (see 2.4.1.3). This relationship at micro level (the closest level that affects development) includes the role of other family members and the community, not just parents. Integration of Bronfenbrenner’s (1979) theory with child development theories emphasises the influence of social interaction (Vygotsky, 1978), community intervention and political context on the attainment of quality for the holistic development of the child. The approach is based on the

understanding that human activities take place in cultural contexts, mediated by language and other symbolic systems, and can be best understood when investigated in their historical development.

The other important theory is the Vygotskian socio-cultural theory of mediation (1978) which builds on observation of the child's zone of proximal development (ZPD) which, according to Vygotsky, assists in the development of human mental activities, direct social interaction and independent social finding where learners can independently solve their own problems (Vygotsky, 1962; Vygotsky, 1978, pp. 56–57; Vygotsky & Luria, 1994, pp. 99–174). This theory of mediation (1978) is used in the framework to show the importance of continuous interactions among and between human beings in child development. It promotes the use of guided discovery in the classroom where learners still receive support from a knowledgeable source (ZPD). Vygotsky (1978) offers encouragement, or strategies in the form of scaffolding and mediation, in order for the learners to attempt the problem. Scaffolding, Vygotsky's principle from the socio-cultural perspective, is important to this framework because it indicates the need to provide the child with hints or clues for problem-solving in order to allow the child to better approach the problem in the future (Van de Pol, Volman & Beishuizen, 2010).

Vygotsky (1978) and Piaget (1952) have played a major role in the field of education by offering explanations for learners' cognitive learning styles and abilities. Although the two scholars contribute to play-based learning which is meaningful to achievement of cognitive development, they differ in how they approach discovery learning. Vygotsky's theory in contrast to Piaget's theory, states that play actually facilitates cognitive development. Piaget (1962) defined play as assimilation, or the child's efforts to make environmental stimuli match his or her own concepts. Piagetian theory holds the view that play does not teach the child anything new (Piaget, 1962). The two approaches point to important aspects of quality as cited in this study, which include the important roles played by people in child development, place for learning, processes and the kind of programme provided to assist the child to develop.

Piaget's theory (1952) looks at the cognitive development of the child through the various stages of child development and advocates discovery learning where learners are engaged in the discovery process with minimal teacher intervention, while Vygotsky (1978) promotes guided discovery in the classroom through continuous support from a knowledgeable adult (ZPD). Piaget (1952) emphasises how children's thinking and reasoning change

qualitatively, over time, hence the four stages of development from the concrete to the formal operational stage. Children actively contribute to their own cognitive development by constructing their own understanding of the world. This understanding happens during experiences with materials and working to resolve discrepancies between prior knowledge and new information. This process is significantly affected by the child's biological development. If teachers receive training on the relevant theories of child development, they will understand the importance of supporting children to reach the required level of biological maturation. If teachers continue to give children meaningless activities, children will continue to struggle to make use of information acquired in their learning environment or struggle to acquire new thinking capabilities.

DAP draws heavily on Piaget's theory of children's engagement in active, self-initiated activities supported by responsive adults (Aronstam & Braund, 2015). Integrating DAP into daily activities will help teachers to prepare appropriate teaching strategies, thereby balancing child-initiated activities and teacher-guided activities that will cater for the child's cultural background and developmental level (see 3.5.5.3). DAP acknowledges all the domains of child development (physical, social and cognitive) that bring diversity into the classroom because curriculum is adjusted to meet the child's needs for learning (NAEYC, 2009). This approach is inclusive because it reduces learning gaps, increases achievement for all children, and allows students to share and engage in the learning process while they solve their own problems as they learn new information (Shipley, 2014).

A combination of these approaches is appropriate to South Africa, because it takes cognisance of relevant issues in relation to South Africa's vision of democracy as enshrined in the Curriculum Assessment and Policy Statement [CAPS] (2011). What the researcher found interesting is that children learn in different ways; therefore, if quality education must be provided, all theories affecting learning should be taken into consideration. Explanation of the following key aspects drawn from various theories points to a composite picture of what quality education means for Grade R in the South African context.

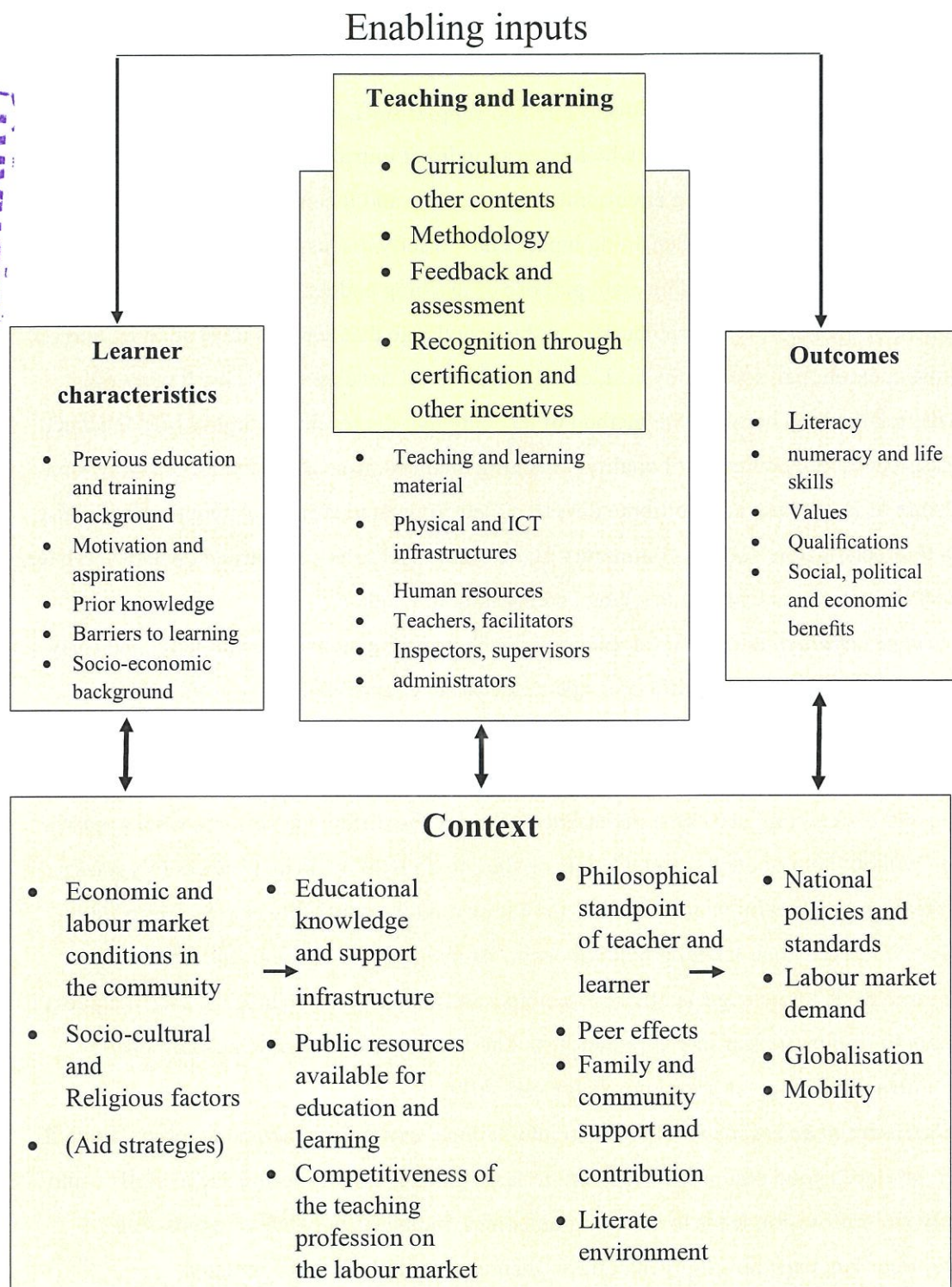
3.3 UNESCO'S FRAMEWORK FOR UNDERSTANDING QUALITY

The worldwide "Education for All" movement (UNESCO, 2005) is one of the sources that provides a comprehensive view of quality in education. According to this framework, the

components that influence quality in education are teaching and learning, learner characteristics, context, and outcomes to be reached. Even though the framework is old, it was chosen and adapted for Grade R led by UNESCO, because it provides for all the important elements that can assist in identifying quality education. This framework supplements the dimensions of quality inherent in the theoretical framework underpinning this study.

According to this framework, quality in education entails a school system where all learners are welcome and where diversity and flexibility are seen as important ingredients for the development and personal growth of all learners. Policymakers and educational planners must bear these issues in mind in order to improve quality and to remove disparities in both public and private systems. All of these definitions testify to the complexity and diversified nature of the concept (see Figure 3.1). Understanding the Education For All Global Monitoring Report (UNESCO, 2005) becomes relevant in assessing whether all aspects of quality are met for good teaching and learning to take place, and to determine whether the South African context allows for the provision of the envisaged Grade R education. The framework uses the critical enabling inputs of teaching and learning, learner characteristics, learning outcomes and context to serve as a guide to ensure the provision of quality that is needed. This is indicated in Figure 3.2 below.

Figure 3.2 UNESCO'S framework for understanding quality education in Grade R
(UNESCO, 2005)



Information from this model was used to enhance the theoretical framework for the study which will assist in the interpretation and understanding of quality Grade R in South Africa's many varied educational settings. The framework also provides more detail on the role of material resources provided by both government and households, and of human resources including teachers, managers, school inspectors and support staff, in ensuring quality teaching and learning. Other important factors which have an indirect impact on teaching and learning (such as governance, safe learning environment, partnership and incentives) also form part of the framework. Each primary critical enabling input is now briefly discussed.

Teaching and learning: The main purpose of teaching and learning in Grade R is the development of the whole learner, focusing on the knowledge that learners must acquire, and on the linguistic, emotional, social, physical, creative and moral development. This framework reflects the relationship between the method of teaching that the teachers employ with feedback and assessment as key processes of quality. Teaching methods, time allocated for teaching, and the language of instruction all contribute directly to teaching and learning. Attention should also be given to others factors such as community involvement and safety of learners, which can have an indirect impact on the learning teaching and learning in Grade R.

Learner characteristics: Socio-economic background, gender, race ethnicity, and early learning opportunities have a significant impact on learner characteristics. Learning often depends on the child having prior knowledge or an ability to do things at a certain level. Vygotsky's ZPD approach fits well in this framework, indicating how the learner's previous education and background can assist the teacher to bridge the difference between what a learner cannot do without help of others, and what he or she can do with the help of others (Vygotsky, 1978). If teaching and learning activities are too far beyond the capability or prior knowledge and skills of a learner, then learning will not occur. At the same time, some students may not have the same basic knowledge as others in a course and will need more help. In such a context it is important to design the learning experience so that it is flexible enough to accommodate students with a wide range of prior knowledge and skills.

Outcomes to be reached: There is an international consensus that good quality Grade R education produces good outcomes – medium to large gains in cognitive and social skills – and conversely, poor provision leads to worrying outcomes, including negative or aggressive behaviour, poor language development, and an increase in child- or family-related

developmental risks (van der Berg et al., 2013). All of these outcomes are supposed to be linked to the national education goals of each country (UNICEF, 2000). The achievement of outcomes depends on the understanding of how young learners learn. This is especially true for Grade R, where curriculum and pedagogy are closely related, and where what children learn is as important as how children learn (Excell, 2011).

The context: This covers all aspects of the environment that contribute to the holistic development of the child at school, at home and in the community. Good design in teaching is influenced by policies, human and material resources, socio-economic factors and the philosophical standpoint of the teacher and the child. According to the framework, successful teaching and learning depends on socio-economic factors, community and parental support, educational knowledge and support, and finally public resources that contribute to making a stimulating environment for child development. Implementation of this approach will help teachers to broaden their knowledge base so that their mediation can be relevant and meaningful to the needs of the learners and other issues relating to South Africa's vision of democracy.

3.4 INTERNATIONAL AND NATIONAL GUIDELINES FOR QUALITY IN GRADE R

The NAEYC (2005) provides guidelines to establish what constitutes quality ECE for children in the US. These are guidelines for responsible behaviour and they also set forth a common basis for resolving principal ethical dilemmas encountered in early childhood and care. The guidelines contain a code of ethical conduct which recognises that children are best supported and understood within the context of family, culture and society which forms part of the conceptual framework of this study.

In Australia, the governmental organisation responsible for Australian children's quality education and care (known as ACECQA), takes outdoor learning to a new level by setting levels of safety and quality to benefit all young children. Play and inquiry-based learning in ECD is a priority (Daelmans, Darmstadt, Lombardi, Black, Britto, Lye, Dua, Bhutta & Richter, 2017). This includes inside and outside free play as part of the daily programme. In 2014, a working group established under the auspices of the European Commission produced a "European Quality Framework" which provides a European benchmark for quality. This framework, is a key document formalising the consensus achieved in early childhood education and care (ECEC) among European member states' policy makers, researchers, educational experts, professional

associations and NGOs active in the field. It embraces diversity of the ECEC systems, culture and policy approaches in Europe which led to the formulation of ten action statements across the following areas of implementation of the framework: accessibility, workforce, curriculum, monitoring and evaluation, governance and funding. These action statements provide guidance for all stakeholders who want to improve the quality of ECEC provision in the process of overcoming common challenges by drawing on a solid base of European research and examples of good practices (Urban, 2014).

Africa also has a continental approach to expanding access and quality to ECE. Europe and Africa adopted continental approaches to the African Union's Agenda 2063, the socio-economic agenda which builds on and seeks to accelerate the implementation of the past and existing initiative for growth and sustainable development (Addaney, 2014). Europe and Africa's contribution to quality was to expand the universal access to quality early childhood education, putting children first, ensuring that no learner misses school because of poverty or any form of discrimination.

In 2009, Africa held its fourth African International ECD Conference in Dakar, Senegal and nine country teams developed strategies for expanding access and improving quality of their ECD programmes. African countries were encouraged to identify and expand high quality early education to include the most vulnerable and disadvantaged children. The following criteria for quality ECE emanated from the meeting: to promote ECD capacity and networking, to promote interactive learning for ECD programme and policy development in Africa, to promote African leadership and information sharing in support of the well-being of African children, and to identify and build on strengths in African ECD showcasing exemplary practice and innovation (UNESCO, 2000). The African Early Childhood Network (AFECN, 2015), a network comprised of organisations from civil society, academia, government, and the private sector at national and regional levels also plays an important role in promoting ECE quality. This network serves as a platform to champion excellence and collaboration in protecting children's rights, influencing policy and practice, strengthening partnerships, and sharing experiences and knowledge in ECD on the African continent with the intention to improve outcomes and create increased access to quality ECD services for all children in sub-Saharan Africa.

Locally, the South African Research Association for Early Childhood Education (SARAECE) was established in 2011 with the purpose of improving the well-being, early

education and holistic development of children from birth to nine years, through research. This association created a platform to bring voices of multiple stakeholders together in order for ECE and ECD researchers to work collectively towards the betterment of the sector. SARAECCE is a research association with the three focus areas of research development, reporting, and analysis (Green, Adendorff & Mathebula, 2014). It provides improved teacher education and training in higher education institutions as well as mentorship, support and guidance for teachers and practitioners in the field of ECD. It has established relationships with NPOs and NGOs as well as with other associated interest groups in the discipline who currently contribute substantively to the aims and benefits of the SARAECCE.

However, government still needs to do more to ensure the implementation of these guidelines, to describe what quality education in Grade R constitutes in a South African context. It is against this background that the present study identifies the invitational theory as a major driving theory which is critical to the interpretation of the meaning of quality. This theory lays a perfect foundation for other theories because it addresses the global nature of human existence. It makes life an exciting experience by encouraging continuous interaction among and between human beings.

Early childhood education as incorporated into the National Integrated ECD Policy (2015), is defined by various NGOs (Ilifa Labantwana, the Childhood Institute of UCT, and Richter's fundamental work) as an umbrella term for the education of children from birth to at least nine years of age in order to allow them to grow and to thrive physically, mentally, emotionally, spiritually, morally and socially. The current South African education system provides a Grade R programme using three models, namely those within the public primary school system, those in community-based centres, and the independent provision of reception year programmes.

In South Africa, Grade R forms part of the foundation phase of the General Education and Training Band, which is the first year of formal schooling. The placing of Grade R in the primary school presents a challenge to the provision of quality teaching and learning. According to the South African Institute for Distance Learning (SAIDE), the system creates conflict between the need for holistic development through play-based learning and the expectation of formal school learning and teaching (SAIDE, 2010).

Grade R needs well-qualified teachers with in-depth specialised knowledge, practical skills and experience in ECD pedagogical programmes. According to Van Rensburg (2015) the problem is exacerbated by the fact that since 2004, many primary schools enrol Grade 1 learners if they turn six before the end of June of the year that they enter Grade 1, even if they have not attended a Grade R class. Some of the inequalities existing between the achievement of previously advantaged learners and learners from disadvantaged backgrounds is created by the fact that learners are admitted to Grade 1 when they are not school-ready. Lack of access to learning readiness programmes is also worsened by poor parenting skills and lack of parental involvement in their children's development and learning.

Even though studies exist concerning theories that underpin teaching and learning, there is a need for conducting further research and for reflection on theories that support teaching and learning in the country's culturally diverse socio-economic context. Quality teaching and learning in Grade R therefore becomes difficult to attain without taking all the approaches and theories relevant to child development into consideration. The following approaches and philosophies that underpin the education of young learners in South Africa have European origins.

3.4.1. International approaches to quality early childhood development (ECD)

Three ECD approaches with European origins have a major influence on the approaches followed in South African Grade R. These are Reggio Emilia, Montessori and Waldorf. Elements of these three approaches are widespread in the currently prescribed CAPS Grade R curriculum in South Africa.

First, the Reggio Emilia approach, which originated in Italy, was adapted in 2010 for the South African context. According to Galloway (2015) the approach dispels the outdated notion of traditional classroom structure but encourages a learner-centred learning environment. According to van Rensburg (2015) this theory is based on teaching children the principles of respect, responsibility and community through exploration and discovery in a supportive and enriching environment, and it uses a self-guided curriculum based on the interests of children. Self-guided activities are hands-on activities, based on the learners' abilities and interests, which allow learners to actively contribute to furthering their own cognitive and social skills, for

instance in water play games where learners can blow water through a straw, thereby creating bubbles.

While the approach differs from Piaget's stages of development, it expands on Vygotsky's approach of constructivism that encourages acquisition of knowledge to create a meaningful product (Galloway, 2015). Vygotsky's approach further emphasises the collaborative nature of learning and the importance of cultural and social contexts, which resonates with the Reggio Emilia approach. The study conducted by Stone (2012) on the Reggio Emilia approach from a Vygotskian perspective also recognises the role of the teacher as a guide and support. Stone's approach of concept development in the child's learning process is important to this study. The study points out the role played by teachers in supporting children's learning by identifying and articulating concepts which children engage with according to how the child develops, at an appropriate time, in an appropriate manner.

Purkey and Novak's (2015) invitational theory shares this view by emphasising that careful attention should be given to the physical environment. This is echoed in the Reggio Emilia approach where attention is placed on learning spaces that are filled with natural light, that possess order as well as beauty. This implies that the space should be inviting to encourage both rich communication and exploration opportunities. Quality education demands that classroom arrangement should encourage plenty of thought-provoking hands-on learning experiences for children and allow for collaborative interactions.

The Montessori method emphasises young learners' independence in an orderly environment where learners work at their own pace. The teacher organises the environment in a way that allows the learners to move around freely, while communicating with their friends. To implement this strategy, the South African education system still needs to address the teacher-learner ratio (Motshekga, 2012), reducing Grade R class sizes further to the ratio 15:1. This will encourage learners to work independently with the learning and teaching support material, known as "manipulatives". When learners work independently they develop self-discipline and self-esteem that contributes to the total spirit within the school. This, according to invitational education, contributes to building skills of becoming a decent and a productive citizen in a democratic country (Haigh, 2011).

The Waldorf pedagogical theory takes into consideration the age-specific psychophysical needs of the child. Even though the literature indicates that Waldorf programmes differ from

other approaches according to geography, culture, group size, age range, and individual teaching approaches (see 2.4.5.1), they include a sense of comfort, adjustment of classroom based on subject matter and balance of colour, as being critical to inspire curiosity and free thinking (Robledo, 2017). Waldorf programmes have an intellectual, artistic approach and focus on the development of practical skills. This approach adds value in assisting the development of guidelines for the present study (Larrison, Daly & VanVooren, 2012).

3.4.2 South African approaches based on theories of child development

There are many different educational approaches that South African scholars have adopted which tend to comply with the aims for pre-school education in South African schools. First, they are perceived as pedagogical approaches informed predominantly by developmental psychology and DAPs. Second, they are socio-culturally historical, and third, they are didactic or instrumentalist (Excell & Linington, 2011). These three recommended approaches inform Grade R pedagogy in South Africa.

The *pedagogical approach* is informed by developmental psychology and highlights principles of DAP which are based on several prominent theories that view intellectual development from a constructive, interactive perspective (NAEYC, 2009). Developmental psychology examines child development closely, especially in terms of how children's experiences and activities lead to more cognition, behaviour and competence. Key ingredients of this approach include exploring and discovery as drivers for learning and development. Wood and Hedges (2016) outline the importance of aligning development psychology with educational psychology to inform curriculum content and propose that a curriculum should be seen as incorporating dynamic working practices, specifically what children choose to do and talk about with each other, and what practitioners enact with children to support their learning and development in a variety of ways – through play-based provision and reciprocal relationships, as well as through intentional and responsive teaching. The alignment of a curriculum with these elements assists in securing school readiness, which is critical to provisioning of quality education.

The *historical socio-cultural approach* grounded on Vygotsky's social constructivist theory (1978) accounts more adequately for social and cultural dimensions of early development. The approach asserts that the young child's development is as much cultural as it is natural.

Stages of child development are embedded in social practices as much as in processes of maturation. In fact, learners' development might most accurately be described as "naturally cultural". Social and cultural context should not be seen as something outside the process of development, "as that which surrounds" but rather "as that which weaves together" learners (NAEYC, 2009, p. 17). Vygotsky shares the view of Bronfenbrenner (1979) regarding the importance of the child's environment and how it influences the way the child thinks.

Vygotsky's emphasis on social interaction reflects a strong belief in the role that the community plays in the development of the child. This can be achieved if focus is on the five domains (the "5 Ps" of invitational theory) that make up the ecosystem in which individuals continuously interact.

The *didactic approach* focuses on academic skills – reading, writing and arithmetic – and tries to establish numeracy and literacy through a more didactic practice which favours table-top activities such as worksheets and other largely "inactive" activities (Excell & Linington, 2011). This approach does not take into consideration how young learners learn (integrated play-based curriculum) and it does not satisfy the needs of the learners. In young learners' learning, the internalisation of concepts is facilitated by a three-phase approach: learners first experience these concepts kinaesthetically (i.e. through movement), then three-dimensionally (through exploring with concrete apparatus) and later using pen and paper. The approach adds more to the child's cognitive development because of its focus on learning outcomes rather than on satisfying the needs and interests which lead to the holistic development of the child.

The didactic approach has, in all probability, been influenced by an incomplete understanding by practitioners of the developmental approach (Excell, 2011). Grade R teachers do not necessarily accept or support the didactic approach – but, when challenged by parents, school management and educational policy demands, teachers feel pressured to implement this more formal approach. Critics of the approach, such as Linington, Excell and Murris (2011) consider the approach to be unsuitable because, according to them, it limits the space of meaningful participation in reasoning and decision-making instead of opening up an enabling space for meaningful participation. Even though didactic approaches may seem effective in achieving cognitive goals, there is a need for developmental approaches that have a positive effect on the child's socio-emotional competence. This can be achieved when teaching in Grade R is sensitive to a culture enriched with creative learning activities that address important aspects

of the child's development. Therefore, there is a need for teachers to recognise the child's social and cultural context.

There is a need to demonstrate that an educational performance advantage for those who attended Grade R persists to later stages of the school career (Van der Berg et al., 2011). South Africa still has a challenge to attend to the approach that the country needs to adopt for Grade R which embraces diversity, emphasising the importance of play-based activities central to child development. The combination of the theories of Bronfenbrenner (1979), Vygotsky (1978), and Piaget (1952) with Purkey and Novak's (2015) invitational theory adds to the research as an attempt to address this challenge.

Trawick-Smith (2014) as cited by Kirsten (2017), defines development as the process whereby a child changes while growing older, and transforms into a new person. Even though psychologists recognise three broad domains of physical, cognitive and psychosocial childhood development, these domains can include perceptual, motor, language, social, emotional, creative, aesthetic, moral and spiritual development (Excell & Linington, 2015). Domains are integrated and no single domain can be understood or its development enhanced in isolation. They are interrelated and affect each other; therefore, education must address the whole child to develop the child's full potential (Berk, 2013) in different settings, such as home, school and community. This is why no single theory can address every aspect of the way a child develops. The following section draws on the theoretical framework presented above (see 3.2 and 3.3) in order to highlight the aspects of quality that this study seeks to explore.

3.5 ASPECTS OF QUALITY EDUCATION IN GRADE R

3.5.1 People

Invitational education begins and ends with people. The role of the teacher is to help learners realise their potential, and this can only be achieved when invitational leaders acknowledge that their success depends upon other people in the organisation (Purkey & Novak, 1988). Haigh (2011) believes that this can be realised by these "5 Ps" that are designed to invite development and people who intentionally invite engagement, including respect, trust, optimism and intentionality (Purkey & Siegel, 2013) as principles on which invitational pedagogy is constructed.

3.5.1.1 The Grade R teacher

Within invitational theory of personally inviting oneself, Purkey and Novak (1988) view trust and respect for oneself, along with optimism and intentionality as prerequisites for being inviting towards oneself emotionally, intellectually and physically. When school managers and teachers are personally inviting, they cultivate a secure and nurturing environment, and their staff members are able to open up and give more of themselves. This nurturing environment has a positive influence on their teaching practice and performance which finally supports the continuous improvement of teaching and learning.

Invitational leaders are inviting to others. They should conduct themselves in a manner that reflects their self-care (such as eating well and exercising regularly), personal development, positive attitudes towards life and their environment, and their ability to recharge, to awaken the same positive approaches in their followers. They must give praise but, at the same time, also be able to accept praise, foster friendship, act politely and share with others. If they are not professionally inviting towards themselves by updating skills, rekindling professionalism, joining professional groups, managing time and even dressing professionally, they will not be in a position to offer support to those under their supervision.

South African schools need more qualified teachers in Grade R to lay a firm foundation for future learning success and this, according to invitational education, contributes to bridging the existing achievement gap. Qualifications in South Africa are based on the National Qualification Framework (NQF) by the South African Qualification Authority (SAQA). The challenge that the country is still facing is that in many schools, Grade R teachers are appointed by school governing bodies. Not all teachers appointed in this manner have appropriate Grade R qualifications. In South Africa, the Level 4 ECD qualification was developed to help practitioners acquire knowledge that will assist them to prepare children for formal schooling (Atmore, 2012). These practitioners are paid less than half the salary of departmentally appointed teachers and they have no medical or pension benefits (see 2.4.1.1). The current status of ECE surely demands invitational leaders to encourage their subordinates to improve their teaching qualification to acquire at least Level 6 qualification.

In order to make a valuable contribution to quality in South African education, this study proposes that an appropriate framework for the training of school principals and educators be established in line with the invitational theories and other child development theories (see 3.3).

This implies that if all the aspects of quality are taken into account as outlined in this study, the framework used in this study can be regarded as a useful model to cater for quality Grade R education for the diverse South African context.

3.5.1.2 Teacher Development

Purkey and Novak (1988) regard being professionally inviting towards others as a consistent process of becoming co-responsible for staff behaviour and for the modification of such behaviour. For quality education to be achieved, leaders should become professionally inviting towards others, taking advantage of the opportunities as presented (see 3.4.1). Since the success of professionally inviting behaviour towards others is determined by what people share with others, it implies that school leaders should focus on forming professional learning support groups, having mentors, working cooperatively, sharing decision-making and being honest and trustworthy.

If teachers and learners are treated in a trustworthy, collaborative, compassionate and respectful manner as explained by Purkey and Collins (1992), they act and react in the same way towards their colleagues. School principals need to strive to avoid creating a disinviting school environment. A positive school climate and culture encourages staff members to buy into their schools' goals and activities. Teacher collaboration implies that there should rather be an emphasis on the principles of personhood, which includes trust, involvement, respect, facilitation and the creation of a pleasant environment. This study contributes to a theory of practice that will assist in addressing the total environment in which leaders function. The study therefore builds confidence that the integration of the "5 Ps" (Purkey & Novak, 2015) with other child development theories could also be useful in the South African educational arena.

3.5.1.3 The Grade R learner

South Africa started implementing compulsory Grade R from 2010. The target was to have all five- to six-year-old children enrolled in accredited Grade R programmes. This target was then extended to 2014 (Zuma, 2009). The current CAPS demands that by the end of the Grade R year, a learner is expected to be physically, cognitively, affectively, normatively, socio-culturally and linguistically ready for a solid start to his or her school career (Powell, 2010). According to a study conducted on the school readiness performance of a group of Grade R

learners in primary schools in the Gauteng province of South Africa (Janse van Rensburg, 2015), lack of access to pre-school education programmes creates problems because learners are admitted at an early age: they turn six in Grade 1. According to scholars this complicates the task of Grade 1 teachers, because it means that some Grade 1 learners can be five-and-a-half years old and others seven years old. According to Janse van Rensburg (2015) and Hoadley (2013), the situation can further imply that not all children from previously disadvantaged areas have access to Grade R classes (see 2.4.1.3).

Bronfenbrenner's multidimensional model of human development suggests that there are layers or levels of interacting systems resulting in physical, biological, psychological, social and cultural change, growth and development of the child (Janse van Rensburg, 2015). What happens in one system affects, and is affected by, other systems. The understanding is that children are also active participants in their own development. Children's perceptions of their context are central to understanding how they interact with their environments. The way they perceive their circumstances influences the way they respond to their human and physical contexts. The model suggest that it is critical that teachers should have knowledge of and understand the complexity of the influences, interactions and interrelationships between individual learners and the multiple other systems that they are connected with.

3.5.1.4 Community and parental support

The situation of children from disadvantaged areas is further aggravated by the fact that their parents often have poor parenting skills, which results in poor involvement in their children's development and learning. Educationists realised that external factors such as parents, pre-school programmes, and the Grade R or foundation phase teacher each play a significant role in school readiness (Lally, 2010). Parental involvement has also demonstrated positive results beyond improving learner performance (Bower, 2011). For example, parental involvement increases social capital and provides additional resources to learners, which increases their academic success (Bower, 2011).

3.5.1.5 Departmental officials

The main aim of invitational education is to understand what it takes to create and sustain an invitational environment (Haigh, 2011). The theory demands that departmental officials and

learners should work together with respect and courtesy in building long-term relationships, and in creating an environment of mutual support. Invitational managers are supportive, nurturing, democratic, ethically encouraging and self-aware. Invitational education is the most relevant tool for intervention for work in negative environments, where people are disempowered, alienated and disengaged. This atmosphere is prevalent in many schools where teachers feel inferior and find it difficult to explain their challenges in order to get support (Haigh, 2011).

The theoretical framework of the current study creates a platform for professional development to be guided by developmental theories. Vygotskian theory supports implementation of continuous support to ensure professional development (Shabani, 2016). This includes the role of departmental officials to support teachers through mentoring, observation and professional learning committees until they improve their teaching practice. Training can also be offered by other stakeholders (tertiary institutions and NGOs). Professional development programmes should be designed according to the needs of the teachers. Therefore follow-up on professional development can be done through in-service training to ensure successful ZPD progression.

3.5.2 Place (context)

Invitational theory views quality education as an intentional act designed to allow the child to develop to his or her full potential (Purkey & Siegel, 2013). This can only be achieved if the learning environment inside and outside the school is consistent and dependably inviting to the realisation of human potential. Creating an inviting, safe, clean and well maintained environment is a good starting point to begin the practice of invitational theory. Teachers have a responsibility to ensure that learning is taking place in a clean, safe and print-rich environment with all educational areas and resources that will support early learning.

Bronfenbrenner's (1970) multidimensional model in the theoretical framework of this study also deals with the effort to make educational places more inviting to learners as a key aspect of the achievement of quality. Because the focus of the present study is on quality, the researcher conducted an environmental scan of the school environment using an observation schedule (see Appendix C1). Collection of this data, which was done outside contact time with teachers and managers, was limited to visible items in the classroom, items relating to cleanliness and attractiveness of the environment. The researcher was not granted permission to observe

interaction during teaching and learning. Had this been possible, the researcher would have been able to gather enough information to refute or agree with other theorists' views on a suitable learning environment that conveys values such as care and trust, warmth and efficiency (Purkey & Novak, 2015). A reflexive journal (see Appendix C2) was used by the researcher to capture information regarding the aspects that appeared to limit the achievement of developmental milestones (educational centres and equipment).

3.5.2.1 Inside classroom and free play

The prescribed minimum national norms and standards for school infrastructure (DoE, 2009) creates an expectation that furniture is sized according to the needs of the learners (for tables that are 55 cm high), with six different activity areas for art (drawing and painting), literacy activities (reading corner), construction (large and small), fantasy play, an educational games area and a maths area. These norms and standards prescribe 2 to 2.6 m² (SA DoE, 2008) for each learner, with a maximum of 30 learners in a classroom. The result is an area of 60 m² (minimum) to 80 m² (maximum). Irrespective of the policy on norms and standards as prescribed, in rural South African schools, lack of space is one of the most important hindrances that has an impact on classroom atmosphere. Classroom atmosphere is just as important as the physical resources. As noted by Purkey and Novak (2015), the atmosphere should be inviting, friendly and playful, yet not without structure and discipline. Schools with overcrowded classrooms and without educational centres deny teachers and learners exciting and creative educational opportunities.

While these standards will not be achieved overnight, all stakeholders should at least consider the importance of having practical, safe, clean bathrooms and classroom floors free from sharp and broken objects that can pose danger to learners (SA DoE, 2008). The observation schedule used to gather information on the school environment in this study was developed to cover all areas of the school environment that can have an impact on quality provisioning of Grade R education (see Appendix C1).

3.5.2.2 Outside play area

The outside play area should have a basic maintenance schedule, such as frequent salt in sandpits, weekly safety checks of jungle gyms and swings, and reparation of this outside

equipment at least monthly. According to the norms and standards, there should be 20 toilets for every 135–320 children. The type and size of toilets (unimproved pit latrines) that are still found in many of the poorest provinces in South African schools pose a major risk to the life of children using them on daily basis, especially when there is no supervision.

Environmental care, health, being prepared for emergencies, protecting children and safety consciousness, support and supervision are fundamental components of the daily early childhood programme (Howes, 2010). The need for a clean, neat and hygienic centre with spacious classrooms was also an aspect specified as quality indicators by many teachers and managers during the interviews. The health and physical well-being of children has been found to be more frequently affected by the quality of the physical environment than that of adults (Bullard, 2010).

3.5.2.3 Learning and teaching support material

Learning and teaching support material that includes the use of real objects, natural resources and recyclable materials allows for hands-on activities and should be dominant in Grade R (Kruger, Wessels, Ebrahim & Shaik, 2015; Greyling, 2015). Greyling (2015) highlights the importance of materials that allow learners to discover new things, co-construct meaning and promote thinking. Teachers who are trained and motivated to use “what they have” are able to address the current lack of resources in schools. Expensive support material is not a prerequisite to ensure quality in Grade R. This is confirmed by what one innovative teacher said during the interview about recycling material, which demonstrates how some teachers improvise to ensure that effective teaching takes place without depending on the DoE to supply all teaching aids. The choice of learning and teaching support materials should support skill development of both gross and fine motor skills. The development of representational skills, which takes into account five senses (hearing, sight, smell, touch and taste), will give children an opportunity to count and explore wholes and parts, to support both language and numeracy skills.

3.5.3 Policy

Purkey and Novak (2015) describe policy as a critical “semantic web” that influences the deep-seated structure of any school. All policies should be monitored for proper implementation and should meet the requirements of invitational education by reflecting trust, care, optimism,

respect and intentionality to everyone in the school. In South Africa, the following policies are well considered and provide clear guidance to where and how teaching and learning in Grade R should take place (CAPS, 2011a).

3.5.3.1 Curriculum Assessment Policy Statement (CAPS)

Given the challenges experienced with outcomes-based education (Janks, 2014), the curriculum incorporated into CAPS (DBE, 2011a) is intended to offer structured guidelines on what is being taught, which in this case, is Language, Mathematics and Life Skills. Piaget's (1964) stages of cognitive development (pre-operational stage) suggest that children become actively involved through pretend play rather than by being taught (Essa, 2014). Their active involvement demands that they be taught in the language they know so that they can understand what is being taught; this will determine their success in later literacy (Essa, 2014).

If teachers are well qualified and they receive appropriate training, they will develop work plans neatly, updating them with appropriate teaching and learning support material, guided by CAPS and other child development theories. This will assist them to confidently present content that will support learners to develop their listening, speaking, reading and writing skills (Janks, 2014; DBE, 2011). In Grade R, this includes arts and craft activities, reading and writing activities, indoor and outdoor activities that will develop their character.

Despite these challenges that Grade R teachers are facing, the prescribed South African curriculum (CAPS) provides an outstanding daily programme that serves as a framework to arrange the teaching and learning activities, including time allocation and a variety of activities to accommodate the young learners' needs regarding their concentration span, physical activity and need for rest.

3.5.3.2 White Paper 6

One of the principles of invitational theory is its applicability to multi-cultural diverse backgrounds. Implementation of DoE's White Paper 6 "Special Needs Education: Building an Inclusive Education and Training System" (2001) assists in identifying barriers that may prevent learners from actively participate in learning. Such barriers are an undifferentiated curriculum, use of an unfamiliar language of communication, socio-economic barriers and lack of parental support. The intention is to raise the overall quality of education which includes learners with

differing levels of ability, and to strengthen special schools to use their specialised knowledge. All these barriers can be addressed through policies that are fair, just, defensible and that are implemented in a consistent manner. The National Strategy on Screening, Identification, Assessment and Support (DBE, 2014), can be used for the orientation of support teams to embrace invitational theory and practice that will guide them to strive for an inclusive education system. If schools receive coordinated support, they respond to the needs of learners as a collective by reaching out to farms, rural and historically disadvantaged communities.

The South African Schools Act, 1996, provides learners with a choice to attend any type of school. This includes ordinary public schools or mainstream schools, full-service schools or special schools. However, classes are often overcrowded and without resources, especially in rural areas where there are no inside play areas or educational centres to cater for the needs of learners. This creates a great deal of pressure for the teachers, especially if they have not been adequately trained. Overcrowding, coupled with a lack of sanitation facilities, clearly leads to health hazards. In the study, information relevant to these aspects was gathered through observation of the inside and outside learning environment (see Appendix C), and interviews conducted with both teacher and managers were used for further clarification.

3.5.3.3 The National Integrated ECD Policy for South Africa

The National Integrated ECD Policy for South Africa (DSD ECD Policy, 2015) aims to provide the best quality start in life for children by building an excellent foundation for emotional, social, physical, linguistic and cognitive development. Henning (2012) as cited by Kirsten (2017) indicates that this policy represents a political commitment by the South African government to make ECD quality services for young children universally available. The National Development Plan supports the importance of investing in ECD interventions which are essential for the community and broader society and for the children to develop into lifelong learners. The current study agrees with the challenges as indicated by Wildsmith-Cromarty (2016), Biersteker (2010), and Henning (2012), that Grade R alone is not sufficient for children to form the foundation for their development, especially for children living in poverty in South Africa.

Despite real attempts by government to implement pro-poor policies and drive back poverty, children are still trapped by its structural nature and are likely to remain there. Statistics South Africa's 2015 mid-year population estimates reflect that the following are predominantly

rural, poverty-stricken provinces: Limpopo (76%), the Eastern Cape (75%) and KwaZulu-Natal (67%) as opposed to the Western Cape and Gauteng (35%). This implies that 79, 6% of the children in the rural tribal areas live in poor households, compared to 57% in urban informal and rural formal areas, and 38% in urban formal areas.

3.5.4 Programme

The teaching theory of constructivism used in this study demands that teachers should receive appropriate training programmes imbued with relevant child development theories that will empower them to play a significant role in assisting learners to construct their own knowledge, when engaging in various activities that enhances their socio-emotional, cognitive, physical and linguistic skills. Rather than relying on one programme, one policy, or one process, invitational education addresses the total spirit within the school with the intention to make schools a more exciting, satisfying, and enriching experience for all. Programmes are specifically designed to invite development, and by people who are intentionally inviting with themselves and others (Purkey & Novak, 2015).

3.5.4.1 The daily programme

Programmes that embrace invitational theory and practice can be formal or informal, curricular or extra-curricular. Therefore Grade R programmes should be enriching, stimulating and developmental, working for the benefit of every learner to encourage them to participate actively (Purkey & Novak, 2015). The daily programme is guided by CAPS for Grade R (CAPS, 2011) and it is designed with the intention of maximising learning, allowing the child to interact with significant content in a meaningful way. The curriculum assists teachers to assess and keep records of learner achievement in Languages, Mathematics and Life Skills which help develop the following key areas:

Language development

Kirsten (2017) defines language development as the ability to read and write in order to solve a problem, to learn new information, meet one's own needs and to find pleasure in the written word. According to Vygotsky (1962) language development and cognitive development are highly interrelated. However this development depends on the cultural context and the level

of support the child receives. Even though the literature reflects some of the differences between the Vygotskian and Piagetian theories, they both offer explanations for children's cognitive learning styles and abilities which can help educators to understand and apply a developmentally appropriate approach when teaching learners, hence these theories have been reflected as complementing each other in the theoretical framework of this study. While Piaget suggests that children use both assimilation and accommodation to learn language, Vygotsky focuses on social learning and ZPD, emphasising mediation through mental tools (using pictures to aid memory) through symbolic systems (rehearsal of words to be remembered) and mediation through another human being (Vygotsky, 1978).

Cognitive development

Methods of and approaches to teaching have been greatly influenced by the research of Lev Vygotsky and Jean Piaget (Leichsenring, 2013). Appropriately trained and experienced Mathematics teachers will give young learners an opportunity to interact with their natural environment using five senses, observing, exploring, investigating, experimenting and being creative in problem-solving (Downer, Booren, Lima, Luckner, & Pianta, 2010).

Early childhood skills and abilities develop during interactions between the child and the child's context, interactions with adults, peers, and learning activities or materials in early education classrooms. If the daily programme is stimulating and enriching, it will allow children a wide range of interactions across the school day. A learner's competence or adjustment is best indicated by the nature and quality of these interactions (Vygotsky, 1978).

Children's behaviours are contextually bound, and may be better understood by considering the educational contexts in which they occur. According to Purkey and Novak (2016), intentionality in the invitational theory allow teachers to enhance total environment, this includes structuring of the children's time throughout the pre-school day which plays a major role in how children practice skills and develop. According to Vygotsky and Piaget, this can only be achieved when teachers are equipped with appropriate teaching methods that will help to lay a proper foundation for a successful transition into Grade 1 and future learning.

Socio-emotional development

The daily programme should provide for a good choice of routine and structured free play activities to assist the child to develop life skills. Age-appropriate, durable and safe educational equipment provides opportunities for play which serve as a means for the growth of children's physical, social, cognitive, emotional, social and moral development. Bronfenbrenner's ecological theory (1979) posits that, in order for young learners to construct their own knowledge of their environment, they need other human beings to help them come to an understanding of their world. Views of Bronfenbrenner and invitational education support the Vygotskian (1978) theory on social interaction in the development of cognition. If programmes have to meet required standards according to invitational theory, classroom activities should be organised into social and academic learning experiences to allow learners' active engagement in a stimulating and healthy environment.

Physical development

The physical development takes place inside (fine motor skills) and outside the classroom (gross motor skills) across the three subjects.

3.5.4.2 Observation, assessment and feedback

Early childhood assessment is a tool for gathering and providing educators, parents, and families with critical information about a child's development and growth. In line with Purkey and Novak (2015), assessment of domains (place, process, and programme) should reflect everyday interaction and experiences in a child's normal and familiar setting. Assessment is a critical part of a high-quality early learning programme. In the case of Grade R, this will take place inside and outside the classroom. Bronfenbrenner's multi-dimensional model includes the child's interaction with the immediate and larger environment. The new 2017 guidelines to strengthen the implementation of CAPS General Education and Training Band indicate that assessment in Grade R is completely formative and integrated.

According to Whiteley (2017), integrated assessment which includes pretend play has to be planned, observed and interpreted in order to gather information on tendencies of children at each stage of their intellectual and cognitive development. This view supports the Vygotskian (1967) understanding of the evaluation of learning and it contributes critically to this study in

responding to the research question, namely, how does teaching and learning contribute to the educational experiences of learners? Scholars such as Dore, Smith and Lillard (2015) believe that pretend play has connections to important cognitive and social skills such as symbolic thinking, theory of the mind and counterfactual reasoning.

3.5.5 Processes

Processes are characterised by democratic ethos, continuous capacity-building and collaboration (Purkey & Novak, 2015). There should be thorough consultation and communication on how processes are conducted for effective implementation. The Vygotskian theory of social constructivism (1978) views knowledge as constructed by individuals, groups and society and not simply transferred. According to Vygotsky, ZPD – which implies the range of tasks that a child can perform with the help and guidance of others, but cannot yet perform independently – has two levels: the actual development level which involves a level of independence, and the second level of potential development, where the child can perform tasks with the assistance of a more competent individual. The two levels prepare both the teachers and the child for scaffolding, which will enable the teacher to engage the child in activities that include skills that the child has already mastered as well as attaining some new learning goals.

3.5.5.1 Teaching and learning

South Africa can improve the quality of education in Grade R if all schools in the country can strive to become “inviting”. It is important that all schools should be restructured to begin offering Grade R pedagogy that is intentionally welcoming, where all children will be cordially invited to develop intellectually, socially, physically, psychologically and emotionally (Steyn, 2014), in line with the requirements of CAPS, to help prepare the child for Grade 1.

Shaik and Ebrahim (2015) study how child participation is understood in Grade R through conceptualisation of agency, rooted in a social model. The findings of this study show how important child participation is in a typical Grade R classroom. There should be a constructivist rather than an instructivist emphasis. An earlier study of child participation in Grade R (Shaik, 2014) suggested that, when teachers adopt constructivist approaches to teaching, higher demands are made on the children’s cognitive, creative, imaginative and language skills.

They are given opportunities to share their thoughts and ideas, which in turn lead to higher levels of participation.

By contrast, when teachers adopt more instructivist approaches to teaching, “teacher telling” is prevalent. This approach constrains participation, as the children lack opportunities to interact, co-construct and make their voices heard (Shaik, 2014). In her study of three- and four-year-olds, Ebrahim (2011) demonstrates that children have the capabilities to use influential strategies, which shows that children exercise and discover agency in early childhood centres. In the international arena, Formosinho and Araujo (2011) developed “pedagogy in participation”, which is at the heart of democratic practice and respects the diversity of young children and their families. Pedagogy in participation focuses on education as holistic and inclusive. Another international study carried out in Finnish childcare centres by Venninen et al. (2014), showed how childcare teachers face challenges when inviting child participation. Childcare teachers can work together to meet these challenges, understanding that children are social beings influenced by tradition, with opinions to be valued and acted upon by others.

For quality to be defined and achieved, various approaches to Grade R education must be taken into consideration. However, the existing research on approaches still applies to developed countries, which makes it difficult to implement recommendations presented through various monitoring and evaluation reports based on the current Grade R. This is evidenced by the minimal concrete information that exists about the needs of the sector and its best practices. There is a need to demonstrate that an educational performance advantage for those who attended Grade R persists to later stages of the school career (Van der Berg et al., 2011).

Research worldwide points to the fact that South Africa still has a challenge to attend to the type of approach which embraces diversity, considering the sociocultural contexts of learners and highlighting the importance of play. Therefore, the three approaches, as stated in the literature (see 3.2.2) call for something different that has to be implemented to transform the current education system.

3.5.5.2 Play-based learning

Although teachers have a strong belief in the Piagetian view of learning that the stages of cognitive development (progressing from the concrete to the formal) are important for learners to learn, the present study also supports play-based learning to encourage learners to interact with

concrete stimuli, learning through concrete experience. The observation of the school environment conducted in this study was to ensure that schools have appropriate equipment and that teachers are competent to set up inviting learning environments to ensure quality (see Appendix C).

Play is the main medium of living and developing for all children (Aronstam & Braund, 2015). Teachers should understand the curriculum and have practical guidelines about the implementation of the play-based activities. The conceptual framework of this study provides an explanation why learning through play is such a crucial aspect of learning for a child. According to Piaget, play is a means by which children can develop and refine concepts before they have the ability to think in the abstract. Play meets the physical, intellectual, language, emotional and social needs of children (Lefevre, 2017). However, due to the advancement of technology, the art of play has started to dissolve and has transformed into “playing” through technology. Technology is beginning to invade the art of play and a balance needs to be found. This includes, for example, the use of digital video discs (DVDs) in teaching the young.

Although Piaget’s view of play indicates that play, in and of itself, does not necessarily result in the formation of new cognitive structures, in reality, play is the first way children learn to make sense of the world at a young age (Lefevre, 2017). As children watch adults interact around them, they pick up on slight nuances, from changes in adults’ facial expressions to their tone of voice. They are exploring different roles, learning how things work, and learning to communicate and work with others. These things cannot be taught using a standard curriculum, but have to be developed through the method of play.

Many pre-schools understand the importance of play and have designed their curricula around it, to allow children to have more freedom. Once these basics are learned at a young age, it sets children up for success throughout their schooling and their lives. Many early childhood programmes provide real life props and activities to enrich the children’s play, enabling them to learn various skills through play. These skills are linked to self-control, which is within the social and emotional development that is learned over time through play among other things.

Observation of outdoor facilities and classroom organisation in the study was undertaken with the intention to understand how the school environment contributed to play-based learning. Data collected from interviews with participants was used to gather information about teachers’ understanding of how play-based learning activities can be used to enhance quality.

3.5.5.3 Developmentally appropriate practices (DAPs)

DAP supports the cognitive learning theories, especially the work of Piaget and Vygotsky that later formed the concept of constructivism (Gauvain & Perez, 2015). Principles of DAP view intellectual development from a constructivist, interactive perspective (NAEYC, 2009). This includes cognitive development in a cultural context. NAEYC (2009) defines DAP as ways of teaching that engage learners' interests and are adapted to learners' age, experience, and ability to help them meet challenging and achievable learning goals. The definition is based on the NAEYC statement on DAP (2005) which requires that teachers make decisions daily based on their knowledge of child development, taking into consideration individual learning differences, social and cultural influences. However, DAP does not meet all the criteria of a curriculum model. It was created not as a fully developed curriculum but as a tool to help practitioners and policymakers distinguish between appropriate and inappropriate teaching practices with young learners, regardless of the curriculum approach under review.

Current literature in the area of DAP is theory-driven as it gives recommendations for implementation and theories about what a classroom should look like (Van Tassel-Baska & Stambaugh, 2006; Shipley, 2012). If quality education is to be provided for young learners, classrooms should be DAP-aligned and learners should have hands-on interaction, using relevant materials and activities that lead to different kinds of knowledge (Beaty, 2009; Shipley, 2014). This will also allow educators to choose teaching strategies that best fit learners.

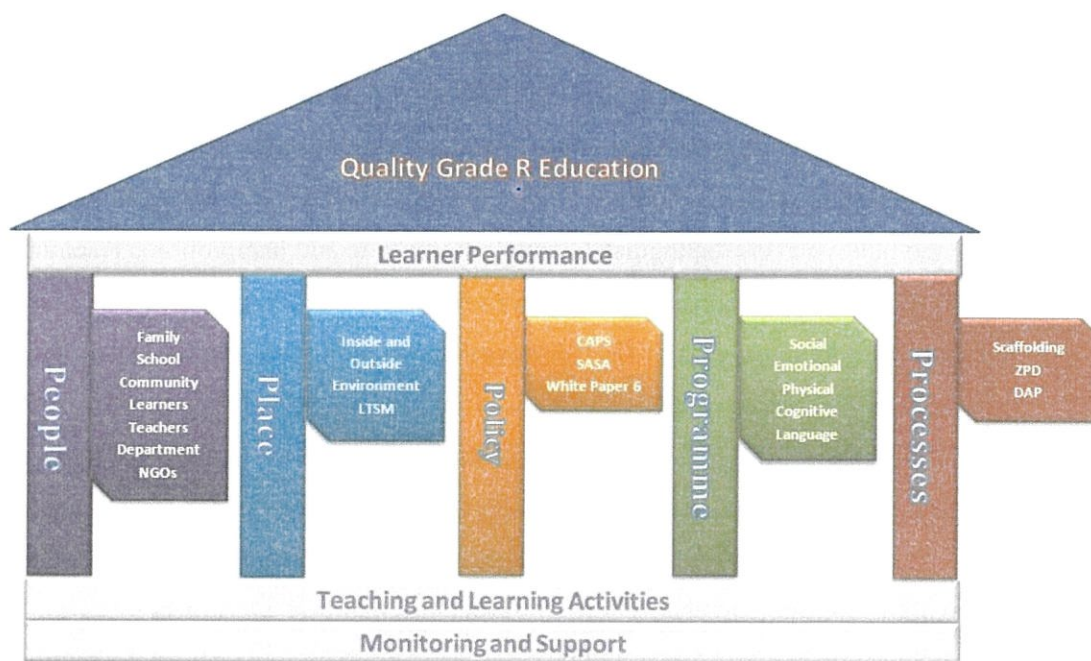
In a study conducted by Morrow (2009) in India (Mumbai) on teachers' perceptions of the benefit of implementing DAP, data was collected from six early childhood teachers who had early childhood degrees and at least two years' experience teaching young learners, and who had the knowledge and ability to use DAP. The participants were able to provide a comprehensive description of their experiences with DAP. Data analysis revealed that teachers' perceptions, collaboration and professional development helped them to learn new ways to incorporate DAP so that learners succeed, want to succeed, and enjoy their success.

3.6 CONCEPTUAL MODEL BASED ON CRITERIA FOR QUALITY

Based on the above theoretical frameworks and requirements for quality, a conceptual model is proposed for Grade R classes in Dwaalboom circuit. This model depicts practical

guidelines and standards that have been developed for quality implementation of curriculum policy for all learners in diverse contexts. Figure 3.3 is an ideographic illustration of the proposed model for quality Grade R education in the South African context. The model is based on the theories reflecting the four pillars on which quality education rests, that respond to the research questions of this study.

Figure 3.3 Conceptual model for quality (Adapted from Purkey & Novak, 2015)



The following criteria have been drawn from the above theories and inform the development of the research instruments as discussed in Chapter 4. They also underpin the themes identified in the content analysis of the four data sets. The following criteria are framed by the “5 Ps” of Invitational theory: people, place, policy, programme and processes and also inform the themes that are uncovered by the analysis.

3.6.1. People

This aspect of quality as identified by the study applies to Grade R teachers, Grade R learner, Departmental officials, community and parents (see 3.4.1). The following criteria identified for the provision of quality in Grade R are classified into categories as follows:

Teacher qualification, knowledge and skills

- Do teachers have the relevant qualifications and experience to teach Grade R?
- Do teachers have skills and knowledge to provide quality education? Do they attend training to develop their skills and knowledge?

Education level of the community and parents

- How do the community and parents assist the school to provide quality education?
- What is the general educational level of the school governing body?

Language

- Are parents and the community aware of the language that the school is using to teach their children?
- Do children understand the instructional language?

3.6.2. Place (context)

Statistics South Africa's 2015 mid-year population estimates reflect the Limpopo province as a predominantly rural and poverty-stricken province, with 79,6% of the children in rural tribal areas living in poor households, compared to 57% in urban informal and rural formal areas, and 38% in urban formal areas (see 3.4.3.3). The following criteria on school location are critical attributes to quality and they include factors that can prohibit or assist learners in accessing the school.

School location

- Where is the school located; how does it impact on access?
- What is the predominant socio-economic context of the region where the school is located?

School infrastructure inside and outside

- What is the size of the school?
- How many Grade R classrooms are there? How are they organised for teaching and learning?
- What safety features are in place?
- Is there a dedicated kitchen? Does the school have a food garden that is properly maintained?
- Are there sufficient toilets for the children in the school; are they appropriate?
- Is there an area for sleeping?
- Are there dedicated play areas?
- Is there appropriate and adequate equipment for gross motor skill development?

3.6.3. Policy

Policies driving teaching and learning have to be thoroughly understood by all role players to ensure proper implementation. This aspect involves the extent to which these policies are implemented and the level of support that teachers are receiving to ensure proper implementation. The following aspects are critical to quality in this area.

- Teachers' understanding of the curriculum: to what extent do teachers understand CAPS curriculum in implementing DAPs?
- Does the policy give benchmarks in terms of learner support (barriers to learning, language delay and qualifications for referrals of learners with special needs)?
- What kind of support do teachers and schools receive from government to ensure proper implementation of these policies in Grade R?

3.6.4. Programme

Programmes implemented in Grade R should address the holistic development of learners. Does the implementation of the daily programmes in the four selected schools address the key child development constructs and do teachers have the knowledge to vary their assessment to cover all the aspects to ensure quality? Does the programme have a balance

between social learning experiences and academic learning experiences that address the key areas of child development as listed below?

- Linguistic development: How do teachers use language in their mediation to encourage learner participation in various activities?
- Cognitive development: Do teachers know how to assess the learners' cognitive skills and how do they provide feedback?
- Socio-emotional skills: How do teachers associate socio-emotional aspects with pretend play to allow for the learners' active participation?
- Physical development: What activities are given to learners to ensure the development of fine and gross motor skills?

3.6.5. Processes

The promotion of teacher–child interaction is a good foundation for learning. The quality of these interactions is also based on how teachers involve children in their own learning. The following are the criteria used to determine if teachers allow children to have agency in the classroom.

- Do teachers understand the difference between an instructivist approach (where teachers tell learners what to do) and a constructivist approach (where they collaborate with them in constructing learning)?
- How do teachers collaborate with children in constructing learning? Do they value their contributions?
- Do teachers treat children with respect? How often do teachers allow children to share thoughts and ideas with others?
- Do teachers understand mediation, scaffolding and guiding learners? To what extent do the teachers mediate learning?
- What do teachers understand by play-based learning? Do they have appropriate space to cater for play-based learning?
- What kinds of activities do they design for play-based learning? Are they varied?
- Do teachers understand how to bring in culturally familiar objects for children's learning?
- How do teachers assess their learners' development? Do they use intergrated assessment?

- How do teachers assess pretend play? Do they understand the value of pretend play? (Do they associate pretend play with the child's social development through social interaction?)
- Do teachers use sufficient and appropriate resources for play-based learning?
- Do teachers understand the connection between appropriate classroom organisation (such as fantasy corners, book corners, arrangement of chairs and tables) and play-based learning?

3.7 SUMMARY

This chapter has presented the theoretical framework of the study leading to the development of the criteria for assessing quality. The following chapter highlights the research methodology and research design.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

This chapter describes the research methodology, which includes the research design and the research context. The purpose of this section is to present the philosophical assumptions underpinning the research. The empirical techniques used are described, including research methods, data collection procedures and data analysis. Data collection was done after obtaining ethical clearance from the Ethics Committee of the North-West University to conduct the research (NWU-00404-16-A9). Permission was sought from the Limpopo DoE, and all participants who signed the consent forms were fully informed about the study.

4.1.1 Philosophical orientation

A paradigm includes the researcher's epistemological, ontological and methodical premises, it effects what should be studied, how research should be done and how the results should be interpreted (Bryman, 2012). According to Creswell and Poth (2018) ontology has multiple realities and reality can be explored and constructed through human action. The intention is to determine how people make sense of their own social world by means of daily routine and conversation, while interacting with others around them. Epistemology indicates that events are understood through mutual process of interpretation that is influenced by interaction with social context (Creswell & Poth, 2018). The study utilises a methodical position of interpretivism to ensure in-depth understanding of the phenomenon, confirmed through interviews and observation as opposed to theory or logic (Du Plooy-Cilliers, Davis & Bezuidenhout, 2014).

The interpretive paradigm was identified as the framework for this study. Information was collected in order to understand the life-world of participants and how they negotiate and make meaning through social and historical constructions (see 1.4.1). The intention was to investigate the impact of Grade R in South Africa, especially in schools within the same circuit, since there is virtually no measurable impact on the poorest three school quintiles, while there are some impacts on the higher quintile schools. Thus, instead of reducing inequalities, Grade R further extends the advantage held by more affluent schools (DBE, 2012). Schools in quintile 1 display

typical attributes of the disadvantaged population, while the schools in quintile 5 exemplify the circumstances of affluent areas (Longueira, 2016).

The researcher's intention was to use information gathered about events, trends, relationships and participants' experiences to assist in responding to the research questions (Wortham, 2010). This information also assisted in exploring theoretical methods and approaches to guide development of the observation schedule, instruments for individual and focus group interviews, as well as a reflexive journal to examine the critical aspects identified in the invitational theory of Purkey and Novak (1994, 2015) which are relevant to every Grade R teacher.

4.1.2 Research questions

4.1.2.1 Primary research question

How can quality be assured for the educational experience of Grade R learners?

4.1.2.2 Sub-questions

- Which framework can be used to best define quality Grade R education for the diverse context of South Africa?
- Which key aspects should be considered as guidelines to improve the provision of quality Grade R education in Limpopo province?

4.1.2.3 Purpose of the study

The main purpose of this study was to examine and explore the environment surrounding Grade R learners and teachers (and principals and selected schools) in order to ascertain how quality ECD provisioning may be provided for Grade R learners in the Limpopo province's Dwaalboom circuit. Relevant data collection strategies were established to gather information and new ideas on real-life experiences and practices in a social setting.

4.2 RESEARCH DESIGN

The research study employs an ethnographic approach using a multiple case study of four schools to collect qualitative data on quality provisioning in Grade R. Multiple sets of data were collected using the following instruments: an environmental scan using an observation schedule;

a reflexive journal; individual interviews with seven Grade R teachers, four school principals and one foundation phase specialist; one focus group instrument for Grade R teachers, and a second focus group for school management teams.

Ethical clearance was obtained from the North-west University and District Director of the Limpopo Department of Education, Waterberg District. However, the researcher was limited to observe teaching and learning inside the classroom during contact time, therefore the epistemological assumption was structured through continuous interviews and focus group meetings with participants. This was agreed upon with the participants and was done at times which were convenient for participants (see Appendices E and H). The multiple data sets were later triangulated for richer analysis and thick description of the participant's experiences (Creswell & Plano Clark, 2011).

As explained under section 1.4.1 of Chapter 1, the design used is a qualitative measure to explore and explain the way people interpret and make sense of their experiences in the world in which they live (Creswell, 2014). According to Wortham (2010), the use of this design allows the researcher to interpret and give a descriptive analysis of the symbolic and contextual meanings that inform the routine practices of everyday life. This, according to Grbich (2013), informs the way in which the context of events and situations has impacted on constructed understandings.

4.2.1 Ethnography

The study utilised ethnographic techniques when fieldwork was undertaken to observe the environment, social interaction of individuals and understanding their culture at the research site over a period of 14 months (Creswell & Creswell, 2017). Ethnographic design can be traced back to the early 1900s when anthropological studies of small remote societies were undertaken. The intention in the current study was to gather a broader picture of issues that critically affect provision of quality education. The collection of the detailed information through interviews and observation of the school environment outside contact time and during breaks provided a vivid holistic insight into people's views and actions concerning the provision of education in Grade R classes specifically in the Dwaalboom circuit. As Hammersley (1985, p. 152) states, "the task [of the ethnographer] was to document the culture, the perspectives and practices of the people with the aim of 'getting inside' the way each group of people sees the world". In the study, this

information was gathered through continuous interaction with Grade R teachers, school management teams and the foundation phase curriculum specialist based on the primary research question:

How can quality be assured for the educational experience of Grade R learners?

The research question was asked to allow the researcher to get a deeper understanding of the enabling inputs and the environmental factors that influence the provision of quality education in Grade R classes. This led to the following sub-questions:

Which framework can be used to best define quality Grade R education for the diverse context of South Africa?

All the research instruments were employed to identify and understand critical aspects of the provisioning of the envisaged quality education. The participants were asked to respond concerning the following areas of interest: elements of the curriculum, teacher development, learning and teaching support material, learning environment, teaching and learning activities, and aspects of child development and infrastructure as guided by the theoretical framework of the study (see Chapter 3). Continuous interaction and thorough observation assisted in responding to the following research sub-question:

What key aspects should be considered as guidelines to improve the provision of quality Grade R education in Limpopo province?

The result of the interpretive analysis and applied methods that describe trends and patterns, provide a test bed for future theories and research studies (see 4.5) Therefore, the product of the applied methodology demands that guidelines for the provision of quality Grade R education be developed to assist Grade R teachers in implementing measures that will improve the provision of education to ensure quality.

4.2.2 Qualitative research method

The use of a qualitative research method offered various alternatives to allow the researcher to collect data that could adequately explain why provision of quality Grade R education in Dwaalboom is an issue for study. According to Grbich (2013), when this method is applied, the researcher seeks patterns of meaning, understanding and definitions of the situation from a range of people to develop a deeper understanding of the topic under study. Fieldwork conducted involved a combination of observation, informal and formal interviews and

participation in community meetings and events. The intention was to explore and describe the real-life experiences of how education is provided in schools with Grade R classes to ensure quality.

The core of ethnographic research is the field study conducted in a natural environment of the group of interest. The number of schools sampled, the number of participants selected for the study, the time allocated for study and the distance travelled from one site to the other were taken into consideration before fieldwork was carried out. The researcher conducted six visits to each of the four schools, 24 in total over a period of 14 months as agreed upon with the participants. All the 24 visits were arranged to take place outside contact time, during breaks and at the participants' convenient time. The background of the study was explained during the first visit, after permission was granted to conduct the study. The second and the third visits entailed the individual interviews with Grade R teachers and included observation of the learning environment (outdoor and inside the classroom, outside contact time). The fourth visits entailed interviews with the four principals of the sampled schools and the foundation phase curriculum specialist. During the fifth visit, the researcher focused on observations of free play outside, observing the interaction between learners and teachers, as well as how the learners interacted among themselves using their local languages (Setswana, English, Afrikaans and isiXhosa). A focus group meeting with representatives of Grade R teachers was also conducted. The last visits were scheduled to conduct interaction based on observation of the school environmental and to have a focus group meeting with the school management teams of the sampled schools and with the foundation phase curriculum specialist. The intention was to close the gaps on other aspects that the researcher identified as important, to enrich data collected during observation and interviews. Table 4.1 details the plan and purpose of the visits conducted, as agreed with the participants.

Table 4.1 Visits and purpose of the visits

VISITS	PARTICIPANTS	PURPOSE
1 (4 visits)	School Management Teams (S1Q1, S2Q1, S3Q5, S4Q5)* and Foundation Phase Specialist.	Explain the background of the study
2 & 3 (8 visits)	Grade R teachers (S1Q1, S2Q1, S3Q5, S4Q5).	Individual interviews and observations – Outdoor and inside the classrooms
4 (4 visits)	Principals and foundation phase curriculum specialist	Individual interviews
5 (4 visits)	Grade R teachers and learners	Observations – Outside free play Focus group meeting
6 (4 visits)	School Management Teams (S1Q1, S2Q1, S3Q5, S4Q5) and the foundation phase specialist	Observation of the school environment – Focus group meeting

* S stands for school; Q stands for quintile

The individual interviews conducted with the seven Grade R teachers and four school principals in this study were regarded as being useful for gathering information based on their experiences of the natural environment. A benefit of face-to-face encounters was that any ambiguities could be explained and clarified. The theoretical framework and the literature covered by the study framed the interview interaction. This enabled the researcher to probe and prompt to have a deeper understanding of aspects of quality that the study wanted to cover (Alshenqeeti, 2014). Discussions were conducted using the language of learning and teaching and the participants' home language to enable the researcher to gather more information. Translation into one of two languages (Setswana or English) was only used for clarity of concepts. Interactive semi-structured interviews which lasted 30 minutes and more were conducted to reach richer and more complete understandings of the issues under study (see Appendix A).

The first focus group interview was formed by four representatives of Grade R teachers from the four sampled schools. The second focus group interview was formed by seven members of the school management teams and the foundation phase specialist. All the members of the focus group were regarded as valuable in gathering data on the basis that they have knowledge about the topic (Nyumba, Wilson, Derrick & Mukherjee, 2018). In these circumstances, teachers had an opportunity to hear from other teachers, and managers also had the opportunity to hear

from other managers, to develop and challenge ideas or suggest new ideas of their own (see Appendices B1 and B2).

4.2.3 Interpretive approach

The study employs an interpretive analysis which is distinctive in its approach to research design, concept formation, data analysis, and standards of assessment (Creswell & Creswell, 2017). According to Scotland (2012), interpretive methodologies are directed at understanding phenomena from an individual perspective and involve an investigation of human interaction as well as their historical and cultural context. Facts gathered from the participants about their environment were used by the researcher to understand the participants' life experiences. This is dependent on the environment in which the research is taking place, recognising that humans are best understood in relation to their environment and their life experiences (Scotland, 2012).

4.3 RESEARCH CONTEXT

4.3.1 Site selection

Dwaalboom circuit was selected from a possible nine circuits in the Waterberg District because the circuit has been underperforming in external assessment examinations (see Table 1.3). The site selection was limited to primary schools offering Grade R and the availability of Grade R teachers in the circuit. Dwaalboom circuit has 13 primary schools. Of these, only six primary schools offer Grade R. Of the six, two primary schools did not give consent to the research, which left four primary schools. These four remaining primary schools consisted of three primary schools with mono-grade Grade R classes, and one primary school with a multi-grade Grade R class; hence the sample included the four primary schools with Grade R classes and teachers in the circuit. These primary schools were from two different quintiles: quintile 1 and quintile 5. The first two primary schools were quintile 1 in rural farm areas, and the other two were quintile 5 in urban areas. These were the two categories of schools investigated in Dwaalboom circuit.

The first school (S1Q1) is a farm school in quintile 1 that uses Setswana as language of learning and teaching, and learners come from local villages and farms in the North West province. The school has one qualified foundation phase teacher, who is appointed to teach Grade R. The class has six Grade R learners and 13 Grade 1 learners, which makes it a multi-

grade class. The school is servicing poor communities and has a low learner enrolment, which impacts on the allocation of teachers according to the post-provisioning model. This situation compelled the school to implement multi-grade teaching (see Appendix C). Grade R and Grade 1 learners are accommodated in one class. This challenge of multi-grade classes is prevalent in the district, especially in the Dwaalboom circuit. The second school (S2Q1) is in quintile 1 and caters for learners coming from local townships and villages of diverse linguistic backgrounds (isiXhosa and Setswana). The school has three Grade R teachers. Two of the three teachers are qualified, while one is unqualified. One classroom has two teachers with 80 Grade R learners and another classroom has one teacher with 40 Grade R learners. The third school (S3Q5) is in quintile 5 and caters for learners whose home language is either English or Afrikaans. Learners come from local mining towns and farms. The school has two qualified Grade R teachers and 25 Grade R learners in each class. The fourth school (S4Q5) is a quintile 5 school and caters for learners whose parents are working in the local farms and mining towns. Learners come from diverse linguistic backgrounds (isiXhosa, English and Setswana). The school has two Grade R teachers; one of the teacher is not appropriately qualified to teach Grade R and did not give consent. These two teachers are employed by the school governing body. Each classroom has 15 Grade R learners.

The approval given by the Limpopo DoE in the Waterberg District, included observation of the site and meeting with participants outside contact time, at the participants' convenient time. However, the approval excluded observation of teaching and learning in classrooms. This limitation was minimised by quality observations of the school environment conducted using the observation schedule which covered the inside and outside learning environment (Appendix C) and by conducting face-to-face interviews with participants at different levels (teachers, managers and monitors). Interviews that took place during the day at break times and after school, as well as focus group discussions, assisted in detailing how participants interact with learners on a daily basis. This continuous interaction with participants allowed the researcher to understand daily routines and practices during meal times and morning play time.

4.3.2 Participants selection

According to Creswell and Plano Clark (2011), a purposive sampling approach is employed to select participants with characteristics and information sought for the study. To provide an in-depth understanding of how education should be provided to ensure quality, the study targets Grade R teachers, school management teams and the foundation phase specialists who, according to the researcher, have particular expertise. This expertise is critical during the exploratory phase of qualitative research.

Seven Grade R teachers, seven members of the school management teams and one curriculum specialist gave consent to be part of the study. The participants were identified because of the different roles they play in the provision of teaching and learning that is taking place on a daily basis at the four sampled schools. These individuals made up a group of experienced teachers and managers. The rationale was to step into the world of the participants and have an understanding of how they attach meaning to the provision of education in Grade R.

4.4 DATA COLLECTION

Ethnography uses a multiple technique approach in data collection (Marshall & Rossman, 2014), hence, the following methods were used for gathering information: observation of the school environment, interviews, focus group interviews and reflexive notes. Data was assessed and captured in relation to aspects of quality arising from invitational theory, and in terms of the theoretical perspectives of Bronfenbrenner, Vygotsky and Piaget. Data collected was checked on a continuous basis; areas which required follow-ups were identified and active questioning was done by engaging participants through interviews.

4.4.1 Data set 1: Environmental scan

The environment scan was used to compensate for the limitation of not observing teaching and learning in practice. The environment scan is critical as it creates an affordance for quality to take place. The researcher as a primary tool for data collection, took part as a participant observer and an investigator who “lives with and lives like” those who are studied, usually for a year and more to observe cultural patterns and values as they interact on a daily basis (Hammersley, 2018), thus providing insight into the first research question:

How can quality be assured for the educational experience of Grade R learners?

Observation of the school environment was conducted. The researcher used an observation schedule (see Appendix C) which focused on the physical and material aspects relevant to the learning environment (Merriam, 2009). Items in the observation schedule covered both inside and outside school environments. Comments and notes made in the observation schedule assisted the researcher in reflecting on critical aspects of the study that needed clarity (see 1.5.1).

During this study, observation was regarded as the most reliable tool to gather information and to correct preconceived ideas. The researcher was able to observe the school environment and how the children were supervised during breaks when they were having their meals. This also included the toilet routine and supervision of learners during play time and when they left the school premises. The observation schedule focused on the landscape but also included remarks made by participants as they were responding to different items (see Appendix C). Observation of peer interaction during breaks assisted the researcher to assess factors that were important to the study, such as language use, safety and resources for play (see Appendix C). The results of the study assist in adding value to the development of guidelines to enhance quality in Grade R.

4.4.2 Data set 2: Individual interviews

This data set was created from questions based on criteria for quality which lead to themes and sub-components of the content analysis. Semi-structured individual interviews were conducted with seven Grade R teachers, four school principals and one foundation phase specialist. This allowed the researcher to understand the meaning that everyday teaching and learning activities hold for Grade R teachers in the different sampled schools.

Interviews conducted provided information regarding all three research questions (see Appendices A and B). Questions covered key points relevant to the study guided by the five identified domains (Purkey & Novak, 2015). Follow-up questions were asked during the interview to ensure depth and detail (see Appendices A and B). Observations were made during the interviews of how participants responded to different questions so as to maintain rapport and control of the interview process. Questions covered elements of the curriculum, teacher development, learning and teaching support material, learning environment, teaching and learning activities, aspects of child development and infrastructure focusing on the following key

aspects of quality: people, place, policy, programme, and processes (Purkey & Novak, 2015). The same set of questions was directed to each of the teachers during the interview and managers also received similar questions from a management perspective (see Appendices A and B).

The interactions with individual participants were recorded. The recordings were later transcribed to text to assist the researcher to prepare information for data analysis (see Appendices A and B). These interviews were conducted in English as approved by the ethics committee. Translation of concepts to the other languages was only offered to assist participants where participants requested the researcher to explain in their home language. This also helped to avoid instances of participants feeling uncomfortable during the interviews.

4.4.3 Data set 3: Focus group interviews

The first focus group interview was conducted with four Grade R teachers (see Appendix B1) and the second focus group interview was conducted with seven members of the school management teams (four school principals, one deputy principal and two departmental heads) and the foundation phase specialist (see Appendix B2). The composition of these focus groups was regarded as the most appropriate because it was a proper representation of four schools with Grade R classes in the circuit forming a team of school managers in Dwaalboom circuit. Questions in the focus group instruments were based on the same aspects of quality informed by the theories identified in the theoretical framework of the study. The focus group interviews were recorded and later transcribed to text.

The focus group interviews were conducted two weeks after the individual interviews and finally after two months to close the gaps on some of the issues that needed more clarity. This was done at a convenient time for the participants and the researcher owing to constraints relating to operational costs and time allocated for the study (outside contact time). The synergetic interaction allowed for analysis and detailed discussion about the participants' opinions, feelings and knowledge concerning how teaching and learning in Grade R took place, and especially concerning their views on what ECD provisioning means in their particular contexts (Lehmann-Willenbrock, Meyer, Kauffeld, Neininger & Henschel, 2011).

4.4.4 Data set 4: Reflexive journal

The researcher used a reflexive journal (see Appendix C2) to interpret and reflect on what was seen during the course of the study. According to Ybema, Yanow, Wels and Kamsteeg (2010), this involves the researcher's experiences and interpretation of participants' actions, opinions, emotions and plans during the research process. Agreements were made about the plans of visits and interviews.

4.5 DATA ANALYSIS

Qualitative research is an interpretive study of a specified phenomenon or problem, which aims to explore and to discover issues about the problem on hand (Austin & Sutton, 2014). Data was collected in this study to gain an understanding of how the four selected schools approach quality provisioning for Grade R. The information recorded is true and results from actual interactions of how participants give meaning to their environment. According to Austin and Sutton (2015), qualitative research requires the researcher to be central to the analysis of data. Data collected using the observation schedule, interviews and a reflexive journal was interpreted and important aspects from transcripts were highlighted and analysed based on the criteria for quality, namely the codes formed from the "5 Ps". The codes were then brought together to form categories guided by the relevant theories to conceptualise the data (see 1.6). Texts (spoken words) from transcripts and visual material were used as the primary basis for organising and reporting the findings (see Chapter 5).

4.5.1 Trustworthiness

Trustworthiness in qualitative research supports the argument that the inquiry's findings are "worth paying attention to". According to Cope (2014), trustworthiness includes consistency of the researcher's findings across the research methods. Trustworthiness proposes credibility, transferability, dependability and conformability (see Chapter 1). This implies that every visit that the researcher made had a purpose and that data collected was sourced from the responses of all participants identified as being relevant to the study to avoid researcher's bias (see Table 4.1).

4.5.2 Credibility

According to Polit and Beck (2012), credibility refers to confidence that the data accurately addresses the intended focus of the research. The researcher assessed credibility by consulting interview scripts from participants and preliminary visits to individual schools (Schreier, 2012). The main reason is to establish whether the findings made by the researcher are accurate, believable, correct and true. Credibility was obtained by purposive sampling of individuals to serve as informants. Triangulation was used to ensure accuracy and all sampled participants were relevant to the context. What is important is the richness of data collected rather than the amount of data collected, hence teachers, school managers, and a foundation phase curriculum specialist were sampled for this study.

4.5.3 Transferability

Transferability (Polit & Beck, 2012; Schreier, 2012) refers to the extent to which the researcher's findings from one study can be applied to other situations. It is the "thick description" of details which allows transferability to other contexts. The results of the study using data collected from 15 participants (seven Grade R teachers, seven members of the school management teams and one foundation phase specialist) are applicable to Grade R classes at schools (see 1.6.1) and at ECD centres. Information on data collection was discussed with participants before the study was conducted, describing why and how interviews would be planned (see Appendix D). Data collected from Grade R teachers and school managers in the circuit can also assist other schools in other provinces and districts experiencing the same challenge of providing quality in Grade R in community-based centres and independent schools.

4.5.4 Conformability

Findings of the research were reached by interpreting and analysing data collected from multiple setting through triangulation. Conformability entails reduction of the effect of investigator bias, and admission of the researcher's beliefs and assumptions, such as the researcher's preferences. The researcher's position as the most senior person in the area did not limit her role as a researcher. Participants were treated equally and the research questions were specific to the study. The sample covered a broader population of schools across the quintiles and in different areas within the circuit to gather more information. This was done to limit the

researcher's preferences and not to focus on schools convenient to the researcher in terms of distance or time, which would be disregarding the purpose of the study.

Consistency in data collection reflects the reliability and dependability of the results. In this study, data collection was planned from multiple sources and the visits conducted to schools were done at different times targeting various aspects of the study to ensure consistency. Ideas and experiences of participants captured during fieldwork were used to reduce investigator bias. This helped the researcher to recognise shortcomings in the study methods and their potential effects. The integrity of research results may be scrutinised owing to the in-depth description of details, to allow colleagues in the field of study to agree or disagree with the conclusions drawn from the data obtained. The guide for the individual interviews was adapted to serve the purpose of the focus group interviews. Consistency entails how the study adheres to its principles and what the researcher did to ensure conformability.

4.6 STUDY LIMITATIONS AND ALTERNATIVES

During the research process there were shortcomings. These shortcomings affected the way the research process was planned and alternative measures were put in place to address them. Of the eight Grade R teachers who were selected to participate in the study, only one teacher did not give consent. This teacher, appointed by the school governing body, did not take part in the study (see 4.8). Seven teachers from the four selected schools were willing to take part in the study voluntarily and they signed the consent forms.

The approval given by the Limpopo DoE in the Waterberg District excluded permission to observe teaching and learning in classrooms (see 5.6). Had this permission been obtained, the researcher could have collected reliable information to enrich data in addressing the primary research question: *How should teaching and learning take place in Grade R classes to assure quality?* This was addressed by restructuring the research question as: *How can quality be assured for the educational experience of Grade R learners?* The researcher attempted to compensate for this limitation through detailed questions in her interviews and focus groups and detailed observations of the environment and people's interactions.

4.7 RESEARCHER'S ROLE

The researcher remains a vital tool when a study is conducted. There were various roles played by the researcher from the beginning to the end of the scheduled period of this study. These include her role as participant observer, which allowed the researcher enough time to collect qualitative data through observation and interviews. For the study to be properly conducted, after site selection, permission was sought to conduct the research and to obtain consent from selected schools and participants. This included announcing and explaining the purposes and intentions of the study to the participants, in addition to investigating issues that would assist in gathering information based on environmental factors that, according to the study, influence the provision of quality Grade R education in the Dwaalboom circuit of Limpopo province.

The researcher participated through reflection and analysis as an ethnographer by describing and interpreting the subject of the study. Observation was planned and conducted to determine the researcher's overall goals as an ethnographer. During the research process, interesting landscape features and daily activities were noticed. Significant differences were noted between the two categories (quintiles) of schools; these were observed particularly before contact time with learners, and during play and break times. Evidence of support given at various schools also differed significantly. Learner behaviour outside the classroom was critical to the study, and indicative of the impact of infrastructural challenges that ultimately have a negative bearing on the culture of learning and teaching.

The researcher participated for a period of more than a year, observing the activities of the school cultures studied. This included the use of language and how participants interacted using facilities outside the classrooms. The researcher's role as a departmental official in the area was significant, in that the support she offered schools assisted her in building a good rapport to ensure curriculum delivery. The good relationship was based on regular interaction with the communities, parents and school management. Even though it was not easy for some teachers to separate the researcher from their own work environment, the limitation of not observing them during contact time assisted the researcher in allowing her to interact with teachers in a relaxed environment outside contact time. The use of open-ended questions helped the teachers to be more relevant and focused.

4.8 ETHICAL CONSIDERATIONS

Ethical clearance was received (reference NWU-00404-16-A9) from the university (see Appendix F). The letter of clearance requesting written permission to conduct the study before data collection was received from the university (see Appendix C5). Permission to access the schools was obtained from the Limpopo Provincial Head of DoE, from the Waterberg District Director and from principals of sampled schools (see Appendix C6). The study was explained to all participants. Strict anonymity and confidentiality was maintained.

The following ethical aspects were considered when conducting this research study:

- Participants were never coerced into participating (Rubin & Babbie, 2005, p. 7).
- Participants received full disclosure of the nature of study.
- Participants were respected as people capable of making informed decisions.
- Consent to conduct the research was obtained in writing from the ethics committee (NW-00404-16-A9) and from the Limpopo DoE in the Waterberg District.
- The researcher provided an appropriate account of the information.
- Participants gave consent and signed informed consent forms (Appendix D).
- Participants remained anonymous.
- Participants could withdraw at any time if they felt their rights were not protected.
- The information was kept safely out of reach of unauthorised persons.

As stated, permission was granted on condition that the research was conducted outside teaching and learning time, to protect learners' contact time. Regardless of this limitation, the researcher had the advantage of familiarity with the study area over a period of more than four years. This enabled easy access to the sites during break times and after school hours. Only one of two Grade R teachers who gave consent was interviewed (S4Q5) and one participant (foundation phase curriculum specialist) was not available during the scheduled interview and was immediately replaced by a colleague in the same position (foundation phase curriculum specialist from the same district).

4.9 SUMMARY

The research methodology employed in this study provides an opportunity to test the findings in order to evaluate the theories applied in the study. This can lead to a detailed

understanding of how real-life social interactions can build a cultural pattern into a setting. The methodology applied will inspire future research to perfect and encourage new ways of developing better frameworks for the research on issues of educational quality.

CHAPTER 5: PRESENTATION OF DATA AND ANALYSIS OF FINDINGS

5.1 INTRODUCTION

This chapter focuses on the presentation of data and analysis of the findings which also assesses the extent to which the research questions were addressed. Implications of the findings are presented using information drawn from multiple data sets based on the themes and the identified criteria for quality (see 3.5). Finally, conclusions are drawn based on the existing literature and the theoretical framework of the study as reviewed in Chapter 3. The following is a map of the four selected schools in Dwaalboom circuit, Limpopo province, showing where they are located in relation to each other.

Figure 5.1 Map of selected schools in Dwaalboom circuit



This map represents the location of the four selected schools in Dwaalboom circuit. S1Q1 is in the Dwaalboom area of the Limpopo province near the villages that border the North West province. S2Q1 is in the old farm residential area, three kilometres from S4Q5 and 26 kilometres from villages that border the North West province. These schools are quintile 1 schools, 55 kilometres apart and are without resources. The two schools service learners from poor economic backgrounds whose parents are poor and not literate.

S3Q5 and S4Q5 are schools situated in small local mining towns. They are also 55 kilometres apart. S3Q5 is in the Koedoeskop area close to Mamba mine and is situated along the Warmbath and Thabazimbi road. S4Q5 is in Northam town, also along the Warmbath road and is 82 kilometres from Rustenburg town and 49 kilometres from Thabazimbi town. The two schools are quintile 5 schools and are well resourced. They service learners whose parents are literate and working in the local mining towns. The schools thus share the same district but are quite far from each other.

The following section focuses on the key aspects of quality as identified in Chapter 3 of the study. The findings have this been arranged under each of the “5 Ps” of invitational theory. The various aspects of quality have been categorised into themes that are relevant to answering the primary research questions and the sub-questions.

5.2 PLACE (CONTEXT)

The following criteria involve context and are critical attributes which can influence quality. These criteria should be read in conjunction with data set 3 (see 4.4.1). The criteria involve the inside school environment, outside school environment and material resources. These aspects include the following indicators of quality in Grade R; fencing, classroom size and classroom arrangement, availability of resources, safety, hygiene, nutrition and access. According to Merriam (2009), they also involve physical and material aspects relevant to the learning environment which affect quality (see 4.2.3).

5.2.1 Inside school environment and free play

The observation schedule (data set 3) was the main instrument used by the researcher to collect information to assess whether the inside school environment of each school is safe, nurturing and clean to support quality teaching and learning (Appendix C). Individual interviews (data set 1 and data set 2) were undertaken to ensure the validity and to increase the reliability of the data collected. Reflection was also used to apply the researcher’s personal responses to what was observed. All three instruments were used by the researcher to deal with this aspect. The following are the findings on the four schools from data collected to assess the teachers’ understandings of a caring, clean and safe learning environment.

S1Q1

The Grade R classroom at S1Q1 is small and overcrowded. Even though the interviewed S1Q1 participants showed an understanding of what it means to provide a caring, clean and safe learning space, the school environment was not entirely conducive to quality, or free from dangerous items that can harm the children. The classroom walls do not display enough pictures and teaching aids to make the classroom colourful and print-rich. Even though the two tables and few chairs are appropriate to be used as classroom furniture for Grade R learners, they are cramped in a small space next to the wall, which does not allow any space for free play. Findings from individual interviews confirmed the concerns that the participants raised about a small, unsafe, overcrowded classroom at their school. The findings also correlate with the findings from the environmental scan. According to the school principal (M1), “the allocated budget is not enough to cover for the maintenance of the school building”.

Picture 5.1 A multi-grade class at S1Q1

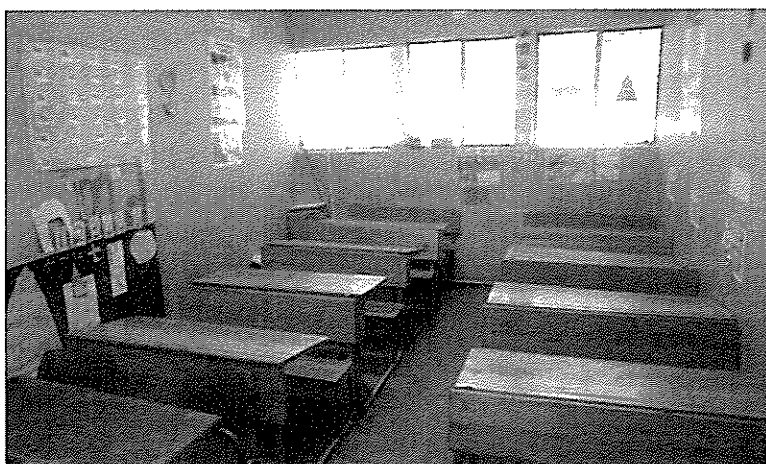


The above classroom picture shows an overcrowded and unsafe Grade R multi-grade classroom at S1Q1. The floor is full of holes which creates an uneven surface.

S2Q1

Two Grade R classrooms at S2Q1 were formerly used as a bathroom and were later renovated and used to address the challenge of 80 overcrowded learners who were accommodated in one Grade R class (see 4.3.1). During the interviews, one of the three Grade R teachers explained that her classroom was an old computer room and was not suitable or stimulating to children because it housed old unused computers. Teachers also complained about the classrooms being too small, without enough space for the teachers to engage the learners in various activities. Even though the classrooms appeared clean and safe with a few shapes and word walls, participants raised serious concerns about overcrowding and shortage of developmentally appropriate furniture. There is no space for theme areas or free play. S2Q1 Grade R classroom picture below confirms the concerns that were raised during the interviews, which correlate with the findings from the environmental scan.

Picture 5.2 A Grade R classroom at S2Q1

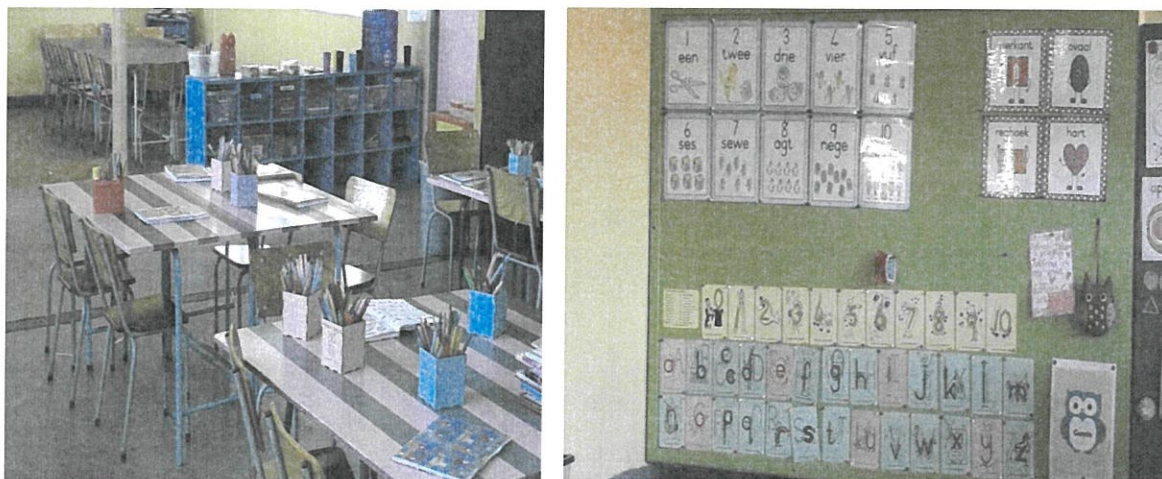


The above picture shows one of the two Grade R classes at S2Q1 that were renovated to address overcrowding challenges in the school, with the classroom furniture that is not developmentally appropriate for Grade R learners. In Grade R, learners are best suited to small group learning at individual tables, not seated in rows all facing forward.

S3Q5

There are the two Grade R classrooms at S3Q5. The layout of the classroom is well organised with enough educational toys. According to the National Integration ECD policy (2015), this includes adequate space for all children to play inside with clean and safe play equipment. The S3Q5 classroom picture below confirms the findings from the environmental scan that correlated with what the participants said during the interviews with regard to a caring, clean, safe learning space that is conducive to quality teaching and learning in Grade R. From the observation conducted, learners' chairs and tables are developmentally appropriate and properly arranged to engage learners in group work. There is a carpet for the morning ring, and there are themed areas for various activities. The classroom is also colourful with pictures and teaching aids. The state of S3Q5 Grade R classroom picture below complies with Grade R policy and further shows the correlation with the findings from individual and focus group interviews and the environmental scan.

Picture 5.3 A Grade R classroom at S3Q5



The pictures above show one of the two Grade R classrooms at S3Q5 that are clean, safe and conducive to quality teaching and learning with furniture that is developmentally appropriate for all the learners.

S4Q5

There are two Grade R classrooms at S4Q5. The two classrooms are clean and safe and have enough resources for all the learners. During individual interviews, S4Q5 participants said that learners and teachers should be proud of their classrooms. Classes and equipment should be taken care of and must be in a good workable condition. From the observation conducted, learners' chairs and tables are appropriate and properly arranged to engage learners in group work and the classroom is also colourful with pictures and teaching aids. The layout of the classroom is well organised. Even though the space is not adequate for inside free play, the environment is safe and clean with play equipment and a carpet for the morning ring activity. The S4Q5 Grade R classroom pictures below confirm the findings from the interviews that correlate with the environmental scan.

Picture 5.4 A Grade R classroom at S4Q5



Invitational theory (Purkey & Novak, 1996) and the National Integrated ECD Policy prioritise a clean, spacious and safe environment because of its impacts on health, discipline and children's perception of their well-being. While these standards cannot be achieved overnight, especially in rural areas, the National Integrated ECD policy (DSD ECD, 2015) demands that all stakeholders should consider practical, safe, clean environments for learners. Classroom floors should be clean, free from holes, and from sharp and broken objects that can pose danger to learners.

It appears that S1Q1 is not ready to accommodate Grade R classes because Grade R and Grade 1 learners are in one class, which is, according to the literature, the largest prohibitive factor to high quality education (Kotze, 2015). The classroom arrangement and environment at S1Q1 and S2Q1 is not stimulating. Even though the classrooms at S2Q1 are clean and safe, they do not conform to the minimum uniform norms and standards for public school infrastructure prescribed by national regulations (specifying space of 2 to 2,6 m², giving a total classroom size of 80 m² including the storage room and inside play area). Classroom furniture in two schools (S1Q1 and S2Q1) is not appropriate for Grade R learners. Even though the classroom size at S4Q5 is insufficient for all learners, the classrooms in S3Q5 and S4Q5 are clean, safe, print-rich and stimulating for quality teaching and learning to take place. The state of the inside learning environment at S3Q5 complies with the criteria for quality as specified in the Grade R policy in comparison to the other three selected schools in the same circuit.

These findings show that the state of Grade R classrooms in the four selected schools varies. The differences between the two categories of quintiles are even more glaring: quintile 5 Grade R classes are clean, safe, print-rich and have a stimulating environment for quality teaching and learning, compared to Grade R classes in quintile 1 schools in the same circuit. If the DoE is serious about access and quality in schools, all schools in the circuit (quintiles 1 and 5) should have the same resources and all schools should be supported to ensure compliance with the national regulations and guidelines relating to minimum uniform norms and standards for public school infrastructure (DBE, 2013).

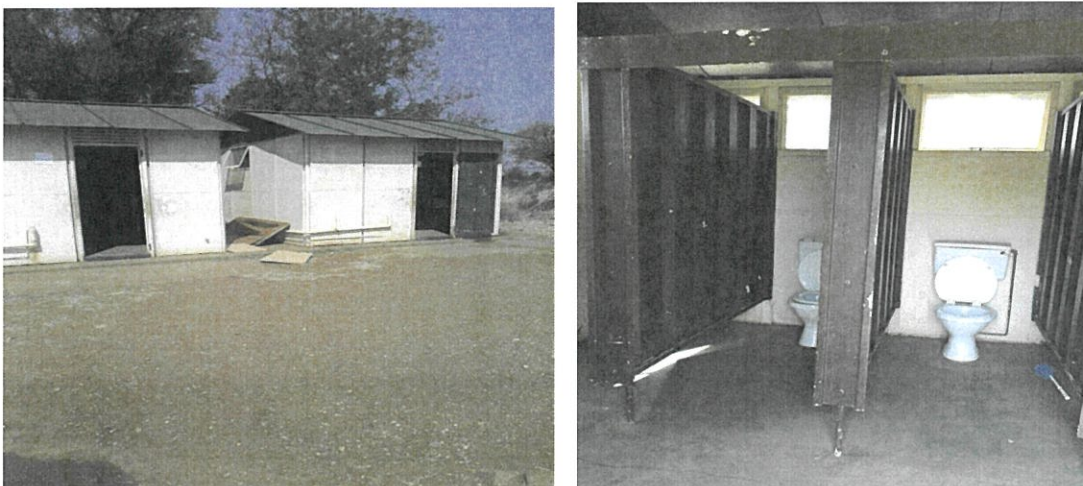
5.2.2 Outside school environment and play area

Quality learning and teaching cannot take place in an environment that does not comply with safety and security precautions. This includes quality and safety of outdoor equipment and play spaces under the supervision of teachers. Outdoor spaces must have developmentally appropriate equipment that addresses all aspects of child development. Outdoor spaces can only be used effectively when they are regularly maintained to ensure that they are safe and suitable for children to play in (see 2.4.2).

S1Q1

The outside learning environment at S1Q1 covers the school kitchen, toilets and outside play area. The school does not have a fence and is surrounded by trees and long grass that can expose learners to poisonous snakes and dangerous stray animals because it is located in a rural farm area. Visitors and strangers can access the school from the road with ease. The toilet building has four adult-sized toilet seats used by both teachers and learners, including Grade R learners. Three open toilet seats are for learners and one open toilet seat is partitioned for use by teachers in the same building. These two toilet areas are situated behind one large door, but do not allow for any privacy inside. The four toilets remain open for teachers, including the school principal and the 76 young learners. This implies that learners have to make way for the teachers and the teachers have to make way for the principal when they have to use the toilets. The challenges of human resource provisioning at the school make it difficult to appoint cleaning staff to keep these toilets clean and hygienic. Learners are cleaning their own toilets and there are no supervisors to assist or monitor the learners when they access the toilets. This situation, according to the literature, can have negative effects on the health, both physical and psychological, of the learners (Bullard, 2010). The findings from the individual interviews on the state and size of toilets correlates with the environmental scan (see Appendix C). The pictures below show the state and size of toilets at S1Q1.

Picture 5.5 Toilet building at S1Q1



Next to the toilet building is the learners' outside play area. According to ECD policy (see 2.4.2) the premises, equipment and outside play areas must be spacious, clean and safe for young children, and all reasonable precautions must be taken to protect children from physical or social threats. The play area has one swing, one slide and a few tyres as play equipment. Grade R learners do not have their own designated play area, as all 76 learners use the play equipment which is clearly insufficient to cater for all learners in the school. Trees surrounding the play area help to provide shade for learners during play time, but they can also hide dangerous animals and poisonous snakes which are frequently seen in the area.

The picture of the outside environment shows the equipment that is used by all learners during free play and break time. The play area is not designated for Grade R learners and all learners can use the equipment. The picture below reflects findings from the S1Q1 that correlate with the environmental scan on the state of play equipment at the school. This picture shows outside play equipment in an open play area not designated for Grade R. The equipment consists of used tyres, a see-saw and a slide (see Appendix C).

Picture 5.6 Outside play equipment at S1Q1



The kitchen building of S1Q1 is situated between the toilet building and the play area. The kitchen building appears to be old and unsuitable for storing food and for the preparation of learners' meals. Even though participants indicated that the rubbish dump

is far from the school, next to the kitchen is an old tank used by mother helpers to store the leftovers and rubbish from the kitchen. This contributes to the low standard of hygiene. The following picture shows the kitchen building, which agrees with the findings from the environmental scan. The picture is of an old dilapidated building that is used daily by mother helpers for the preparation of learners' meals.

Picture 5.7 National School Nutrition Programme (NSNP) kitchen at S1Q1



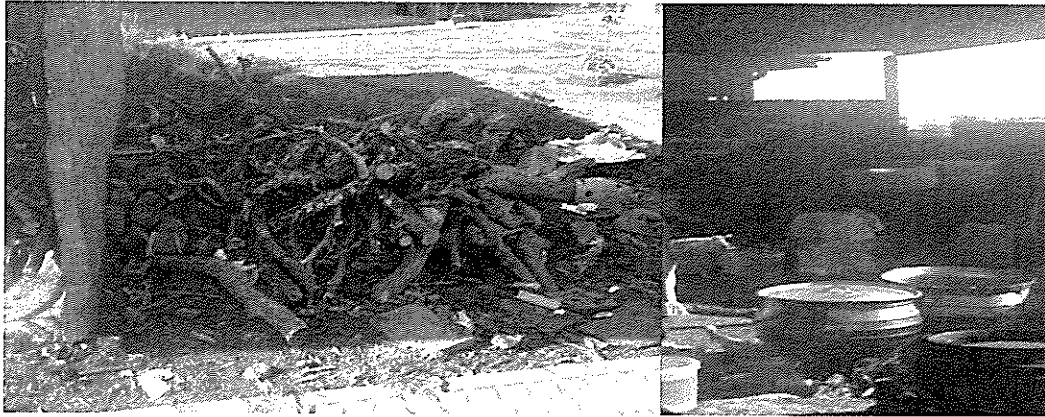
S2Q1

The outside learning environment at S2Q1 covers the school kitchen, toilets and outside play area. The school has a fence that separates it from the local residential area. The open play area that is used by the school is inside the school yard between the classes, without equipment. Next to the classroom building is a shack that serves as a cooking area for mother helpers. They are not using gas stoves, but the school provides firewood for mother helpers to cook meals for the learners and cooking utensils are bought from the school's national school nutrition programme budget. The school tries to keep the cooking area clean but food is exposed to dust, and during rainy seasons the area becomes messy. Food is served in the Grade R classes and Grade R teachers assist with feeding during breaks.

The school principal advised the researcher during her observational visits that the DoE has plans to renovate the whole school and the kitchen building and dining hall are part of these planned renovations. The environmental scan confirms the findings.

The pictures of the shelter provided below show firewood and cooking utensils in an area used by mother helpers to prepare meals for learners.

Picture 5.8 Area where meals are prepared at S2Q1



Grade R learners in S2Q1 have their own toilets, separate from the toilet building of older learners. The school is assisted by parents who are receiving a stipend to care for and ensure that the learners are safe. The DoE has appointed a general assistant who cleans the school toilets. In this school, toilets for Grade R learners are clean, safe and appropriate to the young learners. However, only four toilets seats and three urinals are available, which is an inadequate number for 120 Grade R learners in the school.

Pictures 5.9 Toilet buildings at S2Q1



The above picture shows the state of Grade R learners' toilets. The toilets are lowered, clean and safe to be accessed by all Grade R learners. These toilets are compliant with the Policy.

Inside the school yard is an open space without equipment. This open space is used by teachers and learners for outside free-play activities. Usually the learners play together in the morning, during break and after school without supervision. According to the teachers, they use this open area between the classrooms mostly for Life Skills. This open space does not meet the Grade R policy requirements and therefore does not qualify as a Grade R outside play area.

What participants said during the interview about outdoor equipment was not evident when observation of the school environment was conducted. According to the teachers, open play environment includes sandpits and jungle gyms which were not there when observation of the school environment was conducted. Interviews conducted with the school principal indicated that there are plans by the DoE to renovate the school and to provide the outdoor equipment. What the teachers said about the available outdoor equipment could not be confirmed during observation, and this indicates that S2Q1 teachers only knew about this equipment from what they had learned about the requirements for Grade R outdoor areas. There was no outdoor equipment in the play area.

S3Q5

The outside learning environment at S3Q5 covers the school toilets and outside play area. The school is not taking part in the National School Nutrition Programme (NSNP), therefore it does not have a kitchen like S1Q1 and S2Q1 schools that feed learners. The school is properly fenced, safe and the buildings are in a good state. The outside play area is clean with appropriate equipment in a designated area for Grade R. The play area is inside the school yard behind the two Grade R classes. The play area is appropriate for child development activities and it has equipment that is in a good state and well maintained.

The pictures below show the outside play area in a designated area at S3Q5, which has swings, slides and jungle gyms, and outdoor equipment that is well maintained and complies with the criteria for quality.

Pictures 5.10 Outside play area at S3Q5



The learners' toilets are next to the Grade R classrooms and are only used by the Grade R learners. They are clean and appropriate to their age. According to what the participants said and what was observed by the researcher during break times, there is proper supervision to ensure the safety of all learners even when they go to the toilets. There is a general assistant employed for the supervision of learners' toilets. She ensures that learners wash their hands before they go back to their classes. There are four hand-washing basins for all the 50 Grade R learners, three urinals and four seats of small toilets for boys and six seats for girls.

The pictures below show the learners' hand-washing basins, urinals, toilet seats that are at an appropriate height and suitable for Grade R learners.

Pictures 5.11 Toilet building at S3Q5



S4Q5

The outside learning environment at S4Q5 covers the school toilets and outside play area. The school is not taking part in the NSNP but the school has a kitchen and a dining hall. The school is accommodating hostel learners and the bathrooms are inside the hostel buildings. The bathroom is cleaned by the hostel staff and it is well maintained. The school is properly fenced, clean, safe and the buildings are in a good state. The outside play area is clean with appropriate equipment in a designated area for Grade R. The play area is inside the school yard in front of the two Grade R classes. The equipment in the play area is in a good state and well maintained. Monkey trix jungle gym is the only outdoor equipment on the play area and is not sufficient for the 15 Grade R learners in each class. The rubbish dump is next to the fence, far from the school building and it can be a hazard to both the learners and the local community because it is open.

The pictures below show the school outside play area with the equipment for outdoor play and the open rubbish dump at the back of the school yard.

Pictures 5.12 Outside play area at S4Q5



The next set of pictures shows four urinals, three hand washing basins and six toilets that are used by Grade R learners at this school. The height of basins and toilets seats is not appropriate for the two classes with 15 Grade R learners each, as compared to the urinals.

Pictures 5.13 Toilet building at S4Q5



The National Development Plan Vision 2030 (2012) prioritises high quality infrastructure by 2030. The situation in two of the Dwaalboom schools (S1Q1 & S2Q1) reflects the fact that rural quintile 1 schools still experience acute shortages of outdoor equipment. The outside learning environment of S1Q1 and S2Q1 schools reflects challenges that the literature identifies in relation to a stimulating learning environment. Even though S3Q5 does not have enough outdoor equipment and only the monkey trix jungle gym, it has a clean, safe open area for learners. Learners are not exposed to a dusty area because the area has a lawn which is properly maintained. If there is no equipment, there will be a lack of outdoor play; this, according to the literature, denies teachers the opportunity to observe important aspects of child development such as children's social interactions, physical development, cognitive and language abilities, motor skills, and emotional development (Vygotsky, 1978).

If quality education is to be provided, guidelines for planning school infrastructure should be legislated and implemented to ensure adherence to policy on the improvement of Grade R infrastructure. Quality education can only be provided if it meets the goals as specified in the 2030 Agenda (UNESCO, 2016), namely to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, educational facilities that are inclusive, gender-sensitive, safe and crime-free should be established and maintained for all learners. Grade R teachers should ensure that outdoor areas are sufficient to cater for all learners and are thoroughly checked before learners are invited to play outside. According to Kirsten (2017) most injuries take place during outdoor play, therefore it is important for practitioners to follow guidelines during their daily programme to make sure that equipment is safe for all 30 children to

play with, guidelines includes advance planning, establishing rules, safety education and careful supervision.

5.2.3 Learning and teaching support material

Observation (data set 1) was done to assess the availability of the learning and teaching support material. Individual interviews for both Grade R teachers and school principals (data set 1 and data set 2) were also undertaken by the researcher to collect information to assess the kind of learning and teaching support material that the teachers use, and how it is used to develop learners' cognitive skills (Appendix A). The three data sets were used to ensure the validity and to increase the reliability of the data collected. Reflection was also used to apply the researchers' thoughts on the responses gathered from the participants. All three data sets were required to assess whether teachers and managers are aware of learning and teaching support material that is appropriate to the development of the learners' cognitive skills in Grade R. The following are the findings from data collected.

At S1Q1 there were several posters and charts on the wall and plenty of shapes on the notice board (see picture 5.1). These were examples of the material the teacher used for the Grade R learners. The skipping ropes and the hula hoops that the teacher referred to during the interview were not visible (see pictures 5.1 and 5.6). At S2Q1 the classroom walls looked colourful but with very few shapes and letters of alphabets; the material was limited to the classroom space (see picture 5.2). S3Q5 was print-rich with educational toys and themed areas, resembling a typical Grade R class with enough storage space for educational material and play space (see pictures 5.3 and 5.11). S4Q5 classrooms displayed teaching aids, letters of alphabets and shapes that also made it inviting for learning. There were educational toys and big colourful bean bags in the sleeping area (see pictures 5.4 and 5.13). In all the four schools visited, teachers had CAPS policy documents, assessment records and lesson plans that were visible and neatly packed in files.

When teacher T1 was asked about additional learning and teaching material that she is using, her indication was that the school (S1Q1) relies on the DoE to supply the learning and teaching material, which, according to the teacher, is not sufficient. According to another teacher (B1), the supply from the DoE includes workbooks for all the four terms and the material used by learners for incidental reading and for cutting. One teacher explained that she is using story

books to assess the learners' memory and an abacus and counters for mathematical concepts (T7). Innovative teachers from other schools (T5 and T6) spoke of the importance of recycling material and this demonstrated how other teachers can improvise to ensure that effective teaching and learning takes place without depending on the DoE to supply all teaching aids. Even though some teachers appreciate the supply they receive from the DoE, it was noted that not all participants (teachers and principals) were aware of these resources or certain about the kind of resources they should use for the development of the learners' cognitive skills. Teacher T1 confirmed that the DoE has provided a resource kit, even though it was not visible when observation was conducted. During interviews, although participants mentioned teaching and learning aids such as clay, playing cards, flash cards, jungle gym, puzzles, posters, educational toys and story books – not all the participants could explain how they use them to develop the learners' cognitive skills apart from using question and answer method in Grade R. For instance, teacher T1 had explained that she asked questions from stories.

When focus group participants were asked how they can use the available learning and teaching material to provide a stimulating environment, they said that it was the responsibility of Grade R teachers to make the classroom stimulating. This becomes a challenge when the principal is not aware of the shortages, or does not understand how teachers should use these resources. The following response from one participant indicates that schools experience a shortage of learning and teaching resources.

[We have] not enough space to display the learning material or anyone to assist us. No, we don't have anything, we have only those that we got from the Department of Education from long ago. [T1]

School management teams know that it is important for teachers and learners to have resources. When they were asked how they provide resources at their schools during the focus group meeting, they confirmed their support for the provision of support materials for effective teaching and learning to take place as follows:

The school has to identify stationery needs, monitor the delivery of LTSM [learning and teaching support materials], budget for additional copies and ensure that

photocopying machines are working properly. The school should use catalogues to order additional equipment and make sure that teachers attend workshop to understand how the LTSM has to be used. [B2]

This finding indicates that in some schools the resources are available but teachers do not know how to use them. Additional resources are usually purchased by quintile 5 (fee-paying) schools. The budget allocated to the school is not standard as it depends on the learner enrolment; therefore, not all schools can afford to purchase additional resources to top up shortages. According to the foundation phase curriculum specialist, there is compliance in some of the schools but the environment is still not stimulating. These findings suggest serious challenges that teachers are facing in terms of the use and shortage of resources. This includes lack of understanding by school principals and other Grade R teachers on how these resources should be used to ensure a stimulating environment, which has implications for training.

Greyling (2015) highlights the importance of having materials that allow learners to discover new things and co-construct meaning to promote cognitive skills. The development of these skills assists learners to process sensory information, to learn to analyse, to remember things and make comparisons. The challenge arises when the teacher cannot access the resources or when the resource kit is kept in the principal's office. The other challenge is caused by teachers who are not experienced, not innovative and do not know how to use them (see 3.4.2.3) to make the classrooms inviting.

This implies that teachers should be well trained and motivated to know the relevant material that they must use in teaching and learning. They must be supported to ensure that they know how the resources are used for the development of various skills and to provide an inviting learning environment. If teachers continue to depend on the supply from the DoE, they fail to use simple, concrete familiar objects to address the current lack of resources and stimulate learning.

A study conducted on the role of Grade R teachers in creating a conducive environment for learning numeracy in the Vhembe district confirms this challenge. The DoE still has to do more to train teachers on how to utilise these learning and teaching resources for the development of learners (Mulaudzi, 2016). CAPS (2011) requires learners to be physically, cognitively, affectively, normatively, socio-culturally and linguistically ready for a solid start to

their school career and this can only be achieved if teachers know the relevant learning and teaching support material that they have to use, how and why they should use it.

5.3 PEOPLE

This aspect applies to Grade R teachers, Grade R learners, departmental officials, community members and parents. Data collected using the multiple data sets (individual interview, focus group interviews, observation and reflexive journal) were classified under relevant themes of the identified criteria for quality.

5.3.1 Age, teaching experience, qualifications and early childhood development (ECD) specialisation

The following information on the profiles of Grade R teachers was collected using individual interviews. These criteria involve the age, race, experience, qualifications and language. According to Drew (2010) the criteria are key to quality because the country needs qualified teachers who are properly registered, properly paid and who have pride in their profession to implement quality Grade R programmes (see 2.4.1.1). These teachers also need to have specialised in Grade R.

Table 5.1 Profile of individual participants for School 1 Quintile (S1Q1)

QUESTIONS	T1	M1*	SP1
Age	58	59	50
Race	Black	Black	Black
Highest qualification	Advance Certificate in Education in Foundation Phase	Higher Education Diploma in Primary School teaching	Primary Teachers' Diploma
Experience in Grade R	3	5	17
Home language	Setswana	Setswana	Sepedi
Language of learning and teaching	All the Grade 1 learners are using Setswana but the teacher is also using English to cater for the Grade 1 learners (FAL) who are in the same class	Setswana and English because the principal is teaching Grade 4–7 in the Intermediate and Senior phase	n/a
Other languages spoken by teachers or learners	English	English	English Setswana

* M stands for manager

All S1Q1 participants were responsible for ensuring that six Grade R learners and 13 Grade 1 learners admitted to S1Q1 are supported and provided with quality education. According to the teacher, the learners are five to six years old and they are admitted according to the correct age.

Table 5.1 indicates that the participants for S1Q1 were all 50 years or older. The years of experience in Grade R for the teacher and the principal were less than 10, which may reflect the number of years the school has offered Grade R. Each participant has a primary school teaching qualification relevant to primary school teaching but not specific to Grade R. The principal teaches Grades 5, 6 and 7 at the school.

Table 5.2 Profile of individual participants for School 2 Quintile 1 (S2Q1)

QUESTIONS	T2	T3	T4	M2	SP1
Age	41	48	48	50	50
Race	Black	Black	Black	Black	Black
Highest qualification	Human Resource Management Diploma	ECD Level 4	Diploma in Grade R	Bachelor of Education	Primary Teachers' Diploma
Experience in Grade R	None	5	10	6	17
Home language	Setswana	xiTsonga	Setswana	Setswana	Sepedi
Language of learning and teaching	Setswana	Setswana	Setswana	Setswana and English because the principal is also teaching Grade in the Intermediate and Senior phase	n/a
Other languages spoken by teachers or learners	English	English	English	English Afrikaans	English

Table 5.2 indicates that the participants for S2Q1 were all 40 years or older. Experience in Grade R for the three teachers, the school principal and the foundation phase curriculum specialist was five years and more. Of the three teachers responsible for Grade R in the school, two teachers are qualified to teach Grade R because they have specialised in ECD, only one teacher is not appropriately qualified to teach Grade R because she has a Diploma in Human Resources. Both the principal and the foundation phase curriculum specialist have the appropriate qualification: the principal has a Bachelor of Education degree and a primary school teaching qualification, while the foundation phase curriculum specialist has a primary school teaching qualification relevant to primary school teaching but not specific to Grade R. The principal is teaching Grades 5, 6 and 7 at the school. All S2Q1 participants were responsible to ensure that all 120 Grade R learners are admitted according to the correct age, supported and provided with quality education, which is challenging for the school because classes are overcrowded.

Table 5.3 Profile of individual participants for School 3 Quintile 5 (S3Q5)

QUESTIONS	T5	T6	M3	SP1
Age	55	27	54	50
Race	White	Black	Black	Black
Highest qualification	Higher Education Diploma	Primary Teachers' Diploma Somatology	Bachelor of Arts in Education	Primary Teachers' Diploma
Experience in Grade R	32	4	3	17
Home language	Afrikaans	Afrikaans	Afrikaans	Sepedi
Language of learning and teaching	Afrikaans	Afrikaans	Afrikaans	n/a
Other languages spoken by teachers or learners	English	English	English	English

Table 5.3 indicates that the participants for S3Q5 were all older than 27 years of age. One teacher had 32 years of experience in Grade R, and the other teacher had only four years. The principal had Grade R available at his school for three years, and the foundation phase curriculum specialist had 17 years' experience. Three participants have a Diploma qualification in a primary school and of the three participants, T6 has an additional qualification in Somatology. The principal has a Bachelor of Arts degree and he teaches Grade 7. All S3Q5 participants were responsible to ensure that 50 Grade R learners were admitted according to the correct age in S3Q5 and were provided with quality education. This was possible because of the experience and qualification of teachers.

Table 5.4 Profile of individual participants for School 4 Quintile 5 (S4Q5)

QUESTIONS	T7	M4	SP1
Age	46	52	50
Race	Black	White	Black
Highest qualification	Early Childhood development Level 5	Higher Education Diploma	Primary Teachers' Diploma
Number of learners in a class	15	40	n/a
Experience in Grade R	4	24	17
Home language	Setswana	Afrikaans	Sepedi
Language of learning and teaching	English	English	n/a
Other languages spoken by teachers or learners	English isiXhosa Setswana	English	English

Table 5.4 shows that the participants for S4Q5 were all 40 years and older. One teacher has four years of experience teaching Grade R, while the foundation phase curriculum specialist has 17 years' experience. Two participants have a Diploma qualification in a primary school and the Grade R teacher has an ECD Level 5 qualification. The principal is not directly involved in teaching Grade R; he teaches Grade 7.

The following table shows three members of the school management team from S2Q1 who are responsible for monitoring and support of Grade R teachers.

Table 5.5 Profiles of heads of department and deputy principals of the four selected schools who formed part of the focus group

QUESTIONS	M5*	M6	M7
Age	56	47	46
Race	Black	White	Black
Highest qualification	University Degree in Primary School Education	Primary Teachers' Diploma	University Degree in Primary School Education
Number of learners in a class	n/a	n/a	n/a
Experience in Grade R	29	2	2
Home language	Setswana	Afrikaans	Setswana
Language of learning and teaching	English and Setswana	Afrikaans	English and Setswana
Other languages spoken by teachers or learners	None	English	None

* M stands for manager

Table 5.5 indicates three participants who represented members of management in the four selected schools with Grade R in the circuit. They formed part of the school management team focus group. These teachers were managers at the four selected schools in the circuit who were responsible for support and monitoring of teaching and learning in Grade R. Of the three participants, only one had considerable experience in Grade R. The deputy principal (M5) and the head of department (M7) have university degrees and one head of department has a Diploma in Primary School Education. None of the three members of management specialised in Grade R, but compared to the two heads of department, the deputy principal has had more experience in Grade R.

All seven Grade R teachers from the four sampled schools have different teaching qualifications and teaching experiences. Of the seven Grade R teachers, two have specialised in ECD and the other five have a primary school teaching qualification. This indicates a general lack of ECD specialisation at practitioner (teacher) and management level. This impacts

negatively on the skill and knowledge that teachers need to acquire in order to provide quality education in Grade R.

Three of the four school principals have a teaching qualification in primary school teaching; one has a university degree. All four school principals have teaching experience in the senior classes (Grades 4 to 7) but do not have a specific qualification to teach Grade R.

Teacher qualifications, age and teaching experience have a major influence on how children learn and how learning is facilitated to achieve learning outcomes (van der Berg, 2013). Of the seven participants, only one teacher was younger than 40 years. This suggests that Grade R teachers in these schools are old enough to have gained appropriate experience, but the challenge might have been caused by the fact that they obtained their teaching qualifications many years ago. The need for competent and qualified teachers is confirmed by the literature on invitational education, that South African schools need more qualified teachers in Grade R, to lay a firm foundation for future learning success so as to contribute to the bridging of the existing achievement gap (Niemann, Swanepoel & Marais, 2010). Specialisation in Grade R will be an expected requirement that adds value to quality provisioning.

5.3.2 Teacher development and support

The DoE has to ensure that teachers are given enough support through various structures to address the multiple and complex challenges that teachers and learners face, to ensure learners' optimal development. This support includes the following: teacher development programmes, support from parents and the community, support from their supervisors, a reduced teacher–learner ratio and controlled age of admission. These aspects have influence on the provision of quality learning and teaching in schools. In the Grade R individual teachers' interviews, questions 2 and 3 dealt with these aspects of support, as well as question 8 in the focus group interviews.

Support from parents and the community

The responses by participants to this question were based on the support teachers and schools are receiving mainly from the parents and the school governing body members who are representing the parents at various schools. Studies conducted by Luggya, Tyilo and Mdaka (2017) reveal this need for coordinated support by all in the implementation of ECD policies.

According to the teacher at S1Q1, the school governing body ensures that the school is provided with the learning and teaching support material. This includes photocopying paper, charts and the photocopying machine. An S2Q1 teacher raised concerns about the shortage of resources, lack of a designated area for Grade R learners and overcrowded classrooms, all of which affect the safety and security of learners. The S3Q5 Grade R teachers wanted to be part of the school budget planning meetings, to allow them to identify their needs in terms of resources that the school governing body must procure for the learners and teachers. Overall, teachers at S4Q5 were happy with the support that the school governing body is providing in terms of resource provisioning.

From the two focus groups, Grade R teachers acknowledged that quintile 1 and quintile 5 schools are not equal in terms of resource provision. They acknowledge that quintile 5 schools are fee-paying schools and that the school governing bodies of these schools have the capacity to buy additional resources to make their environment conducive to teaching and learning. According to school managers, most parents in quintile 1 schools are not interested in their children's learning. Most parents in these schools (S1Q1, S2Q1) are migrant labourers who visit their families in the Eastern Cape without making arrangements with the schools, which impacts negatively on learner attendance and performance.

Given the context of S1Q1, it seems difficult for the teachers to get support from parents for their children's schoolwork (see 2.4.1.2). Most of the parents in quintile 1 schools are not literate; therefore it is difficult for the teachers to get support from the parents and the community. These parents are not employed and they depend on the conditional grants.

According to the observation conducted on the school location (see 5.1), there are farmers around the area, and permission is sought from the farmers before parents can attend meetings arranged by the school. According to the findings from the S1Q1 teacher (T1), they try to provide the school with the learning and teaching support material which includes buying of photocopiers and teaching aids for the teachers, but they cannot raise funds to assist the school to buy play equipment for Grade R. The following statement from T1 confirms the kind of support teachers receive: "They support the school only by providing us with learning and teaching material".

This observation indicates failure by the DoE to empower communities to encourage partnership with local farmers, to the benefit of the learners whose parents work on farms.

Literature on parental support states that parents are the prime educators of the children until the children start schooling (Ceka & Murati, 2016). According to Vygotsky's ZPD, parental support creates the best possible environmental conditions necessary to facilitate children's growth (Vygotsky, 1978). Lally (2010) also confirms that external influences such as parents, pre-school programmes, and the Grade R and/or foundation phase teacher each play a significant role in school readiness (Lally, 2010). In pursuit of quality education, parents and teachers have a huge responsibility in ensuring that young learners meet educational demands. Good early childhood education programmes can also help children to develop physical, socio-emotional, language and cognitive skills by providing a stimulating positive interaction with the environment, adults, and other children (see 2.4.1.3).

Support from departmental officials

When participants were asked about the support they receive from the curriculum specialist based on their teaching practice, all seven Grade R teachers and school managers confirmed that they are invited to workshops organised by the DoE. With regard to the support the teachers receive from the curriculum specialists during training, S1Q1 teacher T1 reported that she attends training but she does not get any support or guidance on multi-grade teaching. According to this teacher, there is no specialised support because the focus is on the foundation phase. The following statement by the foundation phase curriculum specialist following the training, confirms this:

Being a multi-grade class with Grade R and Grade 1 does not correlate because the timetable for the Grade 1 and the learning programmes for the Grade 1 do not go hand in hand. [S 1]

S2Q1 teacher T3 was challenged by the timing of the training, noting that it is short and that it happens during contact time. Teachers from S3Q5 (T7) and S4Q5 (T5 and T6) were concerned about the quality of training, explaining that they were not given practical tips or lesson demonstrations to help them to improve their teaching practice.

During focus group interviews, participants from the two focus groups (Grade R teachers and the school management teams) also responded about the quality of training provided with regard to planning, presentation, feedback and monitoring. They proposed that the timing of the training should be reviewed and that a follow-up be put in place after each training to ensure common interpretation and implementation in schools. One focus group member (M1) confirmed the comments of teacher T1 from S1Q1, that the support the teacher receives from the curriculum specialist is not relevant to assist her to teach a multi-grade class:

If teachers are expected to assist in multi-grade classes, they must receive the relevant training for multi-grade teaching. [M1]

Regarding teacher support programmes, the foundation phase curriculum specialist explained how curriculum specialists plan the support visits. During the first visit, they observe teachers in practice. The second visit takes place when they meet with all Grade R teachers at one venue, to share ideas with other teachers in their professional support forum. According to her, they encounter the following challenges caused by practitioners who are appointed to teach Grade R learners in schools:

Grade R practitioners do not know what to teach in Grade R, even when they are given CAPS policy document to show them the content they must teach.[S1]

When the two focus groups (Grade R teachers and school management teams) were asked to share ideas on what they think the DoE should do to improve training provided to Grade R teachers, they indicated that there is a need for well-planned cluster meeting to take place, where teachers are given practical tips and lesson demonstrations on their teaching practice. Workshops should also be followed up by regular monitoring and support. The DoE must supply appropriate resources for the holistic development of Grade R learners and appoint qualified Grade R teachers. Teachers should be advised to plan together to ensure proper and common implementation and interpretation of Grade R policies. This statement confirms inputs made by participants from the two focus groups:

Even though the department provides courses, not enough is explained on the practical part of weekly presentation, for example, advising teachers on how they should handle assessment of important aspects of child development.[B1 & B2]

Concerning the support that teachers and schools receive from the DoE, findings from the individual interviews with Grade R teachers and the two focus group interviews show serious gaps in the training programmes provided to teachers. The Grade R teachers' focus group clearly specified that support programmes that are arranged by curriculum specialists do not address the needs of Grade R teachers and learners. Even though teachers appreciated the fact that the DoE was assisting them with well-developed lesson plans, they still needed to be given practical tips on how they should present the content to the learners. According to teachers, there is a definite need for specialised support.

Lesson plans issued by DBE should be used as guidelines, and programmes offered should develop teachers to be resourceful, pedagogically flexible, knowledgeable and proactive to effect quality, catering for the diverse learners to ensure readiness in Grade R (Dawes, Biersteker & Hendricks, 2012). In order to improve the quality of education provisioning in Grade R, teachers should be properly trained and placed according to the required qualifications. Shabani (2016) supports implementation of both Vygotskian theory and invitational education views on continuous support for professional development to build knowledge and skills to ensure that teachers provide learners with meaningful activities (Perry, 2013). According to Vygotsky (1978) & Piaget (1972), this can be acquired through collaboration (see 2.4.1.2).

5.3.3 Teacher–learner ratio and learner admission

The South African education system still needs to address the teacher–learner ratio (Motshekga, 2012), reducing Grade R classes sizes further to the ratio 15:1. This will encourage learners to work independently with the available learning and teaching support material and allow teachers to ensure that learners get individual attention. This involves monitoring the age of learners admitted to Grade R classes and the number of learners allocated to the Grade R teacher. The two aspects are criteria for quality and effective teaching and learning in Grade R classes. Question 3 on the Grade R teachers' individual interview dealt specifically with these concerns. It should be noted that the environmental scan and individual interviews were used in

this study to obtain information on the class sizes and the age at which learners were admitted to the selected schools.

At S1Q1, the six Grade R learners are taught together with 13 Grade 1 learners in one class. This makes the total class enrolment of 19 learners to one teacher. The teacher (T1) pointed out that Grade R learners are five years but Grade 1 learners are six years old. At S2Q1, 80 Grade R learners are admitted into one class, and the second class has 40 learners. Learners in the class of 80 are between five and five-and-a-half years old (T1 and T2 classes), and the ages of learners in the class of 40 (T3) range from four years six months to five years old. At S3Q1 there are 15 learners in one Grade R class; learners are five to six years old. At S4Q5, 25 learners are in each class; the learners are all five to six years old.

The findings from the two data sets (data set 1 and data set 3) show that schools in Dwaalboom admit Grade R learners from the age of four years six months to six years old. The admission age also differs in classes within the same school (S2Q1). The same difference is applicable to the teacher–learner ratio. Not all schools have the same number of learners in each class. The class learner enrolment differs from school to school and from class to class within the same school.

The age at which the learner enters Grade 1 has an influence on school readiness. When learners are underage, it is actually detrimental to start school too soon, as they are still at a stage where they want to play (see 2.4.1.3). According to Janse van Rensburg (2015) some of the inequalities existing between the achievement of previously advantaged learners and learners from disadvantaged backgrounds are created by the fact that learners are admitted to Grade 1 when they are not school-ready. Lack of access to learning readiness programmes is also worsened by poor parenting skills and lack of parental involvement in their children's development and learning. The environmental scan confirms that the situation at S2Q1 will deny teachers time to give learners individual attention, which will again hinder learners from achieving learning outcomes (Hoadley, 2013; Janse van Rensburg, 2015).

5.4 POLICY: IMPLEMENTATION OF POLICIES IN GRADE R

Questions 2 and 5 from the individual interviews, and questions 2 and 4 from the focus group interview dealt with policy implementation. Individual interviews and focus group interviews were used to assess the extent to which teachers understand the curriculum in

implementing DAP, and whether policies that are implemented give benchmarks in terms of learner support. An observation instrument was used by the researcher to assess whether the school environment assists teachers in implementing curriculum to ensure quality. The other criteria which are part of the policy mandate that influence benchmarks for learner support include the state of infrastructure, availability of basic services, safety and security measures (see Appendix C).

5.4.1 Curriculum Assessment and Policy Statement (CAPS)

All schools in Dwaalboom circuit use CAPS and all schools have the CAPS policy document. What was noticed during observation was that schools are implementing CAPS according to how they understand it, taking into consideration their challenges. This includes the differences in implementing instructional time, which is exacerbated by small schools with multi-grade classes. S1Q1 in the circuit has a multi-grade class because of the poor post-establishment policy on post-provisioning norms. Like S1Q1, these schools do not follow the daily programme and they use the timetable to ensure that all learners are taught at the same time. The timetable has three subjects: Mathematics, Life Skills and Languages, without integrating activities as prescribed by CAPS.

Schools with high enrolment cannot adhere to the teacher–learner ratio applicable to Grade R. In S2Q1, 80 learners are accommodated in one class. According to some teachers (T2, T3, T7 and T1), the classroom arrangement in these schools does not allow them to use integration and play-based methods because of lack of space. Suitable classroom arrangement for small groups was evident in schools S3Q5 and S4Q1 that were using the daily programme. Learners in S2Q1 are seated at desks (see picture 5.2) while learners at S1Q1, S3Q5 and S4Q5 are using developmentally appropriate furniture (see pictures 5.3 and 5.4). None of the four schools have ramps to cater for disabled learners. S1Q1 and S2Q1 have no safety signs, and three of the schools have outdoor facilities even if at S1Q1 and S3Q5, the facilities are not sufficient. S2Q1 has no outdoor facility.

When teachers were asked about their understanding of DAP and the activities they are using for child development, they responded with their own interpretations of the concept:

[A]s a teacher, you do everything you can to develop the child emotionally, physically outside the class and inside the class to help to build the children's body and mental mind. [T7]

We develop learners preparing them for Grade 1 socially through activities, through pretend play. Physically through outdoor play using physical activities. [T2]

Teachers from S3Q5 had the same understanding of the concept and explained as follows:

Group work and role play to develop social skills, hand and eye coordination and balance for physical development and problem solving is very important for memory. Rhymes and songs are used for language development.[T5 & T6]

Teachers from S1Q1 and S2Q1 encouraged the use of shared reading to allow all learners to re-tell stories. According to them, learners should also be encouraged to do activities outside for physical development, and for cognitive development they must read posters and sequence pictures.

When asked about the type of development activities teachers should use, the foundation phase curriculum specialist emphasised the importance of fantasy play, to engage learners in role-play situations and to allow them to express themselves. This would develop their linguistic abilities where they can raise emotions and socialise. Regarding physical development, she indicated that learners should be taken outside to do outdoor activities to develop their muscles.

Both the Grade R focus group and the school management team focus group were asked about policy implementation, to assess whether activities given to learners were adding value to the provision of quality. Question 10 of both focus group interviews dealt with this aspect. Information gathered using the two data sets (interviews and environmental scan) increased the validity of the information that was gathered on policy implementation.

5.4.2 White Paper 6

White Paper 6 on special needs education advocates building an inclusive education and training system (2001) and guides policy implementation with regard to support of learners who experience barriers in learning. Quality education has to be provided in line with the 2030 Agenda (UNESCO, 2016); therefore, it must be inclusive and equitable to allow all learners to access the curriculum to promote lifelong learning opportunities. The South African Schools Act, 1996, provides learners with a choice to attend any type of school, which includes ordinary public schools or mainstream schools, full-service schools or special schools. However, when observation of the school environment was conducted, the situation in S1Q1 and S2Q1 reflected the opposite situation, as classes were overcrowded and without resources.

Findings at three schools (S2Q1, S3Q5 and S4Q5) include use of an unfamiliar language of communication for learners whose home language differs from the language of learning and teaching at these schools. This was only observed during outside free play when learners were interacting using different languages. S1Q1 and S2Q1 also reflected instances of socio-economic barriers and lack of parental support. If quality is to be provided, all schools should have functional structures and accessible educational facilities that are inclusive, gender-sensitive, safe and crime-free. These facilities should be well maintained for the safety and the benefit of all learners.

5.4.3 National Integrated Early Childhood Development Policy

An environmental scan was conducted to assess whether the school environments were compliant with policy, especially in relation to Grade R. All four schools in this study have basic services (water and electricity) which are paid from the budget allocated by the DoE. S1Q1 has basic services but is not fenced. S1Q1 uses gas stoves but there were no fire extinguishers on the walls. The kitchen hygiene is not satisfactory and the four classrooms are made of asbestos (see 5.1, 5.6 and 5.7). S2Q1 has basic services but had no fire extinguishers on the walls. The 16 classrooms are in a good state except the two small classrooms used for Grade R. The school is experiencing overcrowding challenges and, according to the school principal, the school has been prioritised for major renovation by the DoE in partnership with Thabazimbi Development Trust. S3Q5 has basic services as there is a borehole which is tested for human consumption annually. The school has a fire extinguisher mounted on the wall and an evacuation policy. The

16 school classrooms are in a good state and well maintained (see pictures 5.3, 5.11 and 5.12). S4Q5 has basic services and the school also has 16 classrooms. The walls have fire extinguishers and there is an evacuation policy. The buildings are well maintained.

If Grade R policies are supported and monitored by all role players, children will enjoy equal access to education including the vulnerable and those with learning disabilities. Provision of basic services, play facilities, nutrition, safety and security by various education departments is a key priority to ensure quality. There is a need for capacity-building and multi-sectoral response for effective implementation and quality control. Failure to coordinate support from different government departments for implementation of quality ECD programmes creates challenges for teachers attempting to implement ECD policies (see 2.4.3).

5.5 PROGRAMME

Question 1 of the individual interviews with Grade R teachers and school principals dealt with this issue. The intention was to assess the participants' understanding of the elements of the daily programme and how the teachers implement them.

5.5.1 Daily programme

When observation was conducted, it was evident that two schools (S1Q1 and S2Q1) were not using the daily programme as prescribed by CAPS. The schools are using a timetable allocating three subjects that are taught by one teacher. The following statement by T1 explains how the two schools understand and implement elements of the daily programme: "Daily programme consists of Literacy, Home Language, Maths and Life Skills".

The explanation of the teacher about the daily programme was evident during the day of the visit and correlates with the environmental scan. The school still follows the subject timetable. According to the principal, M1:

[L]earners are taught three subjects: Setswana, Maths as well as Life Skills for the whole day from 08h00 to 13h30.

The foundation phase specialist commented that this is happening in schools because managers lack knowledge of how integration enhances teaching and learning in Grade R:

Fifty per cent of our schools are trying in terms of compliance, but we fight with principals because principals want teachers to use timetables; they want to see Mathematics, Home Language and Life Skills on the daily programme. It is important for the educator to use the daily programme. [S1]

This observation by the curriculum specialist suggests that teaching and learning activities at S1Q1 take place in a formal way to cater for both the Grade R and Grade 1 learners in the same class. The information is clearly depicted in the classroom arrangement (see 5.1). Even though there is an indication from the teacher that she attempts to integrate learning using the subject of Life Skills, the teacher needs support to understand the importance of the daily programme in Grade R to ensure implementation of various activities as expected by policy.

Two Grade R teachers at S2Q1 (T1 and T3) are using the same timetable, but the other teacher in S2Q1 had a different interpretation from the other teachers at her school. According to the teachers, the daily programme has routine activities and three subjects; Mathematics was allocated one and a half hours, Life Skills was allocated one hour and Setswana Home Language was allocated two hours. The allocated time for daily activities at S3Q5 was four and a half hours. The elements of the daily programme according to S3Q5 covered greetings or news in the morning, allocated 45 minutes; school readiness programme including Mathematics, Life Skills and Home Language, allocated 50 minutes; free play inside the classroom, allocated 50 minutes; outside free play and tidying up allocated 60 minutes; toilet routine and eating allocated 30 minutes, and story time allocated 30 minutes. The allocated time for daily activities at S3Q5 was 4 hours 25 minutes. S4Q5 teachers indicated that the daily programme deals with learners' development through subjects in an integrated manner. Although the teachers seemed to know the teaching approach in Grade R, they could not analyse time allocated for each aspect of the daily programme.

When the school principal M4 was asked about the elements of the daily programme, he indicated that there should be Mathematics, teacher-guided activities, Creative Arts, free play, toilet routine, refreshments, free play, language, story time and departure. According to him, all these activities took place throughout the school day and were allocated 10 minutes each. Another of the principals (M3) said that Grade R must be routinely structured, although the

timetable in one of the Grade R classes at M3's school did not show any integration of routine activities.

Findings from the data suggest that even though schools in Dwaalboom circuit are using CAPS to drive their daily activities, different schools implement their daily activities differently according to their own time allocations. This difference in time allocation impacts on the quality of activities and how they are carried out by different Grade R teachers.

Literature indicates that programmes are specifically designed to invite development, and by people who are intentionally inviting with themselves and others (Purkey & Novak, 2016). Lack of understanding of the importance of integration in Grade R by school principals hinders Grade R teachers from presenting Grade R programmes that are enriching and developmentally working for the benefit of every learner to encourage them to participate actively (Purkey & Novak, 2016). The daily programme is guided by CAPS for Grade R (2011) designed with the intention of maximising learning and to allow the child to interact with significant content in a meaningful way.

5.5.2 Observation, assessment and feedback

Question 7 of the Grade R teachers' and school principals' individual interviews dealt with this aspect of quality education. Observation was also conducted to check the availability of assessment records and how feedback is given to parents about the performance of their children. The intention was to assess whether teachers and school managers have knowledge of assessment in Grade R and how it should vary according to activities to ensure a balance between social learning experiences and academic learning experiences that address the key areas of child development. The following statements indicate how assessment is conducted at S1Q1: "Grade R assessment is conducted continuously" (T1) and "I am giving the learners homework to write and practice at home" (T2).

At S2Q1, two Grade R teachers reported that they assess learners using rhymes, songs, paintings, and that they use checklists and rubrics. The other teacher (T2) is giving learners homework. According to the teacher, this is used for the learner to acquire writing skills. At S3Q5, Grade R teachers explained that they conduct individual informal assessment to learners to make sure that all the necessary skills are covered to ensure the holistic development of the learners. At S4Q5 the Grade R teacher said that she observes learners on a daily basis to offer

support and monitor progress on the learners' development. The teacher was not able to explain how this progress is monitored. All school principals from the four schools indicated that assessment in Grade R is done on a continuous basis and that all teachers at their schools have assessment records. These records were available in the teachers' files during the day of the visit including samples of the learners' term reports.

During individual interviews, school principals raised concerns about learners who are promoted without achieving the expected learning outcomes. Their comments on assessment also suggested what the DoE could do to ensure improvement in learner performance in both rural and urban schools.

Progression of learners has to be excluded because they leave Grade R without being competent. Those that are not supposed to progress can only be assisted during the year but cannot be retained, so it means the same intervention continues when they move to Grade 1. [M2 & M3]

Accountability sessions should be conducted at the end of each term to account for performance. [M2]

These responses show that even if the school is not using the daily programme as expected (see 5.2.4.1), the teachers and the principal are aware of the type of assessment that has to be used in Grade R. Learners in S1Q1 are given homework which is effective when appropriate to the needs of the learners. At S2Q1, the school manager (M2) noted that it is important that the DoE should implement the programme fully and hold teachers accountable for poor performance to ensure quality.

The concern raised by another principal on the serious challenges of how the DoE is dealing with learner progression, suggests that learners who have not achieved the expected learning outcomes are progressed without being competent. This is a negative indictment of the learner progression policy.

When the environmental scan was conducted, the teachers' assessment records were on the teachers' desks. These records included samples of checklists, rubrics and a sample of the learners' term report. What the researcher could not confirm was whether the records were a true

reflection of what the teacher implemented, because observation of classroom practice was not done. According to Grade R teachers and principals, parents are called at the end of each term to receive reports on learner performance.

Findings from data set 1 and data set 2 show a lack of knowledge of assessment techniques in some Grade R teachers. S1Q1 and S3Q5 teachers know that assessment in Grade R is done on a continuous basis to support child development, but they could not explain the various assessment techniques or how they support child development. Assessment records in the teachers' file are evidence of the support from the departmental workshops, but implementation could not be confirmed in all school except for S3Q5. The department has much to do in ensuring that teachers receive training on the application various assessment techniques and how learners who do not perform can be supported to improve performance. Not all schools gave evidence of assessment programme that assisted child development except for samples presented at S3Q5.

5.6 PROCESSES

Processes involve daily learner interaction with teachers and other learners during contact time and outside the classroom during free play. These could not be observed during contact time because permission was not given to observe teaching in practice. This disadvantaged the researcher, denying her the option to refute or agree with what Grade R teachers and school managers said during the interviews. To compensate for the limitation, the researcher used more questions to assess teaching and learning activities used by the teachers. Question 2 on DAP, question 5 on the activities that teachers can use to develop the learners linguistic abilities, question 6 which assesses the teachers' understanding of free play activities of the Grade R individual interviews, and question 4 of the Grade R teachers' focus group interviews were most critical. These questions were all used to obtain a deeper understanding of the processes and to assess whether teachers understood the importance of mediation, scaffolding and guidance in the child's learning (see Chapter 3).

5.6.1 Teaching and learning activities

Children's participation in Grade R is understood through conceptualisation of agency, rooted in a social model. This can only be achieved if constructivism is emphasised to reduce

instructivist practices (see Chapter 3). These criteria are critical to quality and are used in this study to assess whether learners are given opportunities to share their thoughts and ideas, which in turn lead to higher levels of participation for their holistic development. At S1Q1, T1 explained how the teachers encourage Grade R learner participation to develop their linguistic ability using their home language, in a culturally familiar way: “Language can be developed through singing and the use of rhyme”.

The following statement made by the school principal demonstrates how he thinks teachers can mediate and guide learners in language development:

Teachers must encourage learners to talk, this will encourage reading and as they read the teacher must explain and they must do actions when they are doing certain activities.[M1]

At S2Q1 and S4Q5 teachers use pictures and signs to assist learners who do not understand the language. The teacher mediates by pointing at signs and pictures, doing picture reading. According to the teacher, she involves learners in discussions and drama.

The situation at S3Q5 is more inviting for play-based activities compared to the other three selected schools. The availability of inside classroom space allows teachers to engage learners in role-play to develop their personality, games and daily routine. The classroom arrangement caters for group work activities and learners also take part in problem-solving activities for their cognitive development, and in self-initiated activities.

Schools should provide learners with programmes that provide real-life props and activities to enrich the children’s play. This will enable learners to share thoughts developing their linguistic, socio-emotional and cognitive abilities. The DoE has a responsibility to ensure that teaching and learning takes place in child-friendly environments and that there is thorough supervision to avoid injuries. Schools in the circuit use different languages for teaching and learning (Setswana, English and Afrikaans) which creates a learning barrier for some of the learners whose home language is different from the language of teaching and learning (isiXhosa) and this is also applicable to teachers in the same way (xiTsonga) (see Appendix C). If the barrier is not addressed, it can have a major negative impact on the child’s physical, socio-emotional, linguistic and cognitive development.

5.6.2 Play-based activities

Theories of childhood play as espoused by Vygotsky (1978) and Piaget (1962) lay a firm foundation for an understanding of child play (see 3.4.5.2). Data was collected from individual interviews with Grade R teachers and the focus group interview for Grade R teachers in schools with outdoor equipment and without outdoor equipment, in schools with enough classroom space and in schools with overcrowded and small classrooms. Observation of the school environment was also conducted to assess whether schools have appropriate equipment for child development and how teachers set up inviting learning environments to ensure quality (see Appendix C). These criteria were also used to assess the teachers' understanding of free play and how teachers and learners participate during free play.

At S1Q1, both the teacher and the principal appeared to lack knowledge of the pedagogy of play. The teacher (T1) was also disadvantaged by the school because there was no outdoor equipment at the school to enhance child development through free play activities. The classroom space could also not accommodate fantasy corners for role play, the classroom arrangement also was not inviting for inside free play activities; learners played in an open space with a few old tyres and one slide without supervision.

Even though the principal explained how they address the gap caused by lack of developmentally appropriate equipment, a physical training period was not even allocated in the timetable and it is still not addressing the attainment of all aspects of child development as indicated by policy.

There is a physical training period that they use to develop them through games and exercises. [T1]

From what the teacher said, free play does not seem to be integrated in the daily programme and that there is no observation made by teachers to ensure the achievement of developmental milestones.

The following statement by the principal (M2) indicates the limitations at S2Q1:

When learners play on their own, teachers must supervise them. They supervise them to ensure that they do not get injured when they play.

When the teacher T3 was asked about free play and what learners do during free play, she indicated that free play takes place inside and outside the classroom as follows:

[L]earners create their own games, play with skipping ropes, hula hoops, they play in the sandpit outside, mixing sand, practicing fine motor skills. These learners are learning to socialise because they are talking with other learners.

The classroom space was clearly too small even for inside free play activities to take place. There were no sandpits. Information collected was not according to the findings from the environmental scan. When the classroom is small, teachers can still take learners outside for free play activities if the school has provided the equipment. These findings indicate that the teacher has an understanding of free play activities and how they enhance child development but this is only theory learnt by the teacher that has to be applied to ensure quality.

When school visits were conducted it was observed that learners were playing freely outside with balls, skipping ropes, hula hoops. There was no evidence of proper supervision by their teachers (S1Q1 and S2Q1). This implies that learners were playing without meaning. Responding to the understanding of free play and what learners do during free play, one teacher stated her understanding of free play as follows:

[F]ree play is when learners play outside to develop their muscles, climbing the swings and they are supervised by teachers. [T 1]

When the principal was asked to indicate how learners at his school take part in free play, he said:

In our school, Grade R and Grade 1 share a class and when they have to play they go outside and can only use sports ground to play soccer. [M 1]

At S2Q1 and S3Q5 learners come from different language backgrounds. Some of the learners are using Setswana and others isiXhosa at home. When Grade R teachers were asked how they encourage learners to take part in free play activities, the teachers responded:

We encourage them to mix with other learners, we monitor how they interact because they use different languages. [T 2, T3 & T7]

The teacher (T7) at S3Q5 has a strong belief that it is through free play that learners can interact to develop their social skills.

5.7 SUMMARY OF FINDINGS FROM ALL FOUR SELECTED SCHOOLS

The geographical location of the area in which schools are located has an influence on the quality of education that is provided by schools. The location can negatively affect the development of young children and can deny them lifelong opportunities. Most schools in Dwaalboom circuit are classified under two categories of quintile: quintile 1 and quintile 5. Quintile 1 schools are servicing illiterate communities from poor socio-economic backgrounds and have a shortage of resources while quintile 5 schools are serving learners whose parents are working and are well resourced schools.

The S1Q1 and S2Q1 communities mainly consists of farm workers who work on local farms and largely depend on social grants to survive. Part of the community consists of parents who are employed by government or who work in the local mining town, earning better salaries. Part of the community consists of migrant workers who travel from their home towns to work in the local mines of Northam and Thabazimbi closer to Dwaalboom circuit. When they visit their families they do not make arrangements with the schools and learners miss classes for long periods. This causes serious underperformance and absenteeism that retards the learners' and the teachers' progress because they still regard Grade R as a day care programme. Few learners from local farms attending school in the area walk to the school, and other learners who are 42 kilometres from the school are commuting daily from local farms and villages to the school. These learners are provided with learner transport by the Limpopo DoE.

The outside and inside learning environment in quintile 1 schools is not inviting when compared to the learning environment in quintile 5 schools. Quintile 1 schools depend mainly on

the DoE to supply resources. Quintile 5 schools are fee-paying schools and engage in fund-raising activities to ensure that schools are inviting and well-resourced to provide quality education outside and inside the classrooms. This includes the provision of learning and teaching support material and equipment that enhance the holistic development of learners. In the two quintile 1 schools, the buildings are old or need major renovations, while the buildings in the quintile 5 schools are well-fenced secured, safe, clean and conducive to teaching and learning. In most cases, quintile 1 schools buildings are overcrowded and not safe.

All schools classified under quintile 1 are in the NSNP and are supposed to have a vegetable garden and mother helpers who are employed by the DoE. These mother helpers receive monthly stipends to prepare meals for learners on a daily basis. Two schools (S1Q1 and S2Q1) do not have a telephone line and rely on the principal's private cell phone for communication.

The following table gives a summary of all participants with codes, who were selected and gave consent to take part in the study, with their relevant codes.

Table 5.6: Summary of profiles of participants

SYMBOL	POSITION	QUALIFICATION	HOME LANGUAGE	LANGUAGE OF LEARNING /TEACHING	SCHOOL
S1	Curriculum specialist	n/a	Pedi	Pedi	District official
M1	Principal	Higher Primary Teacher's Diploma	Setswana	Setswana	S1Q1
M2	Principal	Bachelor of Education	Setswana	Setswana	S2Q1
M3	Principal	Higher Education Diploma	Afrikaans	Afrikaans	S3Q5
M4	Principal	Higher Education Diploma	Afrikaans	English	S4Q5
M5	Deputy Principal	University Degree in Primary Education	Setswana	Setswana	S2Q1
M6	Head of Department	Primary Teacher's Diploma	Afrikaans	Afrikaans	S3Q5
M7	Head of Department	University Degree in Primary Education	Setswana	English	S2Q1
T1	Teacher	Advanced Certificate in Foundation Phase	Setswana	Setswana	S1Q1
T2	Teacher	Human Resource Diploma	Setswana	Setswana	S1Q1
T3	Teacher	Grade R Diploma	Setswana	Setswana	S2Q1
T4	Teacher	Early Childhood Development Level 4	xiTsonga	Setswana	S2Q1
T5	Teacher	Higher Education Diploma	Afrikaans	Afrikaans	S3Q5
T6	Teacher	Somatology and Primary Teacher's Diploma	Afrikaans	Afrikaans	S3Q5
T7	Teacher	Early Childhood Development Level 4	Setswana	English	S4Q5

Seven Grade R teachers, seven members of the school management teams and one foundation phase curriculum specialist were selected and gave consent to take part in the study.

Of the 15 selected participants, only one participant was below 30 years of age. The other participants' ages ranged from 40 to 56 years. Of 15 participants, eight had less than 10 years' teaching experience. Eleven of the participants have tertiary and university teaching qualifications but do not have specialisation in Grade R. Two of the participants have ECD qualification (Levels 4 and 5) and one participant has a Human Resource Diploma. Only one participant of the 15 had specialised in Grade R education (Grade R Diploma) and had 10 years' teaching experience in Grade R (see Table 5.6).

CAPS documentation (DBE, 2011a) is intended to offer structured guidelines on what is being taught, which includes the integration of Language, Mathematics and Life Skills in Grade R. Findings of this study reflect that even though all Grade R classes in Dwaalboom circuit are implementing CAPS, there are notable differences between how it is understood by teachers and school managers and its implementation. A great difference is noticed between quintile 1 and quintile 5 schools within the same circuit. This includes time allocated for instruction, the quality of the programme, support given by departmental officials, support of parents and the community, quality of resources and how assessment is conducted to achieve Grade R learning outcomes. Of the four selected schools only one (S3Q5) complied with CAPS implementation. It is the responsibility of the DoE to ensure that policies are correctly interpreted by all for common implementation. Implementation of inclusive equitable policies that include Curriculum and Assessment Policy Statement (CAPS, 2011), Language in Education Policy (DoE) 1997, South African Schools Act, 1996 (84 of 1996), National Minimum Uniform Norms and Standards for School Infrastructure (2009), National Integrated Early Childhood Development Policy for South Africa (2015), and White Paper 6 on special needs education: building an inclusive education and training system (2001) were not monitored or supported in the four selected school to ensure quality. This was confirmed in the individual and focus group meetings and the environmental scan.

A well-balanced daily programme allows teachers and specialists to respond to the needs of individual learners in an enjoyable way. For this to happen, teaching and learning must make use of an integrated approach. The daily programme show integrated activities which address the aspects of child development. Only two of the four schools used the daily programme. Implementation of the daily programme differed from one teacher to another. Findings indicate that in the two schools, the implementation of teacher-guided and self-initiated activities which

are critical to child development is flawed because of inadequate teacher quality and resources. This usually happens because of lack of capacity and the manager's unwillingness to change from the old method of a teacher-centred approach to learner-centred play-based methods.

School management teams and district teams when tasked to support and monitor the quality of teaching and learning in all public schools focus on the foundation phase, disregarding Grade R, especially in schools with multi-grade classes. Teachers lack a thorough understanding of the unique needs of the Grade R learners, and how play-based, developmentally appropriate teaching and learning activities add value to quality in Grade R. School and the district teams should engage in school self-evaluation processes, identifying their areas of under-performance and develop school and district improvement plans. These processes will assist the teams to identify school needs through thorough evaluation, experience and observation of both teachers and learners in pursuit of an improved performance and to provide quality education.

Concerns raised by Grade R teachers and school management teams on curriculum support cover lack of regular curriculum management meetings for teachers to account for their performance. Findings reflect the need of such meetings for common understanding and interpretation of policies and also to inform parents about their learners' performance. If the teams communicate curriculum plans, it will be easy for stakeholders to hold them accountable at all levels.

Childhood programmes that includes developmentally appropriate play-based activities enable learners to share thoughts freedom to actively participate in the learning process. This active participation leads to the holistic development of the child. Findings from the environmental scan, individual and focus group interviews agree with these challenges that hinder the implementation of quality play-based activities in Dwaalboom schools. These include the knowledge of theory that teachers have acquired not being implemented in the real classroom situation, lack of key resources in schools, lack of specialisation in Grade R, safety and security and language barriers. If these barriers are not addressed, it can have a negative impact on the child's physical, socio-emotional, linguistic and cognitive development.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 OVERVIEW OF THE STUDY

In the previous chapter, data was presented and analysed in order to answer the research question on the provision of quality Grade R education in the Dwaalboom circuit, in Limpopo province. The literature was used to confirm the data collected from the environmental scan, individual interviews, focus group interviews and the reflexive journal. Individual interviews were conducted with Grade R teachers, school principals and the foundation phase curriculum specialist. There were two focus group interviews, one with four representatives of Grade R teachers from the four sampled schools, and the second with school management teams and a foundation phase curriculum specialist. This chapter presents a summary of the major findings based on responses to the research questions, and further includes the practical, contextual, methodological and theoretical implications of the study as well as conclusions and recommendations. The thesis culminates in a proposed model and guidelines for quality Grade R education in the South African context.

The aim of the study was to investigate how quality can be assured for the educational experience of Grade R learners in Dwaalboom circuit, with a view to providing key aspects that should be considered as guidelines to improving the quality of teaching and learning in Grade R classes. The primary research question was formulated as follows: How can quality be assured for the educational experience of Grade R learners? This question gives rise to the following sub-questions:

- Which framework can be used to define quality Grade R education for the diverse context of South Africa?
- What key aspects should be considered as guidelines to improve the quality teaching and learning in Grade R in the Dwaalboom circuit of Limpopo?

Subsequent chapters examined the definition of quality in Grade R based on the five key aspects of quality (“5P s”) of people, place, policy, programme and processes, using Purkey and Novak’s (2015) invitational theory as the driving theory, in combination with Bronfenbrenner’s ecological theory (1979), Vygotsky’s socio-cultural theory (1978) and Piaget’s cognitive development theory (1952). Although the study was not initially intended to compare rural and

urban schools, data collected reflected a significant difference between the two categories of quintiles (quintile 1 being rural and quintile 5 being urban schools), on the basis of the findings. The study further explored ways to improve Grade R teaching and learning to ensure that both rural and urban learners are provided with quality education. Finally, the study attempted to develop proposed guidelines and a model for the provision of quality Grade R education (see Figure 3.1 and Figure 3.3). The following section covers the findings of the study, the contextual, practical, methodological and theoretical implication with recommendations and the conclusion.

6.2. PEOPLE

The findings apply to the following quality criteria: age, experience and qualifications of the participants, support provided to ensure quality and the instructional language. The study identified a wide range of experience among the seven Grade R teachers, with the oldest teachers having primary teaching qualification without Grade R specialisation, and two of the three younger teachers having specialised in ECD with teaching experience below 10 years (see Table 5.2). Of the seven selected Grade R teachers in the circuit, only one teacher who specialised in Grade R (Diploma in Grade R) had 10 years' experience teaching Grade R. The DoE continues to appoint under-qualified teachers (practitioners) in Dwaalboom schools who lack the requisite skills, experience and knowledge to teach Grade R. Training provided to teachers is conducted during contact time, which, according to teachers, takes them out of school and impacts on their progress. Trainers of teachers are not appropriately qualified and experienced to capacitate teachers to ensure development. This is evident when teacher development programmes are conducted; teachers are not given practical tips that will assist them to deal with their specific content challenges. The foundation phase curriculum specialist who is supporting and monitoring curriculum delivery only visits schools twice in a term because of the number of schools allocated to her (129 schools in the district). The findings identified that not all schools and teachers receive support from the school management and the parents.

Findings of the study also indicate poor performance of learners in Languages and Mathematics in most rural schools. Learners whose home language is isiXhosa are taught in Setswana or English and learners whose home language is English are taught in Afrikaans where they attend school.

6.3 PLACE

The following findings apply to the inside and outside school environment and learning and teacher support material as key indicators of quality. Findings indicate that some of the Grade R teachers are not well trained or motivated to know the relevant material that they must use in teaching and learning. Teachers continue to depend on the supply from the DoE and they fail to use simple, concrete familiar objects to address the current lack of resources and stimulate learning. In two schools (S1Q1 and S2Q1) that were selected for the study, classroom furniture for Grade R learners was not in line with the norms and standards as prescribed by the DBE. Classrooms did not have the five different educational areas (art – drawing and painting, reading corner, construction – large and small, maths, and fantasy play).

Two Grade R classrooms did not have space to allow the teacher and learners to engage freely during teaching and learning. Grade R learners in these schools are allocated the same furniture as learners in other grades. Findings also reflect that the two schools have a serious shortage of resources. The situation becomes even worse when classrooms are overcrowded (Atmore et al., 2012). Grade R learners in S1Q1 do not have separate toilets as prescribed by norms and standards, and they are not given proper supervision when they visit toilets. Toilets are not clean. The kitchen facilities at S1Q1 and S2Q1 are not meeting the requirements of the National School Nutrition Policy.

6.4 POLICY

Findings reflect that teaching and learning in the Dwaalboom circuit is affected by how Grade R teachers, school managers and monitors support schools to interpret and implement departmental policies in Grade R to ensure quality. The DoE does not appoint well-qualified, experienced teachers with appropriate Grade R teaching qualifications. This affects the practice of teaching because under-qualified teachers lack understanding of child developmental theories, and subsequently fail to plan developmentally appropriate programmes.

Presentation of learning and teaching activities differs from school to school. Common plans are developed, guided by CAPS and are distributed to schools but are not implemented in the same way. Lack of implementation of plans reflects gaps in teachers' knowledge of the curriculum and aspects of child development. Not all schools cater for individual differences in

learning as learners in some rural schools are taught in a formal way without integrating play-based activities.

Time allocated to teaching and learning is prescribed explicitly by the CAPS document, but implementation differs depending on how each school principal and school management in the circuit interprets the policy. Rural schools in the Dwaalboom circuit do not develop, implement or monitor support programmes for learners whose home language is different from the school language of learning and teaching. These findings show that the DoE does not address the diverse needs of learners and teachers with regard to language barriers, such as supplying relevant support material in the learners' home language. This impacts negatively on learner performance.

Findings from the school management teams concern the implementation of the progression policy and how it is implemented differently by schools in the circuit. This also affects how learners are supported at different schools until they meet the required learning outcomes. Schools in the Dwaalboom circuit report learner performance on a quarterly basis by submitting term results to the circuit manager, but not all schools are held accountable by stakeholders.

The findings clearly reflect how the lack of important resources inside and outside the classroom severely inhibits the creation of an inviting learning environment in different schools in the circuit. In schools where there are no department heads, teachers are not monitored. This means teachers are not held accountable for full compliance and commitment in implementing all aspects of teaching and learning as prescribed by CAPS.

6.5 PROGRAMME

The findings of this study regarding the implementation of the Grade R programme were as follows: the teaching of Languages, Mathematics and Life Skills in some Grade R classes is not implemented in an integrated way as prescribed by CAPS. Suitable themes are not used to organise the learning content of the three subjects. In Grade R classes, a timetable is prioritised over the CAPS that prescribed daily programme. Even though schools have their plans in common, teaching and learning in rural and urban Grade R classes in the Dwaalboom circuit differs from one school to another and in some schools, from one teacher to another.

It appears that Grade R teachers' understanding of the curriculum components of Life Skills is in line with what is required by the DoE. However, teachers could not articulate this competency in routine activities or with suitable assessment techniques, except that the teachers know that assessment in Grade R is done on a continuous basis.

Dwaalboom circuit school principals were found to be resistant to using the daily programme. School principals lack understanding of the importance of the daily programme in Grade R; this impacts negatively on the successful implementation and teaching of Grade R programme. Some school principals compel teachers to treat Mathematics separately, allocated to its own lesson time in the timetable, instead of advising teachers to weave Mathematics into day-to-day applications using a daily programme. This lack of understanding and resistance creates a serious limitation for effective monitoring and support of policy implementation to take place. School principals attribute the lack of quality education to the DBE failure to appoint qualified teachers and to properly train Grade R teachers.

According to the foundation phase specialist, the DoE offers good plans but teachers fail to prepare thoroughly for classroom presentation, nor do they use learner and teacher support material to demonstrate to learners and enhance learning in Grade R. For quality Grade R education to be achieved, curriculum policy documents and guidelines provided by the DoE should be correctly interpreted and implemented by all stakeholders. In addition, the circuit managers and schools should ensure that the implemented policy contributes positively to teaching and learning in Grade R.

6.6 PROCESSES

Findings indicate that in some schools, learners are still taught in a formal way. Tables and chairs used by learners are organised in formal rows. Teaching and learning activities are not play-based. The classroom space does not allow learners and teacher to engage in play-based activities. There are no educational centres or themed areas in S1Q1 and in S2Q1 because the classrooms are too small. Grade R classes that have enough space have the carpet for the morning ring where learners share thoughts telling stories and listen to other learners (S3Q5 and S4Q5). Learners who come from different language backgrounds are taught language through signs and picture reading. There are schools in the farm area where learners can be encouraged use culturally familiar objects for learning (S1Q1 and S3Q5). Findings indicate that teachers

know that there is no formal assessment in Grade R but cannot explain various assessment techniques that they can employ to cater for different aspects of child development. There are those that can integrate assessment but there are some who believe that Grade R learners should be given homework (S2Q1). S3Q5 has enough space and material for pretend play. Not all schools have equipment for learning.

6.7. IMPLICATIONS

6.7.1 Contextual implications of the study

Dwaalboom circuit is in the southern part of Limpopo province. The province has a population of 5,8 million (2016) which makes it the fifth largest province in the country. Dwaalboom circuit is a small circuit consisting of the following categories of schools:

Farm schools

These schools are some distance from other schools and villages where learners reside. The buildings look old and are in poor condition. Issues of safety, lack of basic services, health and nutrition are not given much support in terms of funding as other schools in urban areas. There are many challenges emanating from socio-economic status and lack of parental involvement.

Schools near mining towns

These schools are closer to the mining towns where the environment is unhealthy and polluted by mine dumps and sewage systems. Air pollution from the mines is a serious hazard to communities staying closer to these areas. Young children spend significantly more time in outdoor play areas, especially in warmer climates, soils and the air of playgrounds may be contaminated with air pollutants which can put children's health at risk.

6.7.2 Practical implications of the study

Appointment of qualified Grade R teachers who have specialised in ECD will help the DoE to lay a good early childhood foundation for lifelong learning opportunities. Early childhood education should receive priority to ensure that all learners attend school readiness programmes. If older and more experienced teachers are fully utilised and retained by the DoE, they will serve as mentors to the younger entrants coming into the field. Lack of ECD specialisation in Grade R has a negative effect on the knowledge and skills needed to provide

quality teaching for learners at an early age. Lack of teacher support programmes within the school by school management teams retards development and chances for teachers to gain sufficient knowledge and skills to teach confidently. If school managers are not supported, it will be difficult for them to monitor teachers under their supervision. Monitoring and support visits to the schools by the curriculum specialist to can assist teachers to receive proper guidance in the implementation of Grade R curriculum.

Training provided to teachers must address the needs of the learners to close gaps in learning. Well-planned training programmes that are provided to teachers build skills and knowledge needed for the provision of quality education. If the learning environment is not stimulating and inviting it will impact negatively on teaching and learning. Grade R classes should be well maintained, print-rich, safe and clean with enough space for storage and free play activities. Classrooms arrangement and furniture should meet the requirements as stipulated in the Grade R policy. If the learner teacher ratio is reduced to at least 1:15, teachers will be able to attend to all learners, giving them individual attention.

Provision of appropriate indoor and outdoor equipment enhances learner participation and addresses all aspects of child development. This will give teachers ample chance to vary the approaches to ensure the holistic development of learners' socio-emotional, physical, cognitive and linguistic abilities. It is important that outdoor and indoor equipment should be maintained to prevent diseases and injuries. The bathrooms should be lowered to meet the height of learners, and must be clean and safe to be used by all young learners. Grade R classes should be in a designated area.

Grade R policies have to be supported, monitored and implemented because they have an influence on the provision of quality. CAPS provides norms and standards to guide teachers on the three subjects that are taught at a school and should be used with additional teachers' guides and learner's workbooks to strengthen the quality of education delivered at schools. The purpose is to equip learners, irrespective of their socio-economic background, race, gender, physical ability or intellectual ability, with the knowledge, skills and values necessary for self-fulfilment, and meaningful participation in society (DoE, 2008).

CAPS policy documents are provided by the DoE with work plans for the three subjects, to expose learners to Home Language (10 hours), Mathematics and Life Skills (6 hours) and if they are properly utilised, they serve as guidelines on how much time should be spent on each

topic and which content should be covered in that time so that there should be common implementation in all Grade R classes within the circuit. Outdoor activities given to learners should focus on gross motor development and coordination, based on free play activities. They are given to learners to address the holistic development of the learners. If schools are not using daily programmes specially designed for Grade R, learners miss an opportunity for integrated teaching and learning, both indoors and outdoors.

In terms of the South African Schools Act, 1996, the governing body determines the language policy. The learner's home language is the preferred language of choice for teaching and learning in Grade R, i.e. as the language of instruction. What the DoE is not addressing is the compulsory support programmes in areas where learners do not have a choice. The implication is that these learners' requirements can only be addressed if the teacher has expertise, skills and knowledge to introduce an additional language to develop the learner's vocabulary and communicative skills. The introduction of English or Afrikaans as an additional language in Grade R will put learners at an advantage to learn language concepts that will prepare them for the next grade.

The South African Schools Act, 1996 categorises schools according to quintiles. Rural schools which are mostly quintile 1 schools tend to be at a greater disadvantage than the urban or semi-urban schools. Findings indicate that there are still schools with serious infrastructure challenges in Dwaalboom circuit which implies that the DoE should prioritise and provide an enabling inclusive physical teaching and learning environment as an urgent priority.

The South African Schools Act (1988, as amended in 2011), regulates the age at which learners will be admitted to Grade R. What is missing in this policy to address learners' needs in the South African context, is specific admission age requirements and adherence to infrastructural norms and standards that will meet the requirements for the placement of learners. One of the gaps identified in this study is the need for a standardised admission requirement. South Africa lags behind comparable countries such as Swaziland and Botswana when it comes to the development of testing systems, diagnostic tools and intervention packages (van der Berg et al., 2011, p. 2). These intervention packages can be used by different actors within the system (such as parents) working at improving the performance of schools and school accountability (van der Berg et al., 2011). The need exists for South African research-based norms and standards to ensure that Grade R teachers know exactly what should be attained towards the end

of Grade R. These norms and standards need to encompass the cognitive (specifically relating to language development), physical as well as social and emotional domains of the Grade R learner.

Curriculum policy documents and guidelines provided by the DoE are mandatory. Proper and regular training should be provided to capacitate teachers and school management teams to have common understanding of the implementation of curriculum policies throughout the province. Teachers can be encouraged to go on training programmes for the accumulation of credits for teacher development. The DoE in Limpopo province must appoint qualified teachers and qualified Grade R curriculum specialists.

If quality education is to be provided, it is critical that Grade R curriculum specialists develop programmes that will address the diverse needs and interests of the learners' sociocultural backgrounds. School principals as instructional leaders must play their role in ensuring that curriculum is implemented and monitored, to the best of their ability. This can happen if the DoE establishes professional learning communities to allow teachers to engage, share ideas and challenges about their work. Finally, parents and communities should be encouraged to take responsibility by supporting the schools to show interest in their children's work.

The teaching of Languages, Mathematics and Life Skills in the some Grade R classes implies that learners are subjected to direct instructional approaches that do not address their developmental needs. Suitable themed areas are not available which impacts negatively on quality provisioning because learners cannot interact or communicate freely. Teachers prioritised timetable over the CAPS prescribed daily programme because school principals do not understand the importance of the daily programme and this indicates serious gaps on monitoring and support and widens inequality gaps between rural and urban schools when it comes to curriculum delivery.

Teachers know that Grade R learners are not supposed to write formal assessments, but they present content in a formal way which indicates a lack of balance between how learners are taught and how assessment is conducted. The department has to conduct special programmes in line with the new assessment policy for Grade R.

Some school principals who resist using CAPS, compel teachers to treat Mathematics separately, allocated it to its own lesson time in the timetable, instead of advising teachers to weave Mathematics into day-to-day applications using a daily programme. This lack of understanding

and resistance creates a serious limitation for effective monitoring and support of policy implementation to take place. School principals attribute the lack of quality education to the DBE's failure to appoint qualified teachers and to properly train Grade R teachers. According to the foundation phase specialist, the DoE offers good plans but teachers fail to prepare thoroughly for classroom presentation, nor do they use learner and teacher support material to demonstrate to learners and enhance learning in Grade R.

For quality Grade R education to be achieved, curriculum policy documents and guidelines provided by the DoE should be correctly interpreted and implemented by all stakeholders. In addition, the managers of the circuit and schools should monitor to ensure that the implemented policy contributes positively to teaching and learning in Grade R. Special intervention and school improvement plans should be designed in line with the needs of the school, and specifically the Grade R classes, to suit the school context. The specific continuous, professional training needs of teachers should be identified and special training programmes for teachers should be prioritised. It is of utmost importance that the contextual and socio-economic differences between urban and rural schools be identified and recognised when training programmes are developed. After training has been conducted, there should be regular support and monitoring by all relevant officials of the department and feedback should be discussed with the school management team.

Learners should be allowed to share ideas with other learners to develop their linguistic abilities. Teachers should not only depend on commercially bought material; they can use what is in their environment and become innovative using old tyres, old basins or culturally familiar objects for learning. The DoE still has a great deal to do to ensure that teacher training programmes that are provided capacitate teachers on various assessment techniques to ensure that all aspects of child development are monitored and assessed, and this includes the need for appropriate equipment for outdoor and inside free play activities.

6.7.3 Methodological implications of the study

The researcher's personal employment role as a DoE official is to assist in the distribution of resources to schools to ensure that quality teaching and learning takes place in all schools under her supervision. The researcher provided an environmental scan to investigate and explore the school environment and assess quality criteria that have an impact on the educational

experience of Grade R learners. The study showed that people, place, policy, programmes and processes are key indicators that have an influence on quality provisioning. Thus, invitational theory (2015), and the work of Bronfenbrenner (1979), Vygotsky (1978) and Piaget (1952) were all significant in considering the viability and success of providing quality. While the findings of the study are worthwhile, given the nature of this study, the researcher found the limitation of not observing instructional practices frustrating, because data collected relied on what teachers and school managers were saying, hence the primary research question had to be reframed.

6.7.4 Theoretical implications of the study

The theoretical framework re-examines the concept of quality in Grade R education through the lens of invitational theory (Purkey & Novak, 2015). What is new in the existing theory is the extension of invitational theory by integrating it with Bronfenbrenner's ecological model (1979), Vygotskian theory of mediation (1978), and Piaget's approach (1952). What the study emphasises is that it is important to apply all these theories in an integrated manner because they are interactively dependent on each other.

The theoretical framework uses Bronfenbrenner's ecological model (1979) to explain the learning and teaching environment which can be a positive or negative contribution regarding quality. Vygotskian theory of mediation (1978) implies that mediation is important in child's learning. The theory shows the importance of continuous interactions, based on the understanding that human activities take place in cultural contexts, mediated by language and other factors among and between human beings that influence child development. This demands of Grade R teachers to use teacher guided activities in the classroom where learners can still receive support from a knowledgeable source (ZPD). Implications of Piaget's theory (1952) is that children should be engaged in the discovery process with minimal teacher intervention. Teachers should allow children to participate by working with materials that they are familiar with, moving from the concrete to the formal.

If teachers receive training on the relevant theories of child development, they will understand their importance in guiding and supporting children to reach the required level of biological maturation. This implies that teachers should give learners meaningful activities that will cause the children to think, discover things and to make use of the information acquired in their learning environment. These theories point to important aspects of quality in an integrated

way and they include all key roles players in child development, place for learning, processes and the kind of programme provided to assist the child to develop. They are also relevant to the provision of quality Grade R education in the diverse context of South Africa.

6.8 LIMITATIONS OF THE STUDY

This study sampled only four of the 13 primary schools of Dwaalboom circuit in the Waterberg District of Limpopo province in South Africa. The sampled part of the district is already known for its poor performance because of the farm area challenges and the distance of the schools and the circuit from others in the district. Even though the sampled schools had the required characteristics to qualify them for the study, generalisation of the results cannot be easily justified.

It should be noted that the researcher was obliged to undertake data collection at times approved by the district. Conditions for observation were restricted as permission was not granted to observe teaching and learning in practice during contact time. Therefore, findings were based on observations made before and after school and during break times, when learners and teachers were outside their classrooms. To compensate for the limitation the environmental scan was conducted with individual interviews and two focus group interviews for the richness of data. The current situation may differ from that which was captured during the study, owing to changes that were effected at schools by the district after the study was conducted. These changes include the implementation of various policies and programmes by the DoE in partnership with other stakeholders.

6.9 GUIDELINES

The model developed in the study (see Figure 3.3) depicts practical guidelines and standards that have been developed for quality implementation of curriculum policy for all learners in diverse contexts. This model serves to enhance the suggested guidelines that can be implemented by all key stakeholders in the education system. The following guidelines can be implemented to ensure the provision of quality Grade R education in the South African context:

- Proper and regular training should be provided to capacitate teachers and school management teams to have common understanding of the implementation of curriculum policies throughout the province.

- Assessment practices should be addressed immediately to comply with DAP and the new CAPS (2018) assessment policies. Guidelines for these amendments should contain a review of the age of admission in Grade R.
- South African public primary schools should deal with the unique socio-cultural aspects, health and safety needs for the holistic development of young children at public primary schools.
- Clear norms and standards for a Grade R learning environment are needed.
- Infrastructure plans should be implemented and shortage of resources in schools should be prioritised, especially in quintile 1 schools.
- The DoE should give attention to the health and safety standards as prescribed by school safety regulations in all schools, especially schools that offer NSNP.
- The DBE must provide appropriate support material for Grade R to help the learner actively engage in learning.
- Managers in schools should manage the admission to avoid unfavourable learner-to-teacher ratios which seriously affects learner and teacher performance that finally impacts on learner discipline.
- Individual support should be encouraged to provide for an inclusive Grade R programme.

6.10 RECOMMENDATIONS

The following section concludes the study and makes recommendations to define the proposed quality Grade R education in South Africa. The challenges that teachers face with regards to Grade R curriculum policies that do not address the needs of the learners demands that Grade R curriculum policies in public primary schools should be reviewed and be thoroughly monitored and implemented by all role players. The current practice in South African public primary schools as observed, is that learners are sometimes admitted to Grade R at a very young age (four years old). All schools should ensure that the admission policy is implemented correctly to allow learners access education when they school ready. Policies that address the learner-to-teacher ratio should be reviewed to at least reduce the learner-to-teacher ratio to 1:15 in Grade R. The post provisioning model should be fully implemented with special attention given to weighting of multi-grade classes.

The challenge that the department faces with the state of lack of specialisation and teaching experience in Grade R can be addressed by the quality of support programmes that are provided to Grade R teacher. It is important for trainers to do need analysis, identifying areas of development communicated to teachers about their development. Teachers must know how the support that the trainers provides will contribute to their professional development. Effective support programmes help teachers to enhance the holistic development of the Grade R child through appropriately planned play-based teaching-learning activities.

Support programmes provided must ensure that the content of Grade R teacher training is hands-on. Teacher trainers should ensure that teachers are able to implement what they study, and institutions offering Grade R training must ensure that quantity does not compromise quality. CPD should be informed by research-based information about the state of Grade R teachers' curriculum knowledge and skills. These should include newly appointed teachers, experienced teachers, the school management teams and curriculum specialists who are supporting and monitoring Grade R. These programmes should be prioritised at suitable times, not during contact time when teaching and learning is taking place.

Teachers must be given proper support programmes. Only with continuous support and monitoring can teachers develop their skills and knowledge to plan teaching and prepare relevant learning activities. Schools should stop treating Grade R classes as a nursery programme, or even worse, as a "watered-down" version of Grade 1 (Umalusi et al., 2010). There must be continuous monitoring and observation when learners engage in play, so that no play activity takes place without a plan. When learning is not well planned, learners do not benefit from the activities and it becomes inevitable that learning outcomes will not be achieved.

It is of utmost importance that the contextual and socio-economic differences between urban and rural schools should be identified and recognised when training programmes are developed. After training has been conducted, there should be regular support and monitoring by all relevant officials of the department and feedback should be discussed with the school management team. There is an urgent need to amend the rural incentive policy that was introduced in 2009 by the DBE. All posts in rural public primary and secondary schools should be incentivised to address teacher retention challenges and to avoid discrimination.

If the intention of the DoE is to retain teachers in rural areas so that learners in these areas receive the same quality as their counterparts in urban areas, all subjects and grades should

receive the same treatment. The policy was introduced to improve teacher retention and encourage teachers to teach critical gateway subjects such as Mathematics and Science in “hard-to-teach” rural schools. If government wants to curb the decline of teacher retention in rural areas in pursuit of the provision of quality education, the policy should be reviewed, not disregarding the plight of teachers living in the same area, teaching Grade R. The distance that these teachers travel and the accommodation challenges they encounter should receive urgent attention.

Many South African teachers currently struggle with an influx of learners in a classroom that is designed to accommodate only 30 learners. Classrooms cannot be overcrowded and at the same time be conducive to teaching and learning, but this happens because managers of schools continue to admit more learners, even when they do not have enough accommodation.

Overcrowding challenges in schools must be treated as an urgent priority and should be managed. Learners with barriers need individual attention and this can only take place if teachers work in an inviting environment that allows them to use varied teaching methods for the holistic development of the child. Where the school budget allows, well-trained, experienced class assistants could be employed to provide support in overcrowded classrooms. Alternatively, volunteers from the community can provide support to teachers in overcrowded classrooms.

Parents and school management teams should have a shift of mindset from spending money on the learners’ support material to finding other sources, even where material can be recycled. Items such as empty containers, plastic bags and old tyres can be invaluable as support material for learners and teachers. Learners need a language-rich environment, because South Africa is a country of diversity using different languages for teaching and learning. There should be special language support programmes for both teachers and learners to avoid language barriers. Schools should develop an environment where learners can express themselves easily in their mother tongue. When the learner’s home language differs from the language of instruction, the learner may experience difficulties with understanding. The Grade R programme does not cater for formal language periods; schools experiencing this problem must develop multiple opportunities (such as action songs and rhymes as well as stories) for the affected learners to develop their language abilities.

Working through a Grade R programme becomes easy when teachers are provided with Grade R resource kits (including Big Book storybooks). Teaching and learning in Grade R should not be dominated by workbooks, pencil and paper activities. Workbooks should be well

managed and used as a summative assessment tool. Adjustments, specifically with regard to font size, should be made.

To improve the quality of Grade R education, all stakeholders should accept ownership, develop and implement school policies that will address the current challenges identified in rural and urban schools of South Africa. This situation demands that further research should be conducted by well-trained and experienced monitors. Monitoring instruments should be developed by experts in Grade R education who will make a submission to the evaluation committee. Special intervention and school improvement plans should be designed in line with the needs of the school, and specifically the Grade R classes, to suit the school context.

These recommendations highlight the fact that the DBE does not have “best practice” Grade R centres or resource centres in disadvantaged settings. If this does not happen, then nothing will change. If the Department intends to make progress in the improvement of the currently disturbing status, teachers in underperforming schools should visit these centres for accredited teacher development programmes. The intention must be to encourage schools to copy best practices and innovative teachers to share good practices that will discourage distorted views about quality Grade R education. If South Africans are serious about educational outcomes, all stakeholders should work collaboratively to define and implement norms and standards to improve quality in Grade R teaching and learning.

These recommendations are followed by a suggested realistic action plan which can be implemented by all key stakeholders in the education system to ensure the provision of quality Grade R education.

Table 6.1 Action plan for the provision of quality Grade R education 2025

ACTION NR.	ACTIVITY	RESPONSIBILITY	TIMEFRAME
1.	Review of all Grade policies National policies, laws and programmes	Department of Basic Education	2020 - 2021
2.	Training the trainers	Early Childhood Development Accreditation & Training Services	2020-2021
3	Infrastructure development	Department of Public Works Department of Social Development Department of Health	2020 - 2025
4	Stakeholder relations	School governing Body Universities and TVET colleges QLTC, Communities, NGOs	2020 -2021
5	Implementation	Early Childhood Development Accreditation & Training Services & DBE	2025
6	Monitoring and Evaluation	Early Childhood Development Accreditation & Training Services & DBE	2020 -2025

This study proposes a model to support guidelines for quality Grade R education that should be tested in other provinces of South Africa with small rural and urban schools. Applying the proposed model in other provinces will determine whether the model can be suitable and reliable for assisting other schools with improving the quality of teaching and learning in Grade R, throughout South Africa (see Figure 3.3 on p. 82).

South Africa has made strides in realising that the provision of quality Grade R education is a priority. The challenge that remains is whether the country continues to provide education which disregards the needs of learners in differing socio-cultural contexts. South African schools vary greatly and learners and teachers have differing needs. With this in mind, the understanding of various challenges will enable curriculum developers and implementers to develop special programmes to address each unique context, which influences the country's definition of quality Grade R education. For learner performance to improve and for quality to be achieved, there is a need for proper monitoring and evaluation of developmental programmes available at other

institutions and even DoE that are specifically designed to support teachers teaching in diverse situations, including schools with multi-grade classes. The developmental programme should be designed to motivate teachers to accumulate credits for their professional development. This can enable the DBE to have a pool of well-trained teachers with required knowledge and necessary skills to teach Grade R. The model presented in this study (see Figure 3.3) suggests that future research should focus on the five aspects of quality in Grade R education (people, places, policy, programmes and processes), taking the contextual needs as well as the different theories into consideration in a quest to define a holistic, evidence-based understanding of quality Grade R education in a South African context.

Grade R teachers in rural schools of the Dwaalboom circuit need development and regular support to improve their performance. They must be encouraged to enrol for a qualification in Grade R teaching. Provision of reliable and roadworthy learner transport should be prioritised and should meet the standard set by the Department of Transport.

Section 14 of the South African Schools Act of 1996 was intended to end the joint control of schools by the DoE and private landowners. The DoE has an obligation to collaborate with farm owners about farm schools on private land. The rights of both farm learners and their parents must be protected to ensure that learners are provided with good education. Parents working on farms should be given an opportunity to participate in decision-making processes for the benefit of their children.

6.11 CONTRIBUTION OF THE STUDY

This study was an ethnographic study with an environmental scan, specifically meant to benefit the Dwaalboom circuit, especially the schools who participated in the study. The model developed in this study proposes guidelines to improve the provision of education in Grade R in this area.

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Appendix A1: Individual interview guide Grade R teachers

PROVISION OF QUALITY GRADE R EDUCATION IN DWAALBOOM CIRCUIT: LIMPOPO PROVINCE

INDIVIDUAL INTERVIEW GUIDE GRADE R TEACHERS
--

Profile of the teacher

Age in years:

20-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65
-------	-------	-------	-------	-------	-------	-------	-------	-------

Teaching experience in years:

0-5	6-10	11-15	16-20	21-25	26-30	31-35	41-45
-----	------	-------	-------	-------	-------	-------	-------

Highest qualification	
Experience in Grade R	
Home language	
Language of learning and teaching	
Other languages spoken by teachers or learners	

1. How many learners are in your class and what are their ages?

2. Would you say the support you receive has a positive impact on your teaching practice?

3. What do you think the department still needs to do to improve training that is provided to Grade R teachers?

4. What type of activities should teachers use to develop learners in the following domains:

SOCIO-EMOTIONAL DEVELOPMENT	PHYSICAL DEVELOPMENT	COGNITIVE DEVELOPMENT

Place

5. In your opinion how would you describe a clean, safe learning space that is conducive to quality teaching and learning in Grade R?

6. Comment on the kind of learning and teaching support material that you can use to develop the learners' cognitive skills.

7. How can you provide a stimulating environment?

Policy

8. To what extent do you understand CAPS curriculum in implementing developmentally appropriate practices?

9. Does the policy give benchmarks in terms of learner support (barriers to learning, language delay and qualifications for referrals of learners with special needs)?

10. What kind of support do you receive from the department to ensure proper implementation of policies in Grade R?

Programme

11. Explain your understanding of the Grade R daily programme.

12. How do you think assessment should be conducted in Grade R to support learning?

Processes

13. How do you use mediation and scaffolding to guide learners to achieve learning outcomes?

14. What do you understand by play-based learning?

15. What do you understand by developmentally appropriate activities?

Thank You

Appendix A2: Individual interview guide for school principals

PROVISION OF QUALITY GRADE R EDUCATION IN DWAALBOOM CIRCUIT: LIMPOPO PROVINCE

INDIVIDUAL INTERVIEW GUIDE SCHOOL PRINCIPALS

Profile of the school principal:

QUESTIONS	S1Q1	S1Q2	S3Q5	S4Q5
Age				
Race				
Highest qualification				
Experience in Grade R				
Home language				
Language of learning and teaching				
Other languages used by teachers or learners				

1. Explain your understanding of the Grade R daily programme. What elements of the curriculum should be presented in the daily programme and how much time should be spent daily with the learners to cover all these elements?

2. What type of activities should teachers use to develop learners in the following domains:

SOCIO-EMOTIONAL DEVELOPMENT	PHYSICAL DEVELOPMENT	COGNITIVE DEVELOPMENT

3. What is the teacher-to-learner ratio in Grade R at this school?

4. What kind of learning and teaching material do you provide at your school to develop the learners' cognitive skills?

5. Which activities do you think teachers should use to promote and develop the learners' linguistic abilities?

6. What do you understand by free play? What do you think teachers should do during free play?

7. In your view, how should assessment be conducted in Grade R to support learning?

8. How do you provide support to teachers at your school? What do you think the department still needs to do to provide more support for Grade R teachers?

9. In your opinion how would you describe a clean, safe learning space? Comment on how learning and teaching support material is provided at your school to ensure a stimulating environment?

10. How can you improve quality provision of Grade R as a principal?

Thank You

Appendix A3: Individual interview instrument for foundation phase curriculum specialist

**PROVISION OF QUALITY GRADE R EDUCATION IN DWAALBOOM CIRCUIT:
LIMPOPO PROVINCE**

INDIVIDUAL INTERVIEW INSTRUMENT FOUNDATION PHASE CURRICULUM SPECIALIST
--

Profile of the foundation phase curriculum specialist

Age	
Race	
Qualification in Grade R	
Experience in Grade R	
Home language	
Other languages spoken in schools	
Number of schools in the district	

1. Policy

According to your observation, how much time is actually spent on teaching and learning activities by Grade R teachers daily?

2. Child development

What type of activities should teachers use to develop learners in the following domains:

SOCIO-EMOTIONAL DEVELOPMENT	PHYSICAL DEVELOPMENT	COGNITIVE DEVELOPMENT

3. Teacher development

What type of training do Grade R teachers need and how is it provided to improve their teaching practice?

4. Language use

What challenges do teachers have in using the language and how can these challenges be addressed to accommodate all the learners?

5. Programme

In your view, what elements of the curriculum should be presented in the daily programme?

6. Classroom environment

How would you describe a clean, safe learning space? Comment on how schools can use learning and teaching support material to ensure a stimulating environment?

Thank You

Appendix B1: Focus group interview schedule for Grade R teachers

**PROVISION OF QUALITY GRADE R EDUCATION IN DWAALBOOM CIRCUIT:
LIMPOPO PROVINCE**

FOCUS GROUP INTERVIEW GUIDE GRADE R TEACHERS

1. Profile of Grade R teachers

QUESTIONS	TEACHER 1	TEACHER 2	TEACHER 3	TEACHER 4
Age				
Race				
Highest qualification				
Number of learners in a class				
Experience in Grade R				
Home language				
Language of learning and teaching				

2. Child development

What do you understand by developmentally appropriate activities? What type of activities do you use to develop learners in the following skills:

SOCIAL EMOTIONAL DEVELOPMENT	PHYSICAL DEVELOPMENT	COGNITIVE DEVELOPMENT

3. Teacher development

What do you think the department still needs to do to improve training that is provided to Grade R teachers?

4. Language use

Which activities do you think Grade R teachers can use to promote and develop the learners' linguistic abilities?

5. Programme

How do you think Grade R teachers can improve quality provisioning in Grade R?

6. Classroom environment

How can teachers provide a stimulating environment and ensure that all learners are provided with enough learning and teaching support material?

Thank you

Appendix B2: Focus group interview schedule for school management teams

**PROVISION OF QUALITY GRADE R EDUCATION IN DWAALBOOM CIRCUIT:
LIMPOPO PROVINCE**

**FOCUS GROUP INTERVIEW GUIDE
SCHOOL PRINCIPALS AND
FOUNDATION PHASE CURRICULUM SPECIALIST**

Profile of the school management team

QUESTIONS	M 1	M 2	M 3	M 4	M 5	M 6	M 7	S 1
Age								
Race								
Highest qualification								
Experience in Grade R								
Home language								
Language of learning and teaching								
Other languages spoken by teachers or learners								

2. Child development

What type of activities do you think teachers should use to develop learners in the following skills:

SOCIAL EMOTIONAL DEVELOPMENT	PHYSICAL DEVELOPMENT	COGNITIVE DEVELOPMENT

3. Teacher development

What do you think the department still needs to do to improve training that is provided to Grade R teachers?

4. Language use

Which activities do you think Grade R teachers can use to promote and develop the learners' linguistic abilities?

5. Programme

What do you think Grade R teachers can do to improve quality provisioning in Grade R?

6. Classroom environment

How can schools provide a stimulating environment to ensure that all learners are provided with enough learning and teaching support material?

Thank You

Appendix C1: Observation schedule of the school environment

**PROVISION OF QUALITY GRADE R EDUCATION IN DWAALBOOM CIRCUIT:
LIMPOPO PROVINCE**

OBSERVATION OF SCHOOL ENVIRONMENT
--

Environmental scan

NAME OF SCHOOL:.....

LOCATION OF SCHOOL:.....

DESCRIPTION OF THE CONTEXT

.....

.....

.....

.....

.....

.....

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.....

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.....

COMMODITY	Y	N	REMARKS
Accessibility: Easily accessible for the community to reach the school			
Designated area for Grade R (fence and gates)			
Water (water centre)			
Electricity (safety tips)			
Outdoor facilities, such as jungle gyms, sandpit and swings			
Maintenance of buildings, window panes and floors			
Toilet facilities, size of toilets and number of seats			
NSNP policy compliance (meal preparation)			
Kitchen hygiene			
Environmental dangers (old toilet pits and rubbish dump) and supervision rooster.			
DAP furniture			
Learner-teacher ratio			
Organisation of classroom: seating arrangement, indoor play area and storage room			
Classroom is tidy, clean and safe (anchored shelves and lockable cabinets)			
Display of learning and teaching support material (e.g. charts, posters and sequence of numbers and alphabets)			
Impact of LTSM on the language/s used			
Records of planning are neatly kept, organised and updated regularly			
Records of learner assessments are neatly kept, organized and updated regularly			
Records of lesson planning and preparation			
Evidence of interaction or report given to parents on learner performance			

Appendix C2: Example from reflexive journal

APPENDIX D 2: Extract from the journal
Observations: Inside / outside
When the school re-opens (re-organise visit plan)
Cabinet for storage - shelves (anchored)

LTSM
Gr R Resource Kit

Improvise -
Routine signs

What is the daily routine, do the
signs cater for practice, how does the teacher
communicate - "Pictures"

Resources -
Designated Areas

Storage Area
- Hula hoops?
- Skipping ropes?

- Number of designated areas

- Space allocation for construction (Nothing?)

- Space allocated for

free play (Does it allow for practice? -
rehearsal? Now that the school has re-opened

Outdoor equipment (Inclusivity) - clean-in (winter games)

- Space allocated for play, games, large

- Appropriate resources (DAP) Equipments?

- Any checklist for observations?

At least the school did not have a
disabled learner "no other equipment
unless for the learners that were not
challenged" What if we had a disabled learner?

POLICY IMPLEMENTATION

CAPS : Adherence to time allocated v/s
time tabling / daily programme

Time allocation: Grade R v/s Grade 1

Time allocation — Multi-grading
23 hours

Gr. R v/s Gr 1
— Routine Activities

H/W = 10 hours
(No FAW)

Mathematics = 7 hours

Routine Activities

Life Skills = 6 hours

- Break time
- Routine activities
- Free play

Lesson Preparation — How did you integrate?

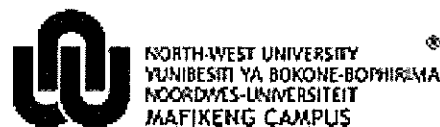
Routine — Morning ring — (Resources? carpet

- Weather chart
- Moral
- Stories

Integration e.g. shapes → colour
→ Numbers

Space Inside play / construction — Block area

Appendix D1: Request for permission to conduct research



The Principal/District Official
Department of Education
Waterberg District
Dwaalboom Circuit

Private Bag X2046, Mmabatho
South Africa, 2735

Tel: 018 389-2111

Fax: 018 392-5775

Education, Leadership & Development

Tel: 018 3892500 (Secretary)

Email: eliza.senne@nwnu.ac.za

Dear Sir/Madam

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

This is to confirm that **Mrs M.C. MOJAFI** (Student No: **16655680**) is a PhD student registered at the North-West University, Mafikeng Campus. The title of the dissertation is: **Provision of quality Grade R education in Dwaalboom Circuit: Limpopo Province.**

Permission is hereby kindly requested to enter ~~Laerskool Koedoeskop, Northam Primary, Dwaalboom Primary and Krause Primary schools of Waterberg district~~ to collect data from the District Curriculum official, teachers and principals. Data collection will be by way of interviews and observations.

Collection of data will occur outside school contact time so as not to interfere with teaching and assessment processes or office duties. The dates and times of the collections are to be agreed upon by the principal and all other participants.

Participants will participate voluntarily in the data collection. The identity of the participants and the school and district will be kept confidential and anonymous. The information collected therefore cannot and will not be used to evaluate the District/school in terms of its performance in comparison with others, because the information collected will not be about academic results or teachers' teaching performance in specific schools.

Should you enquire more information about the project, kindly contact the supervisor for this project: Prof. N. Diko (083 536 9376) (o/h) (018) 389 2889, Dr. E. Wessels (076 307 7581) (o/h) (018) 389 2733, Dr. M. Erasmus (083 854 0000) (o/h) (018) 389 2591 or M.C. Mqhele (082 742 1253/ 072 549 3053).

Herewith permission is kindly requested to perform this research in your schools and district. It would be appreciated if you would kindly grant written permission to this student. Any assistance given to the student to perform the research will be appreciated.

Yours sincerely

Prof P du Toit

Director: School for Education Leadership Development (School in which the Masters and PhD programme is registered)

Mafikeng Campus

Appendix D2: Teacher consent

I _____ Grade R teacher at _____

give consent that I will participate in the research. The purpose and the conditions of the research were explained to me and I participate of my own free will.

Signed: _____

Date: _____

Appendix D3: Head of department consent

I _____ Head of Department at _____

give consent that I will participate in the research. The purpose and the conditions of the research were explained to me and I participate of my own free will.

Signed: _____

Date: _____

Appendix D4: Deputy principal/principal consent

I _____ principal of _____

give consent that I will participate in the research. The purpose and the conditions of the research were explained to me and I participate of my own free will.

Signed: _____

Date: _____

Appendix D5: Foundation phase curriculum specialist consent

I _____ Foundation phase curriculum specialist at

give consent that I will participate in the research. The purpose and the conditions of the research were explained to me and I participate of my own free will.

Signed: _____

Date: _____

Appendix E: Editor's certificate

RUTH COETZEE

Full member: Professional Editors' Guild

Plain language practitioner

Academic specialist

34 Heritage Village

Tzaneen 0850

Cell : 072 9339417

Home : 015 0650145

Email : ruthc111@gmail.com

18 June 2019

To whom it may concern

I am an experienced English language editor, accredited by the Professional Editors' Guild, South Africa.

I hereby confirm that I have completed a language edit of the doctoral dissertation by **MOLATLHWANE CHARITY MOJAFI** titled: **Provision of quality Grade R education in Dwaalboom circuit: Limpopo.**

The work was edited to achieve

- clarity of expression and style;
- accuracy of grammar, spelling and punctuation;
- consistency in all aspects of language and presentation.

The author was requested to attend to suggestions for improvement of the text, and is responsible for the quality and accuracy of the final document. References were not included in the language edit.

R Coetzee

Ruth Coetzee (Mrs)

Professional
EDITORS
Guild

Ruth Coetzee
Full Member

National Treasurer
Membership number: COE004
Membership year: March 2019 to February 2020

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Appendix F: Ethics approval certificate



NORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHIRIMA
HOOROWES-UNIVERSITEIT

Private Bag X6001, Potchefstroom,
South Africa, 2520

Tel: (018) 299-4300

Faks: (018) 299-4310

Web: <http://www.nwu.ac.za>

Institutional Research Ethics Regulatory Committee

Tel: +27 18 299 4349

Email: Ethics@nwu.ac.za

ETHICS APPROVAL CERTIFICATE OF PROJECT

Based on approval by the Human Sciences Research Ethics Committee (HSREC) on 23/08/2016, the North-West University Institutional Research Ethics Regulatory Committee (NWU-IRERC) hereby approves your project as indicated below. This implies that the NWU-IRERC grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the project may be initiated, using the ethics number below.

Project title: Provision of quality grade R education in Dwaalboom circuit: Limpopo.																													
Project Leader/Supervisor: Prof N Diko & Dr E Wessels & Dr M Erasmus.																													
Student: MC Mojafi																													
Ethics number:	<table border="1"> <tr> <td>N</td><td>W</td><td>U</td><td>-</td><td>0</td><td>0</td><td>4</td><td>0</td><td>4</td><td>-</td><td>1</td><td>6</td><td>-</td><td>A</td><td>9</td> </tr> <tr> <td colspan="3">Institution</td> <td colspan="6">Project Number</td> <td colspan="2">Year</td> <td colspan="2">Status</td> </tr> </table> Withdraw, S = Submission, R = Re-submission, P = Provisional Authorisation, A = Authorisation	N	W	U	-	0	0	4	0	4	-	1	6	-	A	9	Institution			Project Number						Year		Status	
N	W	U	-	0	0	4	0	4	-	1	6	-	A	9															
Institution			Project Number						Year		Status																		
Application Type: PhD Application																													
Commencement date: 2016-08-18	Expiry date: 2019-08-18																												
Risk:	N/A																												

Special conditions of the approval (if applicable):

- Translation of the informed consent document to the languages applicable to the study participants should be submitted to the HRREC (if applicable).
- Any research at governmental or private institutions, permission must still be obtained from relevant authorities and provided to the HRREC. Ethics approval is required BEFORE approval can be obtained from these authorities.

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following:

- The project leader (principal investigator) must report in the prescribed format to the NWU-IRERC via HRREC:
 - annually (or as otherwise requested) on the progress of the project, and upon completion of the project
 - without any delay in case of any adverse event (or any matter that interrupts sound ethical principles) during the course of the project
 - Annually a number of projects may be randomly selected for an external audit.
- The approval applies strictly to the protocol as stipulated in the application form. Would any changes to the protocol be deemed necessary during the course of the project, the project leader must apply for approval of these changes at the HRREC. Would there be deviation from the project protocol without the necessary approval of such changes, the ethics approval is immediately and automatically forfeited.
- The date of approval indicates the first date that the project may be started. Would the project have to continue after the expiry date, a new application must be made to the NWU-IRERC via HRREC and new approval received before or on the expiry date.
- In the interest of ethical responsibility the NWU-IRERC and HRREC retain the right to:
 - request access to any information or data at any time during the course or after completion of the project;
 - to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process.
 - withdraw or postpone approval if:
 - any unethical principles or practices of the project are revealed or suspected,
 - it becomes apparent that any relevant information was withheld from the HRREC or that information has been false or misrepresented,
 - the required annual report and reporting of adverse events was not done timely and accurately,
 - new institutional rules, national legislation or international conventions deem it necessary.
- HRREC can be contacted for further information via Estie.Emtsohi@nwu.ac.za or 018 299 2873.

The IRERC would like to remain at your service as scientist and researcher, and wishes you well with your project. Please do not hesitate to contact the IRERC or HRREC for any further enquiries or requests for assistance.

Yours sincerely

Prof LA
Du Plessis

Digitally signed by

Prof LA Du Plessis

Date: 2016.08.27

14:34:54 +02'00'

Prof Linda du Plessis

Chair NWU Institutional Research Ethics Regulatory Committee (IRERC)

Appendix G: Turnitin Report

1._Thesis_MC_Mojafi.pdf			
ORIGINALITY REPORT			
15%	15%	8%	%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS
PRIMARY SOURCES			
1	www.scielo.org.za Internet Source	2%	
2	sajce.co.za Internet Source	1%	
3	uir.unisa.ac.za Internet Source	1%	
4	repository.up.ac.za Internet Source	1%	
5	scholar.sun.ac.za Internet Source	<1%	
6	www.tandfonline.com Internet Source	<1%	
7	sajip.co.za Internet Source	<1%	
8	en.wikipedia.org Internet Source	<1%	
9	www.wholechildeducation.org Internet Source	<1%	