

Promoting quality learning environments at Early Childhood Centres through Service Learning

M Labuschagne

20087012

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Supervisor: Dr A Klopper

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“Be still, and know that I am God.”

Psalm 46:10

Abstract

One of the biggest challenges in early childhood development (ECD) centres in rural districts is that teachers are not trained adequately and therefore they cannot create learning environments in which young children can develop to their optimal potential. In many cases a large group of children is placed in a classroom and no stimulation is given to them, because the ECD practitioner does not have the knowledge or skills to use what is available in the classroom to stimulate the children and facilitate learning. These teachers are desperately in need of guidance to plan age appropriate and suitable activities that will benefit the overall development of learners and prepare them to be ready for school. By promoting service learning at ECD centres, especially in rural districts, both the in-service and pre-service teachers will benefit from the teaching experience taking place.

Since 1994 a great deal of attention has been drawn to the importance of early childhood development and the important role pre-primary education plays in the development of young learners. Early childhood development has the potential to play a crucial role in the socioeconomic transformation of South Africa. By improving the social and economic transformation of the country, more people will be educated, leading to fewer problems with aspects like school readiness and school dropout.

Against this background the study will explore service learning as a way of promoting quality learning environments in Early Childhood Centres in rural districts.

Key terms: curricula, early childhood development, learning environments, rural districts, service learning

Opsomming

Een van die grootste uitdagings wat vroeëkinders ontwikkelingsentrums in afgeleë gebiede ervaar is dat onderwysers nie voldoende opgelei is nie. Dit lei daartoe dat die onderwysers nie 'n gunstige leeromgewing kan skep waar leerders tot hul volle potensiaal kan ontwikkel nie. In baie gevalle word groot groepe leerders in 'n klaskamer geplaas sonder om enigsins gestimuleer te word. Die onderwysers beskik nie oor die vaardighede of kennis om dit wat tot hul beskikking is te gebruik om leerders te stimuleer en leer te fasiliteer nie. Hierdie onderwysers het 'n groot behoefte aan leiding sodat ouderdomsgestemde aktiwiteite beplan kan word wat leerders kan stimuleer en skoolgereed maak. Deur diensleer by vroeëkinders ontwikkelingsentrums in afgeleë gebiede te bevorder, sal beide die student en die onderwysers baat vind by die diensleerervaring.

Ná 1994 is daar baie aandag gevestig op die belangrikheid van vroeëkinders ontwikkeling en die rol wat voorskoolse onderrig speel in die ontwikkeling van leerders. Vroeëkinders ontwikkeling het die potensiaal om 'n daadwerklike rol te speel in die sosioëkonomiese transformasie van Suid-Afrika. Deur die sosiale en ekonomiese transformasie van die land te verbeter sal meer mense kwaliteit opvoeding ontvang en dit sal lei tot minder probleme in terme van skoolgereedheid en skoolverlaters.

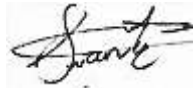
Na aanleiding van bogenoemde sal die studie fokus op die wyse waarop diensleer kwaliteit voorskoolse omgewing kan bevorder in afgeleë gebiede.

Sleuteltermes: kurrikulums, vroeë kinders ontwikkeling, leeromgewings, landelike gebiede, diensleer

Text editor's declaration

18 November 2014

I, **Stefanus van Zyl**, hereby declare that I perused the master's thesis, titled **Promoting quality learning environments at Early Childhood Centres through Service Learning**, by **M Labuschagne (20087012)**, and, where necessary, edited it to the best of my abilities.

A handwritten signature in black ink, appearing to read 'Stefanus van Zyl', is positioned above the typed name.

Stefan van Zyl (MA)
072 820 7275
stefanvanzyl@hotmail.com

List of Abbreviations

AEE	The Association for Experiential Education
B.Ed.	Bachelor of Education
CECD	The centre for early childhood development
CECDE	Centre for Early Childhood Development and Education
CHE	Council on Higher Education
CHEPS	The Community Higher Education Service Partnerships
DGMT	The DG Murry Trust
ECD	Early Childhood Development
ECE	Early Childhood Education
MINMEC	Ministers and Members of Executive Councils
NACCE	North America Community for Cultural Ecology
NELDS	The National early learning and developments standards
NIP	National Integrated Plan
NGO	Non-Government Organisation
NNCC	The National Network for Child Care
NPO	Non-Profit Organisation
NQF	National Qualifications Framework
NWU	North-West University
OECD	Organisation for Economic Cooperation and Development
SA	South Africa
SACE	South African Council of Educators
SAHECEF	South African Higher Education Community Engagement Forum
SRCS	Student Rag Community Service
UNICEF	United Nations Children’s Fund
USA	United States of America
WHO	World Health Organisation

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Chapter 1: Introduction

1.1 Statement of the problem and motivation for the research

After visiting various early childhood development (ECD) centres in the Ikageng and Promosa areas around Potchefstroom, it became clear that most ECD centres in these rural districts did not offer daily programmes, had little or no teaching aids and the indoor and outdoor environments were not appropriate for teaching preschool learners effectively. A large number of teachers did not receive formal ECD training and were mostly volunteers helping out at the ECD centres. They were in dire need of guidance to plan age appropriate and suitable activities that would be beneficial to the overall development of learners and prepare them for school readiness.

Since 1994 a great deal of attention has been drawn to the importance of ECD and the important role pre-primary education plays in the development of young learners (SA, 2009a:7). Awareness of the critical importance of early interventions, to ensure a good start in life and prevent loss of human potential, has been increasing worldwide ever since. International agencies, such as the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO), highlight the importance of a healthy start in life as well as the nurturing and stimulation of an early environment in which the foundation for later psychological, social and physical development can be laid (UNICEF, 2007). UNICEF's education strategy is aimed at improving children's right to education in order to achieve "Millennium Development Goals" by 2015 (UNICEF, 2007).

ECD has the potential to play a pivotal part in the social and economic transformation of South Africa (SA 2009a:7). By improving social and economic transformation in South Africa, more people will be educated. These improvements will lead to fewer problems with regard to aspects such as school readiness and school dropout. Enrolment in education during a child's early years is seen as a key indicator of socio-economic development and progression towards the Action Plan to 2014. The action plan envisions that the enrolment ratio for ages 0-5 years should increase with 50% by 2024 (SA, 2010b:13). Policies and programmes to improve ECD have been put into place by government departments and non-government organisations (Grobler, Faber, Orr, Calitz, and Van Staden, 2007:1; SA, 2009a:7). The importance of ECD was also articulated by the South African government in

the 2009 budget where it was emphasized that the number of children attending ECD centres should be expanded. The budget also stated that new learning sites should be built and that the training of practitioners, to increase the number of caregivers, should receive priority (SA, 2008a).

The Education White Paper 5 on Early Childhood Education (SA, 2001b) states that about 40% of young children in South Africa are brought up in poverty and neglected. Being brought up in such bad conditions may result in infant death, low birth weight, stunted growth, poor adjustment to school, repetition and school dropout. The Interim Policy for Early Childhood Development (SA, 1996b) accentuates the importance of ECD, particularly because of the fact that few families have the ability to provide for their children's developmental needs due to a lack of sufficient aid in their communities. Most of these children's parents received limited or no formal schooling and experience problems teaching their own children the basic skills needed to prepare them for formal education (SA, 1996b). Ramey and Ramey (2004:488-489) support the importance of ECD and states that children from poor and undereducated families have a higher risk of lacking important knowledge and skills to ensure school readiness.

Another factor contributing to the problem is the fact that a large number of parents had a fulltime job and were not educated to identify good ECD centres. Furthermore, the majority of parents have few choices regarding the availability and quality of day care where their children are left. These parents typically choose to leave their children with a caregiver or at a learning site where they assume that their children will receive the training and education needed (Grobler *et al.*, 2007:1). Unfortunately one of the biggest problems of ECD centres in rural districts is the fact that teachers are not trained adequately. They often fall short in creating learning environments in which young children can develop to their full potential. In many cases a large group of children is placed in a classroom with no stimulation (physical, cognitive, emotional, and social), because the ECD practitioner does not have the knowledge or skills to use what is available in the classroom to stimulate the children and facilitate learning (SA, 2010a:30). This lack of ability to create a stimulating learning environment, in which the foundation for future learning can be laid, plays a detrimental role in all future learning and development of the preschool learners.

Apart from the learning environment at ECD centres, Bronfenbrenner's ecological system theory (as cited by Brewer, 2007:13) claims that a child develops in a complex system of relationships which are influenced by surrounding environments in an interrelated manner. Donald *et al.* (2007:40) support this statement by stating that a child's development is shaped by the social context wherein he/she lives. Bronfenbrenner's ecological system theory comprises five systems interacting with one another. These systems are the microsystem, mesosystem, exosystem, macrosystem and chronosystem (Donald *et al.*, 2007:41). Microsystems are systems that involve interactions with familiar people like family or friends. They assist in developing a child socially, emotionally, cognitively, morally and spiritually through relationships and daily activities (Donald *et al.*, 2007:42). Mesosystems consist of microsystems that constantly interact with one another like a teacher helping a child or a neighbour giving advice (Swick & Williams, 2006:372). According to Oswald (2008) exosystems refer to those systems that the child is not directly involved in for example a parent's workplace or friends of a sibling. Macrosystems consist of social and economic structures, beliefs and values (such as respect for senior citizens in the community) which have an influence on the child's microsystem and mesosystem. The chronosystem represents time and the way interactions between systems change over time and affects the development of the child (Donald *et al.*, 2007:42). This theory is discussed in more detail in chapter three in order to indicate the relationship between the various systems connected to the child, for example the roles of the in-service teacher, the service learning team (pre-service teachers), the learning environment as well as other stakeholders involved.

Bronfenbrenner's theory emphasizes the important role of the environment in which learners are educated (Donald *et al.*, 2007:40). The White Paper on Education and Training (SA, 1995) also acknowledges that children's growth and development are influenced by various elements in their environment. This legislation states that an environment, which meets the child's basic needs namely nutrition, stimulation, safety and health, must be established. The National Research Council (as cited by Fu, 2003) supports this view and claims that studies have shown the importance of learning based on the relationship between individuals and their learning environment. This necessitates the establishment of a good learning environment in order to provide opportunities for learning to occur (Grobler *et al.*, 2007:1).

Against this background the study explores service learning as a way of promoting learning environments at ECD centres in rural districts. Before discussing the literature, terminology used in the study will be clarified.

1.2 Clarification of terminology

▪ Early childhood development

In the White Paper on Education and Training (SA, 1995) ECD is defined as growth processes which children undergo from birth to the age of nine years. These processes include processes to develop physically, emotionally, religiously, socially, cognitively and normatively.

▪ Service learning

Lemieux and Allen (2007:310) state that service learning is a form of community engagement on which higher education institutions focus nowadays. Service learning enhances civil responsibility and enriches students' academic curriculum or the participants' community programme. McPherson (2005) supports this view of service learning and describes it as a method through which students can apply their skills and knowledge to address specific needs in a community. Service learning can thus be defined as a collaborative relationship between the classroom and the community where the emphasis is placed on both the students' learning and the resulting community service (Lemieux & Allen, 2007:310; Gonsalves, 2008).

▪ Educare

The term *education* is derived from the Latin words *educare* (referring to "being trained" or "moulded") and *educere* (which means to "bring forth what is within") (Bass & Good, 2004:162). In the years leading up to the democratic elections in 1994 the term "educare" was used to emphasize the fact that learners should not only be looked after but that they should be stimulated in an educational environment in order to develop into a holistic individual (SA, 2001a). Educare equips learners with the necessary tools they will need to get a head start in education, to learn how to learn and to make sense of their environment. Educare especially plays an important role in disadvantaged communities because of the need to compensate for the education that cannot be provided at home because both parents are working.

- **Teacher**

The term *teacher* refers to all facilitators or caregivers at ECD centres. The terms *teacher*, *practitioner*, *in-service teacher*, *facilitator* and *educator* are used interchangeably. Many of these teachers did not receive any ECD training. For the purpose of this study a distinction is made between in-service teachers and pre-service teachers. In-service teachers refer to teachers that may or may not have already completed training and are teaching full time. Pre-service teachers refer to student teachers that are busy with their studies for the degree Bachelor of Education (B.Ed.) in Foundation Phase.

- **Learner**

In this study the term *learner* will refer to all children attending ECD centres. The terms *learner*, *preschool learner* and *child* are used interchangeably.

- **Grade R**

Grade R refers to the year before a learner starts with formal teaching in grade 1. Grade R is also known as grade 0 or the reception year. Learners can be admitted to grade R at the age of four turning five by the 30 June in the year of admission (SA, 2009b). Grade R is included in the National Curriculum forming part of the Foundation Phase (grades R to 3) and should thus not be isolated. Grade R is not yet compulsory for learners in South Africa. Grade R learners follow a daily programme consisting of indoor and outside free play, structured activities, routine activities and guided activities in Languages, Mathematics and Life Skills. During a week ten hours must be spent on Languages, seven hours on Mathematics and six hours on Life Skills (SA, 2011c:6) The grade R classroom has informal and open plan areas. Uniforms are not compulsory for grade R, thus learners attend school in comfortable clothes to better participate in activities (SA, 2008b).

- **SRCS (Student Rag Community Service, NPO 002-000)**

SRCS (Student Rag Community Service, NPO 002-000) is a registered welfare organisation of the North-West University's Potchefstroom Campus which has been managed by students on a voluntary basis for the past 34 years. SRCS is also one of the Student Representative Council's portfolios. The main focus of SRCS's 87 projects is to offer support to existing NGOs in Potchefstroom and surrounding areas by focusing on sustainability, empowerment and quality community engagement. SRCS focuses on four

main areas, namely early childhood development, child and youth development, outreach programmes and vulnerable youth and adults (Stidworthy *et al.*, 2011; Stidworthy, 2011).

1.3 Review of relevant literature

This study focuses on the utilization of service learning to promote the learning environment at various ECD centres and aims to empower in-service ECD practitioners as well as pre-service Foundation Phase teachers who participated in this project. This will be achieved by means of expanding learning opportunities through service learning. This study also anticipates the improvement of the ECD learning environments at the selected ECD centres and the provision of better learning opportunities for preschool learners.

In terms of Section 29(1) of the Constitution of South Africa (SA, 1996a) everyone has the right to basic education. This right to basic education can only be enforced effectively if educators are properly trained to educate learners within their class in order to help them achieve and develop to their full potential. Quality education in the early childhood years is beneficial for learners' growth and development through their entire lives (SA 2009a:7). Because of a typical lack of human, financial and material resources, especially learners from rural districts need good quality ECD centres to help them develop to their full potential (Biersteker & Dawes, 2008:185). For teachers to achieve this it is imperative to establish a suitable learning environment in which effective teaching can be facilitated.

1.3.1 Training of ECD practitioners

Effective and extensive training of ECD practitioners is imperative and a prerequisite for quality early childhood education (Ackerman, 2004:1). ECD practitioners have an immense responsibility with regards to teaching because they have to address the needs of individual learners in their classes. A problem at ECD centres located in rural districts are that the majority of ECD practitioners have no or minimal training. They do not have the knowledge to stimulate and educate learners in their classes (SA, 2010a:30). According to the Preschool Learning Alliance (2011), confident and knowledgeable educators who have been trained adequately are vital in providing quality education and care to young learners. It is therefore a necessity to acknowledge the needs of the ECD practitioner. Educators need specific skills to teach learners effectively and to be able to enjoy teaching and the challenges it may bring (Yildizlar & Kargi, 2010).

Qualified and competent teachers, who are capable of facilitating effective learning opportunities for young learners, are very important for providing quality education. Quality education in the years before formal schooling enables young learners to become ready for school and helps to prevent social problems such as unemployment, poverty, crime, bad social skills and unhealthy life choices. It also contributes to economic development by preparing learners for the workplace and enables them to have access to employment (Calman & Tarr-Whelan, 2005). According to Noble (2008), the quality of education plays a vital role in a learner's achievement. If children fall behind during their early years, they will struggle to reach their full potential later in their lives (Morris *et al.*, 2009:3).

In 2011 the National Qualifications Framework document was released indicating the requirements for all teacher education qualifications. As part of the document a three-year grade R teaching diploma was introduced for teachers who did not receive any grade R training. The diploma can play an immense role in helping teachers continue their studies to become fully qualified (SA, 2011a).

1.3.2 The ECD environment

Another important factor that influences the quality of education at early childhood centres is the environment in which learners are taught. The environment must be appropriate to stimulate learners (Vaughan, 2007) and teachers should have the necessary skills and training to be able to facilitate a quality learning environment and help learners to develop holistically.

Children under the age of six are often left at a care centre by their parents who have to work (Vaughan, 2007). These children generally spend up to 12,500 hours at ECD centres before they start with formal schooling in grade 1. Learners' needs will vary according to their age, ability and learning method (Shaw, 2010) and these differences should be taken into consideration when learning experiences are planned. The learner's growth and development are also influenced strongly by the environment in which they find themselves (Marotz, 2009:186). ECD centres, where learners are taken care of, must be safe, nurturing and stimulating to ensure that the child develops holistically (Vaughan, 2007). In other words, ample opportunities to develop physically, socially, emotionally and cognitively should be facilitated through developmentally appropriate teaching practices.

1.3.2.1 The indoor environment

Pairman and Terreni (2001) believe that the early childhood environment could be seen as another teacher, giving cues and messages for learners to act on. The environment “speaks to the learners telling them what to do, how they can do it, where they can do it and how they can work together with other learners.” The apparatus in a room, as well as how it is arranged, could also have an effect on the behaviour of learners and give them cues or messages to act on. Educators who work in the ECD centre are mainly responsible for the “language” of the classroom and it is therefore important that educators understand the “language” being created. Vygotsky highlighted the importance of the cultural context in which a learner is taught and how it influences the learning that is facilitated. He also emphasizes that the teacher is the “more knowledgeable other”, which means that the teacher needs to “scaffold” activities to enable learners to complete tasks which they are not able to do without assistance (Slavin, 2000:256; Schunk, 2000:244). An example of scaffolding would be to give young learners concrete apparatus to help them with counting. The environment in which a preschool learner functions can be defined as the sum total of physical, cultural and behavioural features that surround and affect him/her (Marotz, 2009:186). While planning a learning environment a teacher should make sure to include the following six play experiences: quiet and calm play, play with structured materials, play involving gross motor activities, discovering play with creative materials, dramatic play and an area for learners with disabilities to play in (ShIPLEY, 2008:100; Pairman & Terreni, 2001). Being in a safe environment encourage preschool learners to explore and learn through play (Marotz, 2009:197; Shaw, 2010). Inclusion of different play experiences will contribute to the holistic development of preschool learners, thereby preparing them for school readiness.

When creating a learning environment it is important to plan the physical space of the classroom (the indoor environment). According to Hill *et al.* (as cited by Brewer, 2007:80) studies have shown that learners’ attitudes and behaviour are influenced by their environment (Pairman & Terreni, 2001). Play is one of the most important ways through which children learn new things (Shaw, 2010). Through play learners do not only learn about themselves, but they also learn about the world around them. It is the ECD practitioner’s job to ensure that a safe, but interesting, play and learning area is created. The following areas are necessary in the classroom: various play areas, an area where

learners can sleep, a toilet area, kitchen, storeroom and a sick room for when learners become ill (Grobler *et al.*, 2007:31; Shaw, 2010). The play area must be big enough for learners to move around freely. Learners must know where things are stored so that they can decide what they are interested in to play with. This knowledge promotes self-regulation. Toys must be stored in such a manner that learners can reach it easily. The surfaces in the play area should preferably be made of washable material that can be wiped clean. The classroom should furthermore have a relaxed atmosphere to ensure learners' optimal development (Grobler *et al.*, 2007:31; Pairman & Terreni, 2001).

1.3.2.2 The outdoor environment

Most parents and educators agree that it is important for learners to play outside (Clements, 2004:68). According to Archer (2007:1) outside play is limited due to new constraints and social conditions of the 21st century. Nowadays most adult activities take place indoors and that causes children to play inside rather than outside because they need to be supervised by adults (Rivkin, 2000). Parents also work longer hours and cannot spend time outdoors with their children and living spaces are getting smaller leading to smaller gardens. Working parents often use technology (for example games and television) as a way to keep children safe inside the house while they attend to domestic chores (Archer, 2007:1; Clements, 2004:74).

Children rarely get a chance to play outside when they are at home. It is therefore important that ECD centres should have enough outside space for learners to play, kick balls and run around. Children need space to skip, jump, move and play without the risk of hurting themselves (Shaw, 2010). If the space outside is limited, the facilitator should rather have less apparatus for learners to play on.

The safety of the learners should always be priority. Apparatus that are suitable for outside play include slides, jungle gyms, sandboxes, swings and toys with wheels. The terrain must be fenced to prevent learners from leaving the school area which may put them at risk for getting hurt. Gates ought to be childproof and learners should not be able to climb over it or open it by themselves (Grobler *et al.*, 2007:42, 47; Cronan & Howard, 2008; New Zealand Ministry of Education, 2011). When planning and designing an outdoor area at an ECD centre, regulations, legislation, the maintenance of the equipment and the needs and abilities of learners should be taken into consideration (Archer, 2007:2).

In light of these prescriptions, service learning can also play an important part in developing the ECD environment and facilitate play at ECD centres. A discussion about the goal of a service learning programme will follow.

1.3.3 A service learning programme's goal

According to McPherson (2005) service learning is a method through which students can apply their skills and knowledge to address specific needs in a community. Sigmon (as cited by Furco, 1996) states that service learning only takes place when it benefits both the provider and recipients of the service. The programme must be designed in such a way that the services provided will enhance the learning of the provider and that the learning, in turn, will enhance the service being provided (Furco, 1996). Service learning can thus be defined as a collaborative relationship between the classroom and the community where the emphasis is placed on both the student's learning and the community service being provided (Lemieux & Allen, 2007:310; Gonsalves, 2008). If service learning students visit an ECD centre on a regular basis and present educational activities to the learners, they will benefit by gaining knowledge and skills with regard to teaching practice as well as problem solving skills such as addressing problems that might occur. The learners in turn will benefit by being exposed to a richer environment where developmentally appropriate activities are demonstrated. In this study pre-service teachers will be involved in the planning of activities taking place during service learning and will also reflect on the activities afterwards. In-service teachers will benefit by receiving training from the pre-service teachers.

Service learning can be considered a form of experiential education. During experiential education individuals engage in community-based activities or services to address certain identified needs. These activities are designed to promote learning and growth (Williams & Gilchrist, 2004:84). Experiential education is the process during which knowledge is created through a grasping and transforming of experience (University of North Carolina, 2009). Kolb states that experiential education comprises four stages, namely concrete experience, observation and reflection, the formation of abstract concepts and testing in new situations (Smith, 2001; Atherton, 2010). By observing, reflecting and forming abstract concepts, ways to enhance learning even more can be invented. By testing what has been experienced, knowledge is gained which can be applied to other learning experiences. By experiencing, an individual can add value to the things being learned. This theory

emphasizes the importance of observation, reflection and critical thinking for students involved in service learning. The research design will elaborate on ways in which observation and reflection will be facilitated.

Service learning should not be confused with volunteerism, community service, internship programmes or field education. The focus of volunteerism is on the service being provided rather than on the learning taking place (Lemieux & Allen, 2007:312). James and Toole (as cited by Furco, 1996) support this view by arguing that volunteerism could be seen as people providing a service out of their own free will without receiving any compensation. Volunteerism can be seen as people helping people who are not included in a person's circle of social support on a regular basis by personal cost of a person's time, resources and talents without the expectation of a reward or compensation for the help being provided (Biggs & Cvancara, 2008).

Community service focuses on the service being given to the participants as well as the benefits that the service will have for the participants and community (Furco, 1996; Lemieux & Allen, 2007:310). Weyers and Herbst (2010:8) differ from the previous statement by arguing that community service is the most basic form of community involvement. People involved in community service engage in activities in the community in order to help make the community a better place. The people involved in community service do not receive any compensation and willingly give their time to perform community service. Although both views hold that all parties involved will gain something from the service, it is clear that service learning emphasizes the importance of learning while providing the community service.

Internship programmes' differ from community service, the main purpose is to provide the student with hands-on experience in their specific field of study (Leeward Community College, 2007). Students doing internships may receive payment for their services or they may do it on a voluntary basis. Internships can be done in profit or non-profitable organisations (Furco, 1996).

During field education students on the other hand provide a service as part of a programme that helps them to understand their field of study while providing a service (Furco, 1996). Field education focuses on the development of a student's knowledge and skills and not on the benefits it has for the community (Lemieux & Allen, 2007:312). The distinction between

service learning and field education is thus that both the learning gains of students and the benefits for the community partners during service learning are valued as important. This study however only focused on service learning in which pre-service teachers participated as part of their Bachelor of Education course.

In light of the literature study the following research questions were asked:

1.4 Anticipated research problems

1.4.1 Primary problem

The primary problem was the lack of quality ECD environments due to the insufficient training of teachers. The major question that this study addressed was: To what extent can service learning promote quality learning environments in Early Childhood Centres through service learning?

1.4.2 Secondary problems

The following questions arose from the primary problem:

- How will service learning contribute to the promoting of a quality learning environment at ECD centres?
- In which ways can service learning contribute to the empowerment of in-service teachers at ECD centres?
- In what way will pre-service teachers benefit from service learning at ECD centres?
- In what ways will the ECD environment influence learners' development according to Bronfenbrenner's theoretical framework?

1.5 Aim of the research

Ultimately this research wants to determine whether service learning can be utilized to promote quality learning environments at ECD centres located in rural districts. ECD lays the foundation for human and social development as well as the success of future teaching and learning. Learners from rural districts particularly need good quality ECD centres to help them develop to their full potential (Biersteker & Dawes, 2008:185). Because of my involvement with SRCS, I experienced on a weekly basis that children in rural districts were not receiving the quality education they deserve. I therefore wanted to get involved in research on how good quality ECD centres in rural districts can be developed and how teachers can be guided to establish developmentally appropriate and quality learning environments at ECD centres.

The following objectives were set to help with the research:

- To determine if service learning can promote a quality learning environment at ECD centres;
- To explore ways in which service learning can contribute to the empowerment of in-service teachers at ECD centres;
- To determine if pre-service teachers will benefit from service learning at ECD centres; and
- To determine ways in which the ECD environment will influence learners' development according to Bronfenbrenner's theoretical framework

1.6 Research design and methodology

1.6.1 Literature study

For the purpose of this research various primary and secondary sources were consulted. Primary resources could be seen as data that is unpublished and obtained directly from participants or organisations such as reports, correspondence etc. However, it could also be published in the form of a letter in a newspaper. Primary sources are therefore any original source documents. Previously published work in any form such as books, articles etc. are classified as secondary sources (Nieuwenhuis as cited by Maree, Creswell, Ebersson, Eloff, Ferreira, Ivankova, Jansen, Nieuwenhuis, Pietersen, Plano Clark & Van der Westhuizen, 2010a:82-83).

For this study books, articles and policies were consulted. SRCS documents and interviews with the chairperson for the terms 2009/2011 of the SRCS were used to obtain information regarding SRCS. Search engines such as Google Scholar and academic databases such as EBSCO Host were used to gather information. The following key words were used during searches for sources: classroom environments, development of pre-primary learners/children, early childhood development, learning environments, outside play areas, rural districts and service learning.

1.6.2 Research design

According to Leedy and Ormrod (2005:133) a qualitative research design focuses on phenomena that occur in natural settings. The qualitative researcher should try to not interfere while observing. Researchers recognize that the issue they are studying may have many dimensions and they take that into consideration when observing. According to Du Plooy (2001:83) a qualitative research approach is used when norms, needs and

qualities of individuals, groups, communities or organisations are being investigated. Methods that can be used with a qualitative research design to obtain information include observation and semi-structured interviews. A qualitative content analysis can be used to analyse the data collected. The qualitative research design gives the researcher the opportunity to reflect on data. A good way of collecting data is to keep a reflective journal. The researcher must act as if invisible while observing but may also interact as long as the data that are interpreted represent the voice of the participants being observed (Burgess & Kemp, 2004).

1.6.3 Site or social network selection

For this study two ECD centres in Ikageng (Potchefstroom), where service learning students were already involved, were chosen to be observed. Each ECD centre had a teacher that received training from the faculty of Education Sciences of the North-West University, Potchefstroom and SRCS. Both ECD centres were not registered at the Department of Education.

ECD Centre 1 had 42 preschool learners with varying ages between one to six years. The learners only spoke Setswana and had little understanding of English and Afrikaans. ECD Centre 1 had no toilet facilities, basins with running water or electricity. A feeding scheme was previously implemented at the ECD centre but the service was withdrawn. The caregiver at the ECD centre provided food to the learners by asking a minimal school fee.

The learners were taught in a corrugated iron classroom. The classroom had teaching aids, but not all items were used to its full potential and indoor movement was restricted due to the small space. The terrain was not fenced off, had a lot of bushes around the ECD centre and the surface was very rocky. Because of the unsafe outside area, learners were not allowed to play outside and were confined to the classroom most of the day. There was a great need for blankets, cushions, educational toys and posters as well as apparatus for the playground. The terrain also had to be fenced off and the ablution facilities upgraded.

ECD Centre 2 had 80 children aged between three months and five years. This ECD centre had five enthusiastic, but untrained/unqualified teachers. However, one teacher started training provided by the faculty of Education Sciences of the North-West University, Potchefstroom and SRCS. The ECD centre was previously managed by a church which made improvements and the construction of new buildings difficult. After efforts from SRCS

to obtain new grounds for the ECD centre the church donated the current grounds to the ECD centre which in turn enabled SRCS make improvements to ECD centre. There was only one building with three classrooms (divided by hardboard) and a kitchen. The toilet facilities had recently been renovated with added basins and running water. The playground had very limited space and although there were various jungle gyms, swings and sandboxes, they were not in a good condition and unsafe to use. This ECD centre recently received a donation of 100 blankets, but needed tables, chairs, mattresses, carpets, cutlery, educational toys, posters and better ventilation in the classrooms.

1.6.4 Researchers' role

The researcher acted as an observer and non-participant during visits to the ECD centres. The learners, in-service teachers and pre-service teachers (service learning students) at both ECD centres were observed. The researcher also acted as an interviewer who conducted interviews with the pre-service and in-service teachers, attended planning and reflection sessions and recorded observations.

1.6.5 Participation selection

In qualitative research, the population is usually purposefully selected to ensure that individual participants have the best experience in the field studied (Babbie & Mouton, 2008:28, Ivankova, Creswell & Plano Clark., 2010:259). This enables the researcher to obtain data by letting participants share their views and experiences of the study (Ivankova *et al.*, 2010:259). Convenience sampling entails the selection of people that are already available (Leedy & Ormrod, 2005:206). A purposeful sample of two ECD centres in Potchefstroom, North-West Province was used in this study. Both ECD centres were located in a rural district and formed part of the ECD centres where SRCS was involved. Twenty Foundation Phase service learning students in their fourth-year from the Faculty of Education Sciences of the North-West University's Potchefstroom Campus were involved at the two ECD centres, however not all students stayed involved. The one group of students became involved with service learning because it was compulsory for one of their fourth-year (PPSE 411 and 422) subjects. The other group became involved with service learning as volunteers in their second year because they wanted to be involved in the community. This community involvement continued into their fourth year when it became compulsory to partake in service learning. One in-service teacher from both ECD centres also received the training provided by the Faculty of Education Sciences and SRCS.

Table 1.1 Profile of Participants

	ECD Centre 1	ECD Centre 2
In-service teachers	<ul style="list-style-type: none"> • 3 in-service teachers at a rural ECD centre in Potchefstroom where SRCS were also involved • 1 in-service teacher attending training provided 	<ul style="list-style-type: none"> • 5 in-service teachers at a rural ECD centre in Potchefstroom where SRCS were also involved • 1 in-service teacher attending training provided
Pre-service teachers	<ul style="list-style-type: none"> • 13 fourth-year students from the Faculty of Education Sciences of the North-West University's Potchefstroom Campus • Involvement in service learning – 3 years 	<ul style="list-style-type: none"> • 7 fourth-year students from the Faculty of Education Sciences of the North-West University's Potchefstroom Campus • Involvement in service learning – 1 year

1.6.6 Data collection methods

Different methods were used to collect data. These methods will be discussed in detail in Chapter 4. Collecting data for a qualitative study is very time consuming (Leedy & Ormrod, 2005:143). According to Nieuwenhuis (2010a:80) it is generally accepted that the use of various methods of data collection will establish the credibility and trustworthiness of the data. For this study the following methods were used:

- *Observations*

According to Nieuwenhuis (2010a:83) observations can be seen as a process that helps to record participants' behavioural patterns without communicating with them. Using observations to collect data enables the researcher to be flexible and the researcher can make use of unforeseen data sources as they occur (Leedy & Ormrod, 2005:145). Over a period of three months (September–November 2011) the researcher observed the in-service teachers (ECD practitioners), learners and pre-service teachers. Observations were made when the service learning students were present at the ECD centres as well as when the in-service teachers were working on their own. Observations were made once a week at each of the chosen ECD centres. The observations also focused on the indoor area, the outside area and the general appearance and resources at the ECD centre as part of the learning environment.

- *Semi-structured interviews*

An interview can be defined as a conversation taking place between a participant and an interviewer in order to help the interviewer to collect descriptive data and learn about the participant's beliefs, opinions and views (Nieuwenhuis, 2010a:87). According to Leedy and Ormrod (2005:146) making use of semi-structured interviews allows the researcher to be more flexible with the questions being asked. Open-ended questions are used for these types of interviews to help conduct views and opinions of the participants. An advantage of open-ended questions is that the researcher may gain unforeseen information (Leedy and Ormrod, 2005:146). Semi-structured interviews were conducted with both pre-service and in-service teachers at the ECD centres. The semi-structured interviews consisted of predetermined questions about certain topics (Nieuwenhuis, 2010a:87). This type of interviews enabled the researcher to ask follow up questions (Du Plooy, 2001:177). Questions that arose during the interviews included open-ended questions such as: How did you, as pre-service teacher, benefit from service learning? What challenges did you, as pre-service teacher, experience when you started with service learning at the ECD centre? (See Addendum E).

Feedback from the in-service teachers about the monthly training sessions were used to determine what they have learnt and how their obtained knowledge and skills were implemented at the ECD centres.

- *Focus groups*

The researcher interviewed several participants at a time by conducting focus group interviews. As suggested by Leedy and Ormond (2005:146) focus groups were not larger than ten participants. Focus group interviews were conducted based on the assumption that the group will give more responses to questions asked and that answers may help to recall forgotten information (Nieuwenhuis, 2010a:90). Focus group interviews with the pre-service teachers were conducted twice –once at the beginning of the research, and once at the end of a three month period.

- *Reflective journals*

According to Burns (as cited by Maree *et al.*, 2010) reflective journals can be seen as a log of activities that gives clear information about work patterns. The journals of the pre-service teachers were used to gather information relevant to this study. The researcher also

attended weekly planning and reflection sessions of the pre-service teachers in order to gather information from the service learning teams (pre-service teachers). The journals helped to identify issues, concerns and successes the pre-service teachers experienced during the project.

1.6.7 Data analysis

Content analysis is often used to analyse data when the researcher makes use of journals, open-ended questions, interviews or focus groups to collect data (Nieuwenhuis 2010b:101). By using qualitative content analysis the researcher investigated and described the observations, semi-structured interviews, focus group interviews and observations. Qualitative content analysis is a detailed and systematic examination of content and focuses on the interpretation and understanding of participants' perspectives during the research. The method aims to find patterns and themes in the collected data (Devi, 2009; Leedy & Ormrod, 2005:108).

As proposed by Nieuwenhuis (2010b:101) as well as Leedy and Ormrod, (2005:142) the information was organised and categorised by looking for similarities and differences that would help to confirm or disconfirm the theory. The researcher made use of observations to categorise the data and themes that came forth from the semi-structured interviews. Information was sorted according to aspects such as how service learning had influenced the learning environment and what pre-service teachers gained from performing service learning at the ECD centre. The researcher then drew conclusions about the findings ().

1.6.8 Validity of data

Various methods of data collecting, including observations, semi-structured interviews and journals, were used to get similar results in support of the study's hypotheses. By using triangulation the validity and trustworthiness of the data collected could be established (Nieuwenhuis, 2010a:80; Gay *et al.*, 2006:446; Leedy & Ormrod, 2005:99).

1.6.9 Ethical aspects of the research

Permission to conduct this study was obtained from the ECD practitioners of the ECD centres as well as from the service learning students by means of consent forms (See Addendums A and B). The names of teachers and service learning students were kept confidential by using pseudonyms. The names of the ECD centres were also kept confidential. Although observations have been made, no systematic data on the children's learning and development was collected. However, interviews and analysis of the notes

from weekly reflection meetings revealed advances and gains in knowledge and skills development for children. Each ECD practitioner that was invited to participate in this study received a letter of intention and a copy of the consent form. This ensured that they would have time to review the content and decide whether or not they wanted to participate in the study.

A letter of information and consent was given to participants before interviews were conducted. If the participant was unable to read the letter themselves, someone was appointed to read and/or explain the letter to the participant. The participants had the chance to ask questions and get answers with regards to the research. They were given the opportunity to sign the consent form to participate in the study.

Interviews were expected to have a duration of 30-45 minutes each. The interviews were conducted in a semi-structured conversation manner. When the interviews were done, transcripts thereof were made available to the participants to review and comment on for accuracy. Any suggestions or comments from the participants were noted to ensure that the data reflected the intent of the participants. Once the interviews had been transcribed and reviewed by the participants, the researcher systematically analysed and coded the content for themes and messages.

1.7 Chapter divisions

In **Chapter One** the introduction, problem statement, purpose of the research and research design were discussed.

Chapter Two gives a conceptual framework of service learning. The role service learning plays in the enhancement of learning outcomes for pre-service teachers, in-service teachers as well as the learners and community, is reviewed.

Chapter Three comprises the field of early childhood development (ECD), with specific reference to the history of ECD in South Africa and early childhood learning environments in the South African context. The role of the teacher in promoting a quality learning environment, as well as the importance thereof, is discussed

In **Chapter Four** the appropriateness of the chosen qualitative research method is discussed. The research design and methodology as well as an analysis of the data are also given.

The findings of both the empirical and literature study are reported in **Chapter Five**. Conclusions and answers to the questions posed in this study are dealt with within **Chapter 6**.

Chapter 2: Service learning as a tool for enhancing quality learning

2.1 Introduction

The purpose of this chapter is to situate the study within the existing understanding of service learning in the South African context. This chapter thus provides a literature overview of service learning as well as service learning in the South African context. The benefits and challenges service learning holds for the faculty, pre-service and in-service teachers, as well as the importance of reflection during service learning will be described.

2.2 The importance of service learning

Before discussing the role service learning can play in the promotion of quality learning, it is necessary to contextualise service learning within the theme of the study, namely the promotion of quality learning environments at ECD centres. Students of the 21st century find themselves in a constantly changing world where knowledge is obtained from a variety of contexts and from various people (Osman & Petersen, 2013:3). Service learning provides pre-service teachers with the opportunity to leave their comfort zone by encouraging them to participate in activities they would normally not partake in (Lane, 2007:6). This provides situational learning in varied learning situations, contexts and environments through which an understanding of the complex and differentiated nature of the South African society can be formed (SA, 2010c:9). Additionally service learning requires students to be receptive to different kinds of knowledge and to think critically (Osman & Petersen, 2013:3). New teachers are required to have many competences when they start teaching, but it is especially the ability to reflect critically that this study focuses on. This ability allows them to improve themselves and adjust accordingly to evolving situations (SA, 2010c:55).

According to the Policy on Minimum Requirements for Teacher Education (SA, 2010c:52) seven roles are expected from teachers. One of these requires that teachers should comply with the role of being involved in the community and to be a good citizen. Community service, in the case of this study service learning, is one of the ways through which pre-service teachers can be enabled to become involved in the community, as well as be good citizens and shift their perceptions and attitudes towards social transformation (Costandius, 2011:20; Leeward Community College, 2007; Gaeddert, 2012; Seifer & Connors, 2007).

The distinction between service learning and community service will be discussed in paragraph 2.3 and Figure 2.1.

Service learning is a form of experiential learning (see par. 2.5) and by engaging in service learning students are given a chance to obtain knowledge and also critically reflect about the service that has been provided (Osman & Petersen, 2013:3). Service learning thus has the potential to play a vital role in the enhancement of critical thinking skills (Costandius, 2011:20; Leeward Community College, 2007; Gaeddert, 2012; Seifer & Connors, 2007).

In order to explain the concept of service learning in more detail, the history and evolvement of service learning in South Africa over the past years will subsequently be described.

2.3 History of service learning in South Africa

Since the end of apartheid in South Africa in 1994, many challenges for reconstruction and development have risen in all sectors, including education. Forming part of this overall strategy for reconstruction and development, the White Paper on Transformation of Higher Education challenges higher education institutions to respond to the needs of society (Hlungwani, 2011:36). These needs include aspects such as the necessity to contribute to the socialisation of enlightened, responsible and constructively critical citizens (SA, 1997:4). Costandius (2011:20) states that a transformation of people's perceptions and attitudes must take place in order to establish the social transformation which is needed for a democratic South Africa. Smith-Tolken and Williams (2011:10) argue that it is imperative to educate global citizens who will promote democracy and human development and will have the ability to transfer and create skills to work together despite of differences and limitations in order to solve global problems.

The founding documents of community engagement highlight the need for higher education institutions to contribute to the socio-economic development of communities and the social and civic responsibility of students (Maistry, 2011:14). South African higher education institutions can comply with this requirement by incorporating service learning, which is a component of community engagement, into the curricula offered at higher education institutions (Hlengwa, 2011:16). The benefits of a curriculum that includes service learning will be discussed in more detail in par. 2.6.

Smith-Tolken, Deputy Director of Community Interaction (Service learning and Community Based Research from the University of Stellenbosch), states that the development of service learning in South Africa is in line with the National Plan for Higher Education which states that community engagement should be compulsory for all educators, however at many South African universities it is still seen as an insignificant element (University of Stellenbosch, 2012). Higher education institutions should encourage pre-service teachers to develop a reflective capacity and renew prevailing ideas, policies and practices aimed at commitment to 'the common good' (SA, 1997:4). By including service learning into curricula at various universities, young people, who are the leaders of tomorrow, will be given the opportunity to change their perceptions and attitudes towards people they come into contact with on a daily basis (Zeller *et al.*, 2010; Council on Higher Education (CHE), 2011:58; Costandius, 2011:20).

Over the past decade service learning, as a model for academic-based community engagement, has gained a lot of ground. The Community Higher Education Service Partnerships (CHESP) initiative was responsible for incorporating service learning in South African higher education since 1999 (Osman & Petersen, 2013:5; SA, 2013a). According to Lazarus (cited by Smith-Tolken & Williams, 2011:5) CHESP was also responsible for introducing theoretical frameworks and practice models for service learning in the United States of America (USA). As a result a large number of higher education institutions began to use these models and frameworks provided by the CHESP. As service learning became more established in South African higher education institutions during the past decade, researchers and scholars began to integrate the applicability of these frameworks and models in a South African context (Smith-Tolken & Williams, 2011:5). To ensure that service learning reaches its full potential in the South African context, it is important that researchers and scholars share ways in which they integrate models of service learning to ensure that service learning in South Africa will become a widely used practice.

Recognition of the importance of service learning increased rapidly over the past ten years and a Community Engagement Conference in Higher Education was held in Bantry Bay in 2006. According to Smith (2011:9) the main focus of this conference was to discuss innovations for service learning for the next ten years. In 2009 the South African Higher Education Community Engagement Forum (SAHECEF) was established to help with the development and transformation of service learning and community engagement within

higher education institutions (Osman & Petersen, 2013:5). In April 2011 SAHECEF held a Service Learning Research Colloquium in Stellenbosch. The colloquium aimed to determine the current status and positioning of service learning at the different higher education institutions in South Africa. It also established new debates that broadened discussions on theory and practice regarding service learning and envisioned a more full-bodied agenda for service learning research (Smith-Tolken & Williams, 2011:6). As outlined in White Paper 3, South African higher education institutions are expected to engage in the *“pursuit of academic scholarship and intellectual inquiry in all fields of human understanding, through research, learning and teaching”* (SA, 1997:4). This also applies to service learning since it strives to create, share and evaluate knowledge.

The interest in service learning has grown to such an extent over the past few years that higher education institutions are starting to recognize its potential to fulfil the aims of higher education, the state and the local communities (O’Brien, 2011:13). It is emphasized by the University of Stellenbosch (2012) that the efforts and interest of academic and community leaders have hitherto contributed to the success of service learning. The Office for Service Learning: Division for Community Interaction (University of Stellenbosch, 2012) states that universities are embracing service learning as a teaching methodology that suggests interaction with communities involving educators and learners. According to Smith (2011:10) the University of Stellenbosch has made impressive progress with regard to community engagement, mainly in service learning due to efforts by Dr Jerome Slamet. The University of Stellenbosch also began to train their lecturers and colleagues from other institutions in service learning. Service learning has also been utilized by other universities in South Africa. Erasmus (2011:30) states that the University of the Free State relies on collaboration with non-profit organizations (NPOs) as community based sites for academic student service placement, including service learning. Examples of collaborations with NPOs include working in partnership with schools, church funded initiatives or healthcare services in the community.

The Potchefstroom Campus of the North-West University (NWU) also relies on the support of NPOs. In 2010 the NWU’s Faculty of Education Sciences approached the Student Rag Community Service (SRCS) (see par. 1.2) to identify and support suitable ECD centres where pre-service teachers in the Foundation Phase could be given the opportunity to engage in service learning.

Similar projects evolved at other universities. Dippenaar (2011:33-34) draws attention to the fact that the University of Pretoria includes service learning into the curriculum of the B.Ed. undergraduate programme of the Faculty of Education. This inclusion gives lecturers the opportunity to incorporate community engagement into the programme without overburdening students or lectures by giving them various community engagement projects in different modules (Dippenaar, 2011:34). This argument support the notion that well-organised service learning, that forms part of the curricula and supports the outcomes of the programme, can enhance learning (Petker, 2011:38-39). However, to ensure the effectiveness of service learning in real context, reflection as a crucial aspect of service learning is emphasized (Eyler *et al.* cited by Carleton College, 2010; University of Minnesota, 2011c; University of Indiana, 2011).

2.4 Reflection as a key element of service learning

Reflection can be defined as thinking for an extended period of time, linking recent experiences to earlier experiences (The Leeward Community College, 2007). It can also be regarded as a form of learning that comes from experience and it must be purposeful. Reflection sessions provide pre-service teachers with the opportunity to strengthen the connection between content knowledge of the programme and learning from practice during the service learning experience (University of Minnesota, 2011c; The Leeward Community College, 2007). According to Mitchell (2011:23) service learning is intended to be a student-centred discovery learning process. Reflection enables pre-service teachers to develop their higher thinking and problem solving skills while engaging in service learning (Eyler *et al.* cited by Carleton College, 2010; University of Wisconsin-Madison, 2012). It allows them to reflect on decisions made and actions taken which in turn will help them improve the service they are providing (Carleton College, 2010).

The process of continuous critical reflection is a very important aspect of service learning (Mitchell, 2011:23). Reflection sessions and service learning give pre-service teachers a chance to work towards a common goal while making a noticeable difference at the ECD centre (Prentice & Robinson, 2010). To ensure that in-service teachers, pre-service teachers, faculty and community partners benefit from service learning, proper reflection must be done on a regular basis.

Eyler *et al.* (cited by Carleton College, 2010) suggest that reflection can be broken down into four C's indicating the essential aspects that it should contain. These include the importance of continuous, connected, challenging and contextualized service learning. Gaeddert (2012), Seifer and Connors (2007) and Rice (2008) also refer to the four C's of reflection.

Continuous reflection should, in other words, take place before, during and after service learning. Before students visit the ECD centre, they should plan and reflect in order to determine what needs should be provided for during their visit. According to the Leeward Community College (2007) and the University of Indiana (2011), the role of reflection will vary according to the stage of the project. Reflection done before the project can be used to prepare students for service learning by explaining certain concepts needed for the project, orientate them towards the community and emphasize problem solving skills that would help them handle challenges that may arise. During the project, reflection can be used to encourage independent learning while providing feedback and support to students as needed (Gaeddert, 2012). Reflection provides faculty members with the opportunity to reinforce course content with service experience (Rice, 2008; Carleton College, 2010). Reflection done afterwards can help students to evaluate their achievements and failures, help them grasp their emotional responses and integrate knowledge and new information to existing conceptual knowledge (University of Indiana, 2011). Reflection should not only be assessed at the end of a semester by means of a presentation or report - numerous opportunities should be provided for students to reflect before, during and after a service learning experience. Ongoing reflection helps to provide students, members of faculty with a better understanding of the projects students are involved in, their problem solving efforts and the progress that has been made (Gaeddert, 2012; Eyler *et al.*, as cited by Carleton College, 2010). Good communication will help to improve the effectiveness of the project as well as the student's learning (Leeward Community College, 2007).

Reflection should also link personal reflection with first hand experiences that pre-service teachers experienced during their visit. When participating in reflection it should be challenging in such a way that problems encountered can be discussed in order to find a solution and to reveal new perspectives from other pre-service teachers. It should also challenge them to ask questions about their experiences (University of Wisconsin-Madison, 2012; Rice, 2008).

Reflection should also be contextualized (Rice, 2008; University of Wisconsin-Madison, 2012; Gaeddert, 2012). It is important to involve the community. By interacting with the community, the pre-service teacher is enabled to gain a better understanding of certain aspects that need to be dealt with at the ECD centre. One such aspect could be learners' struggle to concentrate in class due to a lack of food. Many parents in rural districts have difficulty in providing food to their family due to unemployment.

The Leeward Community College (2007) stresses the fact that reflection is a critical component of service learning which helps to turn volunteer work into a learning opportunity. It is necessary for students to be given the opportunity to reflect on their experiences in order to create a link between their work in the classroom and their work in the community (Seifer & Connors, 2007; Rice, 2008; Leeward Community College, 2007; Gaeddert, 2012). Should a pre-service teacher observe that a learner has problems with cutting, they could, for example, consult their textbooks or other study material for ways in which they can improve fine motor skills.

To get the most of the service learning experience, students should participate in reflection sessions (University of Minnesota, 2011b). Reflection is very important for service learning for the following reasons: students need a safe space to vent their emotions after a service experience; it gives an opportunity for students, members of faculty and the community to exchange relevant information; and project effectiveness and the students' learning can be enhanced by giving guidance to students and reviewing their reflections (Leeward Community College, 2007; Astin *et al.*, 2000; Gaeddert, 2012; Seifer & Connors, 2007). When students reflect after a visit to the ECD centre it should not be regarded as an emotional outlet or a didactic retelling of events.

Reflection comprises many activities such as reading, writing, doing and telling (Gaeddert, 2012; Seifer & Connors, 2007). Speaking activities may consist of class or group discussions, oral reports, discussions with community members or experts on relevant issues and public speaking. Writing activities include keeping a journal, doing a narrative for a film or a slideshow, newspaper or magazine articles and other published articles. Multimedia activities may comprise photos or video essays, paintings, drawings, collages, dance, music and other theatre presentations (Leeward Community College, 2007; Rice, 2008).

Service learning can play a big part in accomplishing the transfer and creation of necessary skills as mentioned previously, but in order to accomplish this one must first understand what service learning entails. To help clarify this, various interpretations and definitions of service learning, as well as relevant concepts distinguishing between similarities and differences, will be described in the following paragraph.

2.5 Definitions of service learning

Waghid (2011:11) makes the following statement regarding service learning:

“Service learning is tautological because service is inherent in learning. If learning is not in service to ‘Other’s it cannot be learning.”

This quotation is supported by Unisa’s Department of Social Work which defines service learning as service through learning and learning through service (Schenck & Harrison, 2011:27). A person learns a new skill by being actively involved in the learning process. While providing a service at an ECD centre, pre-service teachers are enabled to acquire new skills related to the content and conceptual knowledge of their coursework (The Leeward Community College, 2007; McPherson, 2005). In other words, pre-service teachers are providing a service through their learning and at the same time learning is enhanced by the service they provide to the community.

Service learning has multiple meanings and interpretations. According to Lemieux and Allen (2007:310) service learning can be seen as a form of community engagement on which higher education institutions focus. Service learning is also described as a method through which students can apply their skills and knowledge to address specific needs in a community (McPherson, 2005). Sigmon (cited by Furco, 1996) states that service learning only takes place when the provider benefits by learning through the service provided and similarly the recipients benefit by the service being provided. Service learning is thus defined as a collaborative relationship between the classroom and the community where the emphasis are on both the students’ learning and the community service taking place (Lemieux & Allen, 2007:310; Gonsalves, 2008). Service learning falls under community engagement and should be used to contribute to the transformation of the South Africa (Smith-Tolken & Williams, 2011:27).

The Leeward Community College Service Learning Colloquium adopted the following definition of service learning in 1997:

“Service learning engages students in guided community service, application of skills and knowledge, and reflection appropriate to the course/program. Service learning can enrich students’ education, increase their civic awareness, and enhance the quality of life of the entire community” (Leeward Community College, 2007).

The Leeward Community College (2007) also defines service learning as a form of experiential education where students are given the opportunity to integrate community service with their studies. Pre-service teachers take part in activities that focus on the needs of the people they are working with as well as the needs of the community while making use of reflection to achieve learning outcomes and promote learning and growth (Williams & Gilchrist, 2004:84). Experiential education is based on the idea that learning takes place through experience (University of North Carolina, 2009). By combining learning with concrete experiences and reflection, experiential education aims to include all learning styles (University of North Carolina, 2009). The Association for Experiential Education (AEE) (2013) defines experiential education as follows:

“Experiential education is a philosophy that informs many methodologies in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities.”

Experiential education is facilitated when experiences are supported by reflection, critical analysis and synthesis (University of North Carolina, 2009; Carleton College, 2010; AEE, 2013). See Figure 2.1.

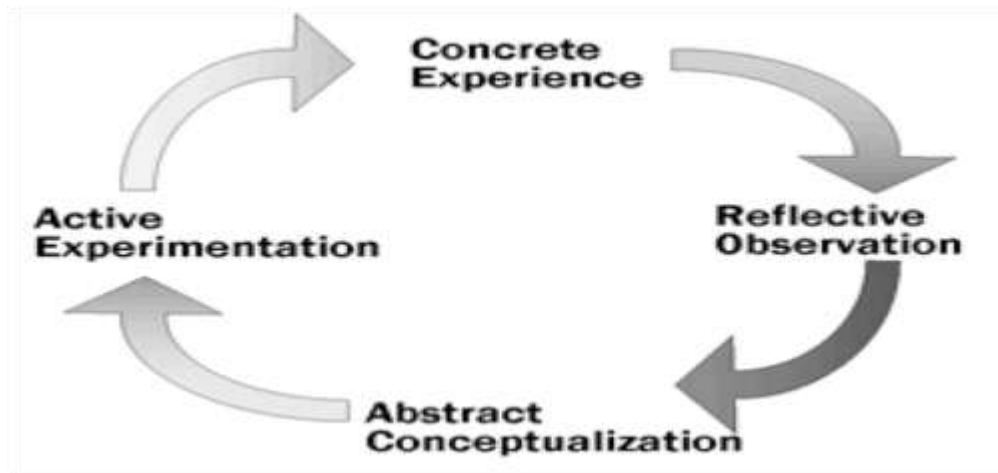


Figure 2.1 Kolb's model of the experiential learning cycle (Carleton College, 2010).

The University of Stellenbosch (2012) defines service learning as a transformative, learner-centred and community-orientated pedagogy used in all their academic programs. The University of Minnesota (2011a) sees service learning as a method of teaching that incorporates community involvement into coursework. Charmaz, Glaser and Strauss (cited by O'Brien, 2011:13) accentuates that the grounded theory on which the service learning framework is based confirms that service learning consists of a lot of characteristics, structures and processes. Daniels and Adonis (2011:15) states that service learning can be seen as a teaching methodology although it is not the only form of community engagement. These definitions all emphasize important aspects of service learning such as good teaching practices, pedagogy and grounded theory that should underpin a service learning framework.

The various definitions of service learning displayed certain similarities and differences. All definitions emphasized the following aspects: both parties involved must benefit from the service being given; service learning can be seen as a form of community engagement; and it is a method of applying skills and knowledge obtained through study to the benefit of community members. For the purposes of this study, service learning will be defined as learning that addresses specific needs in the community by providing opportunities to ensure that the provider, as well as the participant, benefits from the service provided through skills and knowledge acquired during tertiary education. Because of the variety of definitions for service learning, it can easily be mistaken for volunteerism, community service, internship programmes and field education. These concepts, which are often used as interrelated, will be differentiated in order to clarify the meaning of service learning.

Furco's distinction between the different forms of service learning is illustrated in Figure 2.2. The figure illustrates how related aspects such as volunteerism, community service, field education and internship programmes can be distinguished (Purdue University North Central, 2013).

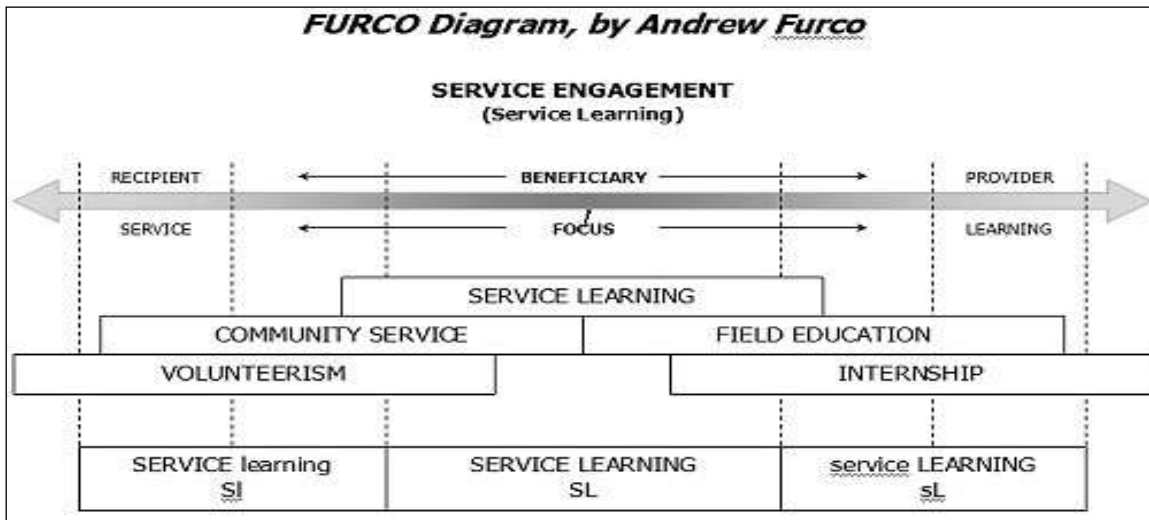


Figure 2.2 Different forms of service learning (Purdue University North Central, 2013).

- **Volunteerism**

According to Lemieux and Allen (2007:312) volunteerism's main focus is on the service being provided rather than on the learning taking place. Volunteerism can be seen as a service provided by people out of their own free will without receiving compensation for the work (James & Toole cited by Furco, 1996). The act of helping people (not in your social group) on a regular basis by giving your time, resources and talents, without expecting a reward or compensation, can be seen as volunteerism (Biggs & Cvanara, 2008). The Leeward Community College (2007) support this view, but elaborates that service learning is more than just volunteering due to the fact that it helps to create a level of critical thinking not obtained through regular volunteerism.

- **Community service**

Weyers and Herbst (2010:8) state that community service can be seen as the most basic form of community involvement. People involved in community service will strive to make the community a better place by willingly giving their time to engage in community service activities without wanting to receive compensation. Furco (1996), Lemieux and Allen

(2007:310) and the Leeward Community College (2007) agree that service learning focuses on the service being provided to the participants. They also state that the emphasis of service learning falls on the benefits of the service for the community, but add that participants will also benefit in the process.

- **Internship programmes**

The purposes of internship programmes are mainly to provide the student with hands-on experience in their specific field of study (Leeward Community College, 2007). Students participating in internships programmes may receive compensation for the work they are doing or they may do it on a voluntary basis. Internship programmes can take place in profitable or non-profitable organisations (Furco, 1996).

- **Field education**

Field education occurs when students perform a service as part of a programme that helps them to understand their field of study while providing a service (Furco, 1996; Osman & Petersen, 2013:148). According to Lemieux and Allen (2007:312) the focus of field education is on the development of students' knowledge and skills and not on the benefits it may have for the community.

With the different forms of service learning outlined, the benefits of service learning for the respective participants will be described. These include benefits for the in-service and pre-service teachers, faculty and community partners.

2.6 Benefits of service learning

Service learning can provide a diverse and innovative learning experience that extends from the classroom to the community (Leeward Community College, 2007). According to the Colorado State University (2012) involvement in service learning helps students to develop the tools and understanding required to be effective and knowledgeable leaders in the diverse community where they live and work. By participating in service learning, identified community needs are also addressed (University of Minnesota, 2011c).

Service learning has many benefits, not only for the pre-service teachers, but also for the ECD centres where they are involved in. Through service learning civil responsibility is enhanced and the academic curriculum of students and community programme of

participants are enriched (Lemieux & Allen, 2007:310; Gonsalves, 2008; University of Minnesota, 2011c).

The benefits for pre-service teachers, faculty, community partners, in-service teachers and learners will be described respectively.

2.6.1 Benefits for pre-service teachers

Service learning contributes to the personal, academic and professional development of pre-service teachers by enabling them to practically apply their theoretical knowledge. It also prepares them for a future career by improving their critical thinking capacity and building their confidence (Stidworthy & Labuschagne, 2011; Prentice & Robinson, 2010; Colorado State University, 2012; University of Wisconsin-Madison, 2012). Pre-service teachers are able to retain knowledge better when engaging in service learning because they are involved hands-on at the ECD centre (Lane, 2007). The Leeward Community College (2007) argues that because service learning is academically anchored, it will enhance learning in the class and help students to reflect on their practical experiences during service learning. For example: if pre-service teachers encounter learners who has difficulty with gross motor skills, they will be able to refer to their textbooks to see what factors may contribute to the problem and also find ways of solving the issue.

Pre-service teachers will have the opportunity to act on their beliefs and values and also develop their problem solving and critical thinking skills (Colorado State University, 2012). Students in turn become more self-sufficient by handling social challenges, needs and problems (Colorado State University, 2012; University of Wisconsin-Madison, 2012).

By involving pre-service teachers in community based learning, in this case service learning, it helps the pre-service teachers to make a positive contribution to the lives of individuals as well as the community. Service learning will help them to develop an understanding and tolerance for different cultures and communities. Pre-service teachers will learn more about social issues and their causes by being involved in the community (University of Wisconsin-Madison, 2012). Pre-service teachers who become more involved in the community will for instance begin to understand the effect poverty and unemployment have on the people in the community as well as the learners at ECD centres. This will help pre-service teachers to improve their ability to handle situations

which are uncertain and vague and they will become more open to change, more flexible and able to adapt in different situations (University of Minnesota, 2011c).

Another benefit is that the development of communication, planning and leadership skills as well as of the ability to work in a group will be enhanced (Colorado State University, 2012; University of Wisconsin-Madison, 2012; Tennessee State University, 2011; Jordaan, 2011:25). Service learning will help pre-service teachers' students to build lasting relationships with their peers. Pre-service teachers will typically be required to work together as a group to achieve certain goals (Lane, 2007:7).

Service learning will provide the opportunity for pre-service teachers to come into contact with professionals and community members thereby advancing their interpersonal skills (Leeward Community College, 2007; University of Minnesota, 2011c). Interpersonal skills are becoming very important in achieving success and professional and personal spheres will be improved during the process (University of Minnesota, 2011c; Leeward Community College, 2007; Tennessee State University, 2011). When applying for a job, many companies will look for well-rounded individuals when appointing new staff (Prentice & Robinson, 2010). Community involvement will help students to become well-rounded individuals.

Additionally, service learning helps students to become culturally competent by understanding and showing respect for different cultures (Prentice & Robinson, 2010; Tennessee State University, 2011; Jordaan, 2011:25). Being involved in service learning provides students with the opportunity to meet and get to know people whose life experiences are different from their own, and it also helps to confront prejudgements which they may have. Service learning helps pre-service teachers to interact with people from different ethnic and socio-economic groups; it also helps to reduce stereotyping and promotes tolerance for others (Colorado State University, 2012; Tennessee State University, 2011; Prentice & Robinson, 2010).

Involvement in service learning from the first year of study not only holds benefits for pre-service teachers, but also for other stakeholders involved. Incorporating service learning into pre-service teachers' curriculum enhances the academic curricula as well as student learning while simultaneously real needs in various communities are met (Petker, 2011:38-39). By letting pre-service teachers engage in service learning in a continuous and

sustainably way, they are enabled to develop with the ECD centre where they are involved. Projects/activities that require a longer period of time, and ensure the sustainability of the project, will enable students to see how the learners develop during the course of their studies. As their studies progress they will be able to implement their newly acquired knowledge and skills at the ECD centre. Swick (cited by Petker, 2011:38) agrees that incorporating service learning into Foundation Phase education will have benefits for pre-service teachers. One of these benefits is that they are given the opportunity to get to know the learners and in-service teachers better enabling them to address issues they may encounter and thereby gaining a better understanding the community they find themselves in (Colorado State University, 2012; University of Minnesota, 2011c; The Tennessee State University, 2011). Additionally service learning provides pre-service teachers with the opportunity to experience situations in the classroom with real-life consequences. Pre-service teachers also benefit by gaining knowledge and skills on how to teach and handle difficult situations when presenting educational activities at the ECD centres they are involved in (Lane, 2007).

If pre-service teachers are willing to walk the extra mile while engaging in service learning, they will benefit much more from the experience than pre-service teachers who are only engaging in service learning because it is compulsory and part of their curriculum. An example of an initiative that may be undertaken to ensure a better working relationship with community members, is to paint the ECD centre. Pre-service teachers may, for instance, take initiative to approach businesses to sponsor paint, brushes etc. and they could also involve community members to participate in the painting of the ECD centre. By approaching sponsors the pre-service teachers will acquire new skills in seeking sponsors, not only for the ECD centre where they are engaging in service learning, but also for when they start their own teaching careers (University of Wisconsin-Madison, 2013:27).

Pre-service teachers will also be taught how unusual family units, for example child-headed households may present exceptional challenges for the Foundation Phase teacher in South Africa. By engaging in service learning, pre-service teachers are given the unique opportunity to identify learning difficulties that are commonly found in Foundation Phase learners such as perceptual and emotional difficulties (Petker, 2011:38).

2.6.2 Benefits for faculty

By integrating service learning into the curriculum, faculty members may benefit personally and professionally. Partnerships with the local community, which may benefit both the community and the faculty, can be built (McAndrew, 2001). Service learning may lead to research topics and publications and also create opportunities for professional recognition and reward (Leeward Community College, 2007). Hlungwani (2011:36) feels that service learning makes higher education more effective and also helps with the social outcomes of the government's reconstruction and development outcomes. Service learning may additionally lead to new insights and dimensions in class discussions (University of Minnesota, 2011c). Service learning also promotes democratic citizenship and leadership and develops problem solving skills (Tennessee State University, 2011). By sharing ideas and insights both faculty members and students can learn from one another. Another benefit is the fact that service learning may provide networking opportunities with other faculties and help to establish relationships between other community organizations (University of Minnesota, 2011c).

2.6.3 Benefits for the community partners

By involving community partners in service learning they may benefit by gaining additional human resources which may make it easier to achieve goals that has been set (University of Minnesota, 2011c). Public awareness about certain issues can be increased and new perspectives and enthusiasm can be brought to the project (Tennessee State University, 2011). Students will be supported in becoming future civic leaders and networks may be established between different organizations (University of Minnesota, 2011c). Many students may continue to be involved in service learning after the time required to do so has expired (Leeward Community College, 2007; Tennessee State University, 2011). By approaching various sponsors, relationships may be established between the ECD centre and the sponsor centre (Anon, 2010).

2.6.4 Benefits for the in-service teachers and learners

As indicated in paragraph 2.5 service learning should be beneficial for both the recipient and provider (Sigmon cited by Furco, 1996). Figure 2.2 also illustrates that service learning should equally benefit the provider and the recipient. It is not only pre-service teachers that should benefit from service learning, but the learners and in-service teachers should also benefit. In-service teachers can benefit from service learning by receiving in-service training from the pre-service teachers while they are at the ECD centre (Roehlkepartain,

2007; University of Wisconsin-Madison, 2012). The learners at the ECD centres may benefit by learning something new from the pre-service teachers that they can apply in their daily lives. The pre-service teacher can also assist in establishing a richer learning environment. If the community gets involved, it will enable the in-service teachers to approach the community members for help when needed.

Service learning can thus be seen as a collaborative relationship between the community and the classroom with the emphasis on both the learning taking place as well as the community service that is happening (Lemieux & Allen, 2007:310; Gonsalves, 2008). Service learning helps pre-service teachers, who are involved in service learning, to experience success in what they achieve and may also encourage them to stay involved even after the service learning is complete (Roehlkepartain, 2007; The Leeward Community College 2007; Tennessee State University, 2011). The focus, scope and quality of the service learning will lead to different benefits for all parties involved with service learning (Roehlkepartain, 2007).

Irrespective of all the benefits outlined here, there are also certain challenges that can hinder the effectiveness of service learning. Challenges faced by faculty members and students, as well as ways to overcome these challenges, will be discussed next.

2.7 Challenges of service learning

Many challenges may be encountered by pre-service teachers, faculty members and community partners (University of Wisconsin-Madison, 2012; Tennessee State University, 2011 Colorado State University, 2013). It is thus very important that all stakeholders in service learning should be aware of what are expected of them and what they can expect of the other stakeholders involved. According to Boughey (2011:24) orientation of students partaking in service learning is crucial. This orientation should include aspects such as discussing the benefits as well as the risks involved in service learning, the skills that are required from the pre-service teachers and also their rights and responsibilities (Towson University, 2011). It is important that pre-service teachers will realize that real life does not happen according to textbooks. Every situation they will encounter is unique and will have to be approach in its own unique way.

Challenges faculty members and pre-service teachers are facing, as well as ways to deal with these challenges, will be discussed in the next section.

2.7.1 Challenges for the faculty members

Faculty members may have concerns that by implementing service learning into the curriculum, it will weaken the academic content covered in the course (Ziegert & McGoldrick cited by Carleton College, 2010). Service learning can however be used to enhance the course content rather than replacing it (McAndrew, 2001). Unexpected experiences can also be used as teachable moments (Ziegert & McGoldrick cited by Carleton College, 2010). Resolving a conflict situation between learners could for instance be modelled by the faculty member to in- service teachers. In the same way both pre-service and in-service teachers can learn to overcome the gap between theory and practice.

Another challenge that may be encountered is students that struggle to get along with the people in charge of the service learning project (University of Wisconsin-Madison, 2012). If students struggle to get along with the people in charge at the ECD centre they could first discuss the problem with the person in charge at the ECD centre to see if they cannot reach an agreement and if not they could ask the faculty member to assist them or assign them to another ECD centre (Colorado State University, 2013; University of Wisconsin-Madison, 2012). Should students find it difficult to get along with the people in charge at the ECD centres, it would be wise to have other ECD centres already identified to which the students could be assigned to (Colorado State University, 2013). A service contract (Carleton College, 2010), to which all participants agree to, may help to overcome the challenge. The contract will ensure that the project goals are clear. If problems occur, students from various service learning groups could meet once a month for a reflection session to discuss issues, find solutions and share ideas with each other.

Faculty members are often concerned that they do not have control over the learning taking place when students are busy with service learning since it occurs outside the classroom (Tennessee State University, 2011; Ziegert & McGoldrick cited by Carleton College, 2010). By completing assignments, students will be able to demonstrate what they have learned during service learning (Howard, 2001). Another way of linking service learning to academic work may be to ask students to give a presentation about what theories, principles and concepts they have used during their involvement with service learning (Colorado State University, 2013). The faculty member can also encourage reflective and analytical thinking by means of facilitated discussion groups or journals and

in doing so the faculty member can monitor the learning process. Students will be expected to state what they did, how they felt or interpreted what they did as well as how the service they provided link to the academic concepts they have learned (Colorado State University, 2013). To ensure that students see the relevance between the service learning they are engaging in and the concepts learned in class, regular sessions to discuss the connections between the two could be scheduled.

The assessment of students is another challenge for faculty members due to the fact that most of the learning occurs outside the classroom (Ziegert & McGoldrick cited by Carleton College, 2010). To help faculty members with assessment, students could make video recordings of their visits to the ECD centres (Schwartz & Hartman, 2006). These videos could be uploaded to an internet site after each visit. This will enable faculty members to keep record of visits to the various ECD centres and also allow them to make sure that students are actively involved during service learning. Faculty members could also phone or request a report from the person in charge at the ECD centres throughout the semester to see if students are actively involved during service learning (Colorado State University, 2013; University of Wisconsin-Madison, 2012). Visits to ECD centres could also be helpful in order to observe pre-service teachers and give feedback that will augment their learning. Regular reflection sessions could be used to assess a group of students (University of Wisconsin-Madison, 2012).

Faculty members may also be concerned about the time being put into the development of a service learning programme (Tennessee State University, 2011; Ziegert & McGoldrick cited by Carleton College, 2010). Matching students with community organizations can be very time consuming. To overcome these challenges careful planning, preparation and outlining of project goals and outcomes by the faculty member is essential. Faculty members can also collaborate with other organizations that are involved with service learning to help them develop a service learning programme (Towson University, 2011). An organization such as SRCS can be approached to help identify organizations since they are involved with various ECD centres in the community (Stidworthy, 2011). Students could be asked to identify potential community partners or implement the project over a period of time in various stages (Ziegert & McGoldrick cited by Carleton College, 2010).

Another challenge faculty members may encounter is the lack of motivation students have to engage in service learning. To keep students motivated the faculty member will have to inform the students of what they can expect and what is expected of them (Howard, 2001). For example an in-service teacher from one of the ECD centres can be invited to talk to the pre-service teachers to help them understand what is going on at the ECD centre and how their skills can be valuable in improving a quality ECD environment. A presentation can also be done by die faculty member to encourage pre-service teachers to get involved at the ECD centre. If the faculty member is enthusiastic and positive about the service learning project, pre-service teachers will be encouraged to also become involved (Colorado State University, 2013).

Some challenges that pre-service teachers may face and ways of overcoming these challenges will be discussed next.

2.7.2. Challenges for students

Students may find it difficult to visit the ECD centre because of their numerous commitments to work, academics and responsibilities at home (Tennessee State University, 2011). By planning ahead, this problem can be managed (Ziegert & McGoldrick cited by Carleton College, 2010). A possible solution for this problem could be to follow a schedule. Pre-service teachers can compile a schedule with the help of the in-service teachers to have set dates and times on which to visit the ECD centre.

Students should also learn to have empathy and not sympathy (Batlle, 2012). This will help students to distance themselves and not overstep boundaries. Community partners may ask students to perform tasks that are not in line with the service learning they are expected to do (Ziegert & McGoldrick cited by Carleton College, 2010; University of Wisconsin-Madison, 2012). Such tasks may include aspects such as transporting in-service teachers for private affairs, paying bills which they are not liable for or buying food for the in-service teachers' own use. Students may also not be sure what exactly their role as service learning student entails and this problem can be overcome by preparing students for their role when they start with service learning (Colorado State University, 2013). The main objective will be to provide a service that will benefit both the students and the people of the centre (Sigmon cited by Furco, 1996).

Some students may be anxious to work with unfamiliar issues or people from different socio-economic backgrounds (Tennessee State University, 2011). If students are given an ECD centre where they are confronted by issues unfamiliar to them, they could consult the faculty member for help or they could do research to better understand the issues at hand. Working with people from different socio-economic backgrounds may lead to stereotyping or students being insensitive towards the people at the ECD centre (University of Wisconsin-Madison, 2012). Faculty members and peers should help students to avoid stereotyping and also be sensitive towards the needs and feelings of people at the ECD centre.

Another challenge students might have to face could be working with their peers (University of Wisconsin-Madison, 2012). Students may have difficulty working with their peers since some students may depend on one member to do all the work and still take credit for what has been done. Having regular meetings to ensure that all participants are still in line with the service contract will also help. Students who experience difficulty working with their peers can have a discussion to see if they can come to an arrangement and if a solution cannot be found, the faculty member should be approached to help assess the situation (University of Wisconsin-Madison, 2012).

Students may find it difficult to link service learning with their coursework (Tennessee State University, 2011). They could have group discussions on a regular basis to help each other understand how the service they are engaging in is linked to their coursework (Eyler *et al.* cited by Carleton College, 2010; University of Minnesota, 2011c). Regular reflection sessions are necessary and may also help to link service learning to coursework (University of Minnesota, 2011c; The Leeward Community College, 2007) as mentioned in paragraph 2.4.

Transport may be another problem for some students since all students do not have their own vehicles or may not have a valid driver's licence (Tennessee State University, 2011; Anderson & Pickeral, 1999). Faculty members can encourage students to travel together allowing students to socialize, save money and reduce fuel consumption (Ziegert & McGoldrick cited by Carleton College, 2010). Management and providers of funding such as the European Union could be approached for funding or grants (European Union, 2013). These funds can be used to ensure that transport is accessible to all in-service teachers.

The Departments of Basic Education and Social Development can also be approached for the funding of projects (Ilifa Labantwana, 2013).

Students may also have difficulty finding a suitable project and making contact with the person in charge (University of Wisconsin-Madison, 2012). To solve this issue maps could be given to students to find the project or a street address could be given to the students to find it by means of a GPS device. The faculty member could accompany students the first time they visit the project if he/she had been there before. To help students get in contact with the person in charge at the project, contact numbers could, if possible, be given to the students beforehand by the faculty member.

Student safety is of great concern (Osman & Petersen, 2013:222) and many parents of students may be hesitant to let their children participate in service learning in rural districts because of the location of some of the projects (Tennessee State University, 2011; University of Wisconsin-Madison, 2012). There will always be a risk when activities take place outside the classroom/lecture hall and therefore it is important that pre-service teachers are fully informed of the risks they may encounter (University of Wisconsin-Madison, 2012).

Another challenge students may face is funding (Anderson & Pickeral, 1999). Students may not have the necessary funds to buy the learning materials needed to enhance service learning at the ECD centre. To acquire funding students can approach businesses for either cash or product donations. A fund raiser could be organised with the help of the in-service teachers (National Service Learning Clearinghouse, 2008). Instead of buying learning materials, students could make the materials themselves by applying skills learned through their studies.

Language is also a challenge many students have to face, especially when engaging in service learning in rural districts (SA, 2008c; Osman & Petersen, 2013:103). Students may have difficulty understanding the language the learners and in-service teachers speak. To overcome the language barrier, students could ask the in-service teacher to teach them basic words in the language they speak, they could ask the in-service teacher to translate the instructions to the learners or pictures can be used to give instructions (Ashcraft, 2006).

Irrespective of all the challenges mentioned earlier, the benefits of service learning for all participants outweigh the challenges by far given that everyone involved during service learning will gain something as mentioned in the definitions of service learning in paragraph 2.5.

2.8 Conclusion

Many South African universities began to incorporate service learning into curricula (Erasmus, 2011:31; Dippenaar, 2011:33-34; Smith, 2011:10). Although universities define service learning in many ways, it can be summarized as follows:

Service learning addresses specific needs in the community by providing opportunities to ensure that the provider as well as the participant benefits from the service provided.

By engaging in service learning, the student, faculty and community partners benefit from this service in numerous ways (University of Minnesota, 2011c; Roehlkepartain, 2007). Challenges may however be encountered by the faculty or students while engaging in service learning (McAndrew, 2001; University of Wisconsin-Madison, 2012). Fortunately those challenges can be overcome by partaking in reflection sessions, doing proper planning and establishing good communication between the faculty members, students and community partners at the ECD centres.

In this chapter service learning has been defined and clarified. The benefits service learning offer to pre-service teachers, faculty members and community partners were discussed as well as the challenges faculty members and pre-service teachers may encounter. Reflection, and the important role it plays during service learning, was also illustrated.

The next chapter will give an overview of early childhood development in South Africa and other parts of the world. The importance of relevant training for ECD practitioners will be highlighted with an emphasis on the importance of a quality learning environment to provide quality learning at ECD centres.

Chapter 3: ECD and the importance of the ECD environment

3.1 Introduction

The early years of a child's life are very important for the development of skills, concepts and attitudes that lay the foundation for lifelong learning. The implementation of quality ECD provision in South African education will improve this development (SA, 2001b). During this developmental stage children should develop their language skills, perception-motor skills necessary for reading and writing, basic numeracy concepts and skills, problem solving skills and a love for learning (SA, 2001a; SA, 2001b; The 2004 Education Stakeholder's Forum, 2004). ECD refers to an inclusive approach to policies and programmes for children from birth to nine years of age in which their parents and caregivers actively participate. ECD's purpose is to protect children's rights and to develop his or her full emotional, cognitive, physical and social potential (SA, 2001a; SA, 2001b).

The manner in which ECD provision are handled in countries around the world, as well as the development of ECD in South Africa since the end of apartheid, will be discussed in this chapter. The types of ECD provision, as well as the curricula and policies that have been put in place to ensure the improvement of quality of ECD will be explored. A discussion on the importance of training ECD practitioners and the importance of ECD will follow. The development of learners through ECD and the influence of the environment on children's development according to Bronfenbrenner's theory on ecological systems will also be discussed. The influence of both the indoor and outdoor environments on the development of children will also be described.

3.2 ECD in other countries

On 12 February 2013 President Barack Obama said the following concerning ECD:

"I propose working with states to make high-quality preschool education available to every child in America... Let's do what works, and make sure none of our children start the race of life already behind. Let's give our kids that chance."

In order for the middle class to thrive and excel, a strong education foundation should be laid. Millions of children in America are not receiving quality ECD and this prevents them from excelling. The state however plans to address the issue by providing every child with access to high quality preschool education. Their goal is to enable every four-year-old

learner to attend a quality preschool programme led by a skilled teacher (Department of Education United States of America, 2013).

Other countries worldwide share the same view concerning the importance of ECD. In Europe access to ECD is generally accessible for learners between the age of three and the compulsory school age. In Finland access to ECD services are part of the national support system for families who have young children. It is aimed at the promotion of children's health and the development and learning of skills (Urban, 2009; Organisation for Economic Cooperation and Development (OECD), 2000). In Belgium, France, Italy and the Netherlands, national legislation entitles access to free preschool services for learners between the ages of two-and-a-half and four years (Urban, 2009). In 2006 the National Quality Framework for Early Education was introduced in Ireland and the focus was on quality early childhood education (ECE) for children from birth to six years. ECE can be divided into three categories, namely birth to eighteen months, one to three years and two-and-a-half to six years (Centre for Early Childhood Development and Education (CECDE), 2006; Urban, 2009). In England three- and four-year-old learners have the right to ECD for 15 hours weekly or 38 weeks annually (Tagnuma *et al.*, 2013; Urban, 2009). Sweden is characterized by higher levels of ECD provision than the European average. From the age of four years preschool morning services of three hours are provided free of charge in Sweden (Urban, 2009).

In developing countries such as Kenya, much has been achieved by the government, development partners as well as community and parental investment to promote access to ECD education (Githinji & Kanga, 2011; Okengo, 2013). Despite all these investments, access to ECD services remain low and only 65% of children aged three to six years living in Kenya have access to ECD services. Many ECD centres are privately owned and levies are determined by the owners which make it inaccessible to children from less privileged families. In the arid and semi-arid parts of Kenya very few children aged three to six years have access to ECD services (Githinji & Kanga, 2011). In Uganda, Malawi and Zimbabwe access to ECD services are promoted in collaboration with UNICEF by establishing innovative programmes. These programmes include a community-based childcare programme in Malawi, a child-to-child mentoring approach in Ethiopia and the expansion of ECD programmes to primary schools in Lesotho and Zimbabwe (UNICEF, 2013). In South Africa the government has been working for more than a decade to incorporate ECD

programmes and services into the educational system. Many policies, priority statements and programmes were issued by various government departments emphasising the importance of service provision for ECD (Ilifa Labantwana, 2013). In the next section the status of ECD in South Africa will be discussed.

3.3 ECD in South Africa

ECD lays the foundation for human and social development as well as the success of the school system in which the learner will be taught (The DG Murry Trust (DGMT), 2013; SA, 2001b). In South Africa many rural districts exist where ECD provision is much more curtailed than in urban areas in terms of quality and quantity (SA, 2001b). Especially learners from rural districts are in need of good quality ECD centres to help them develop to their optimal potential (Biersteker & Dawes, 2008). Most ECD centres situated in rural districts very seldom offer daily programmes that are age appropriate and beneficial for the development of a preschool learner (DGMT, 2013).

The reason for these shortcomings may be linked to practitioners who are not adequately trained, are not required to register with the South African Council of Educators and the absence of accreditation systems for practitioners (SA, 2001b; Biersteker & Dawes, 2008). In rural districts teaching aids are usually limited and some teachers are not trained to use these teaching aids effectively. The indoor and outdoor environments of the ECD centres are mostly not up to standard. A large number of the teachers at ECD centres in rural districts do not have formal ECD training and are predominantly volunteers helping out at the centres (SA, 2008d; Stidworthy & Labuschagne, 2011). In order to enable teachers to facilitate effective learning at ECD centres, a suitable learning environment has to be established and teachers should be trained efficiently (Yildizlar & Kargi, 2010). It is clear that ECD still has a long road ahead to ensure high quality education to all young learners in South Africa. On the positive side, however, South Africa is the largest and most powerful country in Southern Africa and also the country that has done the most to promote ECD (Penn, 2008). It also has the most comprehensive legislation regarding ECD (Penn, 2008; DGMT, 2013). Irrespective of the existence of extensive legislation, the quality of ECD is not reflected in reality.

South Africa is well known for its complex history. During the apartheid years black and white citizens were separated and separate services were offered in various areas,

including education (Penn, 2008; South End Museum, 2013). Black citizens were predominantly taught in substandard township and rural schools while Indian and coloured citizens were also treated differently from white citizens (South African History Online, 2013). During the apartheid years the government had a nursery school building programme in place for white citizens. These nursery schools (hereafter referred to as ECD centres) were seen as an enhancement to the learners' home life (Penn, 2008).

ECD centres subsidised by the state government had substantial space and facilities and were staffed by teachers trained at teacher training colleges to work with young learners at ECD level (Penn, 2008). When the ANC came to power in 1994, equity, democracy and redress were important goals set by the government, however to achieve these goals the entire system of the government had to be reorganized and restructured (Penn, 2008; OECD, 2009). ECD centres in rural districts were mostly on unregistered premises and staffed by women who were barely qualified and received little remuneration for services rendered (Penn, 2008). Some of the crèches and ECD centres were financially supported or managed by NGOs (Penn, 2008).

A year and a half before the first democratic election in South Africa, a study on the status of children attending school and ECD programmes was conducted because of the high rates of grade repetition and dropout in education for a large percentage of the population. The study revealed that the new South African government had to find methods to ensure that all children would be ready to enter their first year of primary education with the necessary knowledge (Evans, 1995). Although this need was identified early on it was only envisaged by the 2009 Medium Term Strategic Framework that universal access of grade R to all learners should be completed by 2014. In 2011 the Department of Education set a target to provide all grade R learners with quality ECD programmes to help compensate for socio-economic deprivation and low family literacy. The department also set a target for all pre-grade 1 children to attend grade R by 2014 (SA, 2011b). When considering the current reality, it is clear that the target has not been met.

One of the outcomes of the struggle against apartheid included addressing the lack of quality early childhood education for learners who have been deprived from a citizen right (SA, 2009a:7). One of the founding principles of the Constitution of South Africa is common citizenship and the equal enjoyment of various citizen rights. Especially the right to

education and the rights of children are emphasised (Vally, 2005:41; The World Bank, 2013). In terms of Section 29 (1) of the Constitution of South Africa (SA, 1996a), everyone has the right to basic education. Each learner therefore has the right to basic education and properly trained educators who have the ability to help them achieve and develop to their optimal potential (SA, 2012). This also applies to education during the early years. A year after the democratic election The White Paper on Education and Training set a goal to review and adjust the existing curriculum. One of the things the new curriculum emphasized was “common citizenship”.

3.4 Types of ECD provision and programmes

In South Africa children between the ages of seven and fifteen years of age are required by law to attend school. Learners are required to attend grade 1 in the year they turn seven according to the admission age policy (UNESCO, 2006). The policy however permits learners who are turning six by 30 June in the year of admission to be admitted to grade 1. A learner may also be admitted to grade 1 at a younger age if it is in the child’s best interest and suitable facilities are available (UNESCO, 2006; SA, 1996c).

Two main categories of ECD provision can be distinguished, namely public and independent ECD provision (Meier & Marais, 2012:58). Provincial departments of education fund public ECD centres consisting of pre-primary schools that provide ECD services and programmes to children three to five years of age (SA, 2001b). Independent ECD centres offer a greater variety of ECD services and operate by means of parent fees, community fundraising and/or donations with little or no funding from the government (UNESCO, 2006). Independent ECD provision currently includes various forms of education such as grade R at independent schools and grade R as part of public schools managed by the school governing body and operated by a private individual or the community. It also includes independent pre-primary schools that provide education for children from three to five years of age, privately-operated or community-managed crèches and pre-primary schools. Another form of ECD provision entails home-based provision that provide for children from birth to five years (UNESCO, 2006). This type of ECD provision is flexible towards the needs of the learners and is very common in urban areas. Independent pre-primary schools and community operated institutions are the largest providers of independent ECD services and programmes to children. The different forms of ECD

provision illustrate the variety of ECD services that exist as well as the fact that the programmes vary greatly in terms of quality (SA, 2001b; UNESCO, 2006).

As illustrated in the discussion about the different forms of ECD provision in South Africa, it is clear that two forms of pre-primary programmes can be distinguished, namely grade R and pre-grade R. Grade R (the reception year) refers to the year before grade 1 and caters for five-year olds while pre-grade R programmes cater for children under four years of age (UNESCO, 2006). More than 8, 3 million children living in South Africa fall within the age range of ECD of which 5, 5 million are aged zero to five years (Penn, 2008). According to surveys there are approximately 25 000 ECD centres in South Africa catering for 16% of eligible children (Penn, 2008).

ECD programmes are mostly developed and maintained by the private sector, non-governmental organizations (NGOs) and international organizations (Penn, 2008). ECD remains dominated by the private/home/community sectors. NGOs such as training organizations, community- and religion-based organizations play a critical role in ECD. Additionally the government receives support from some donors to rectify imbalances in ECD provisioning (UNESCO, 2006). The Education White Paper 1 on Education and Training also commits the Department of Education to inter-departmental collaborations with NGOs, ECD practitioner groups and the private sector (SA, 2001b). Minister Edna Molewa, chairperson of the Ministers and Members of Executive Councils (MINMEC) committee, stated that, with the help of the private sector and her department, rural communities will be assisted in the establishment of more ECD centres. The Social Development MINMEC has also resolved to increase access to ECD services in the country to accommodate the more than four million children who do not have access to ECD services (SA, 2010d).

According to the nationwide audit of ECD provisioning in South Africa only about one million of an estimated six million children in the zero to six year age group are enrolled in some type of ECD provision (SA, 2001a). The problem with ECD provision in South Africa can be linked to access and equity. About 75% of ECD provision is fee-based and this financial burden affects especially the poor (SA, 2001b). People living in privileged communities have better access to high quality ECD services whereas people living in rural districts struggle to provide quality ECD services for their children (Penn, 2008; The 2004

Education Stakeholder's Forum, 2004; Van der Vyver, 2012:142). Apartheid also contributed to the limited access of children with special needs to ECD services, especially because no early identification and intervention, which are crucial for the best possible development of many children struggling with special needs, have been done (SA, 2001b). If problems were identified in the early years, intervention could take place which might have led to fewer problems later in life when the child grows up (SA, 2001b). Subsequently the curricula and policies in South Africa will be described.

3.5 Curricula and policies for ECD in the South African school system

The Education White Paper 1 on Education and Training adopted in 1995 clarifies the role of the Department of Education concerning the development of a policy for children zero to nine years old with the focus on five-year-old children as well as the phasing in of grade R into the school system (SA, 2001b). The development of grade R classes at primary schools, especially in poorer districts, has been one of the educational initiatives prioritized by the government (SA, 2001b). This is a much cheaper option for parents than taking their children to a pre-primary school which is dependent on parent fees to function (Penn, 2008). A National Qualifications Framework for ECD was also put in place in 2011 and many initiatives have been launched to improve the quality of ECD. Unfortunately the impact of these initiatives has been very small given the poverty many children in South Africa live in (Penn, 2008). According to the Education White Paper 5 on Early Childhood Education, South Africa is on the brink of a new era regarding ECD and all children should have the opportunity to grow up in dignity and equality since the end of apartheid (SA, 2001b). Learners will thus have access to quality ECD services and the importance of ECD will be recognized.

A National Programme of Action for Children was adopted by the South African government in 1996 which focused on the rendering of various services to children. An important aspect of the programme was to emphasise ECD and basic education. Additionally the Interim ECD Policy of the Department of Education was adopted in 1996 (SA, 2001b; SA, 2001d). This policy focused on the implementation of a National Reception Year Pilot Project to be completed by 1997. The aim of this project was to test a lower cost model and curriculum for the implementation of grade R with the help of NGOs and community-based ECD service providers (SA, 2001d). An amount of R125 million was allocated by the Department of Education, provincial education departments and the

European Union to implement the National Reception Year Pilot Project (SA, 2001c). 2730 ECD centres and grade R teachers as well as about 66000 grade R learners from all over the country participated in this project over a period of three years (SA, 2001b). Two main objectives of this project were to make and test ECD innovations related to the accreditation of practitioners, policy and subsidy systems as well as research about the most effective ways of delivering grade R education (SA, 2001b). As a result of this policy, the National ECD Pilot Project Interim Unit Standards for ECD practitioner training were developed (SA, 2001b). In post-apartheid South Africa many things have changed for the better but many citizens are still reliant on poor public services (Penn, 2008).

Policy and racial discrimination by the government during apartheid also had an effect on ECD provision (SA, 2001b). In 1998 the government decided to withdraw education funding from ECD centres to prevent imbalances. Since the relatively privileged minority received the largest part of the funds available, this forced some ECD centres to become private institutions where parents had to pay school fees and others had to close (Penn, 2008). Teacher training programmes for ECD practitioners were also discontinued (Penn, 2008). The South African government has put various ECD policies and programmes into place to support children who don't have access to quality ECD. One of these was the phasing in of a reception year of schooling (Penn, 2008; SA, 2001c; Evans, 1995).

The first curriculum that included learning outcomes for grade R as part of the Foundation Phase of teaching was The National Curriculum Statement Policy released in 2002. The Foundation Phase consisted of three learning programmes, namely Literacy, Numeracy and Life Skills (SA, 2002). The National Curriculum Statement Policy built on the vision and values of principles in the Constitution, which include a healthy environment, social justice, human rights and inclusion. The pedagogy promoted learner-centeredness and group work. For grade R learners, the suggested percentage of time allocation was as follows: Literacy 40%, Numeracy 35%, and Life Skills 25% (SA, 2002). The objectives and aims of this curriculum were the development of each learner to his/her optimal potential as a citizen of a democratic South Africa. The curriculum also aimed at the creation of lifelong learners who are literate, confident and multi-skilled with the ability to participate in society as active citizens (UNESCO, 2006; SA, 2002). According to the National Curriculum Statement published in 2011 by the Department of Basic Education (SA, 2011c:6) ten

hours must be spent on Languages, seven hours on Mathematics and six hours on Life Skills in a week on Grade R instruction.

In 2004 the social sector was instructed to develop an integrated plan for ECD. This policy, created in 2005, is known as the National Integrated Plan (NIP) for ECD (UNICEF, 2005; SA, 2005). This policy required the departments of Health, Social Development (welfare) and Education to work together at national and local level to oversee services, however some evidence suggest that cooperation worked on national level but that it was weaker at regional and district levels (SA, 2005). The NIP was created to address the needs of children under the age of five years with specific focus on poor and vulnerable children. The NIP also aimed at creating environments in which especially vulnerable children could achieve success. These environments had to increase opportunities for children to prepare them for entering schooling as well as reduce unfavourable developmental effects of poverty in which young learners live (SA, 2005). The NIP for ECD recognised that all ECD educators should be supported as professionals (UNICEF, 2005). This initiative aimed at intervention on three levels, namely family, community and formal services (UNICEF, 2005). For the purpose of this study the most important level is the formal service level. The formal service level includes crèches, day care centres and preschools (UNICEF, 2005). The NIP intended to improve existing ECD provision by improving access to and quality of ECD provision through a programme of legislative changes and targeted subsidies (SA, 2005). A system of per capita grants for children from low-income households to attend formal settings was also introduced by the government. These grants were given directly to the centres to be spent only on services for children, food, equipment, etcetera, and not for payment of staff or other running costs (Penn, 2008). The National early learning and developments standards for children from birth to four years (NELDS) that was released in 2009 similarly focussed on addressing the lack of quality early childhood education for learners zero to four years of age (SA, 2009a). In order to effectively use these grants to the benefit of learners, it was necessary to train ECD practitioners to buy the necessary equipment and food according to the needs of the learners. The importance of adequate and effective training of ECD practitioners for the improvement of effective early childhood education will be discussed next.

3.6 Training of ECD practitioners

ECD practitioners have a big responsibility when teaching because they are the ones that have to address the needs of the learners in their classes (Childcare Education Institute, 2009). A problem at ECD centres located in rural districts are that many ECD practitioners are under- or unqualified and thus do not have the knowledge to stimulate and educate learners in their classes (SA, 2010a:30). The White Paper 5 on Early Childhood Education (SA, 2001b) states that the inconsistent quality of ECD services and programmes may be linked to ECD educators not being required to register with the South African Council of Educators (SACE). It may also be linked to inequities in the qualification of ECD practitioners and the absence of an accreditation system for trainers of ECD educators. Many ECD practitioners have only a teacher's qualification at Level 4 on the National Qualifications Framework (NQF) (SA, 2011a). The aim of the NQF is to regulate training of teachers. In South Africa there are ten NQF Levels that regulate the qualifications of teachers. NQF Level 4 presents the lowest qualification for an educator. A NQF Level 4 qualification will offer an unqualified teacher, who is already working in ECD, a Further Education and Training Certificate in ECD enabling the teacher to enter the ECD field and improve their qualifications (Rhodes University, 2012). According to The Policy on Minimum Requirements for Teacher Education (SA, 2010c) NQF Level 5 entails a Higher Certificate in Grade R Practices. Based on the old 8 level NQF there are few ECD educators who have higher qualifications such as a NQF Level 6 (Bachelor's degree) or NQF Level 7 (Honours Bachelor's degree) and NQF Level 8 levels (Master's or Doctorate level) are almost non-existent amongst ECD educators (Harwood *et al*, 2013; Penn, 2008; SA, 1996b; SA, 2010c). The Policy on Minimum Requirements for Teacher Education (SA, 2010c) state that a grade R teacher must have an initial minimal qualification of a 360 credit level 6 diploma to teach grade R.

The importance of the effective training of ECD practitioners was acknowledged by various stakeholders over the last decade. In 2001 the Departments of Education and Labour recognised crucial aspects of education in the early years such as professional development of ECD practitioners, quality assurance of education and training programmes, registration of ECD sites, professional development of ECD practitioners and training programmes at ECD sites (SA, 2001b). Another example of the value attached to the importance of ECD was the statement by the Preschool Learning Alliance (2011) that

confident and knowledgeable educators who have been trained effectively are essential to provide quality education and care to learners. All of the examples mentioned emphasize the importance of acknowledging the need of ECD practitioners to receive training in order to be proficient teachers. Educators need specific skills to teach learners effectively and therefore training is important to provide educators with a sense of profession as well as experience. Training also helps educators to enjoy the experience of teaching and address the challenges it may bring (Yildizlar & Kargi, 2010).

There are many organisations in South Africa which provide ECD services, however many of these services and providers are unregistered and unregulated (UNESCO, 2006). In order to improve the quality of ECD programmes, it is required that all ECD programmes are registered with provincial departments of education, that all ECD educators are registered with SACE and that all educators who do not have the necessary qualifications undergo approved training programmes (SA, 2001b). NGOs involved in ECD programmes have developed training systems that provide ECD practitioners with the necessary skills and knowledge to work with learners entrusted in their care. It is also enabling communities to take ownership of ECD programmes and make them sustainable over time (Evans, 1995). Provincial departments of education received funds from the Department of Education to provide start-up subsidies for community based ECD sites and the training and accreditation of educators (SA, 2001b). As part of an employment initiative the Department of Public Works sponsored an additional programme to train women from poor communities as early childhood workers. While in training the women received salaries (Penn, 2008). All these initiatives are aimed at the improvement of ECE, the advancement of ECD programmes and the qualification of ECD practitioners. Quality ECD programmes also necessitate ECD centres that will support effective learning. This aspect will be discussed next.

3.7 The importance of ECD and ECD centres

Since 1994 a great deal of attention has been drawn to the importance of ECD and the important role pre-primary education plays in the development of young learners (SA, 2009a:7). Enrolment in education in the early years is seen as a key indicator of socio-economic development and progression towards the Action Plan of 2014 with the vision called Schooling 2025. The Action Plan envisages that the enrolment ratio for ages zero to five years should increase with 50% by 2024 (SA, 2010b:13).

According to Lipoff (2012) ECD offers young children the necessary learning experiences that will benefit them all throughout their educational career. The early years are the best time to transfer knowledge regarding health, values, morals and decision making skills as well as laying the foundation of a positive self-esteem (The 2004 Education Stakeholder's Forum, 2004). Awareness of the crucial importance of early interventions to ensure a good start in life, and prevent loss of human potential, is increasing worldwide (UNICEF, 2007). It is argued that intervention in the early years may possibly lead to increased productivity during one's lifetime (The 2004 Education Stakeholder's Forum, 2004). International agencies, such as the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) highlight the importance of a healthy start in life as well as a nurturing and stimulating early environment on which the platform for later psychological, social and physical development can be laid (UNICEF, 2007). The importance of ECD was also articulated by the South African government in the 2009 budget where it was announced that the number of children enrolled in ECD should be increased. It also stated that new sites and the training of practitioners to increase the number of caregivers, should be a priority (SA, 2008a). The five key areas that need to be addressed are the quality of ECD services, the extent of ECD provision, the inequality of existing ECD provision, access to ECD services and incomplete and fragmented legislative and policy frameworks for ECD (SA, 2001b). Children from poor rural communities will benefit the most from better quality ECD and by helping them an end can be made to the inter-generational cycle of poverty, disease, violence and discrimination. To break the cycle of poverty, the government has to increase the access to ECD programmes especially for poor children. They also have to address the quality of these programmes. The White Paper 5 on Early Childhood Education (SA, 2001b) also states that, by intervening in children's early years, it helps to diminish the social, economic, race and gender inequalities that divide our society.

Quality early childhood education has the potential to play a crucial role in the social and economic transformation of South Africa (SA, 2009a:7). By improving the social and economic transformation of the country, more people will be educated. It will enable parents to get employment, prepare learners for the workplace once they have finished school and help to prevent social problems that may occur in the future. This will lead to fewer problems regarding aspects such as school readiness and school dropout (Calman & Tarr-Whelan, 2005; SA, 2010b:13; SA, 2001b). South Africa's position in the global

economy depends on the capabilities that are developed early in life and these capabilities should be stimulated before a child starts with formal education in primary school (SA, 2001b). The shortage of access to quality ECD education influences the development of children negatively and it prevents primary caregivers to earn an income, get educated and take part in other activities (Vally, 2005:33). By relieving women from their duties regarding ECD education, it will result in better income for women and families, especially families living in poverty. This, in turn, can have a remarkable influence on the social and economic development in local communities, regions and the nation (SA, 2001b).

The fact that a large number of parents have a fulltime job, are not educated to identify good ECD centres and have few choices regarding the day care for their children, underscore the importance of quality early childhood education. These parents typically choose to leave their children with a caregiver or at an institution where they assume that their children will receive the training and education needed (Grobler *et al.*, 2007:1; The 2004 Education Stakeholder's Forum, 2004). The benefits of quality early education depends on how prepared teachers are to teach and care for learners that attend an ECD centre (Calman & Tarr-Whelan, 2005). According to Noble (2008) quality education is the one school factor that contributes more to learners' achievements than any other school factor. If children fall behind in the development of skills (including life skills) they will be at risk to struggle later in life which may prevent them from reaching their optimal potential (Morris *et al.*, 2009:3). When quality ECD is ensured the system will not have problems with under aged and ill-prepared learners (SA, 2001b).

If ECD provision is improved, increased productivity during a lifetime and a better standard of living when a child becomes an adult will follow, thereby saving costs on remedial education and health care as well as rehabilitation services (The 2004 Education Stakeholder's Forum, 2004; SA, 2001b). Quality ECD programmes have the potential to generate significant long term benefits that includes providing children with important learning opportunities, involving parents to become involved and working with teachers to support children's education (The 2004 Education Stakeholder's Forum, 2004). According to the Interim Policy for ECD (SA, 1996b), ECD is important because few families can provide for their children's developmental needs due to a lack of sufficient aids in their communities. Investing in the education of young children can lead to higher employment, more people undergoing tertiary education, lower crime and a decrease in the dependency

on welfare in South Africa (The 2004 Education Stakeholder's Forum, 2004). Studies in the USA have shown that the equivalent of every R1 spent in ECD, saves R7 later on a child's school life and triples the chance that a child will successfully complete primary school (The centre for early childhood development (CECD), 2007). Additionally it provides teachers with in-service training and support (The 2004 Education Stakeholder's Forum, 2004). The influence that a practitioner or site (ECD environment) may have on the development of a learner can be explained by means of Bronfenbrenner's ecological systems theory. Bronfenbrenner's ecological systems theory will be used as theoretical underpinning to illustrate the interpersonal relationships learners have with other people such as parents, teachers and siblings and how these relationships are influenced by the different environments they manifest.

3.8 Bronfenbrenner's ecological systems as theoretical framework

According to Bronfenbrenner's ecological systems theory (cited by Brewer, 2007:13) a child develops in a complex system of relationships and these relationships are influenced by the surrounding environments. Donald *et al.* (2007:40) and Oswald (2008) support this statement by stating that a child's development is shaped by the social context in which he/she grow up. Bronfenbrenner's ecological systems theory consists of five interacting systems. These systems are distinguished as the micro-, meso-, exo-, macro- and chronosystems (Donald *et al.*, 2007:41; Oswald, 2008; Swick & Williams, 2006). Microsystems refer to systems that involve interactions with familiar people like family or friends. These types of systems help to develop a child socially, emotionally, cognitively, morally and spiritually through relationships and daily activities (Donald *et al.*, 2007:42). Mesosystems consist of microsystems that constantly interact with one another such as a teacher helping a child or a neighbour giving advice (Swick & Williams, 2006:371). Exosystems consist of systems that a child is not directly involved in for example a parent's workplace or friends of a sibling (Oswald, 2008; Donald *et al.*, 2007:42). Macrosystems consist of social and economic structures, beliefs and values such as the respect that is expected towards senior citizens in the community and it also has an influence on a child's micro- and mesosystems (Swick & Williams, 2006:372). The chronosystem represents time, as well as the interactions between systems as time passes, which affects the development of the child (Donald *et al.*, 2007:42). See Figure 3.1 for a visual representation of Bronfenbrenner's ecological systems theory.

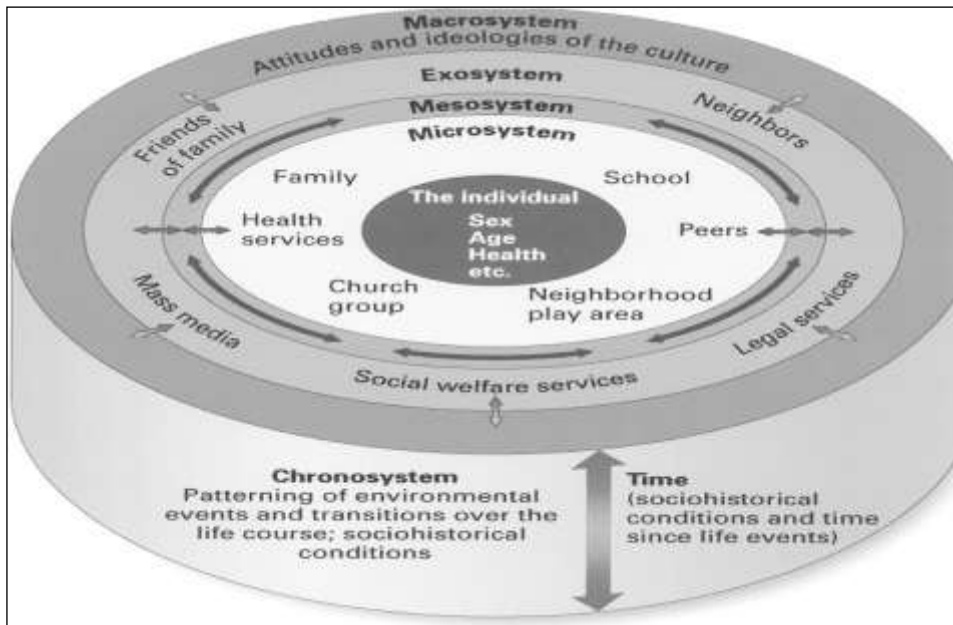


Figure 3.1 Illustration of Bronfenbrenner’s ecological systems theory (Miller, 2011).

According to Bronfenbrenner (Covell, 1995:283; Brewer, 2007:13), a child’s development is influenced by various environmental systems. The development of a child growing up in a rural district may be influenced by the various systems in the following ways.

The microsystem is a child’s immediate environment and will have the most influence on his/her development since the most direct interaction takes place in this system (North America Community for Cultural Ecology (NACCE), 2012; Paquette & Ryan, 2009; Swick & Williams, 2006:372; Oswald, 2008). For example, the way in which parents interact with a child will have an effect on the development of the child, his/her beliefs and behaviour (Paquette & Ryan, 2009; Sincero, 2012). If a child is treated with love and respect he/she will also learn to treat others in the same way (Oswald, 2008). If a parent is violent towards the child, beating him/her and screaming at him/her the whole time, the/she will not develop a good self-esteem and this will limit him/her in developing social skills. Siblings will also play a role in the developing of the child since they will act as role models for the child. The interaction between different microsystems will influence the child’s development. These interactions occur in the child’s mesosystem (Oswald, 2008; Swick & Williams, 2006:372; NACCE, 2012; Paquette & Ryan, 2009). For example, children who are rejected by parents may have difficulty in opening up to a teacher and will have trouble developing a positive attitude towards teachers (Sincero, 2012). If a child is brought up in a

religious home and if he/she attends church with their families, the values which he/she might have learned will also reflect in their behaviour towards others (Paquette & Ryan, 2009). Neighbours and friends of siblings may also have an influence in a child's behaviour towards others. Children can thus be influenced directly, as well as indirectly, by places and people.

A child's exosystem is influenced by other people or places that the child may not necessarily interact with directly (Oswalt, 2008; Paquette & Ryan, 2009; NACCE, 2012; Swick & Williams, 2006:372). The following factors will have an influence on the child's development: (1) the involvement of social workers, students from the university or pre-service teachers in the community; (2) access to health care in the community; (3) new laws and legislation; and (4) a decision of the Department of Education to implement a new curriculum. A parent's workplace may also influence a child indirectly (Paquette & Ryan, 2009). If a parent is experiencing stress with regard to their work, it will have a negative effect on the child (Oswalt, 2008). Financial problems in a family may indirectly have an influence on the child's development because parents may not be able to provide the family with enough nutritious food which is important for development. A parent may have to take on more than one job to support the family and this will have an effect on the routine the child is used to. Should a parent receive a promotion at work, it will have a positive effect on the child's life since the parent will be able to provide in the physical needs of the child (Oswalt, 2008).

The macrosystem represents the culture in which a child is brought up and is influenced by their socio-economic status and ethnicity (NACCE, 2012; Swick & Williams, 2006:372; Sincero, 2012). Examples of macrosystems are the ECD centres used in this study which is situated in areas where poverty can be seen everywhere. Most of the people in the community live in shacks and have very little access to basic necessities such as running water, working sewerage systems and electricity. People living in these communities earn a very low income and struggle to manage on a daily basis. Many of them are also unemployed and have no or very little education. Over time the circumstances in which children live may change for the better or the worse. A child's chronosystem represents the way in which environmental effects develop over time (NACCE, 2012; Paquette & Ryan, 2009). Death of a family member or a caregiver can influence this system (Paquette & Ryan, 2009). This will not only disrupt the child's daily routine, but will also have an

emotional effect on him/her. When parents divorce, a child needs to adjust to new circumstances and has to learn how to interact with family members in a new family setup (Sincero, 2012). It will also have an effect on a child's social skills and emotions. Changes in the environment in which the child lives will have an effect on his/her development. The areas where the selected ECD centres are located do not have proper access to water, sewerage systems or electricity. Should these areas evolve, it may be favourable towards the development of the child.

Bronfenbrenner's theory emphasizes the important role of the environment in which learners are educated (Donald *et al.*, 2007:40). It necessitates the importance of establishing a good learning environment in order to provide opportunities for optimal learning to take place (Grobler *et al.*, 2007:1). The National Research Council (cited by Fu, 2003) supports this view and claims that studies have shown the importance of learning based on the relationship between individuals and their learning environment. The White Paper on Education and Training (SA, 1995) also acknowledges that children's growth and development are influenced by various elements in their environment. This legislation states that an environment which meets the child's basic needs namely nutrition, stimulation, safety and health, must be established. The Education White Paper 5 on Early Childhood Education (SA, 2001b) and The 2004 Education Stakeholder's Forum (2004) also state that children's needs and rights include health, nutrition, a safe environment and psychosocial and cognitive development.

To meet these needs an integrated and cross-sectorial approach must be followed (The 2004 Education Stakeholder's Forum, 2004). This includes government departments (with the Department of Education taking a leading role), civil society, the corporate sector, religious organisations, NGOs, parents/caregivers and other stakeholders (The 2004 Education Stakeholder's Forum, 2004). Children's rights should be protected from an early age (The 2004 Education Stakeholder's Forum, 2004; SA, 2001b). It is never too late to improve a child's health and development, teach him/her new skills and help him/her overcome fears or reflect on beliefs. But, if a child does not have the right foundation, he/she will struggle to catch up and reach their optimal potential (SA, 2001b). It is important to invest in ECD because South Africa committed itself to the advancement of the rights and development of children (SA, 2001b; The 2004 Education Stakeholder's Forum, 2004). By providing quality education in the early years, the effectiveness of education in South

Africa will provide children with the opportunity to gain the necessary concepts, skills and attitudes they need for successful learning and development before or shortly after entering the school system. This will decrease their chances of failure (SA, 2001b). Research has shown that regardless of cultural differences or level of development, preschool education greatly improves the chances a child has to later succeed in school (CECD, 2007; SA, 2001b; Lipoff, 2012).

Preschool learners' growth and development are continuously influenced by their environment (Marotz, 2009:186). In the next paragraph the development of the preschool learner will be discussed with focus on the physical, social and emotional as well as cognitive development of the preschool learner.

3.9 The development of preschool learners

The Education White Paper 5 on Early Childhood Education (SA, 2001b) states that about forty percent of young children in South Africa are brought up in poverty and are being neglected. Being brought up in such deprived conditions may result in infant death, low birth weight, stunted growth, poor school adjustment, repetition of grades and school dropout (SA, 2001b). Most of these children's parents received limited or no formal education and experience problems in teaching their own children the basics to prepare them for formal education (SA, 1996b). Ramey and Ramey (2004:488-489) support this view and state that children from poor and undereducated families have a higher risk of not being ready for school due to a lack of knowledge and skills. By giving children a healthy start in life and a solid foundation by means of ECD in their first few years, they will be less likely to suffer from illnesses, repetition of grades, school dropout and in need of remedial services (UNICEF, 2013). In light hereof it is crucial that the Department of Education should look into an action plan to address early learning opportunities for all learners but especially those learners living in poverty. Timely and appropriate interventions can reverse the effects of early deprivation and the development of learners' potential can be optimised (SA, 2001b; UNICEF, 2007; The 2004 Education Stakeholder's Forum, 2004).

It is widely acknowledged that the effects of experiences during the early years of a child's life can last a lifetime (SA, 2001b). Minister Molewa (SA, 2010d) highlighted the importance of ECD services and emphasized that the early years of a child's life is the ideal phase to pass on values that are seen as important for the building of a peaceful, prosperous and

democratic society. Examples of these values to be instilled include respect for human rights, appreciation of diversity, tolerance, and justice are examples of (SA, 2010d; The 2004 Education Stakeholder's Forum, 2004; SA, 2001b). Professionals and parents are reaching a consensus that the care of children during their preschool years should provide them with the necessary educational experiences which can have a positive impact on their learning in school (Lipoff, 2012; SA, 2001b). The way in which children learn are influenced by the type of care they receive from parents, preschool teachers and caregivers (SA, 2001b). Research in child development shows that the largest part of brain development takes place before a child reaches the age of three years (SA, 2001b). It is also during this period that a child develops abilities to think, speak, learn and reason and during which the foundation for values and social behaviour as adults is laid (SA, 2001b; The 2004 Education Stakeholder's Forum, 2004). Additionally, a child develops confidence, curiosity, purposefulness, self-control and the ability to communicate during their early years (SA, 2001b). The early years of child's life are also crucial for the acquisition of concepts, skills and attitudes important in laying the foundation for lifelong learning (SA, 2001b; The 2004 Education Stakeholder's Forum, 2004). Since ECD plays such an important role in the development of skills in learners' life, it is crucial that all learners should have the opportunity to attend grade R and experience quality ECD programmes.

Grade R programmes should primarily make use of play to facilitate opportunities for children's emotional, intellectual, social, physical, moral and spiritual development (SA, 2001b). Solomons (cited by Vally, 2005:32) agrees with this statement and believes that grade R should adopt an informal preschool approach to teaching and learning since children learn through play. However, Solomons (cited by Vally, 2005:32) also states that most children living in South Africa lack stimulation and grow up in the most unhealthy and dangerous environments. Because of the importance of holistic development (SA, 2001a) physical, social, emotional and cognitive development as key areas of school readiness will be discussed briefly.

Physical development

Physical development focuses on two aspects, namely children's physical growth process and their skill improvement by means of various tasks, using their small and large muscles (White & Smith, 2013). The rate at which a preschool learner develops is influenced by environmental factors such as the freedom to practice movement, good nutrition as well as

the availability of learning materials. It also has been observed that learners develop gross motor movements before fine motor movements (Brewer, 2007:18). Gross motor development refers to the physical skills that use large body movements involving the whole body for example walking up stairs. Fine motor skills are necessary to engage in smaller movements such as cutting a piece of paper (Oswalt, 2013a; White & Smith, 2013).

Physical development is extremely important because of the fact that children from urban areas are more exposed to technology (such as television and computers) than usual (Pitman, 2008). The lifestyle and diets children follow also has an influence on their physical development (SA, 2013b). If children do not lead a healthy lifestyle by exercising and following a healthy diet, it may lead to obesity and diabetes (SA, 2013b; Great Play, 2012). A learner who does not develop physically, will have a lack of gross motor skills, will not be able to develop their muscles, will struggle to control their body's movements and will also lack endurance (Shiple, 2008:375-376; Batema, 2013).

Activities for physical development should be presented in ways that children find enjoyable such as games and activities that focus on physical development through play (Shiple, 2008:376; Stanberry, 2013; Great Play, 2012). According to Oesterreich (cited by The National Network for Child Care (NNCC), 2012) physical skills that should be developed in grade R include riding a tricycle, catching a bouncing ball, jumping over low objects, skipping, running, galloping, tumbling, cutting on a line using scissors and using a knife and fork (Government of Western Australia Department of Health, 2012; White & Smith, 2013). As learners develop physically, for example while mastering climbing a jungle gym, running and competing with the peers, it becomes easier for them to interact with other learners and as a result social development is enhanced (Shiple, 2008:376).

Social and emotional development

Learners' social development refers to their ability to form relationships with others (White & Smith, 2013). An environment in which a child feels loved and cherished will play a vital role in his/her emotional development (Cybertots, 2012). When participating in physical group activities with other learners, the motivation to participate in group activities is influenced by their social experience (Shiple, 2008:376; White & Smith, 2013). The preschool learner will develop his or her own identity as a reflection of relationships with people around them (American Academy of Pediatrics, 2013). Being in an environment

where interaction between adults and children takes place will help to enhance the social and emotional development of the child (Cybertots, 2012). A learner's self-esteem will also develop as he/she is given opportunities in the classroom or on the playground to feel successful and good about themselves (DeBord, 2007; Reinsberg, 2010). The classroom environment should be structured in such a manner that learners can be successful in that what they do. This will develop their self-esteem to its optimal potential (Head Start, 2003). A learner's social development is also influenced by play such as playing house and taking on different family member roles (Government of Western Australia Department of Health, 2012). Learners will also begin to distinguish between genders and therefore it is important that the teacher structure the class in such a manner that both genders have the opportunity to participate in play (Brewer, 2007:20-22, 26).

Learners develop affective characteristics through physical experiences in their environment (Shipley, 2008:376). According to Oesterreich (cited by NNCC, 2012) and Brewer (2007:28), preschool learners will develop a sense of right and wrong by the age of five years and they will be able to describe their own emotions as well as situations that may cause those emotions. Learners will also begin to develop a sense of humour (Government of Western Australia Department of Health, 2012). By developing empathy, learners will be able to understand what another person is feeling and they will begin to react on facial expressions, spoken thoughts and behaviours such as crying and laughing (Oswalt, 2013c; American Academy of Pediatrics, 2013 Smith & White, 2013). The development of empathy and sympathy occurs during cognitive development.

Cognitive development

The cognitive development of a child refers to the way a child thinks, understands and perceives his/her world (White & Smith, 2013). While growing physically, learners are also growing mentally and are improving their observation and interaction skills. If a child grows up in an environment that provides modest or no intellectual or sensory stimulation, he/she may not develop necessary cognitive skills (Pachucki, 2013). Cognitive development includes the acquisition of skills related to memory, communication, conceptual understanding and problem solving (Shipley, 2008:92). A noisy environment may also influence a child's cognitive development (Cornell University, 2013). According to White and Smith (2013) and Oesterreich (cited by the NNCC, 2012), learners should be able to

memorize their address and phone number, place objects in a required order, create and tell stories and understand time concepts like today, tomorrow and yesterday.

Piaget and Inhelder (cited by Brewer, 2007:29) and Oswalt (2013b), state that learners' cognitive development can be categorised into several stages, namely the sensorimotor stage, the preoperational stage and the concrete operational stage. Vygotsky (cited by Brewer, 2007:29) believes that the learners' cognitive development is influenced by social interaction and also by imaginary and fantasy play. As learners develop cognitively, their play will change from simple fantasy play to plots with more characters and games with set rules. By engaging in open-ended play such as sand and water tables and building with blocks, mathematical concepts and the ability to estimate, predict, solve, evaluate and compare will be promoted. A well-organised and well-equipped outdoor environment provides the child with endless problems to solve (Shipley, 2008:378).

It can be concluded that the environment in which a learner is educated, plays a crucial role in the various areas of his/her development (Cornell University, 2013; Peterson, 2013; Seifert, 2013; Pachucki, 2013; Martinez, 2013; Cherry, 2013). The indoor and outdoor environment will be discussed in the next sections.

3.10 The environment of the ECD centre

As highlighted in paragraph 3.8 the quality of the environment at the ECD centre plays a substantial role in the quality of stimulation and teaching (Marotz, 2009:186). In order to give learners adequate stimulation, the learning environment needs to be developmentally appropriate with a variety of apparatus (Vaughan, 2007). Additionally teachers should have the necessary skills and training to be able to facilitate learning within a quality learning environment that will help to holistically develop the learner (Vaughan, 2007).

A safe, nurturing and stimulating environment that provide for differences in learners' ages, abilities and developmental levels is crucial for maximum stimulation (Vaughan, 2007; Shaw, 2010). Both the indoor and outdoor environments play an important role in the development of the learners (Marotz, 2009:186) and will be discussed next.

3.10.1 The indoor environment

According to Pairman and Terreni (2001) the early childhood environment can be seen as an additional teacher since it gives cues and messages for learners to act on. The

environment “speaks” to the learners and tells them what to do, how they can do it, where they can do it and how they can work together with other learners. The objects/equipment in a room and how it is arranged can have an effect on the behaviour of learners and give them cues or messages to act on (Pairman & Terreni, 2001). According to Hill, Midjaas, Prescott, Jones, Kritchevsky and Weinstein (cited by Brewer, 2007:80), studies have shown that learners’ attitudes and behaviour are influenced by their environment (Pairman & Terreni, 2001; Brewer, 2007:182). Educators who work in ECD centres are mainly responsible for the “language” of the classroom, so it is important that the educators understand the “language” being created (Pairman & Terreni, 2001). While planning a learning environment a teacher should make sure to include the following six play experiences: (1) quiet and calm play; (2) play with structured materials; (3) play involving gross motor activities; (4) discovery play with creative materials; (5) dramatic play; and (6) an area for learners with disabilities to play in (Shipley, 2008:100; Pairman & Terreni, 2001).

Preschool learners are encouraged to explore and learn through play and by being in a safe environment this learning is enhanced (Marotz, 2009:197; Shaw, 2010). To ensure the safety of learners, rules must be set and enforced by the teacher, for example, a rule that no running is allowed in the classroom (Vashon Maury Cooperative Preschool, 2012). Teachers should check electrical cords and outlets on a regular basis and make sure they have safety covers (Anon, 2011; Goodyear, 2013; Bullard, 2011). A fire extinguisher must be in all classes as well as a map indicating the nearest exits in case the classroom has to be evacuated due to a fire or bomb scare (Brewer, 2007:98-100; Anon, 2011). Teachers should also have first aid training and be aware of any allergies learners may have (Vashon Maury Cooperative Preschool, 2012). If toys have small or loose parts they should be kept away from learners since they are a choking hazard (Hendricks, 2008; Preschool Education, 2013). Broken toys should be repaired or disposed of to avoid injuries (Preschool Education, 2013; Warner Manczak, 2010; Hendricks, 2008). Toys such as blocks should be checked for rough edges or splinters on a regular basis (Preschool Education, 2013; Hendricks, 2008). Sharp edges of tables must also be covered to ensure the safety of learners (Anon, 2011). The above mentioned precautions are only a few aspects that should be taken into consideration to ensure that the indoor environment is safe for learners.

When creating a learning environment it is important to plan the physical space of the classroom. The environment in which preschool learners function can be defined as the sum total of physical, cultural and behavioural features that surround and affect the preschool learner (Marotz, 2009:186). The layout of the classroom should enable the teacher to scan the room in order to prevent problems before they escalate (Brewer, 2007:183). Furniture used in the classroom must be the appropriate size for learners and should be easy to rearrange if necessary. Every child should also have a space where personal belongings can be placed (Brewer, 2007:79). It is furthermore important that spaces in the classroom have multiple uses. Books, for example, can be placed on a table while cushions can be stored underneath the same table. Room dividers can be used to display art projects while objects such as cushions or shelves can be used as dividers (Brewer, 2007:80; Wardle, 2008).

Kritchevsky and Prescott (cited by Brewer, 2007:83) differentiate between activity areas in the learning environment in terms of their simplicity or complexity. Activity areas can consist of simple, complex and super units (Shiple, 2008:105). A simple unit has only one purpose, is normally used by one learner at a time, and does not give the learner an option to manipulate or improvise while playing for example swings. Complex units consist of two different parts which learners can manipulate and improvise with for example a telephone with notepads at the side. A super unit has more than two play materials for example a sand table with tools and water (Colbert, 2008; Brewer, 2007:83; Wardle, 2008; Shiple, 2008:105). As learners' interests change, it is advised to change the super unit to suit learners' needs (Shiple, 2008:106-107; Wilson, 2008). Additionally, the indoor environment should have an area for dramatic play, block play, art activities, music, a reading corner, games, science and physical education (Brewer, 2007:88-89). Grobler *et al.* (2007:31) and Shaw (2010) agree with the fact that a variety of play areas are essential, but add that an area where learners can sleep, a toilet area, kitchen, storeroom and a sick room for when learners become ill are important. The play area must also be big enough for learners to move around freely. Learners must know where equipment and teaching aids are stored so that they can make choices according to their own needs and interests without the teacher's help (Wardle, 2008). The surfaces in the play area must preferably be of a washable material that can be wiped clean. A relaxed atmosphere must be created in the classroom for the learners (Grobler *et al.*, 2007:31; Pairman & Terreni, 2001).

Children learn best in an environment that enables them to play, discover and explore (Shaw, 2010; Englebright Fox, 2008; White & Stoecklin, 2012). Learners do not only learn about themselves, but they also learn about the world around them (Hunt, 2013). It is therefore important to create not only a suitable indoor environment but also an outdoor environment that will enhance the development of learners (Marotz, 2009:186). The outdoor environment will be discussed in the next paragraph.

3.10.2 The outdoor environment

According to Archer (2007:1) young learners' outdoor play is limited by the new pressures and social conditions of the 21st century. Other factors that contribute children spending less time outside include parents' longer working hours (which means that they cannot spend time outdoors with their children) and the smaller size of families (which means there is no older sibling that can look after the young children) (White & Stoecklin, 2013; Mulligan, 2012:208). Additionally relatives live far away and cannot help with the supervision of young children while playing, living spaces are getting smaller which leads to smaller gardens and technology such as video games and television that are utilised to keep children occupied (White & Stoecklin, 2013). Working parents may for instance use technology as a way of keeping children inside the house and safe while they are attending to domestic chores (Archer, 2007:1; Mulligan, 2012:207; White & Stoecklin, 2013).

Limited access to outdoor play at home necessitates the importance of a suitable outdoor play area at school where learners have sufficient opportunity to play and run around (Monkfield Park, 2013). Apparatus that is suitable for outdoor play include slides, jungle gyms, sandboxes, swings and toys with wheels. Children need space to skip, jump, move and play without hurting themselves (Shaw, 2010). By having moveable apparatus such as tyres, tubes and boxes on the playground, learners are given the opportunity to engage in creative play (Brewer, 2007:97; Shipley, 2008:386; White & Stoecklin, 2013). Water tables and sandboxes are a good way to initiate creative play because it allows for more opportunities to explore since the water and sand can be moved around the playground (Brewer, 2007:97; Britt, 2007). It is important that the outside area should be planned according to the needs of learners. Regulations and legislation such as the maintenance of equipment and the needs and abilities of the learners should be taken in consideration when planning the area (Archer, 2007:2; Brewer, 2007:98). If the outside space is limited the facilitator must rather have less apparatus for learners to play on (Brewer, 2007:96).

Outdoor play provides learners with opportunities to solve intellectual, social and emotional problems (Anon, 2009). Learners develop socially and emotionally by playing in groups during outdoor play because it enables them to interact socially with their peers (Brewer, 2007:168; Shipley, 2008:91). By engaging in creative and role-play, learners' cognitive skills are developed by means of fantasy play and problem solving (Brewer, 2007:96; Shipley, 2008:91). Physical activities develop learners' gross motor skills (Britt, 2007; Oswalt, 2013a; White & Smith, 2013). By incorporating toys such as tricycles, children also develop physically and specifically their gross motor skills are stimulated (Britt, 2007). Apparatus that provide opportunities for activities such as swinging, climbing, sliding and crawling enhance the physical development of learners (Brewer, 2007:96; Britt, 2007).

The safety of the learners at ECD centres should always be a priority for the teachers (Britt, 2007; Learning and teaching Scotland, 2010). Any poisonous plants in the outdoor play area should be removed and sand areas must be kept clean and replaced on regular basis (Shipley, 2008:385). There should be enough space between apparatus to prevent children from colliding with each other while playing (Shipley, 2008:389). The outside area should be fenced off to prevent learners from getting hurt outside the school area. All fences must be sturdy without any sharp edges (Brewer, 2007:98; Child Care Aware, 2013). Gates should also be childproof in order to ensure that learners are not able to climb over it or open it by themselves (Grobler *et al.*, 2007:42, 47; Cronan & Howard, 2008; New Zealand Ministry of Education, 2011). Teachers should do regular checks to ensure that apparatus has no openings where a child's head could get stuck, that all moving parts of apparatus are without defects, that no apparatus has sharp edges and that all large apparatus are secured in the ground (Brewer, 2007:100; Shipley, 2008:390; Marotz, 2009:205-206). All teachers and staff must be trained in first aid since accidents on the playground are bound to happen (Brewer, 2007:99). Teachers are also responsible to keep a watchful eye on the learners while they are playing outside (Shipley, 2008:381) in order to prevent injuries and ensure the safety of all the children placed in their care.

3.11 Conclusion

As indicated at the beginning of the chapter, there are many rural districts in South Africa where learners do not receive quality ECD provision. There is also a shortage of ECD centres. Many policies and curricula have been put into place to ensure that all learners will have access to quality ECD. One such initiative is the phasing in of a reception year in

schooling. The inference can be made that although ECD in South Africa has come a long way since apartheid, there still is room for expansion and growth to ensure that every preschool learner will have access to quality ECD and that all practitioners will be trained adequately. Undoubtedly the environment of the ECD centre, indoor as well as the outdoor environment plays an important role in the development of the preschool learner. If certain basic requirements are not met with regard to the ECD environment, children are deprived of the opportunity to learn effectively.

Chapter 4: Research design and methodology

4.1 Introduction

In chapter two, service learning was contextualised with an emphasis on how professional development of pre-service as well as in-service teachers and learning in ECD can be enhanced. Chapter three inquired into ECD and ways in which the quality of learning in ECD centres can be enhanced. In this chapter the research philosophy and qualitative approach will be discussed as well as the way in which the empirical study was conducted.

4.2 Research philosophy

In this study the overarching research question focuses on how service learning can be utilized to promote quality learning environments in ECD centres located in rural districts. Promoting quality learning environments at ECD centres by means of service learning is the guiding theme of the study with the purpose of gaining insight into the way in which service learning can enhance the ECD environments. A qualitative interpretive approach, as opposed to a positivist approach, is followed. I investigated how service learning could enhance the learning environment at ECD centres, contribute to in-service and pre-service teachers' professional development as well as learners' development and determine if service learning holds any other benefits for pre-service teachers. The research was based on the interpretive approach which entails that one can only understand the phenomena by actively being involved and experiencing it and then sharing the experience with others (Andrade, 2009).

Interpretivism focuses on the meaning that individuals or communities give to experiences encountered. Since the behaviour that is interpreted by the researcher is formed by means of social gatherings, interpretation plays an important role as facts can't speak for themselves. Unlike positivism, no distinction is made between the researcher and the objects being studied during interpretivism (Jansen, 2010:21, Myers, 1997).

4.3 A qualitative approach

Due to the fact that the research question focussed on an in-depth understanding of how quality ECD learning environments can be promoted through service learning, a qualitative approach was followed. I aim to give a sense of meaning to the interpretation of pre-service as well as in-service teachers attached to quality learning through service learning.

Leedy and Ormrod (2005:133) state that a qualitative research design focuses on phenomena that occur in natural settings (in the case of this study the effect service learning has on the ECD environment) and that the researcher should not interfere while observing. A phenomenological study was done to interpret the influence pre-service teachers had on the quality of learning at the ECD centres and the environment. Phenomenology can be defined as the study of structures of experience or perception from the perspective of an individual (Stanford University, 2008). It is, in other words, the study of phenomena – people interpret how things appear or how they appear through our experience. When conducting this type of study, the experiences are experienced from the first person's point of view (Stanford University, 2008). Phenomenology focuses on the various types of experiences a person can have ranging from perception, thought, memory, emotion, imagination, desire, social and linguistic activity, and actions. Experience does not only consist of passive experiences such as listening and seeing, but also active experiences by means of participating in an experience (Stanford University, 2008).

Researchers recognize that the issue they are studying has many dimensions and they take that into consideration when observing. According to Du Plooy (2001:83) a qualitative research approach is used when norms, needs and qualities of individuals, groups, communities or organisations are being investigated. The researcher can focus on the how and the why of phenomena instead of only concentrating on the outcome thereof (McMillan & Schumacher, 2010:323). Various methods can be used during phenomenological-based research such as interviews, conversations, participant observation, focus meetings and analysis of personal text (Lester, 2011). By making use of observations and interviews it has been determined why there was a lack in the quality of the learning environments at the ECD centres. Reflection and focus group sessions with the pre-service teachers gave insight on how the quality of the learning environments can be enhanced.

According to Burgess and Kemp (2004) methods that can be used with a qualitative research design to obtain information include observation and semi-structured interviews. Collected data can be analysed by means of qualitative content analysis. The qualitative research design gives the researcher the opportunity to reflect on the data. A good way of collecting data is to keep a reflective journal. The researcher must act as if invisible while

observing, but may also interact on condition that the data that is interpreted represent the voice of the participants being observed (Burgess & Kemp, 2004).

Leedy and Ormrod (2005:106) state that by conducting interviews on more than one occasion it may reveal real life in-depth experiences that could result in better understanding for the researcher. A person defines and interprets experiences by means of their own experiences and believes (Truncellito, 2014). Epistemology is the study of knowledge, in other words “how we know” (Stanford University, 2008). This study is aimed at determining to what extent service learning can promote quality learning environments at ECD centres located in rural districts.

4.4 Site or social network selection

For this study two ECD centres in Ikageng, Potchefstroom where service learning students were involved, were chosen to be observed. At both centres one in-service teacher attended training provided by the Faculty of Education of the North-West University, Potchefstroom and SRCS (Student Rag Community Service, NPO 002-000). At the time the study was conducted both ECD centres were not registered with the Department of Education or Health and Welfare.

Table 4.1 Site selection

	ECD Centre 1	ECD Centre 2
In-service teachers	<ul style="list-style-type: none"> • 3 in-service teachers but only one attended training 	<ul style="list-style-type: none"> • 5 in-service teachers but only 1 attended training
Learners	<ul style="list-style-type: none"> • 42 learners 	<ul style="list-style-type: none"> • 80 learners
Age of learners	<ul style="list-style-type: none"> • 1–6 years 	<ul style="list-style-type: none"> • 3 months–5 years
Facilities	<ul style="list-style-type: none"> • One classroom • Kitchen • No bathrooms with toilets, basins and running water 	<ul style="list-style-type: none"> • One building with three classrooms • Kitchen in one classroom • Bathrooms with toilets, basins and running water
Outdoor area	<ul style="list-style-type: none"> • Not fenced off • Uneven terrain • No playground 	<ul style="list-style-type: none"> • Fenced off • Even terrain • Small and overcrowded playground
Language	Speak Setswana, understand little English and Afrikaans	

At ECD Centre 1 there were about 42 learners and their ages varied between one to six years. The learners only spoke Setswana and had very little understanding of English and Afrikaans. There were no running water, electricity or toilet facilities at ECD Centre 1. A feeding scheme was previously implemented at the ECD centre but was no longer active. The caregiver at the ECD centre provided basic food to the learners by asking a minimal school fee. Some of the food provided to learners included vegetables, rice, soya, soup, porridge and sometimes fruit.

The learners at ECD Centre 1 were taught in a corrugated iron classroom. The classroom had teaching aids, but not everything was used to its full potential and movement inside was also restricted. The terrain was not fenced off and there were a lot of bushes around the centre which may have housed dangers such as snakes. The outside terrain was also very rocky and uneven. Because the outside area was so unsafe, learners could not play outside and were therefore confined to the classroom most of the day. The centre had a great need for blankets, cushions, educational toys and posters as well as equipment for the playground that was constructed. There was also a need to fence off the terrain and to build bathrooms with toilets, basins and running water for the school.

ECD Centre 2 had approximately 80 children aged three months to five years. This ECD centre is run by five enthusiastic, but untrained teachers. One teacher however started training provided by the faculty of Education Sciences of the North-West University, Potchefstroom and SRCS. Learners only spoke Setswana and had very little understanding of English and Afrikaans. On site there was one building with three classrooms divided by hardboard and a kitchen. The bathroom had recently been renovated. The playground had very limited space. There were various jungle gyms, swings and sandboxes, but they were not in a good condition and many parts of the equipment were broken. A need to obtain tables, chairs, mattresses, carpets, cutlery, educational toys, posters and better ventilation in the classrooms has been identified.

4.5 Researchers' role

As a trained Foundation Phase educator it was inevitable that I had some knowledge regarding ECD centres. I however tried to embrace the new knowledge I was confronted with from the pre-service teachers' perspective, but my existing knowledge regarding ECD centres cannot be ignored. During this study I acted as an observer when the ECD centres

were visited and had also been a non-participant during the visits. The learners, in-service teachers and pre-service teachers were observed at both ECD centres. I also took on the role of interviewer with the pre-service and in-service teachers, attended planning and reflection sessions and recorded observations. During the interviews and reflection sessions I was actively involved.

4.6 Participation selection

In qualitative research, the population is usually purposefully selected to ensure that individuals used for the studies have the best experience in field studied (Babbie & Mouton, 2008:28, Ivankova *et al.*, 2010:259). This will enable the researcher to obtain data by letting participants share their views and experiences of the study (Ivankova *et al.*, 2010:259). Leedy and Ormrod (2005:206) state that convenience sampling makes no pretence to identifying a population because it takes people that are already available. A purposeful sample of two ECD centres in Potchefstroom, North-West province was involved in this study. See table 4.2 for the criteria for participation selection. Both the ECD centres were located in a rural district and at both centres SRCS members were involved. Fourth year Foundation Phase service learning students from the Faculty of Education of the North-West University's Potchefstroom campus were also involved at both the ECD centres. One in-service teacher from both the ECD centres also attended the training provided by the Faculty of Education of the North-West University's Potchefstroom campus in co-operation with SRCS.

Table 4.2 Criteria for participation selection

Criteria for participation selection	ECD centre 1	ECD centre 2
Located in Potchefstroom	Yes	Yes
Located in rural districts	Yes	Yes
Provides grade R education	Yes	Yes
Involvement by fourth year Foundation Phase pre-service teachers	Yes	Yes
Involvement by SRCS	Yes	Yes
Training of in-service teachers (NWU Faculty of Education and SRCS)	Yes	Yes

4.7 Data collection methods

Collecting data for a qualitative study can be very time consuming (Leedy & Ormrod, 2005:143). According to Nieuwenhuis (2010a:80) it is generally accepted that various methods of data collection will establish credibility and trustworthiness of the data. Different data collection methods should be used to ensure that all the experiences of the participants can be better understood. For this study observation, semi-structured interviews, focus groups and reflective journals were used to collect data. Subsequently each of these methods will be discussed.

4.7.1 Observations

According to Nieuwenhuis (2010a:83) observation is a process that helps to record behavioural patterns of the participants without communicating with them. Gay, Geoffrey, & Airasian (2006:413) state the following with regard to observations: *“the emphasis during observation is on understanding the natural environment as lived by participants, without altering or manipulating it”*. Using observations to collect data enables the researcher to be flexible and to make use of unforeseen data sources as they occur (Leedy & Ormrod, 2005:145). There are two types of observations, namely participant and non-participant observation. When the observer is part of the situation being observed, it is referred to as participant observation. Non-participant observation occurs when the observer is not directly involved with the situation being observed (Gay *et al.*, 2006:414). For this study participant observation was applied and observations were recorded by means of field notes. Gay *et al.* (2006:414) state that field notes should describe all relevant aspects of the situation observed as correctly and comprehensively as possible. Field notes must contain two basic types of information, namely descriptive information and reflective information (Gay *et al.*, 2006:414).

By using observation as a method of data gathering it was possible to not rely only on the participant perception of the ECD environment or the quality of learning that took place at the ECD centres. Observation also helped in the compilation of questions for the focus groups and semi-structured interviews.

Over a period of three months, September–November 2011, the learners, in-service and pre-service teachers at both centres were observed. Observations were done when the pre-service teachers were present at the ECD centres as well as when the in-service

teachers were working on their own. Observations were done once a week at each of the chosen ECD centres and focused on the indoor and outside areas as well as the general appearance and resources at the ECD centres as part of the learning environment.

4.7.2 Semi-structured interviews

According to Babbie and Mouton (2007:289) interviews in a qualitative research study are interactive and have a specific objective. An interview can be defined as a conversation taking place between the interviewer and the participant in order to help the interviewer collect descriptive data and learn about the participant's beliefs, opinions and views (Nieuwenhuis, 2010a:87). Semi-structured interviews focus on specific themes relevant to the study for example the outdoor environment at an ECD centre. The themes for this study will be discussed in the next chapter. Patton (2002:340) states that by making use of semi-structured interviews the participant will have the opportunity to speak their mind by addressing other issues that may have occurred. This gives the researcher the advantage to gain unforeseen information.

According to Leedy and Ormrod (2005:146) semi-structured interviews allows the researcher to be more flexible with the questions being asked. Questions could be asked in different orders allowing the participants to engage in open-ended or in-depth responses (Gay *et al.*, 2006:419). Open-ended questions were used to help conduct views and opinions of the participants. When asking open-ended questions, people are given the opportunity to respond in their own words, thus minimizing the frustration of predetermined responses (Patton, 2002:353).

Semi-structured interviews were conducted with the in-service and pre-service teachers at the ECD centres. The semi-structured interviews consisted of predetermined questions about service learning, the ECD environment and centre as well as the pre-service and in-service teachers. Even though a set of predetermined questions were asked, the interviews were not dictated but rather guided by the questions (Nieuwenhuis, 2010a:87). These types of interviews enable the researcher to ask follow-up questions (Du Plooy, 2001:177). Examples of questions that occurred during the interviews include: How did you as pre-service teacher benefit from the service learning? What challenges did you as pre-service teacher experience when you started with the service learning at the ECD centre? (See Addendum E).

As the researcher conducting these interviews I did not just listen to the answers but also to the way in which participants answered the questions. This also helped with the interpretation of their experiences.

4.7.3 Focus groups

Several participants at a time were interviewed by means of focus group interviews. In line with the phenomenological approach, focus group interviews help to get more perceptions of the participants, based on the assumption that the group will give more responses to questions asked and that answers may help to recall information that may be forgotten (Nieuwenhuis, 2010a:80; Fontana & Frey, 2005:704). According to McMillan and Schumacher (2010:363) the main focus of these interviews is to get high-quality data in a social context by allowing people to consider their own views in perspective with other people. Hatch (2002:133) states that the participants of focus group interviews should be chosen according to their similar experiences. Patton (2002:385) states that people participating in the focus group interviews may have similar backgrounds and may also have different perspectives on which not all participants may agree with.

An important reason for including focus group interviews as one of the data collection methods was to help with the crystallisation of data. The use of multiple data collection methods to accumulate data led to more insight about the phenomenon.

Leedy and Ormrod (2005:146) advised that focus groups should not be larger than ten participants and therefore the focus group for this study did not exceed ten people per group. Focus groups interviews were done twice with the service learning groups – at the beginning of the research, as well as at the end of the three month period.

4.7.4 Reflective journals

According to Burns (cited by Maree *et al.*, 2010) reflective journals can be seen as logs of activities that gives clear information about work patterns. Journals of the service learning students were used to gather information needed for this study. I attended weekly planning and reflection sessions of the pre-service teachers in order to gather information from them. The journals helped to identify issues, concerns and successes the pre-service teachers experienced at the respective projects.

4.7.5 Crystallisation of data

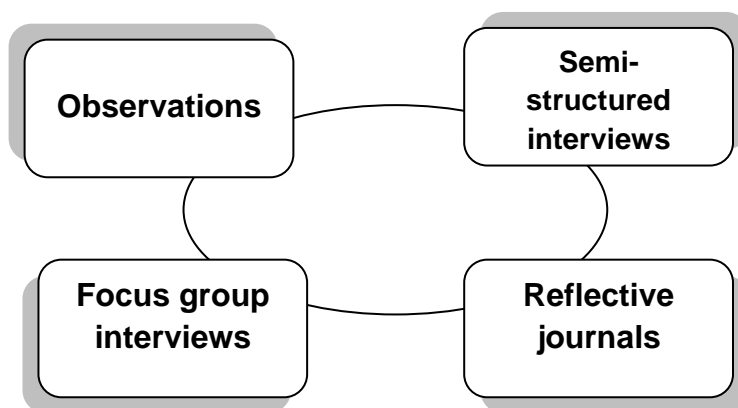


Figure 4.1 Methods of data collection

For this study various methods of data collection were used to assemble data and ensure that all aspects, dimensions and perceptions of participant could be taken into consideration. The concept of crystallisation is used in this study. Crystallisation is an alternative form of triangulation which is used to contribute to the trustworthiness, validity and reliability of the data in qualitative research (Ely, 1991:96). Triangulation is the use of numerous methods to study the same topic and come to an understanding (Robert Wood Johnson Foundation, 2008).

Richardson and Adams St Pierre (2005:963) uses the image of a crystal to represent all the different dimensions and approaches followed, rather than the triangle used in triangulation which she sees as a two-dimensional object. In figure 4.1 the different methods used to assemble data are illustrated. The way in which these methods were applied differed at both ECD centres. At both ECD centres observation, focus group and semi-structured interviews were used to collect data. Only pre-service teachers involved at ECD Centre 1 made use of reflective journals and had weekly meetings which I attended. The reflective journals and weekly meetings gave the pre-service teachers a more structured form of service learning. They planned their activities in advance and were thus prepared when arriving at the centre. They could evaluate each visit and document their successes as well as issues that might have occurred during the visit. The group of pre-service teachers involved at ECD Centre 2 did not make use of reflective journals thus making service learning at their centre unstructured.

After visiting the ECD centres, informal conversations and observations of the ECD environment led to the more formal observations and interviews which contributed to observing aspects such as the potential benefits of service learning in the promotion of a quality ECD learning environment.

4.8 Data analysis

Based on the phenomenological interpretive approach, data analysis was used to determine if service learning contributed to the enhancement of a quality learning environment at ECD centres. Content analysis can be used by the researcher when journals, open-ended questions, interviews or focus groups are used to collect data (Nieuwenhuis, 2010b:101). Qualitative content analysis provides the researcher with a detailed and systematic examination of content focusing on the interpretation and understanding of the participants' perspectives and is aimed at finding patterns and themes to confirm or disconfirm a theory (Devi, 2009; Leedy & Ormrod, 2005:108; Nieuwenhuis, 2010b:101). Observations were used to categorise data and themes that emerged from the semi-structured interviews. Information was sorted according to aspects such as how service learning influenced the learning environment and what pre-service teachers gained from performing service learning at the ECD centre. A qualitative content analysis was done to investigate and describe the observations, semi-structured interviews, focus group interviews and reflective journals by repeatedly reading through the data that was collected. This method helped to form an idea of how everything fits together and to draw conclusions about the findings. During the process of data analysis I was continually aware that my personal involvement and influence could have affected the situation and results in a positive or negative way. A positive influence could be that my involvement influenced the in-service and pre-service teachers to examine their way of teaching and their approach to learning content. A negative influence could be that pre-service and in-service teachers tried to interact with the learners in a way they thought I wanted to see and that would not give a true portrayal of their everyday operations.

4.9 Validity of data

The quality of data will be determined by its validity and trustworthiness. The validity of the data collected during a qualitative study refers to the way in which the participants and the researcher's interpretation of events are similar (McMillan & Schumacher, 2010:330).

By means of triangulation the validity and trustworthiness of the collected data is established (Nieuwenhuis, 2010a:80; Gay *et al.*, 2006:446; Leedy & Ormrod, 2005:99). Various methods of data collecting (also known as triangulation) such as observations, journals, semi-structured and focus groups interviews were used to establish a deeper understanding of the phenomenon being studied. Patton (2002:248) feels that by making use of more than one method a deeper understanding of the phenomenon is established. McMillan and Schumacher (2010:379) argue that the validity of data is enhanced if the same findings are concluded in more than one method used to accumulate data.

During observations I made thorough notes to describe what I observed to ensure that no data will be lost. After the observations additional reflective notes were made to enhance the data. The reflection sessions and journals also played an important role in keeping track of everything that happened during service learning (see paragraph 2.4 about importance of reflection).

Interviews took anywhere from 30–45 minutes and were conducted as a semi-structured conversation. After each interview transcripts were made available to the participants to review and comment on for accuracy. Any suggestions or comments by the participants were noted to ensure that the data reflected the intended information or messages from the participants. Once the interviews had been transcribed and reviewed by the participants, the content was systematically analysed and coded for themes and messages.

4.10 Ethical considerations

Ethical clearances was obtained from the NWU Potchefstroom Campus to conduct this study. Permission to conduct this study was obtained from the ECD practitioners of the ECD centres and parents of the learners by means of consent forms. The names of the teachers, learners and ECD centres were kept confidential and pseudonyms were used. Although observations were made, no systematic data on the children's learning and development was obtained. The children's progress in skills and development could be determined through interviews and the analysis of notes from weekly reflection meetings.

Each ECD practitioner who has been invited to participate in this study received a letter of intent and a copy of the consent form. This ensured that they had time to review the content and decide whether or not they wanted to participate in the study. Additionally a letter of information and consent was given to participants before interviews were

conducted. If the participants could not read the letter themselves, someone was appointed to read and/or explain the letter to them. The participants were given the opportunity to raise any questions regarding the study.

Chapter 5: Analysis of data

5.1 Introduction

In the previous chapter the research design, methodology and rationale for data collection strategies were discussed. The overarching research question was emphasized and the research philosophy that supports the entire study was explained in detail. In this chapter the collected data will be analysed.

When this study commenced, the aim of the research was to determine if quality learning environments at ECD centres in rural districts can be improved by means of service learning. During the course of the research it became clear that the respective participants interpreted service learning in different ways and that many did not fully understand what service learning entails.

In the subsequent data analysis the role service learning can play in promoting quality environments at ECD centres, stands central. The various factors that contributed to quality learning at the ECD centres namely facilities, buildings and infrastructure, the inside and outside environment as well as learning and teaching support materials, will be addressed. Additionally the effect of service learning on both pre-service and in-service teachers, as well as the learners, will be described.

5.2 Presentation of categories and themes

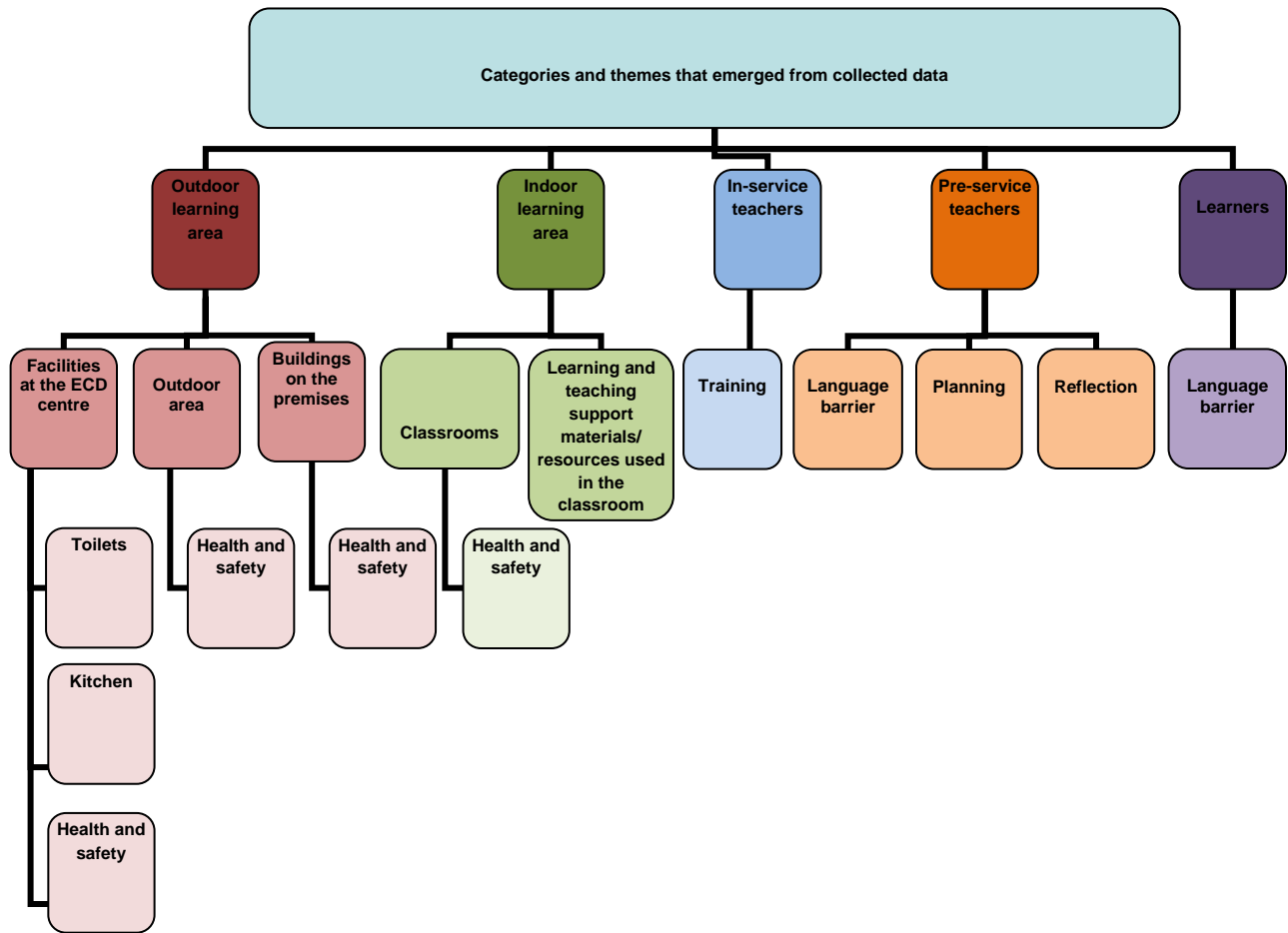


Figure 5.1 Categories and main themes that emerged from the collected data.

In figure 5.1 the categories and themes that emerged from the collected data are reflected. Themes related to the outdoor learning area will be discussed first, followed by themes related to the indoor learning area. A central theme that emerged from both the indoor and outdoor environments is the issue of health and safety. Subsequently themes concerning in-service and pre-service teachers as well as the learners will be described.

Firstly background of the ECD centres' establishment will be given, followed by the discussion of the categories and themes in figure 5.1.

5.2.1 The ECD centres

Two ECD centres in Ikageng, a rural district of Potchefstroom, were chosen to be observed. The rural district in which these two centres are operating from has a negative influence on the learners' marcosystem According to Bronfenbrenner's ecological systems

theory discussed in 3.8. Both schools were part of a service learning initiative launched by the North-West University. At ECD Centre 1, pre-service teachers were in their third year of involvement at a project for which they volunteered to participate in. Pre-service teachers at ECD Centre 2 became involved as part of a compulsory module and were only involved from the beginning of the year. Service learning at Centre 2 was less structured and elements such as planning and reflection were not explicitly present.

In South Africa there are many organisations that offer ECD services, however many of these service providers are unregistered and unregulated (UNESCO, 2006). Both ECD centres were not registered at the Department of Education or the Department of Social Development and therefore they could not apply for any funding. In order to improve the quality of ECD programmes, it is required that all: 1) ECD programmes are registered with provincial departments of education; 2) ECD educators are registered with SACE; and 3) educators who do not have the necessary qualifications undergo approved training programmes (SA, 2001b). At both centres the desired criteria for programmes and teacher qualifications were not met.

ECD Centre 1 was founded in 2008 as part of a church initiative where the local pastor's mother started to take care of preschool children whose parents had to work. As the centre became more popular, the need for more and better learning activities and preparation for formal schooling increased. Although the children were taken care of, the centre had no running water, electricity or toilet facilities – only a pit toilet. ECD Centre 2 was similarly founded in 2004. This centre had running water and toilet facilities, but no electricity at the time since the power cables were reported to be stolen.

The first category, namely the outside learning environment, will be discussed with special reference to the available facilities, buildings on the premises, the playground areas and the safety of the outdoor areas at the ECD centres.

5.2.2 Outside learning environment

5.2.2.1 Facilities at ECD centres

Learners' growth and development are influenced by their environment as discussed in paragraph 3.10 (Marotz, 2009:186). Vaughan (2007) also states that the environment in which learners are educated must be appropriate in order to provide stimulation. For this

reason the observations and running records focussed on the facilities that were available at the two ECD centres.

Table 5.1 Availability of water, electricity and toilet facilities at the ECD centres

	Running water	Electricity	Toilet facilities
ECD Centre 1	No	No	No
ECD Centre 2	Yes	No	Yes

Table 5.1 indicates the availability of water, electricity and toilet facilities at the two centres that will be discussed next.

According to Bronfenbrenner’s ecological systems theory discussed in 3.8, the lack of water, electricity and toilet facilities at ECD Centre 1 will influence the macrosystem of the child negatively. The lack of electricity at ECD Centre 2 will also negatively influence the child’s macrosystem. However, if these issues are addressed at both centres, it will have a positive influence the child’s chronosystem.

Toilets

The journals of the pre-service teachers and observations established that there was only one pit toilet on the premises of ECD Centre 1 which did not appear very hygienic. One of the pre-service students noted the following in her journal:

“The toilet smells bad and does not look very clean and safe to use. The seat of the toilet was quite loose and very high making it difficult for the learners to reach. The learners could fall and hurt themselves while trying to get onto the seat”

It was observed that five plastic buckets were placed outside one of the buildings which the learners used as toilets. The ratio of buckets to learners is 1:8. Through semi-structured and focus group interviews it came to light that the buckets used by the learners were not very hygienic. It was also observed that there were no buckets with water or soap for learners to wash their hands after they have used the toilets. A pre-service student at Centre 1 noted the following:

“There is no privacy for the learners when they go to the toilet since the buckets are placed out in the open. If it should rain it may be difficult for the learners to use the toilets.”

The bathrooms of ECD Centre 2 were built in 2010 by members of the hostel involved at the centre through SRCS and are currently situated in a brick building next to one of the classrooms. Before the bathrooms were built, learners made use of buckets when going to the toilet. Observations also indicated that the bathroom was neat, tidy and decorated with curtains. There were two toilets, one for the girls and one for the boys. The toilets could flush, which helped to keep the bathroom environment hygienic. A small plastic stepping stool was placed in front of the toilets to help learners reach the toilet easily. A special seat was also placed on the existing seat to make it more comfortable for the learners.

It was also observed that there were two basins in the bathroom; soap was provided to wash hands after the toilet has been used. In the bathroom of the ECD centre posters were put up with pictures that showed learners how they should use the bathrooms, how to wash their hands after they used the toilets and how to flush the toilets after use. The bathroom was tiled which helped the caregivers to easily clean the bathrooms. It was noted that each child had his/her own facecloth that hung from the bathroom wall – however the facecloths kept falling off the wall. The facecloths were provided by die hostel’s member involved at the centre. The wall was very uneven and the brackets that had been stuck on the wall kept coming loose.

Kitchen

The need to provide food to learners seemed to be a priority to teachers at both ECD centres. At ECD Centre 1 a Wendy house served as a kitchen and a gas stove was used to prepare food for the learners. A feeding scheme was previously implemented at the ECD centre but was no longer active. Food was now provided by the caregiver and included basic, affordable food such as vegetables, rice, soya, soup, porridge and sometimes fruit. A minimal school fee is paid by the learners to help cover the costs. The kitchen at ECD Centre 2 was situated at the back of classroom one and was separated from the classroom by means of a wall made from hardboard and curtains. The space for the kitchen was very limited but adequate to the needs of the centre. Although there was an electric stove, the in-service teachers could not use it because they could not afford electricity. The centre

provided the same food to learners as ECD Centre 1. A minimal school fee was also paid to cover costs.

ECD Centre 1 had the necessary cooking utensils and made use of plastic containers filled with water to clean everything after preparing food. Utensils and cutlery were stored in the Wendy house that served as a kitchen. A need that has been identified at ECD centre 2 was necessity to acquire new pots to cook in since the available pots were worn out and some of the handles were broken. There was a basin in the kitchen where cooking utensils could be washed. The kitchen had cupboards to store utensils and supplies in, but they were unable to lock. An old bookcase has been converted to serve as a place to store the learners' cups. Brackets were screwed into the bookcase and the cups were hung on each of the brackets. Observations also indicated that the surfaces in both centres' kitchens were clean and neat.

It was evident that, although only the basic equipment and resources were available, learners at both schools were supplied with daily meals. Despite the fact that minimal infrastructure existed, in-service teachers at both centres diligently tried to provide learners with the safest and cleanest environment possible.

In-service teachers seemed to realise that, since learners spend the biggest part of a day at the ECD centres, it is important that the ECD centres had to be well-equipped and safe. It also had to provide a healthy environment where learners could receive tuition and where they could have fun, but also develop holistically (see paragraph 3.9 about the development of the child). However, it became clear that in spite of in-service teachers concern for safety, facilities at both centres lacked the basic needs of safety and a healthy environment – particularly in the case of Centre 1 which had no running water or toilet facilities. This in itself would make it very difficult to care for the children and may possibly be the reason why very little attention was given to activities that would stimulate and prepare them for school, as the initial observations confirmed.

5.2.2.2 Buildings on premises

Table 5.2 Buildings located on premises of ECD centres

	Classrooms	Toilets	Kitchen	Storeroom	House
ECD Centre 1	One corrugated iron classroom	One pit toilet	Kitchen situated in Wendy house	Storeroom made from corrugated iron	In-service teacher's house is on premises
ECD Centre 2	Two corrugated iron classrooms	Two toilets in brick building	Kitchen situated in classroom 1	Storeroom situated at the back of classroom 2	No house on premises

Table 5.2 indicates the available buildings on the premises of the two ECD centres.

ECD Centre 1 consisted of a classroom, a storeroom, a house, one pit toilet and a kitchen. All the buildings were made from corrugated iron except for the kitchen which was situated in a wooden Wendy house next to the classrooms. Some areas of the premises were covered with grass. In front of the ECD centre was a board with the centres' name on. None of the buildings were painted. This building was used as a church on Sundays, with the result that all equipment had to be packed away on Fridays.

ECD Centre 2 consisted of two corrugated iron classrooms, toilets, a storeroom and a kitchen which was situated in the one classroom and separated from the classroom by means of hardboard. ECD Centre 2 was previously managed by a church which made improvements and construction of new buildings very difficult since permission had to be obtained from the church. After efforts from SRCS to obtain new grounds for the ECD centre, the grounds that the church owned were donated to the centre which in turn enabled SRCS and other parties involved at the centre to make much needed improvements. The paint on the outside of the buildings was peeling off and had to be repainted.

5.2.2.3 Playground area

Realising that play is an important element in learners' development (see paragraph 3.9 – physical as well as social and emotional development) and a way through which they learn, the pre-service teachers involved at ECD Centre 1 decided to improve the outdoor area by creating a playground for the learners. The area chosen to convert into a playground was located at the back of the premises and elevated from the rest of the terrain. The extent of the renovation of the outside area motivated in-service teachers to get help from the

community, other students and the parents in order to transform the outside area into an area where children could play without getting hurt.

Bushes had to be removed and ground had to be levelled by a contractor before the transformation of the area into a playground could start. After the area was cleared and levelled, pre-service teachers, with the help of in-service teachers and parents, started to transform the dull area into a playground. One tree was left on the playground to provide shade. A path and staircase leading to the playground was also made by using old cement slabs. Plants were planted around the tree and next to the staircase leading to the playground. A hole was dug and laid out with bricks to later be transformed into a sandpit where the learners could play. A jungle gym was placed at the one end of the playground, wooden poles were cemented into the ground at various heights, two old tyres were fastened between three wooden poles and then cemented into the ground to serve as a climbing apparatus. Old tyres were placed halfway into the ground around the playground for learners to play on, but it had to be taken out because of theft. Pre-service teachers, members of the community, in-service teachers, contractors and faculty members helped to set up the apparatus on the playground. One of the pre-service teachers described the learners' first reaction to the new playground as follows:

“The first time the learners were taken to the playground they were very excited and enjoyed it very much. The younger learners however struggled on some of the apparatus. Daily activities with the learners on the various apparatus will give them confidence and also develop their gross motor skills.”

The new playground of ECD Centre 1 will influence the macro- and chronosystems of the learners positively according to Bronfenbrenner's ecological systems theory discussed in 3.8.

In contrast to ECD Centre 1, ECD Centre 2 seemed to comply better with the challenge of a safe environment. The premises of ECD Centre 2 were fenced off in front of the centre and a secure gate with a safety lock was at the entrance of the school. Grobler *et al.* (2007), Cronan and Howard (2008) and the New Zealand Ministry of Education (2011) also confirms the importance of a fenced off premises and a secure lock on a gate to ensure the safety of the learners. A cement pathway scattered with toys lead up to the classrooms. A race track and other games such as hop scotch were painted on the pathway. Alongside

the pathway brightly coloured painted tyres were planted halfway into the ground which learners could play on. Outside the centre was a large board with the centres' name on as well as a photo of all the learners.

However, irrespective of the gate and fence, it became clear that ECD Centre 2 also did not meet the safety requirements. During the focus group interviews a pre-service teacher voiced her concern about the jungle gyms that were placed so close together that it could hurt the learners. Other pre-service teachers were also concerned that while using the swings on the jungle gyms, learners might hurt others by bumping into them or kicking them with their feet.

The playground of ECD Centre 2 consisted of various jungle gyms, see-saws, a slide, sandpits, a shaded area and a large grass-covered area ideal for physical development (see paragraph 3.9). There were two sandpits where the learners could play, but the centre needed suitable toys for the learners to play with in the sandpits. A pre-service teacher mentioned during an interview that the learners do not have spades or buckets to play with in the sandpits. Observations also indicated that not all the apparatus at the centre were in good condition and that most of the apparatus were rusted and broken. Learners also had tricycles but there were not enough for the amount of learners at the centre causing learners to fight about the apparatus.

A shaded area underneath a green shade net on the playground could be observed at ECD Centre 2. This could be an indication that in-service teachers were knowledgeable and caring about the safety of learners. Semi-structured and focus group interviews revealed that blankets were placed in this area creating a place for the learners to play without being in the scorching sun the whole day. However, it seemed that ECD Centre 2 was in need of more shade on the premises. Although there was a lot of space outside where learners could run and play, the playground was not used to its full potential and apparatus could be better spaced.

The classrooms of ECD Centre 2 were in an L shape. Where the two classrooms met, a covered entrance was erected. Underneath the covered entrance there was only ground causing the area to become very muddy when raining. Learners got very dirty when they had to cross the area to get to the classrooms. It was also observed that under the covered area a wheelbarrow, spade and rake were stored, which could pose danger to children.

At ECD Centre 2 a brick pathway leading to the bathrooms was reported to be very uneven. At the back of ECD Centre 2, near the bathrooms, the researcher observed a lot of old rusted pipes and building rubble lying around causing a safety hazard on the terrain. The pipes might fall onto the learners when they are playing or learners may cut themselves on the rusted edges of the pipes. It was also noticed that the fence at the back of the centre was very flimsy and not very safe. The fence acted as a separation between the ECD centre and an adjacent lot.

The playground of ECD Centre 2 may influence the marcosystem of the child negatively. However, if certain issues are addressed, it may have a positive influence the child's chronosystem according to Bronfenbrenner's ecological systems theory as discussed in paragraph 3.8.

5.2.2.4 Safety of outdoor area

Initially the outdoor area at ECD Centre 1 was unsafe which resulted in keeping the learners inside the classroom for the whole day. ECD Centre 1's premises were not fenced off, thus giving learners the freedom to wander into the street and get hurt. There were still a lot of bushes around the centre where snakes could live. The surface of the terrain was very uneven and rocky; posing a danger where learners can easily trip and fall. The area around the classroom was also not safe since there were a lot of rubble lying around. One of the in-service teachers said:

"It is not safe to play outside, we keep kids in class the whole day [...] the bushes make it very unsafe and there are snakes and other dangerous objects that could hurt children. That is why we rather keep them inside the whole day. At least they do not get hurt in the class."

Similarly, a pre-service teacher voiced her concern about the safety of the area:

"The corrugated iron which the buildings were made of had begun to rust and the sharp edges could be a danger to the learners. Bricks sticking out around the garden edges could also be a safety hazard."

It is evident that safety was a major concern regarding the outside learning environment. See paragraph 3.10.2 on the importance of safety. The lack of safety may have an influence on the marcosystem of the child. However, if safety would improve at the centres,

it should positively influence the child’s chronosystem (See Bronfenbrenner’s ecological systems theory as discussed in 3.8). In the following paragraphs the inside learning environment as another category, will be discussed.

5.2.3 Inside learning environment

	ECD Centre 1	ECD Centre 2
Classrooms	• 1	• 2
Material classrooms consist of	• corrugated iron	• corrugated iron • walls of classroom are rusting
Ventilation	• Bad • Gets very hot in summer and very cold in winter	• Bad • Gets very hot in summer and very cold in winter
Doors	• 2	• 2
Windows	• 4 with curtains	• Classroom 1: small windows covered with curtains • Classroom 2: bigger windows but cannot open • A lot of windows are broken
Floors	• Covered with carpets	• Covered with carpets

Table 5.3 Structure of the classrooms

Table 5.3 compares the structure of the classrooms at the two centres which will be discussed subsequently. Observations from both centres and journals kept by the pre-service teachers involved at ECD Centre 1 made it possible to obtain the following information with regard to the classrooms of the centres.

5.2.3.1 Classrooms

Both ECD centres had classrooms made from corrugated iron and had problems with ventilation in the classrooms. Through semi-structured interviews it was established that in summer the classrooms at both ECD centres got extremely hot and in winter very cold. These factors were observed as aspects that contributed to the passivity of learners during certain times of visit.

ECD Centre 1 consisted of one classroom with four windows and two doors. There were curtains in front of the windows and the classroom appeared neat and tidy. ECD Centre 2 had two classrooms. Classroom one had very small windows which were covered with curtains. Classroom two had more windows but very few of them could open properly. A

lot of windows at ECD Centre 2 were broken and needed replacing. Both ECD centres had carpets in the classrooms that covered the floors.

Observations also revealed that the walls of the classroom at ECD Centre 2 had begun to rust – especially where the walls met the floor. It may hold a danger to the learners while playing since they may accidentally cut themselves on the rusted parts of the wall and the wounds might get infected. Pre-service teachers placed wood skirting along the walls to cover the rusted areas as a temporary solution.

As stated in par 3.10.1 preschool learners should be encouraged to explore and learn through play by being in a safe environment where learning is enhanced (Marotz, 2009:197; Shaw, 2010). It is evident that both ECD centres lacked the basic structures in order to provide a safe learning environment in which learning through play can be facilitated optimally. The bad conditions of the classrooms may influence the macrosystem of the child however if the state of the classrooms should improve it may have a positive influence the child's chronosystem according to Bronfenbrenner's ecological systems theory discussed in 3.8.

5.2.3.2 Learning and play areas

Observations also indicated that both ECD centres did not comply with all six play experiences as described in Chapter 3 by Shipley as well as Pairman and Terreni. ECD Centre 1 did not have an area for learners with disabilities and initially an area of play involving large motor activities lacked, but a playground was erected with the help of the pre-service teachers. Since the space in the classroom is very limited there were no fixed play areas for discovery play with creative materials, dramatic play, play with structured materials and quiet and calm play. As stated earlier, the building was used as a church on weekends, which made it impossible to have permanent play areas such as a fantasy area. Vygotsky (cited by Brewer, 2007:29) believes that learners' cognitive development is influenced by social interaction and also by fantasy play, thus making this area very important in a grade R classroom. Similarly, a reading corner or book area, where learners could practice pre-reading skills, did not exist. On the other hand, ECD Centre 2 had a reading corner with chairs and cushions where literacy skills could be developed. Additionally, a fantasy corner was situated next to the reading corner where learners could play. This is a very important area in the classroom since it encourages social interaction

between learners while playing. The reading and fantasy corners were already in place before the pre-service teachers came to the centre. ECD Centre 2 had play areas for large motor activities, dramatic play, play with structured materials as well as quiet and calm play. An area for discovery play with creative materials and an area for learners with disabilities lacked at both ECD centres.

Both ECD centres had insufficient play areas in the classroom. The same area served as classroom, play area, place to sleep and sick room. The space in the classroom of ECD Centre 1 was very limited and tables and chairs had to be stacked against the wall when not in use to ensure that the learners had enough space to move and play. Shelves provided for by the service learning team, provided adequate space at ECD Centre 1 for storage apparatus and learners' bags. Some apparatus were also stored in old 5 litre ice-cream containers. ECD Centre 2, on the other hand had more than enough space between the tables and chairs and learners could move freely without any obstructions in their way.

5.2.3.3 Furniture

ECD Centre 1 had chairs and tables in the classroom which had to be stacked against the wall due to the lack of space in the classroom when learners were not working at the tables. There were a few shelves where apparatus and the learners' bags could be stored. Babies slept and were fed on a mattress in the classroom.

Classroom two of ECD Centre 2 had chairs, was separated by dividers painted with colourful and educational pictures such as the alphabet, the four seasons and an ocean scene. The dividers were painted by members of the hostel who were involved at the centre in 2011. At the back of classroom two a room was used as a storeroom. The storeroom was quite cluttered, which posed a danger to children who could get hurt if they entered the room and objects were to collapse on them. The mattresses on which the learners of ECD Centre 2 took their afternoon naps were very thin and worn out. A pre-service teacher mentioned that:

“The mattresses were so thin that the learners might as well sleep on the cold hard floor.”

Additionally, there were not enough mattresses for the learners to sleep on – some of the learners only slept on blankets. The learners took an afternoon nap because of their busy

programme at the centre and the fact that they spent most of their day at the centre. An in-service teacher noted that:

“They (learners) have to share a mattress because we don’t have enough [...] some (learners) only sleep on thin blankets because there is a shortage of mattresses.”

The availability of learning and teaching support materials available at the two centres will be described next.

5.2.3.4 Learning and teaching support materials/resources in the classroom

Both ECD centres had plastic tables and chairs at which learners used to work and eat. All apparatus were stored neatly in the classrooms and it was noted that the teachers had put a lot of effort into the appearance of the classrooms to make it as educational and appealing to the learners as possible. The chairs, tables and apparatus were already at the centres before the pre-service students became involved.

ECD Centre 1 had learning and teaching support materials (teaching aids) in the classroom, but not everything was used to its full potential. Movement was restricted inside due to the number of learners. There were educational posters on the walls with different shapes, colours and rhymes but it did not include all the aspects that are required for a grade R class. Important display areas such as a weather chart and daily programme were observed, but in-service teachers did not seem to be aware of the importance of using these to facilitate important learning activities. Minimal stationary, such as a few pairs of scissors, glue, crayons and paper was available with the effect that learners at both centres had to take turns in using these during art activities. No other important art supplies such as paint and brushes were available.

A small blackboard was observed in classroom two of ECD Centre 2, but only a few could use the blackboard at a time because of its size. Sponges were used for art and there were a lot of crayons in containers. There were also magazines in the classroom which learners used during art activities. Beside every table in classroom one of ECD Centre 2, a plastic dustbin could be found and in-service teachers encouraged learners to dispose pieces of paper into these. Learners also had a lot of soft toys to play with and toys made from recycled material. The walls were full of educational posters and it made the classroom

come to life. It can thus be stated that ECD Centre 2 compares favourably to ECD Centre 1 in terms of learning and teaching support material.

ECD Centre 1 also had very little to no learning and teaching support materials to enhance large motor skills. ECD Centre 2, on the other hand, received bean bags and soccer balls as a donation, but was still in need of hula hoops and jump ropes to improve the large motor skills of the learners. It was clear that not a lot of attention has been given to the large motor development of learners at both ECD centres. Various reasons, including a lack of knowledge about the importance of large motor skills for holistic development, insufficient learning and teaching support material and a lack of a safe and developmentally appropriate outdoor play area, might have been contributing to this tendency.

Another factor that complicated a favourable teaching learning environment was the fact that babies, younger children and grade R learners had to be cared for in one classroom. This complication will be discussed subsequently.

5.2.3.5 Babies, younger children and grade R learners

At ECD Centre 1 the babies, younger children and grade R learners were looked after in the same room. The babies slept on a mattress in the classroom and had to be fed and cared for. A lot of attention had to be given to the needs of the babies thus taking time away from the other learners who were in need of activities that would stimulate and prepare them for school readiness. This might have influenced the micro- and mesosystems according to Bronfenbrenner's ecological systems theory as discussed in 3.8. The hygiene at ECD Centre 1 was better than at ECD Centre 2 with regard to the babies.

On the other hand, classroom two of ECD Centre 2 was mostly used for the younger children and babies. Although the classroom was equipped with a bed and cot, the diapers of the babies were not properly disposed of. A pre-service teacher voiced her concern with regard to hygiene and the fact that the classroom was smelly and diapers were not thrown into an outside bin.

ECD Centre 1 had about 42 learners with ages varying between one and six years. ECD Centre 2 grew from 80 learners to 150 learners (from 2010 to 2011) and their ages varied

between three months to five years. The learners at both schools varied greatly in age, which brought an additional challenge to handle more than one age group in a single classroom.

At both ECD centres the learners only spoke Setswana and had little understanding of English and Afrikaans. This had serious implications for the communication between learners and pre-service teachers as was accentuated in focus group interviews and observations. It was evident that the learners and pre-service teachers struggled to understand each other, which made it difficult to uphold good discipline while working with the learners. In-service teachers at both ECD centres remarked that pre-service teachers found it difficult to communicate with the learners, due to the language barrier.

The language barrier was similarly expressed by a pre-service teacher at ECD Centre 1 who remarked the following:

“It is very difficult to do an activity with the learners when they do not understand what you want them to do. We have to ask the teacher to translate instructions and a conversation with the learners is impossible, making it very hard to facilitate learning.”

Pre-service teachers at Centre 2 were not familiar with learners’ progression over the period of time spent at the school. However, pre-service teachers at Centre 1 were convinced that learners progressed in many ways over the time. A pre-service teacher involved at ECD Centre 1 made the following remark:

“The weekly repetition is helping learners to remember the things we [have] done when we last visited the school. When we arrive at the school, the learners are excited and start to sing the songs and recite the poems they learnt the previous weeks. The teacher also seems to be proud about the fact that the learners practised all the words, games and songs with her in the absence of pre-service teachers.”

The weekly repetition that took place when the centre was visited by the pre-service teachers, as opposed to the other centre where the pre-service teacher only visited on a random base, could have been a factor in the progress that was observed. These teachers were convinced that learners’ abilities have been improved by weekly visits during which the pre-service teachers could help in-service teachers to teach learners to write, cut, identify colours and colouring between the lines.

Additional efforts of pre-service teachers at Centre 1, such as displaying pictures of colours and shapes as well as alphabet cards with pictures on the walls, seemed to help learners to learn faster and remember better. Similarly, other learner activities, such as naming colours and shapes, dramatizing songs and action rhymes as well as playing games, had positive learning gains and helped learners to develop.

5.2.4 In-service teachers

ECD Centre 1 had three people who tended to the needs of the learners. A total of five people helped out at the ECD Centre 2. Three people tended to the learners' needs in the classroom, one cooked for the learners and one other person took care of the premises.

A problem in ECD centres located in rural districts are that ECD practitioners are not trained adequately and thus they do not have the knowledge to stimulate and educate learners in their classes (SA, 2010a:30) (see paragraph 3.6). This also influences the micro- and mesosystems according to Bronfenbrenner's ecological systems theory as discussed in paragraph 3.8. According to the Preschool Learning Alliance (2011) trained, confident and knowledgeable educators are necessary to provide quality education and care to learners. Semi-structured interviews indicated that at least one teacher of each of the ECD centres attended training provided by the Faculty of Education Sciences of the North-West University, Potchefstroom Campus and SRCS. Training was provided once a month by a Foundation Phase lecturer of the university on Saturday mornings. In-service teachers were fetched and dropped off at certain assembly points on the days of training. The training sessions aimed to empower the in-service teachers by teaching them the basics with regard to grade R and give them a general background on ECD. Sessions consisted of PowerPoint presentations and some interactive participation. Themes that were dealt with included the development of preschool learners, school readiness, the layout of the classroom and playground, daily programmes, importance of play, art, making and baking, language development, early science and maths, motor skill development and music, theme planning, learning and teaching support materials, discipline, as well as health and safety.

It was observed at both ECD centres that the in-service teachers were actively involved with the learners the whole time and that they focused on activities that were stimulating

learners and helped them to achieve school readiness. The in-service teachers at both ECD centres were eager to learn from the pre-service teachers.

Another aspect that was perceived as favourable was that in-service teachers started to share responsibility and continued with the activities and work during the rest of the week. The shared responsibility and collaboration between in-service and pre-service teachers seemed to have benefitted from regular and continuous efforts of service learning. This could be seen as an example of modelling good practices such as an emphasis on physical activity through games, outside play and movement activities.

The pre-service teachers at the ECD centres will be discussed next.

5.2.5 Pre-service teachers

Every time the pre-service teachers visited ECD Centre 1, they were actively involved with the learners and consulted with the in-service teachers. It was evident that these pre-service teachers were prepared for every session and knew exactly what they wanted to do and achieve. The fact that they attended weekly planning sessions seemed to give them direction and confidence, with a positive effect on the learning benefits for learners. Weekly reflection sessions after the last visit to the centre similarly seemed to sensitise them to the needs of the learners as well as reflect on good practices. During reflection sessions they had the opportunity to discuss problems and concerns regarding the previous visit. The pre-service teachers claimed to learn a lot from reflection and each other and said that they learned more from the service learning than from any coursework done at the university. (See paragraph 2.4 for more on the importance of reflection).

It was also observed how all the team members were involved during visits. When working with the learners, pre-service teachers were spaced between the learners – everyone ready to lend a helping hand and give individual attention when needed. The learners' and in-service teachers' needs were also taken into consideration. Pre-service teachers would discuss activities in advance with the in-service teacher and consulted her on all issues. This observation was confirmed by journals entries that stated that all the activities were done at the appropriate level for learners and a lot of repetition occurred. It was also clear that the pre-service teachers who were involved at this ECD centre had a great love for the learners and vice versa. This has a positive influence on the learner's micro-, meso- and

ecosystem as indicated by Bronfenbrenner's ecological systems theory (see paragraph 3.8). In one of the pre-service teachers' journals the following was written:

"They (learners) are so cute, especially the one with the red sweater and many pigtails. It just makes my day when they see us and start running towards us with their arms wide open and screaming of excitement."

An in-service teacher also remarked that:

"They (pre-service teachers) are good with the kids... the kids like them and they are so happy when the teachers arrive at the school every week."

When I visited ECD Centre 2 I observed that the pre-service teachers were not always actively involved with the learners, which might have been caused by the lack of planning and reflection sessions. Focus group interviews confirmed that only some of the team members were actively involved in the service learning project. A pre-service teacher said:

"We were always just the same people going to the school [...] we go whenever we get a chance and try to help, but we don't always know what to do when we get to the school."

During visits to ECD Centre 2, I also noticed that activities facilitated by the pre-service teachers at ECD Centre 2 were done at the appropriate level, but it was not necessarily repeated to ensure that learners could recall what have been learned. Possible reasons for this might include the fact that pre-service teachers did not attend planning and reflection sessions. Additionally, they did not always consult with the in-service teacher or the SRCS project leader of the hostel who were also involved at the centre. There seemed to be a lack of communication between the respective role-players, which might have contributed to needs being addressed more than once or not being addressed at all.

In-service teachers at both centres expressed their gratitude and agreed that the service learning initiative made a difference and helped them and the learners a lot. Continuity was however prevented by the fact that the pre-service teachers' visit was interrupted by university-related activities such as examination, practical teaching and holidays. Some of the in-service teachers remarked that the fact that the pre-service teachers visited the site irregularly was a problem. An in-service teacher at ECD Centre 2 said:

“Sometimes they (pre-service teachers) just come to the school and then we have to stop what we are doing.”

It seemed to bother this teacher that she didn't know when to expect in-service teachers and felt that she had to stop and stand back when they arrived, without knowing what they wanted to do with the learners and how that would contribute to learning. The learners were also disappointed when pre-service teachers did not show up at the centre on a continuous base.

One of the major difficulties pre-service students at both ECD centres experienced was the language barrier. In some of the cases the pre-service teachers asked the in-service teacher to help with the language barrier:

“It is very frustrating when you want to teach or help a learner and you don't share a common language. We asked the in-service teacher to translate instructions to learners since we can't speak Setswana – this prevented chaos.”

Most of the pre-service teachers found it helpful to learn basic Setswana words. Unfortunately, basic words were not sufficient when pre-service teachers wanted to facilitate learning on a deeper level and interact with learners during lessons. One of the pre-service teachers remarked that:

“We learned some Setswana words and it helped us a lot, it made basic instructions possible without the help of the in-service teacher.”

The language barrier that exists between the learners and pre-service teachers at both centres seemed to be problematic and a factor that impacted negatively on learning.

5.3 Concluding remarks

This chapter reported on the data analysis process and included a description of the following categories: indoor and outdoor learning areas, in-service and pre-service teachers and the learners. In the following chapter, findings will be discussed and recommendations will be given based on the data analysis as well as the preceding literature review.

Chapter 6: Conclusion

6.1 Introduction

In this conclusive chapter the main findings, based on both the literature review and the empirical study, and the implications of these findings are summarised. Thereafter some recommendations and challenges are discussed and finally suggestions for further studies and the limitations of this study are outlined.

The objectives of the study were:

- To determine if service learning can promote a quality learning environment at ECD centres;
- To explore ways in which service learning can contribute to the empowerment of in-service teachers at ECD centres;
- To determine if pre-service teachers will benefit from service learning at ECD centres; and
- To determine ways in which the ECD environment will influence learners' development according to Bronfenbrenner's theoretical framework

6.2 Summary of the research

The following paragraphs provide a concise overview of the content of each chapter and the insights and themes that emerged from the literature reviews and empirical studies are presented.

In **Chapter 1** the researcher gave an introduction to the study and discussed the problem statement, purpose of the research and research design.

Chapter 2 provided a conceptual framework with regard to service learning. The role service learning plays in the enhancement of learning outcomes for pre- and in-service teachers, the learners and the community were also reviewed.

The focus of **Chapter 3** was on the field of ECD with specific reference to the history of ECD in South Africa and early childhood learning environments in the South African context. The importance of a quality learning environment, and the role that a teacher plays in the promotion thereof, were discussed.

The appropriateness of the chosen qualitative research method was discussed in **Chapter 4** and the research design, methodology as well as data analysis were also given.

In **Chapter 5** the findings of both the literature review and empirical studies were reported on.

The aim of this conclusive chapter has already been stated in the introduction.

6.3 Findings and recommendations

As indicated in Chapter 5, the lack of sufficient outdoor and indoor learning areas at both schools had a detrimental effect on learning at both ECD centres. Inadequate indoor and outdoor learning and teaching support material, as well as basic facilities such as water and sanitation, posed challenges to the pre-service teachers who were involved in service learning. However, these challenges are only discussed briefly and recommendations will be limited to the scope of this study, namely the role service learning played in promoting quality learning at the respective ECD centres.

6.3.1 The ECD Centres

6.3.1.1 Outdoor learning areas

Pre-service teachers at ECD Centre 1 went to great lengths to create an outside learning area since no such area existed resulting in learners being kept indoors for the duration of the day (see paragraph 5.3.2). Although this is an extreme example of how motivated students can take it upon themselves to improve the outside learning environment, the aim of service learning is learning through the service provided.

Future initiatives could include collection of outside learning and teaching support material such as water and sand apparatus. Workshops can be held to make these from waste material as part of the in-service teacher training.

Support to improve other important aspects such as toilets, running water, electricity and extractor fans need to be obtained on another level. The faculty members involved in service learning and those who have access to apply for funding made available on university level should address these issues.

As in the past, parents could once again be asked to help to repair outside apparatus – an aspect that needs urgent attention because of safety concerns. Similarly more grass and trees could be planted and shade netting could be erected over the sandpits.

In the same way, in-service and pre-service teachers at ECD Centre 2 could involve other parties to improve the safety of the outdoor learning area. The possibility to pave the area leading to the bathrooms, thereby making the surface more even and safer for the learners, should be investigated and building rubble should be removed from the premises as soon as possible to ensure the safety of learners. Gardening equipment should also be stored in the storeroom where it cannot fall onto the learners and hurt them. A wooden fence might be considered which could be painted in bright colours on the ECD centres' side to make the premises more child-friendly. Workshops, as well as planning and reflection sessions, should continuously emphasize the aspect of safety and both in-service and pre-service teachers should be made aware of their responsibility to guarantee the safety of learners at all times.

6.3.1.2 Indoor learning areas

Pre-service teachers could help the in-service teachers at both ECD centres to facilitate the necessary play experiences by rearranging the classroom with the assistance and permission of the in-service teachers in order to create more play areas.

The health issue can be addressed by suggesting alternatives such as outside bins to dispose of diapers and washing covers of mattresses at ECD Centre 2. Pre-service teachers could approach the university to donate or sell old mattresses, which are no longer in use at the hostels, to the centre.

The storeroom areas should be locked to restrict access. Pre-service teachers can spend a day at the school to help organise and rearrange the storeroom and compile an inventory list. This list can be used to obtain developmentally appropriate and needed supplies when the centres are approached by sponsors.

6.3.1.3 Facilities at ECD centres

- **Toilet and bathroom area**

Health and safety was a main concern during observations. During planning sessions pre-service teachers could discuss measures for hygiene improvement at both schools. For

example, facecloths could be marked with a symbol for every learner, washed regularly and hung on screws on the wall. The aspect of hygiene and health should be discussed regularly with learners and routines such as the bathroom routine should be used as opportunities to instil healthy habits as an important life skill.

- **Kitchen**

Since food is provided at both centres, the kitchen areas pose a threat to the safety of learners, especially when a lot of children have to be overseen by one or two adults. The pre-service teachers at ECD Centre 2 could help to make the division between the classroom and the kitchen a more permanent structure. This will help prevent the learners from entering the kitchen and hurting themselves. At both centres collaboration with in-service teachers is needed to sensitise the learners about the dangers in the kitchen area such as open flames on a gas stove, sharp knives and boiling water in pots.

6.3.1.4 Learning and teaching support materials/resources in the classroom

Pre-service teachers of ECD Centre 2 could approach the university to donate or sell old bookcases to the centre. The bookcases can also be used as shelves. Pre-service teachers engaged in service learning at ECD Centre 2 could consult with the in-service teachers to paint more classroom walls with blackboard paint for learners to draw on or to practice forming letters and numbers. This would stimulate the learners to develop emergent Literacy skills. The same idea could be implemented at ECD Centre 1.

Workshops could be held during which the use of waste material to create own learning and teaching support material could be modelled. Various apparatus for the development of small and large motor activities, musical activities and art could be made from empty tins, hose pipes, plastic bags and containers.

If little resources are available, apparatus made by pre-service teachers as part of their course could be donated to the centres. SRCS could also be approached to help pre-service and in-service teachers to make resources from recycled materials.

6.3.2 In-service teachers

A needs analysis should be conducted in order to compile a relevant curriculum that focuses on in-service teachers teaching in rural districts and takes into consideration their socio-economic background. The curriculum should enable them to teach learners

effectively with the resources they have to their disposal. The curriculum could also be presented by means of short courses or workshops in which they are actively involved in with hands-on activities.

Another possibility that might benefit in-service teachers and pre-service teachers includes short courses in administration and finances, fundraising, first aid and recycling. A course in administration and finances could typically focus on how to do filing, store apparatus, arrange resources according to themes, and compilation of a budget.

By attending a basic first aid course, in-service teachers will be able to assist learners who might get injured at the centre.

Both ECD centres need a well-planned daily programme. Pre-service teachers can assist in putting up a daily programme with pictures to enable learners to “read” it as the day progresses. It is a good thing for the learners to have a routine to follow and it will help the in-service teachers to be well-prepared by knowing what happens next.

6.3.3 Pre-service teachers

A weekly time slot should be communicated to in-service teachers regarding the visits to ECD centres. This will enable the teacher to prepare accordingly and prevent the daily programme from being disrupted unexpectedly. Having a fixed schedule will allow the faculty members to allocate time in their schedule to visit the centre. Pre-service teachers should also confirm a visit to the centre with the in-service teacher one day before the visit to ensure that it will take place as scheduled.

It would be useful for pre-service teachers to learn basic Setswana words to communicate with the learners. To address this issue, pre-service teachers could ask in-service teachers to translate instructions to learners while working with them. Compiling a booklet with basic Setswana words relevant to the Foundation Phase could be very helpful to the pre-service teachers. Pre-service teachers could also use code switching while working with the learners, thus teaching the learners new words in another language. Faculty members could incorporate Setswana into a service learning module focusing on basic words and commands that could be used at an ECD centre. The in-service teachers should also be involved in this process to help the learners learn the new English words. The in-service teachers could practice new words with the learners during the week. Eventually the

learners will become acquainted with the meaning of the new words, thus promoting communication between the pre-service teachers and the learners.

Pre-service teachers can be encouraged to collaborate with the hostels' SRCS house committee members involved at the centre throughout the year. By collaborating with students at other faculties of the university, more expertise and volunteers could become involved and bring various expertise and resources to the centre. In the beginning of a SRCS house committee member's term a social worker accompanies them to the centre to help identify needs and set goals. It could be constructive for pre-service teachers to also participate in such a visit.

See paragraph 2.6.1 for more benefits with regards to service learning and paragraph 2.7.2 for challenges regarding service learning.

6.3.4 Faculty members

A faculty member specialising in ECD should also accompany pre-service teachers to identify needs from an ECD perspective. Most Foundation Phase faculty members were teachers before they became lecturers and thus know what resources an ECD classroom needs. When identifying needs and setting goals, it is important to also involve in-service teachers in the process and give them a sense of ownership and empowerment. This collaborative approach should be maintained throughout the service learning process.

When pre-service teachers engage in service learning it is advisable to have a meeting with all parties involved. During that meeting everyone present could state what they expect from each other and describe their needs and uncertainties. This will also prevent in-service teachers from asking pre-service teachers personal favours and give the respective parties a sense of ownership.

It is essential that faculty members are familiar with each centre and its challenges before pre-service students are assigned to a centre. It is important that a map from the university to the centre is provided to help pre-service teachers find it easily. It is also advised that the faculty member accompany the pre-service teachers the first time they visit the centre.

Motivation seemed to be one of the aspects that were highly dependent on faculty input. Pre-service teachers from ECD Centre 1 became involved after a short PowerPoint presentation by another year group who was in their final study year. This group had taken

ownership of the project and wanted to ensure that continuity remained – an aspect that proved to advance continuous involvement and motivation. The faculty member had also been involved at this centre over a long period of time and was constantly involved with pre-service teachers at ECD Centre 1.

Pre-service teachers could be encouraged to attend some of the courses and workshops for in-service teachers. Senior and honours students could assist faculty members to present workshops or courses.

In the case of pre-service students at Centre 2, where reflection sessions did not take place, the link between theory and implementation at the workplace could not be made and service learning was less structured. Pre-service teachers thus failed to develop problem solving and critical thinking skills. As mentioned in Chapter 2, it is important to apply the four Cs of reflection during service learning, namely continuous, connected, challenging and contextualized (refer to 2.4 for a discussion on the four Cs of reflection). It is therefore important that faculty members are aware of what reflection entails and that they facilitate reflection sessions to ensure that service learning takes place effectively.

To ensure that faculty members can give guidance to pre-service teachers with regard to service learning, they must receive adequate training in service learning as part of work-integrated learning. If faculty members have the necessary knowledge about what service learning should entail in order to comply with the definition (see paragraph 2.5) they will know what will be expected from them during service learning. If faculty members have no training in service learning they might engage in what they think to be service learning while in fact it will only be a form of community service or volunteerism.

More faculty members should become involved in service learning to make it possible to visit more centres, address problems quicker and solve them in a shorter period of time. A suggestion would be to assign a specific faculty member and a group of pre-service teachers to a centre for the duration of the pre-service teachers' studies.

Service learning needs to be restructured to ensure that all students are actively involved. Annually about 240 students enrol in the Foundation Phase at the NWU Potchefstroom Campus' Faculty of Education Sciences. If eight faculty members commit to become involved in service learning, each of them would have 30 students per year group they will

have to give guidance to. The 30 students could be divided into two groups of 15. The more advance the year group, the less guidance can be given. Every year group could focus on another aspect or subject of the Foundation Phase curriculum. First-year students could accompany fourth-year students to the centre to get acquainted with the centre, the learners and in-service teachers. This will allow them to observe how service learning is implemented. They could also observe reflection sessions of the fourth-year students. When the fourth-year students finish at the centre at the end of their fourth year of study the first-year students would be settled in and ready to start with service learning in their second year of study.

The theoretical aspects of service learning can be addressed in the first semester of first-year students' various modules. The second year group can focus on life skills when engaging in service learning, the third years on language and the fourth year students on mathematics. This will enable a student to focus on a subject for one year and become competent in that area.

If pre-service teachers are involved in service learning from the beginning of their studies, it will broaden their fields of interest and it might encourage them to do an honours degree in a service learning-related topic.

Lecturers should also visit the ECD centres where pre-service teachers are engaged in during practical teaching to evaluate them. By incorporating work integrated teaching with service learning, faculty members will be given the opportunity to assess pre-service teachers over a longer period of time. This will take some of the pressure off them to assess pre-service teachers in a short amount of time and it will also reduce time spent on travelling to other towns for assessment. Pre-service teachers will be more at ease when presenting their lessons since they will know the learners better thus enabling them to cater for the specific needs of the group.

To assist faculty members in assessing the service learning they could call the in-service teacher to give feedback on activities that took place. Pre-service teachers may be requested to upload videos and a report onto the university's e-Fundi site after every session at the centre. With the technology available today most cell phones, iPads and tablets are able to take pictures and videos. Faculty members can use the footage to assess the pre-service teachers. By uploading videos, the involvement of the pre-service

teachers at the centres can be monitored and there will be a time stamp to confirm that they have visited the school. In doing so, pre-service teachers cannot lie about their involvement at the centre. Assessment is necessary to ensure that the pre-service teachers can implement the coursework and to give them guidance on areas where they can improve.

It might be helpful to identify a coordinator to administrate the service learning projects in the Foundation Phase to prevent miscommunication and overlap of services rendered. The coordinator could be responsible for identifying potential centres to become involved in, administration of funding and sponsorships, arranging of workshops and training as well as distribution of materials and resources to centres. The coordinator could also collaborate with SRCS or other organizations such as Childline or churches to help identify potential centres to become involved in and to assist with funding and resources.

See paragraph 2.6.2 for more benefits with regards to service learning and paragraph 2.7.1 for challenges of service learning.

6.3.5 Learners

The main concern of in-service teachers seemed to be to keep learners safe and fed. This can be understood in terms of a learning environment where minimal resources are available. Learners at both centres were expected to sit still for most parts of the day. The fact that various age groups had to be cared for in one classroom further divided the attention of teachers.

The lack of learning support and teaching materials was another factor that constrained active learning through play. However, active involvement by learners increased by means of games, songs and movements modelled by pre-service students. Unfortunately, the language barrier complicated interaction and active learning. Nonetheless this did not prevent learners from being excited when the pre-service teachers visited the centre.

The abilities of learners to write, cut, identify colours and colour between the lines improved according to observations. Learners were eager to be involved in learning activities such as naming colours, shapes and objects. They showed a natural inclination to learn easily through songs and movement, an aspect that could be built upon by future service learning

involvement. Individual attention was made possible when the pre-service teachers visited the centres because there were more teachers in the class to attend to the learners.

6.4 Challenges

The possibility of a transport service or shuttle should be investigated. An amount could be made available in the faculty's budget to cover costs. The car park on campus could be approached to make use of their vehicles when travelling to the centres. If pre-service teachers decide to make use of their own transport the possibility of carpooling could be considered. Pre-service teachers from ECD Centre 1 and ECD Centre 2 made use of carpooling.

It is important that faculty members and pre-service teachers are informed about the culture of the in-service teachers and learners at the ECD centre where they are engaged in service learning and vice versa. By being informed cultural differences will be better understood, language that may be interpreted as offensive can be avoided helping to transform people's perceptions and attitudes. Faculty members could incorporate information about various cultures into a service learning module or pre-service teachers could do a project on various cultures. As stated earlier, regular meetings should be encouraged where sensitive or problematic aspects could be discussed.

It is recommended that pre-service teachers spend a longer period of time (two to three years) at a centre and that they visit the centre on a weekly basis to help with sustainability. Pre-service teachers will thus get better acquainted with the in-service teachers, the learners and their circumstances. The pre-service teachers will gain more experience and achieve goals that were set. It will also make it easier to ask for sponsorships since there will be long-term involvement at the centre giving the sponsor assurance that their contribution will be used effectively.

Risks and safety measures that are in place must be discussed beforehand. If pre-service teachers or parents of pre-service teachers are not comfortable visiting ECD centres in rural districts alternative centres must be recommended by faculty members.

Pre-service teachers will have the opportunity to step outside their comfort zone while engaged in service learning since they will be confronted by various situations and people. They will have the opportunity to fulfil their civil responsibility. Service learning will help to

improve their problem solving, critical thinking, interpersonal and communication skills thus helping to prepare them for the work environment.

6.5 Further studies

Research could be done on faculty members' perceptions about service learning, reasons they are engaging in service learning or not and ways of improving involvement amongst faculty members to enhance the quality of service learning within the Foundation Phase.

A study can also be done to investigate what a curriculum for unqualified in-service teachers at rural ECD centres should consist of – their socio-economic background taken into consideration. There is a big need for ongoing, in-service training for in-service teachers in the Potchefstroom area and elsewhere. This curriculum can be developed in the format of a short course that can be accredited to give access to the grade R diploma offered at the North-West University.

Similarly, a needs analysis should be conducted in order to compile a relevant curriculum that focuses on in-service teachers teaching in rural districts with their socio-economic background taken into consideration.

6.6 Limitations of the study

It may be argued that the limited size of the number of participants is a limitation to this study. However, this notion will go against the nature and purpose of qualitative research, namely to understand that the issue being studied, in this case, service learning at ECD centres, has many dimensions which should be taken into consideration when observing.

Another limitation that occurred during the course of the study was the language barrier. Not only did I struggle to understand the in-service teachers at times, but the learners and in-service teachers had difficulty communicating with the pre-service teachers. In-service teachers sometimes had difficulty expressing themselves during interviews because of the language barrier. If the service learning teams were able to address the teacher and learners in their mother tongue, the learning benefits might have been more.

Due to the fact that a formal daily programme was not followed at the ECD centres and learning was not structured according to the prescribed grade R curriculum, the scholastic benefits for grade R learners could not be tested by a standardised test. In future studies,

an ECD centre that follows the grade R curriculum can be used and learners can be tested for school readiness.

6.7 Conclusion

As seen from this study, service learning has the potential to make a difference in the ECD environment in rural districts. Through service learning, higher education institutions could encourage pre-service teachers to develop a reflective capacity and renew prevailing ideas, policies and practices aimed at commitment to 'the common good'. This will also provide a vehicle through which an understanding of the complex and differentiated nature of the South African society can be formed by situational learning in varied learning situations, contexts and environments (SA, 2010c:9). Pre-service teachers will thus be enabled to acquire the ability to be receptive to different kinds of knowledge and to think critically. Additionally, collaborative relationships between the community and the classroom will be advanced and the gap between theory and practise bridged.

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Addendum A – Consent form for Service Learning Students

Service learning student consent form

Date: August 2011

Project Title: Promoting quality learning environments at Early Childhood Centres through Service Learning

Supervisor:

Dr. Audrey Klopper
Lecturer: Foundation Phase
School Education
Faculty of Education Sciences
North-West University
018 299 4328 (office)
Audrey.Klopper@nwu.ac.za

INVITATION

Dear service learning student

You are invited to participate in a research study which will aim to:

- Bring change in practice and
- Research to increase understanding.

You were selected to take part in this study because you are a fourth year Foundation Phase student involved with service learning at one of the following 2 identified schools: ECD Centre 1 and ECD Centre 2.

The purpose of the research will be to:

- determine if service learning at preschools has helped to enhance quality learning environment for the learners and what the effect will be on the learner's development.
- to explore how service learning can be used to enhance effective teaching in preschools.
- to determine if pre-service teachers will benefit from service learning at Early Childhood centers.

WHAT IS INVOLVED

Over a period of 3 months the researcher will make use of naturalistic observation of the preschool educators, learners and service learning students. Observations will be done when the service learning students are present at the school and when they are not. During observation there will be focused on the indoor area, the outside area, the general appearance of the school and other impressions.

During observation of the indoor area there will be focused on the amount of learners at the school, the layout of the area, the learning support material and the furniture in the class. The observation of the outside area will focus on the play area, the placing and availability of equipment, the layout of the outside area. The observation of the general appearance will focus on the safety of the preschool, the social economic community and the support of other teachers and other school in the community. There will also be focused on the training of the teachers and how the teachers cope in their work environment.

Semi-structured interviews will be conducted with the teachers and service learning students at the preschool.

Feedback about the training sessions will be used to determine what the teachers have been taught to see if it has been implemented at the preschools.

The journals of the service learning students as well as field notes of the researcher will be used to gather information needed for this study. Reflection sessions of the service learning students will be attended by the researcher after they have been to the preschools.

Please take note: The information you provide will be kept confidential. Your name will not appear in any thesis or report resulting from this study.

POTENTIAL BENEFITS AND RISKS

This study will provide you with the opportunity to reflect more deeply on your own teaching practices. You will also be contributing to effective Foundation Phase teaching and assist in an attempt to improve learners' development in the preschool classroom. Another direct benefit is your own professional development and growth as a future Foundation Phase educator. There are no known or anticipated risks associated with participation in this study.

CONFIDENTIALITY

Pseudonyms will be used for the names of participants and schools in the reporting of the findings from this study.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. If you wish, you may decline to answer any questions or participate in any component of the study. Further, you may decide to withdraw from this study at any time and may do so without any penalty or loss of benefits to which you are entitled. There are no consequences for withdrawing from the research study.

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study or require further information, please contact the supervisor using the contact information provided above. Thank you for your assistance in this project. Please keep a copy of this form for your records.

CONSENT FORM

I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Name: _____ Date: _____

Signature: _____ School: _____

Addendum B – Consent form for In-service teachers

In-service teacher consent form

Date: August 2011

Project Title: Promoting quality learning environments at Early Childhood Centres through Service Learning

Supervisor:

Dr. Audrey Klopper
Lecturer: Foundation Phase
School Education
Faculty of Education Sciences
North-West University
018 299 4328 (office)
Audrey.Klopper@nwu.ac.za

INVITATION

Dear educator

You are invited to participate in a research study which will aim to:

- Bring change in practice and
- Research to increase understanding.

You were selected to take part in this study because you are preschool educator at one of the following two identified schools: ECD Centre 1 and ECD Centre 2.

The purpose of the research will be to:

- determine if service learning at preschools has helped to enhance quality learning environment for the learners and what the effect will be on the learner's development.
- to explore how service learning can be used to enhance effective teaching in preschools.
- to determine if pre-service teachers will benefit from service learning at Early Childhood centres.

WHAT IS INVOLVED

Over a period of 3 months the researcher will make use of naturalistic observation of the preschool educators, learners and service learning students. Observations will be done when the service learning students are present at the school and when they are not. During observation there will be focused on the indoor area, the outside area, the general appearance of the school and other impressions.

During observation of the indoor area there will be focused on the amount of learners at the school, the layout of the area, the learning support material and the furniture in the class. The observation of the outside area will focus on the play area, the placing and availability of equipment, the layout of the outside area. The observation of the general appearance will focus on the safety of the preschool, the social economic community and the support of other teachers and other school in the community. There will also be focused on the training of the teachers and how the teachers cope in their work environment.

Semi-structured interviews will be conducted with the teachers and service learning students at the preschool.

Feedback about the training sessions will be used to determine what the teachers have been taught to see if it has been implemented at the preschools.

The journals of the service learning students as well as field notes of the researcher will be used to gather information needed for this study. Reflection sessions of the service learning students will be attended by the researcher after they have been to the preschools.

Please take note: The information you provide will be kept confidential. Your name will not appear in any thesis or report resulting from this study.

POTENTIAL BENEFITS AND RISKS

This study will provide you with the opportunity to reflect more deeply on your own teaching practices. You will also be contributing to effective Foundation Phase teaching and assist in an attempt to improve learners' development in the preschool classroom. Another direct benefit is your own professional development and growth as a Foundation Phase educator. There are no known or anticipated risks associated with participation in this study.

CONFIDENTIALITY

Pseudonyms will be used for the names of participants and schools in the reporting of the findings from this study.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. If you wish, you may decline to answer any questions or participate in any component of the study. Further, you may decide to withdraw from this study at any time and may do so without any penalty or loss of benefits to which you are entitled. There are no consequences for withdrawing from the research study.

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study or require further information, please contact the supervisor using the contact information provided above. Thank you for your assistance in this project. Please keep a copy of this form for your records.

CONSENT FORM

I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Name: _____ Date: _____

Signature: _____ School: _____

Addendum C – Observation Checklist

Observation Checklist	
A. Indoor environment	
	Amount of learners
	Amount of teachers
	Layout (access and distance to toilet, basins, office, outside area and other classes etc.)
	Floor covering of classroom
	Use of light (natural and artificial)
	Ventilation
	Education Storage
	Furniture
	Learning support material
	Storage for materials and tools
	Tools and materials available for children
	Water source
	Information for parents
	Posted daily routine (pictures and/or text)
	Children's representations (e.g. visual art, structures, writing samples)
B. Outdoor environment	
	Area of playground
	Apparatus (availability, spacing of apparatus, maintenance).
	Layout (distance from classroom, street etc.)
	Shading
	Natural elements
	Storage

C. General		
	Safety	Surface
		Fencing
		Gates
		Security
	Socio-economic setting	
D. Other impressions		
	How the teacher functions in the workplace	
	Interaction with the learners	
	Instruction: individual, groups	
	Facial expressions	
	Interaction with colleagues	

Addendum D – Questions for Pre-service teachers

Questions for pre-service teachers at Early Childhood Development Centres

1. What are the difficulties you as pre-service teacher had to overcome while you were involved at the Early Childhood Development Centre?
2. What achievements and failures did you experience at the Early Childhood Development Centre?
3. What would you as pre-service teacher have done differently at the Early Childhood Development Centre?
4. In what way did your involvement as pre-service teacher at the Early Childhood Development Centre equip you to become a better teacher for the future?
5. What is your vision for the Early Childhood Development Centre where you were involved?
6. What areas or problems can the next group of pre-service teachers focus on?
7. Who benefits from service learning at Early Childhood Development Centre? Explain in which way they benefited.
8. Do you think service learning should be compulsory for students? Elaborate on your answer.
9. Do you think planning and reflection sessions are necessary? Elaborate on your answer.
10. What do you think the effect will be if planning and reflection sessions are not done?

Addendum E – Questions for In-service teachers

Questions for in-service teachers at Early Childhood Development Centers

1. How would you describe your role as a teacher?
2. What is your dream for yourself as a teacher?
3. What is your dream for your school?
4. What would you need to make your dream for your school come true?
5. How did the pre-service teachers contribute to you school?
6. Have you learned anything from the pre-service teachers when they came to the school? Elaborate on your answer.
7. Have you adjusted your way of teaching since you attended the training and the pre-service teachers became involved at your centre? Elaborate on your answer.
8. Did you find the training provided useful? Elaborate on your answer.
9. Should the pre-service teachers do anything different when they come to your school? Elaborate on your answer.
10. Have the learners benefited from the pre-service teachers coming to the school? Elaborate on your answer.

Addendum F – Schedule for visiting ECD centres

Date	ECD centre 1	Date	ECD centre 2
6 September 2011	Observation Focus group interviews	7 September 2011	Observation Focus group interviews
13 September 2011	Observation Interviews	14 September 2011	Observation Interviews
20 September 2011	Observation Interviews	21 September 2011	Observation Interviews
11 October 2011	Observation Interviews	12 October 2011	Observation Interviews
18 October 2011	Observation Interviews	19 October 2011	Observation Interviews
25 October 2011	Observation Focus group interviews	16 October 2011	Observation Focus group interviews
1 November 2011	Observation Interviews	2 November 2011	Observation Interviews
8 November 2011	Observation Interviews	9 November 2011	Observation Interviews
15 November 2011	Observation	16 November 2011	Observation
22 November 2011	Observation	23 November 2011	Observation