Teacher training guidelines for curriculum differentiation in a Foundation Phase programme

by

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I dedicate this PhD thesis to my late parents Matsobane Jackson and Mokibelo Nelly Ledwaba for their immense contribution to my education. I greatly cherish the values and ethos they installed in me during my upbringing.

This thesis is also in loving memory of my late brother William and my niece Bontle for being part of my life.

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DECLARATION OF ORIGINALITY

I, Raesetja Gloria Ledwaba, declare that the thesis titled **"Teacher training guidelines for curriculum differentiation in a Foundation Phase programme"** which I hereby submit for the degree PhD at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

Signature…… Date……..

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by Raesetja Gloria Ledwaba

- Has been edited for language correctness and spelling.
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ABSTRACT

Schools globally are characterised by an increasingly diverse learner population in terms of age, gender, language, socio-economic background, cultural practices and learning abilities. The diverse needs of learners in schools have implications for teacher training, as it demands a shift from the traditional “one-size-fits-all” approach to a more inclusive approach. Because teachers play a significant role in addressing diversity among all learners, several teacher-training programmes have been implemented worldwide since the inception of inclusive education. The main purpose of these programmes is to ensure that teachers acquire the relevant knowledge and skills to meet the learning needs of all learners in schools. One of these skills pertains to curriculum differentiation for making the curriculum accessible to all learners irrespective of their abilities.

This research investigation was rooted in Bronfenbrenner’s ecological model. Situated in the interpretative paradigm, the study adopted a qualitative approach. A multiple case study research design was employed to investigate nine Foundation Phase teachers from rural, township, and former Model C full-service schools. All of them had completed the BEd (Hons) in Learning Support programme at one of South Africa’s major universities. Semi-structured face-to-face individual interviews were conducted, and a document analysis was used to explore participants’ understanding and implementation of curriculum differentiation. The analysis of the study revealed that teachers who had completed the BEd (Hons) in Learning Support programme had the necessary theoretical knowledge of the concept of curriculum differentiation. However, most of them faced difficulties regarding the understanding and implementation of curriculum differentiation. The study also showed that teachers did not make use of official documents that guide and explain the differentiation of school curriculum to meet the diverse needs of learners in full-service schools. In the light of these findings, five sets of recommendations were made in ensuring the effective implementation of curriculum differentiation in schools in order to make the curriculum accessible to all learners.

Key words: curriculum differentiation; foundation phase; full-service schools; inclusive education; learners’ diversity; learning support; school; teacher

LIST OF ABBREVIATIONS

ALS	Aided Language Stimulation
AIDS	Acquired Immune Deficiency Syndrome
BEdHons	Baccalaureus Educationis Honoris
CAPS	Curriculum Assessment Policy Statements
DBE	Department of Basic Education
DBST	District-based support teams
DHET	Department of Higher Education
DoE	Department of Education
CP	Cerebral palsy
DS	Down syndrome
ECD	Early Childhood Development
EFA	Education For All
EU	European Union
FM	Frequency modulation
FP	Foundation Phase
FSS	Full-service schools
HIV	Human Immunodeficiency Virus
HOD	Head of Department
IDEA	Individuals with Disability Education Act
IE	Inclusive Education
ILP	Inclusive Learning Programme
MDG	Millennium Development Goals
NCESS	National Committee on Education Support Services
NCSET	National Commission on Special Education and Training
NGO	Non-governmental organisations
SASA	South African Schools Act
SBST	School-based support teams
SGB	School governing body
SIAS	Screening, identification, assessment and support
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
UN	United Nations
USA	United States of America

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CHAPTER 1: ORIENTATION AND BACKGROUND

> *"In accepting this inclusive approach we acknowledge that the learners who are most vulnerable to barriers to learning and exclusion in South Africa are those who have historically been termed 'learners with special needs' i.e. learners with disabilities and impairments. Their increased vulnerability has risen largely because of their historical nature and extent of the educational support provided"* (Department of Education, 2001, p.7)

1.1 INTRODUCTION

Schools worldwide are characterised by an increasingly diverse learner population, which can be attributed to globalisation and the associated movement of people, goods, money and services (Florian, Young & Rouse, 2010). Diversity in terms of language, culture, race and learning abilities (Swart & Pettipher, 2011) served as the impetus for the policy of inclusive education (IE), which emphasises that all children, irrespective of their barriers to learning, have the right to attend local schools together with their peers (United Nations Educational, Scientific, and Cultural Organization (UNESCO), 1994; Rock, Gregg, Ellis & Gable, 2008).

The typical education approach that was followed prior to the release of the Salamanca Statement in 1994 related to policies and teaching methodologies that were standard and not planned according to learners' diverse needs (Flem, Moen & Gudmundsdottir, 2004). The Salamanca Statement promotes the inclusive approach, which provides learning support and appropriate education for everyone regardless of their learning needs (Burstein, Sears, Wilcoxen, Cabello & Spagna, 2004). The key challenge of ensuring access to education for a diverse learner population is that it demands a shift from the traditional "one-size-fits-all" to a more inclusive approach.

Since the dawn of the new democracy in South Africa in 1994, educational institutions were opened to all population groups. Subsequently, the school system became characterised by diversity in terms of language, cultures and learning needs. The Department of Education (DoE) addressed the challenge of diversity by implementing policies to make provision for learners with various educational needs in one classroom in full-service schools (FSS). Tomlinson, Brighton, Hertzberg,

Callahan, Moon, Brimijoin, Canover and Reynolds (2003) postulate that curriculum differentiation is crucial to ensure that all learners have an equal opportunity to access the curriculum. Curriculum differentiation can be defined as an IE practice in which teachers modify teaching methods, teaching and learning resources, assessment methods, learning activities and learners' products, taking into account the diverse needs of learners and maximising learning opportunities for each learner in the classroom (Wehmeyer, Lance & Bashinski, 2002; Westling & Fox, 2009). According to Algozzine and Anderson (2007), differentiation of the curriculum emerges from beliefs about the different ways in which learners acquire their learning preferences and interests.

Numerous teachers have not been trained in the IE paradigm and therefore have difficulty in differentiating the curriculum (César & Santos, 2006). Florian et al., (2010) contend that a more equitable approach to meeting the learning needs of all learners can be ensured by preparing teachers to focus on improving educational quality and take responsibility for learning when their learners experience learning difficulties, instead of merely referring them to specialists.

In line with the official policy on IE (DoE, 2001), the university under study has introduced a postgraduate teacher training programme, namely the Baccalaureus Educationis Honours (BEd) (Hons) in Learning Support (LS), which is embedded in the Foundation Phase (FP) which is the phase for young children aged six to nine years. This programme supports the "No Child Left Behind" approach (Deiner, 2010), which demands teachers who are well equipped to teach all learners, including those who experience diverse learning needs (Harvey, Yssel, Bauserman & Merbler, 2010). Curriculum differentiation is a primary component of the programme, because it is regarded as one of the key strategies for reaching the goal of IE and aims to ensure that all learners have access to the curriculum. The aim of this study was to determine how teachers who have completed the BEd (Hons) in Learning Support understand and implement curriculum differentiation in FSS. The literature reports that teachers have trouble in differentiating the curriculum (George, 2005; Tomlinson, 2005; Hawkins, 2009) this study therefore suggests teacher training guidelines for curriculum differentiation in an effort to strengthen the FP teacher training programme.

1.2 RATIONALE FOR THE STUDY

One of the many challenges to ensure educational equity in the creation of “schools for all” is the preparation of student teachers who can teach all learners, irrespective of their abilities (Florian et al., 2010). As one of the former lecturers in the Department of Early Childhood Education (ECE) at the university under study, I had the privilege of being part of the training team that piloted IE in nine South African provinces. The training was based on two documents from the DoE, namely Screening, Identification, Assessment and Support (SIAS) (DoE, 2005) and the Inclusive Learning Programme (ILP) (DoE, 2005). Training teachers in FSS to use the SIAS document was aimed at orienting them on IE policy and its implementation. Furthermore, it field-tested the practical implementation of the IE policy in participating schools. The training of teachers in the ILP focused on curriculum differentiation, which is regarded as the heart of the IE policy (DoE, 2005).

My participation in the teacher training programmes for the DoE on IE and curriculum differentiation has resulted in strong relationships with teachers in several provinces. Teachers raised numerous concerns, related to learners who found it difficult to learn, could not read and write, overcrowded classrooms, limited time to complete the curriculum, limited resources in schools, the changing curriculum, inability to assist learners with learning barriers, and lack of support from their support structures. Their biggest concern related to the demand that they implement the IE policy, regardless of the challenges they were facing. Their concerns made me wonder whether they were indeed able to differentiate the curriculum, as experience had taught me that this skill would address many of their challenges they experienced.

While I was still a lecturer in the BEd (Hons) programme, my responsibility was to prepare FP student teachers to implement IE. The programme included theory on curriculum delivery in order to support learners with diverse learning needs. As part of my duties, I followed up on the students who completed the programme, through informal conversations on how they implemented IE and provided for differentiation as part of the curriculum and how they made adjustments to address learning diversity among their learners. Their response was that they still found it challenging to teach learners with diverse learning needs. Their feedback indicates the gap

between their training and the practical implementation of curriculum differentiation in meeting the different learning needs of all learners particularly in FSS. The focus of this study was therefore to devise teacher-training guidelines for curriculum differentiation in the FP teacher-training programme. To achieve the aim of the study included searching for the meaning attached to teacher training and curriculum differentiation. The interest in exploring this issue also stemmed from the work of Cochran-Smith (2003), who postulates the need to produce teachers who know how to teach, how to learn and make decisions that are informed by theory and research together with feedback from the classroom context.

1.3 PROBLEM STATEMENT

Curriculum differentiation as one of the key strategies in addressing learners' diverse learning needs in schools is documented in several studies (Tomlinson et al. 2003). School reform movements such as the UNESCO Salamanca Statement (1994) call for teachers to differentiate their curriculum to ensure that all learners, including those who are in need of additional support, have access to high-quality learning in schools (Tomlinson et al. 2003). Despite the guidance provided by the DoE in documents such as Education White Paper 6 (DoE, 2001; DoE, 2008) on addressing diversity and exclusion, implementation is still hampered by the lack of teachers' skills in differentiating the curriculum (Rock et al. 2008; Chataika, Mckenzie, Swart & Lyner-Cleophas, 2012). Consequently, George (2005) regards teachers' inability to differentiate the curriculum as a real educational and profession dilemma. I saw a gap in the literature, by realising that teachers need guidelines to differentiate the curriculum. Moreover, the guidelines are needed for teachers of young children, therefore in the FP, as this is the phase where the foundation for all learning is established.

Teachers are key role players in addressing diversity among all learners (Engelbrecht, 2006). Various studies have been conducted to explore the knowledge base and skills of teachers when attempting to address the learning needs of all learners. Such studies have focused on issues such as teachers' attitudes towards integration (Avramidis & Norwich, 2002); teacher's attitudes towards IE (Stella, Forlin & Lan, 2007); how teachers are prepared for inclusive classrooms (Jordan, Schwartz & McGhie-Richmond, 2009); teachers' knowledge of and attitudes towards inclusion

(Johnstone, 2010); and teacher preparation for inclusion (Harvey et al. 2010). However, little research has been conducted on the effectiveness of teacher training programmes for preparing students teachers to support all learners regardless of their diverse learning needs.

This study therefore investigated such a programme, namely BEd (Hons) in Learning Support at a university in South Africa. The students who enrol for this programme are usually FP teachers who want to gain more knowledge on how to support learners. With this study, I wanted to explore whether FP teachers in the FSS who have completed this programme were now able to differentiate the curriculum in the schools where they were currently teaching. My study was guided by the following research questions:

1.3.1 Primary research question

What are the constituent elements of teacher training guidelines for curriculum differentiation in a Foundation Phase programme?

In order to answering the main research question, the following secondary research questions were formulated.

1.3.2 Secondary research questions

- What are the official policies that inform curriculum differentiation in addressing diverse learning needs of learners in schools?
- How do Foundation Phase teachers understand and experience the implementation of curriculum differentiation to support learners with diverse learning needs as part of inclusive education practice?
- How effectively does teacher training which focuses on learning support in the Foundation Phase, prepare teachers to differentiate the curriculum to support learners with diverse learning needs?

1.4 RESEARCH AIMS

Providing equal learner access to education through differentiating the curriculum is quite complex (Engelbrecht, 2006; Forlin, 2006). Furthermore, there is a lack of

research on how this is being accomplished in schools to ensure that all learners have access to the curriculum. The research aim of this research was therefore to:

Devise teacher training guidelines for curriculum differentiation in a FP programme. In order to achieve the main aim as stated above, the following sub-aims were pursued:

- To understand the official policies that inform curriculum differentiation in addressing the diverse learning needs of learners in school;
- To explore the understanding and experiences of FP teachers about curriculum differentiation in supporting learners with diverse learning needs in their classrooms;
- To explore the effectiveness of teacher training in the Learning Support programme in preparing teachers to differentiate the curriculum to support learners with diverse learning needs.

1.5 CONCEPT CLARIFICATION

The following terms are frequently used in the study and as a result need some clarification.

1.5.1 Learner diversity

Learner diversity refers to the uniqueness among learners in schools. It denotes learners' variation or differences according to their learning styles, language, gender, socio-economic status, ability status, disability, ethnicity and culture (Spradlin & Parsons, 2008). In addition, Florian et al. (2010) regard learners' diversity as differences in emotional, social, language, ethnicity, cultural, intellectual or disability in an educational environment, while Wood (2009) views it as learners' learning dissimilarities based on their language, culture and learning ability. In the context of this study, learners' diversity refers to learners' differences in terms of their strengths, gifts, interest, cultural practices, language of communication, race, place of origin, socio-economic background, learning styles and learning abilities.

1.5.2 Learning support

The term learning support describes the teachers' response to learners' learning needs by providing an effective intervention during the learning process (McLoughlin, 2002). Weeks (2013) further define learning support as any form of help, assistance and guidance given to a learner who experiences barriers to learning and to enable such learners to overcome their learning barriers. In this study, learning support is associated with any form of assistance that a teacher or a facilitator provides to all learners with the aim of ensuring their effective learning and active participation during class and school activities.

1.5.3 Inclusive education

Ainscow, Howes, Farrell and Frankham (2003) define IE as an educational practice that provides all learners with equal access to the curriculum, and ensures belonging, participation and achievement in the general classroom for all. In the South African context, IE is defined as an educational approach of addressing and responding to diverse needs of all learners by increasing the level of participation, providing appropriate support and reducing exclusion (Engelbrecht, 2006; Walton & Nel, 2012). IE has to do with acknowledging diversity among learners and ensuring that all their learning needs are met in various education settings such as early childhood development (ECD) centres, mainstream schools, special schools as resource centres (SSRC), full-service schools (FSS) as well as higher institutions (HI).

1.5.4 Curriculum differentiation

Curriculum differentiation is the process whereby the teacher differentiates the content, teaching and learning process, and products according to the learner's strengths, interests, skills and readiness in a flexible learning environment (Tomlinson, 2004). Simpkins, Mastropieri and Scruggs (2009) regard curriculum differentiation as an adjustment of instructional strategies, materials, products and the environment in accommodating the different learning needs of an individual child. A differentiated curriculum encompasses modification, changing, adaptation, extension and variation of teaching methodologies, teaching strategies, assessment strategies, resources and the content of curriculum in meeting diverse needs of

learners in schools (DoE, 2011). Taking account of the aforementioned statements, the definition of curriculum differentiation that I adopted for this study was:

> *Curriculum differentiation refers to the differentiation or alteration of any activity that a teacher carries out to ensure accessibility of active learning in all learners in a school environment or classroom setting. Since the study is focused on the FP, differentiation of curriculum is strongly linked to all activities such as literacy activities such as reading and writing, mathematics, different learning areas as well as extra curricular activities.*

1.5.5 Foundation Phase

The FP forms part of the General Education and Training band according to the classification of the South African education system. This is the phase for Grade 1−3 learners and caters for children who are between 6 and 12 years old (DoE, 2011). In this study, FP refers to the curriculum that is specifically designed for all small learners whose ages ranges between 6 and 12 years. Education provision for these learners is in the lower grades which is Grade 1 to 3.

1.5.6 Full-service schools

Full-service schools are ordinary schools which are specially equipped to address a full range of barriers to learning in an inclusive education setting (DoE, 2001). In other words, these are the schools that are established to accommodate learners who are in need of various learning needs for their active learning and participation. Furthermore, they are furnished with necessary human and physical resources in order to provide the necessary support for all learners.

1.6 PRELIMINARY LITERATURE REVIEW

One of my first steps towards this study was to find out what had been done in the field, as advised by Mouton (2001). Literature on curriculum differentiation as a key strategy for the implementation of IE was therefore consulted. By implication, the literature review was the precondition for conducting this study (Gray, 2009). Reviewing the literature from a national and international perspective provided me with a knowledge base and greater understanding of issues related to my research.

It further provided the framework for establishing the importance of my research and served as the benchmark for comparing the results of this study with other findings (Creswell, 2009). I reviewed the literature based on the framework provided by Mouton (2001), to:

- ensure that I did not merely duplicate previous studies on the topic I investigated;
- discover studies about the subjects on IE and curriculum differentiation;
- find the most empirical findings in the field of study;
- find the most acceptable definitions of key concepts such as IE and curriculum differentiation.

In ensuring that this preliminary literature review was logically structured, I organised it around the key construct (Mouton, 2001) pertaining to IE and curriculum differentiation. The next section will therefore deliberate on the concept inclusive education and curriculum differentiation.

1.6.1 Conceptualisation of inclusive education

IE is a moral issue of human rights and values as embedded in the Salamanca Statement, which constitutes a paradigm shift from discrimination to more inclusion of all learners regardless of any barriers they experience in schools (UNESCO, 1994). Its main purpose is to eliminate academic and social exclusion based on attitudes and responding to diversity in race, social class, building an inclusive society and achieving education for all (Ainscow, 2005). Lomofsky and Lazarus (2001) warn that although IE presents many exciting opportunities for education, it also brings about several challenges, because separate special education structures have to be dismantled and teachers have to cope with the diverse learning needs of all learners in schools, particularly in countries such as South Africa. Despite the IE challenges mentioned in the study of Lomofsky and Lazarus (2001), Engelbrecht (2006) views IE as a celebration of an educational transformation approach based on equality education that responds to the diverse needs of all learners by increasing participation and decreasing exclusion. In terms of equality, Downing (2008), in her study on the outcomes of IE, regards IE as not only benefitting learners with disabilities, but also their peers without disabilities. She found that both groups of

learners should be introduced to diversity as early as possible. In addition, Winter (2006) emphasises that IE is not only focused on accommodating children with or without disabilities in general classrooms, it also demonstrates the quality of schooling where learners are supported to learn.

IE aims to eliminate academic and social exclusion based on attitudes and responding to diversity in race, social class, building an inclusive society and achieving education for all (Ainscow, 2005). Furthermore, it concentrates on the change in attitudes in the education system by informing the education system to accommodate all children in schools regardless of their physical, intellectual, socio-economic, linguistic or other barriers to learning (UNESCO 1994). In order to include all learners in the same schools, IE should ensure that all staff members in schools are appropriately trained to acquire knowledge, skills and attitudes towards diversity. It also involves collaboration among teams and differentiation of the curriculum and the environment (Walton & Nel, 2012). Although IE comprises of differentiation of the curriculum for accommodating learners' needs within the learning environment (Lomofsky & Lazarus, 2001), its main focus is on teachers' practices by removing and minimising barriers to learning caused by an inaccessible pedagogy, inappropriate expectations or environments with physical barriers (Johnstone, 2010). Apart from the above factors, IE is more focused on institutional capacity building in administrative systems, teacher training and their collaborative role in accommodating diversity in the inclusive classroom (Engelbrecht, 2006).

IE can be implemented effectively by focusing on the following characteristics identified by Lomofsky and Lazarus (2001): a single education system that offers a range of learning contexts, with varied curriculum and support services, curriculum differentiation, capacity building through various training approaches, development of community-based support systems, development of the psychosocial environment, establishment of school and district support teams, and the provision of adequate funding and resources to address the diverse learning needs of the learner population. In the international arena, IE is broadly an approach of supporting diversity in schools (Ainscow & César 2006). In a heterogeneous classroom, not all learners can execute tasks in a typical way without additional support and structured experiences (McLoughlin, 2002). Consequently, learners experiencing some learning

barriers often require intensive or specialised support to access the curriculum (DoE, 2001). Needs for learning support may also arise from the following factors: mental, sensory, neurological, developmental, psychosocial disturbances, and differences in the intellectual abilities and socio-economic needs of the learners (DoE, 2001).

1.6.2 Curriculum differentiation

When considering IE, the most critical aspect relates to the responsibility of an educational system to include a large diversity of learners and provide a differentiated and appropriate education for everyone (Flem et al., 2004). Curriculum differentiation has also been identified as one of the key strategies to enable and support learners with barriers to learning with access to the curriculum (Lee, Amos, Gragouda, Lee, Theoharis, & Wehmeyer, 2006). Again, addressing the needs of all learners in schools should be understood from the perspective that teachers must not only be positive about learners perceived as achieving lower outcomes than their classmates, but also be able to differentiate the curriculum to meet their learning needs. In order to provide learning support to a diverse group of learners, adequate differentiation of the curriculum is required for better support and integration of individuals regardless of any learning barriers they experience (Mooij & Smeets, 2006). According to the DoE (2011), curriculum differentiation includes the modification, changing, adaptation, extension and variation of teaching methodologies, teaching strategies, assessment strategies, resources and the content of the curriculum. The collective components of curriculum differentiation are: assessment, content, teaching methods, resources, learning activities, learning environment and learners' products to address the diverse needs of individuals and to maximise their learning opportunities in the classroom (Tomlinson et al. 2003; DoE, 2011).

Rock et al. (2008) identify four guiding principles related to curriculum differentiation: focus on essential ideas and skills in each content area, responsiveness to individual learners' differences, integration of assessment and instruction and ongoing adjustment of content, process and products. In addition, it focuses on the task, seating arrangement, time allocated and outcomes presented to the learner who is in need of additional support to learn (DoE, 2011). The differentiation will be guided by

variation in individuals' learning abilities, learning needs and learning style. In this instance, the teacher or the facilitator differentiate or alter his/her way of teaching, assessment of learners activities, time allocation to complete an activity, environmental settings as well as teaching and learning resources for learning to take place.

1.6.3 Foundation phase teacher training programme

Delivering good teachers is a key element in improving quality primary education in schools (Harris & Sass, 2011). In addition, Horne and Timmons (2009) suggest that without suitable teacher training, teachers cannot do their best for all learners, including those with diverse learning needs. This view is confirmed by Forlin (2010) who points to the significance of producing teachers who will be able to teach and include all learners. In the past two decades, American states have witnessed a remarkable increase in the number of policies directed at teacher training and an intense debate about whether and how various approaches to preparing and supporting teachers make a difference (Darling-Hammond, 2010). A similar trend occurred in South Africa. By inference, quality teacher training for the early childhood years is one of the main agendas of education transformation in all states or countries, including South Africa. An example is the FP teacher training programme that was designed to prepare teachers to teach in lower grades, thus Grade R to Grade 3, and accommodates children whose ages range between 5 and 12 years (Department of Higher Education and Training (DHET), 2011).

Currently, 13 of 21 South African higher education institutions (HI), mainly the universities, provide FP teacher training programmes (Green, 2011). According to the South African Revised Policy on the Minimum Requirements for Teacher Education Qualification (DHET, 2015), these training programmes offer two qualification pathways, namely the initial teacher education as well as relevant continuing professional development or postgraduate qualifications. The goals in both programmes are as follows:

- Offer student teachers with extensive and specialised knowledge of early childhood learning to teach reading, writing and numeracy;

- ❖ Prepare student teachers to specialise in First Language teaching in one of the official languages together with First Additional English Language teaching;
- ❖ Provide students teachers with learning opportunities that will prepare them to work with Grade R learners; and
- ❖ Ensure that student teachers acquire skills and knowledge in early identification and addressing of barriers to learning, as well as ability to differentiate the curriculum.

With regard to the background of IE and curriculum differentiation, these goals are instrumental towards development of the skills and knowledge required by FP teachers in order to respond to the needs of young learners in FSS.

1.7 THEORETICAL FRAMEWORK

This study was conducted through the lens of Bronfenbrenner's ecological system theory (1979), as it takes into account the various influences, interactions and interrelationships in human development and the environment (Bronfenbrenner, 1979). The ecological environment in which a developing person lives is conceived as a set of nested structures with different levels, each inside the next like a set of Russian dolls (Bronfenbrenner, 1979). These levels, ranging from the inside to the outside, are referred to as the microsystem, mesosystem, exosystem and macrosystem (Bronfenbrenner, 1979) and the chronosystem (Bronfenbrenner, 1994) and are visually presented in Figure 1.1.

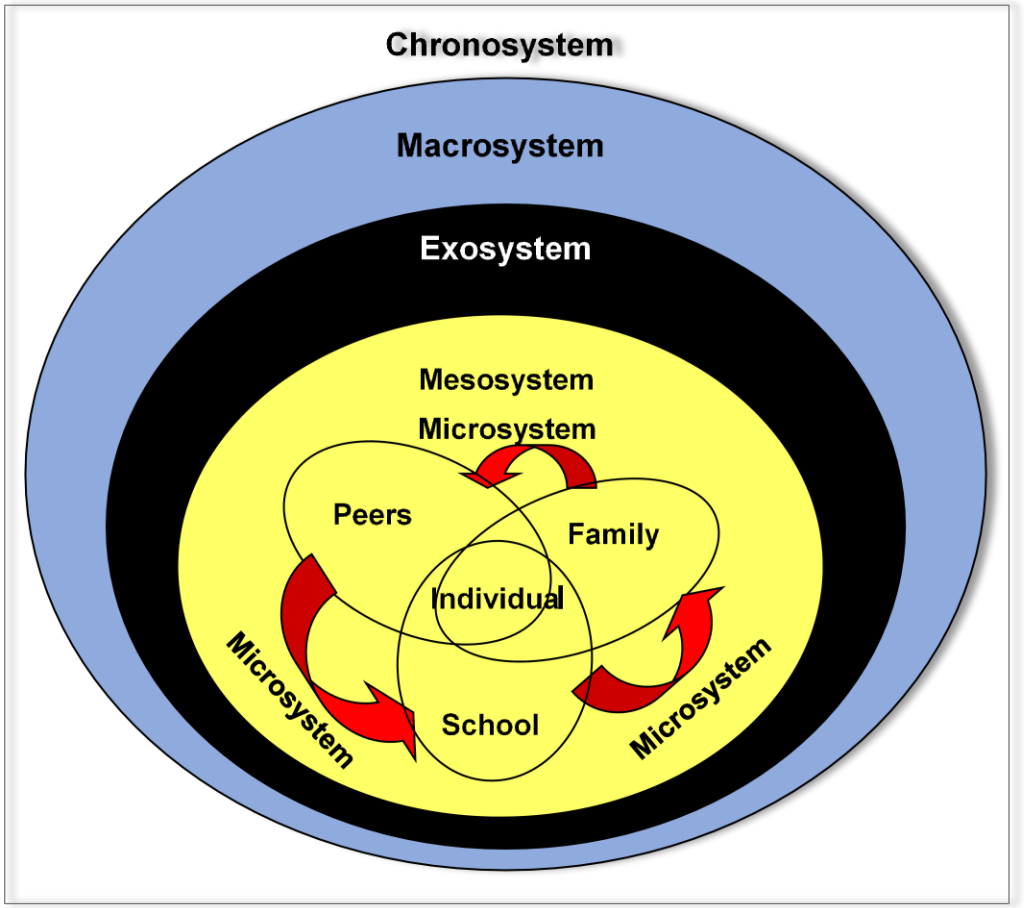

Figure 1.1: Different systems of bronfenbrenner's ecological systems theory (1979; 1994)

When considering the inclusion of all learners with regard to their development and learning, Bronfenbrenner's ecological systems theory (1979) makes provision for the various factors which influence IE and subsequently the implementation of curriculum differentiation in schools. Due to the evolution of IE, in which curriculum differentiation is rooted, the discussion of these influences and interactions (as represented by the various systems) will start at the outside (chronosystem), progressing towards the centre (microsystem).

1.7.1 The chronosystem

Bronfenbrenner (1994) defines the chronosystem as time-frames over the life course of an individual in their family structure, socio-economic status, employment, places of residence or the degree of pressure and ability in everyday life, which have much to do with the impact of changing societies on developing lives. The chronosystem offers ways of understanding typical patterns of change and growth over time within

the human lifespan, with the proviso that these patterns may be modified, or show themselves differently in different contexts (Green, 2001). The chronosystem in this study focused on the evolution of IE as a framework for curriculum differentiation as a strategy to ensure access to the curriculum for all leaners in schools.

1.7.2 The macrosystem

The macrosystem consists of the belief systems, bodies of knowledge, material resources, lifestyles, opportunity structures, hazards and life-course options embedded in each of these broader systems (Bronfenbrenner, 1994). The macrosystem in this study is concerned with some of the key influences, including policies, legislation and movements that shaped the provision of IE globally and in South Africa.

1.7.3 The exosystem

Bronfenbrenner (1979) defines the exosystem as one or more settings that do not involve the developing person as an active participant, but in which events occur that affect or are affected by events occurring in the setting containing the developing person. In this study, settings and events that do not involve the learner as an active participant include educational support services, local organisations, and school boards.

1.7.4 The mesosystem

The mesosystem involves the interrelations among two or more settings in which the developing person actively participates, such as the relations between the home of a child and the school, together with the schools and peer group (Bronfenbrenner,1979). The important aspect of this level is that it emphasises not only the interaction within the immediate setting, but also the interconnection between them that are influential towards the child's development. For the purpose of this study, aspects that constitute the mesosystem comprise the partnership between a home and the school.

1.7.5 The microsystem

Bronfenbrenner (1979) defines microsystems as patterns of activities, roles, and interpersonal relations experienced by the developing child in a particular setting with particular physical and material characteristics. Example of this context or settings includes home, school, classroom and peer group (Bronfenbrenner, 2005).

In this study, the microsystems consist of homes, peers and schools that play a crucial role in ensuring active learning and participation of an individual learner in FSS. Within the context of inclusive education and inclusion, the microsystem is characterised by aspects such as the overall quality, the makeup of the class, the ways that teachers arrange the classroom, and their teaching strategies (Odom & Diamond, 1998).

1.8 ASSUMPTION OF THIS STUDY

The following assumptions were directives to the conceptualisation of this study:

- Some teachers in FSS have acquired sufficient training (e.g BEd (Hons) in Learning Support) to teach learners with diverse learning needs.
- The BEd (Hons) in Learning Support programme has theoretically prepared teachers to differentiate the curriculum, which is a key strategy to meet diverse learning needs of learners in their classes.
- Teachers who have completed the BEd (Hons) in Learning Support can identify learning barriers in their learners that demand the differentiation of the curriculum.
- However, although teachers have completed the BEd (Hons) in Learning Support, they still find it difficult to differentiate the school curriculum to meet the diverse learning needs of their learners in their classrooms.
- Teachers' inability to differentiate the curriculum is due to limitations on the implementation of the theory into practice, overcrowded classes, lack of resources, lack of support from their school management team and the district support teams.

1.9 RESEARCH METHODOLOGY

Research methodology is concerned with the theory, methods, conceptualisation, and justification of the procedures used in research (Creswell, 2009). It consists of the research design and research methods, which will be briefly discussed and elaborated on in Chapter 4.

1.9.1 Research design

Research design is a plan and procedure for research that spans the decision from broad assumptions to detailed methods of data collection and analysis (Creswell, 2009). In other words, it refers to the planning of the steps that was followed when conducting my study and which assisted in answering the research questions. For the purpose of this study, my research design was planned along the following dimensions: research paradigm, research approach and research type (Figure 1.2).

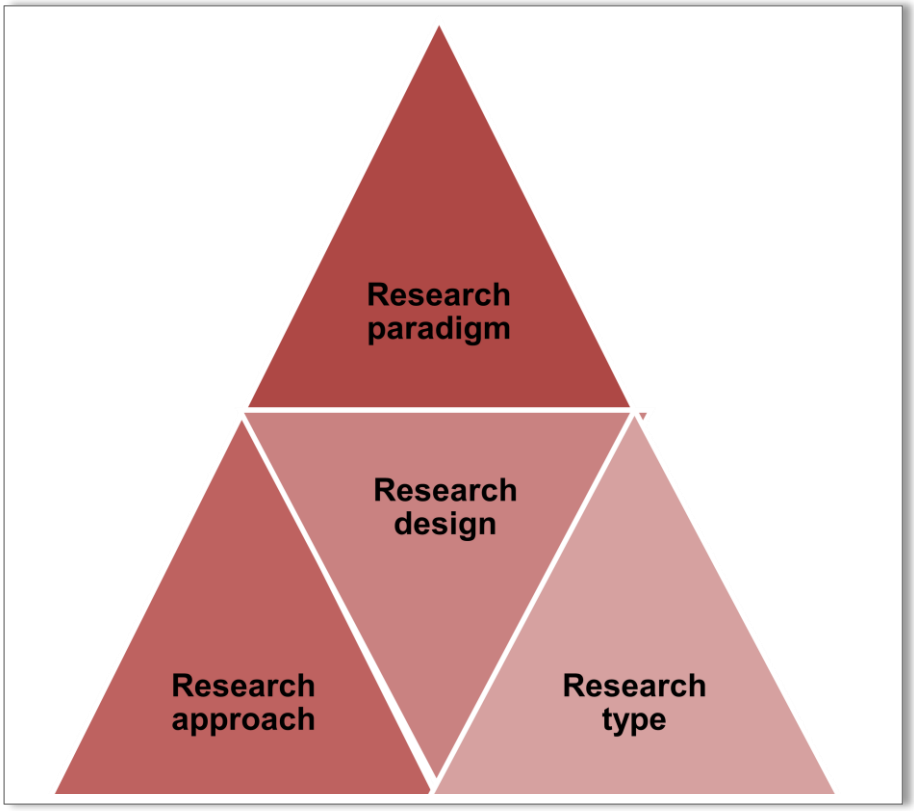

Figure 1.2: Dimensions of the research design

1.9.1.1 Research paradigm

Guba and Lincoln (1994) define a research paradigm as a worldview that defines the nature of the world and the individual's place in it, as well as the range of possible

relationships to that world and its parts. In other words, a paradigm serves as the lens for interpreting reality (Nieuwenhuis, 2010). Paradigms guide the research methodology to be employed in a particular study and are based on the philosophical beliefs about the nature of reality, knowledge and values, and by the theoretical framework that informs the study (Wagner, Kawulich & Garner, 2012). According to Nieuwenhuis (2010), there are three main types of paradigms, namely positivist, interpretive, and critical theory. This study was positioned within the interpretivist paradigm to explore how FP teachers understood and implemented curriculum differentiation in addressing the diverse needs of their learners in schools.

1.9.1.2 Research approach

This study was rooted in a qualitative research approach to illustrate how FP teachers employ differentiation to make the curriculum accessible to all learners. Qualitative researchers are interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences (Merriam, 2009). They achieve this by collecting rich descriptive data in respect of a particular phenomenon, so that they can understand what is being observed or studied (Maree 2010). Using the qualitative approach enabled me to observe behaviour and gestures during the data collection process, which is one of the strengths of qualitative research (Babbie & Mouton, 2001).

1.9.1.3 Research type

A case study was the research type considered the most appropriate for this study. Yin (2014) suggests that case studies can be used in various situations to contribute new knowledge of individuals, groups, organisations and with, social, political, and related phenomena. Creswell (2009) defines a case study as a strategy of inquiry in which a researcher explores a programme, event, activity, process or one or more individuals in depth. A case may be a person such as a teacher, a group of teachers or learners, a school or an organisation (Bertram & Christiansen, 2014). A case in this study consisted of a particular type of school where participants who had completed the BEd (Hons) programme in Learning Support were teaching.

Case studies can be single or multiple (Yin, 2014). Multiple case studies derive from the prior hypothesis of different types of conditions and the desire to have subgroups

of cases covering each type (Yin, 2014). For the purpose of this research, a multiple case study was preferred because it involved teachers who are employed in three different types of schools, namely rural schools, township schools, and former Model C schools.

1.10 RESEARCH METHODS

Creswell (2009) defines research methods as various data collection strategies, research sites, research participants, analysis and interpretation of the research. Various methods were considered for gathering information, but the choice lay with the research method that would be the most appropriate for answering my research questions (Bertram & Christiansen, 2014).

1.10.1 Research participants and sample selection

The idea behind qualitative research is to purposefully select participants that will best assist the researcher to understand the problem and answer the research questions (Creswell, 2009). It was appropriate to select participants based on my knowledge of the population, their characteristics, and the nature of my study. Purposive sampling was employed explicitly for gathering rich data to answer the research question. A sample of nine teachers from nine full-service schools was purposefully drawn from the population of all teachers who had completed the BEd (Hons) in Learning Support at the university under study. All the participants were females whose ages ranged between 25 and 59 years. The teachers who participated in this study were also employed in nine full-service schools situated in three different contexts i.e. rural, township, and former Model C schools. Apart from their contextual differences, these schools were further situated in three different South African provinces.

1.10.2 Data collection

Once the researcher finalises the research questions, the next step is to consider ways that may answer the research questions satisfactorily (Babbie & Mouton, 2001). Data for this study was solicited from these nine participant teachers using semi-structured face-to-face individual interviews and document analysis.

1.10.2.1 Individual interviews

An interview is a purposeful interaction in which one person gathers information from another person (Gay, Mills & Airasian, 2011). Because the aim of these interviews was to see the world through the eyes of the participants, I regarded individual semi-structured interviews as the most appropriate data collection instrument. In line with the interpretivist paradigm, I employed in-depth individual interviews based on open-ended and semi-structured questions. The general aim of such individual interviews was to acquire rich and descriptive information that would enable me to understand the social reality of the participants and to saturate my data (Seabi, 2012).

1.10.2.2 Document analysis

Merriam (2009) regards document analysis as another rich source of information. I also made use of this instrument to collect useful data. Gray (2009) identifies various types of documents that can shed significant light on the phenomenon being investigated. These documents include institutional documents and state, financial, political, and legal records. Merriam (2009) adds that these may be either public or personal. Nieuwenhuis (2010) asserts that these documents may be published or unpublished. Bowen (2009) postulates that one of the rationales for using document analysis as a data collection strategy is to improve various programmes such as those on school improvements. Since the main aim of this study was to devise teacher-training guidelines for curriculum differentiation in the FP programme, I found the use of document analysis appropriate for this study.

1.10.3 Data analysis

Data analysis includes a range of approaches, processes and procedures whereby researchers extract explanations, understanding or interpretation from the qualitative data (Nieuwenhuis, 2010). He (Niewenhuis, 2010) further identifies two approaches namely the inductive and deductive approach. Inductive data analysis is described as being the most common approach to analyse qualitative data. However, the deductive data analysis approach is increasingly being used by qualitative researchers (Pope, Ziebland & Mays, 2000), particularly in studies that evaluate projects (Thomas, 2006). Deductive data analysis was found to be the most suitable

approach to analyse data for this study, as it was strongly informed by the priori reasoning (Pope et al,. 2000).

1.10.4 Role of the researcher

As a qualitative researcher in this study, I assumed the role of the research instrument by conducting individual face-to-face interviews together with document analysis (Merriam, 2009). I served as an interpreter, writer, creator and constructor of the research world (Mantzoukas, 2004). In other words, I was mostly responsible for sampling my research participants, I collected, transcribed, and analysed the data and then reported on the findings. In line with Taylor and Medina's (2013) advice, I constantly reflected on my values and believes in interptreting the thoughts and feelings of my participants to their experiences with curriculum differentiation during the research process.

1.10.5 Demarcation of the study

This study was conducted in three of the South African nine provinces, namely Gauteng, Mpumalanga and North West. The sites and the teachers who participated in this study included rural, township and former Model C schools. The target participants were nine FP teachers who had completed the BEd (Hons) in Learning Support and taught in full-service schools.

1.11 TRUSTWORTHINESS

Qualitative studies should be evaluated according to different criteria from those used in quantitative studies (Bryman, 2001). During the process of conducting this research, it was fundamental to ensure the accuracy of the findings and interpretations; they were guided by trustworthiness, which is the primary criterion for evaluating the quality of qualitative research as proposed by Guba and Lincoln (1994). The trustworthiness of this study was made up of the following strategies, namely credibility, transferability, dependability and conformability (Lincoln & Guba, 2003), which will be explained in more detail in Chapter 4.

1.12 ETHICAL CONSIDERATIONS

Because the study dealt with human participants, ethical matters were significant to this research project. Prior to the commencement of this study, I submitted my ethics application to the ethics committee of the university under study. The main aim was to consider to what was right or wrong, proper or improper, good or bad (McMillan & Schumacher, 2006). Ethical considerations and contact with research participants could not be separated, and I ensured that I adhered to ethical principles throughout my research (Glesne, 2006). In line with the expectations of the ethics committee of the university under study, I further used guidelines which were devised by the Medical Research Council (1993), to ensure that I safeguarded human dignity and promoted justice, equality, truth and trust to my participants. Protection from harm, informed consent, the right to privacy and confidentiality, and avoiding the use of deception (Gray, 2009) were other ethical issues I considered in this study. Ethical research practice is grounded in the moral principles of respect for persons where I respected their privacy, anonymity and right to participate, beneficence that addresses the principle to not harm and justice that focuses on who benefit from the study and who does not (Marshall & Rossman, 2011).

1.13 ORGANISATION OF THE STUDY

This thesis is divided into six chapters with the following layout:

Chapter 1: Orientation and background

This chapter introduced the background and orientation of the study by providing the rationale and problem statement. Furthermore, it highlighted the primary and secondary research questions as well as the aim of the study. A brief theoretical framework and review of the literature exploring Inclusive Education as a foundation for curriculum differentiation from international and national perspectives were discussed. This was followed by the basic assumptions and clarification of important concepts in this research. This chapter concluded with the presentation of the research methodology, trustworthiness of the study and ethical measures.

Chapter 2: Ecological system perspective on inclusive education

Chapter 2 contains a literature review on IE, which is embedded in the theoretical framework of Bronfenbrenner's ecological systems theory (1979). These include:

- The conceptualisation of IE
- The revolution of IE
- International and national policies, legislation, and movements that drove the introduction and implementation of IE
- Contribution of educational support services, local organisations, and school boards towards IE
- The significance of home-school partnerships in ensuring access to the curriculum for all learners.

The aforementioned issues were reviewed due to their influence and contribution towards IE in schools worldwide and therefore viewed as fundamental for this research.

Chapter 3: A micro-systemic perspective on curriculum differentiation

Chapter 3 continues with the exploration of IE with regard implementation of curriculum differentiation. The relevant review of literature in respect of the above mentioned aspects includes:

- The significance of the home context and peers towards effective learning of the learner
- The characteristics of full-service or inclusive schools
- The school curriculum
- The differentiation of the curriculum
- The importance and challenges of curriculum differentiation
- Determinant factors of curriculum differentiation
- Differentiation of different parts of the curriculum

Chapter 4: Research methodology

This chapter provides an in-depth view of the research design and methodology employed in this study. The research paradigm, approach and type are discussed, followed by the discussion of sampling, research sites and research participants as well as strategies used for data collection and analysis. Furthermore, the issue of trustworthiness and ethical measures that were followed in this research are highlighted.

Chapter 5: Data analysis and interpretation

In this chapter, the results of the study on the issue of curriculum differentiation are presented and analysed using themes and categories. This was done to reveal how teachers who completed the BEd (Hons) in Learning Support programme implemented curriculum differentiation to meet the diverse learning needs of their learners in schools.

Chapter 6: Summary, conclusions and recommendations

This chapter presents the synthesis of both the literature and empirical study. The discussion further focuses on the findings in relation to the primary and secondary research questions. Four sets of recommendations with specific reference to the effective implementation of curriculum differentiation in schools are presented.

1.14 CONCLUDING REMARKS

Most countries, including South Africa, have witnessed a growing recognition of the importance of curriculum differentiation as a key strategy to make the curriculum accessible to all learners in schools. However, increasing recognition has not been proportional to the number of opportunities provided to learners to access quality education. In general, schools in South Africa are faced with a diverse learner population that demands a shift from traditional teaching to a more inclusive approach. South Africa has been hailed for developing a comprehensive and progressive IE policy that requires the implementation of curriculum differentiation to meet the diverse needs of learners in schools. However, in spite of this policy, a huge percentage of learners in need of additional learning support are not able to

access the curriculum effectively. The main aim of this study was therefore to devise teacher training guidelines for curriculum differentiation in a FP programme.

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CHAPTER 2: ECOLOGICAL SYSTEM PERSPECTIVE ON INCLUSIVE EDUCATION

> *"Schools should accommodate all children regardless of their physical, intellectual, social, linguistic or other conditions. This should include disabled and gifted children, street and working children from remote and nomadic populations, children from linguistic, ethnic, or cultural minorities and children from disadvantaged or marginalised areas and groups"* (UNESCO, 1994, p.6)

2.1 INTRODUCTION

Numerous educational teacher training programmes are offered worldwide, all based on various contexts (McIntyre, 2009; Lomofsky & Lazarus, 2001). The main purpose of these programmes is to equip teachers with knowledge and skills on teaching all learners, including those in need of additional support, so that these learners can participate and learn effectively during classroom activities (Grant & Gillette, 2006; Landsberg & Matthews, 2016). Gay (2010) maintains that for teachers to be able to teach all learners regardless their differences, they need to recognise, honour and incorporate the individual abilities of learners into their teaching methods and strategies. It is a source of concern that despite these teacher preparation programmes, most teachers still are unable to meet the various needs of their learners. This shortcoming of the teachers may be ascribed to their inability to differentiate the curriculum, which according to Drake and Sherin (2006) serves as one of the key aspects in teachers' implementation of IE.

Curriculum differentiation is a teaching methodology that ensures that the teaching methodology, learning content and learning output matches the readiness level, ability and interest of the learner (Tomlinson, 2004; Lee et al. 2006; Drake & Sherin, 2006). In other words, it refers to the manner in which the teacher modifies the content, instructions and learning outputs to allow the learner to engage and respond to the school curriculum (Lee et al., 2006). Like many parts of the world, the South African educational system is characterised by learner diversity, and teachers are expected to differentiate the curriculum in ensuring accessibility of learning opportunities to all learners (Engelbrecht, 2006). The aim of this study was therefore

to devise teacher-training guidelines for curriculum differentiation to inform teachers on addressing the diverse learning needs of all learners in the Foundation Phase. Curriculum differentiation as the core of my study is not a standalone practice, but strongly rooted within the concept of IE, which according to Mitchell (2005) is embedded in a range of systems. IE is the key policy that strives for elimination of exclusion in a number of countries including South Africa (Lomofsky & Lazarus, 2001), the United Kingdom (UK), and the United States of America (USA) (Lindsay, 2007).

To explain the context in which curriculum differentiation should take place, it was imperative to explore related studies on IE, which I did through the lens of Bronfenbrenner's ecological systems theory (1979). The literature review is organised in two consecutive chapters. In Chapter 2, I provide a comprehensive review of scholarly literature on IE, as the point of departure when considering curriculum differentiation. This was done within the framework of Bronfenbrenner's chronosystem, macrosystem, exosystem and mesosystem. Chapter 3 extends the literature study on IE and includes discussions based on the microsystem as framework. Before embarking on a systemic outline of IE, the concept of IE should first be conceptualised.

2.2 CONCEPTUALISING INCLUSIVE EDUCATION

IE is a buzzword in social and educational policies in many parts of the world, including the UK, European Union (EU) and the USA (Evans & Lunt, 2002). Hornby (2001) points out that it is prone to confusion, while Lindsay (2003) regards it as a complex and contested concept. When they define and conceptualise the concept of IE, researchers do not uniformly agree on what in fact constitutes IE, as is evident from the various definitions attached to it (Ainscow, 2000; Walton & Nel, 2012) as well as the questions posted by the researchers to explore its meaning. To illustrate, Evans and Lunt (2002) ask questions such as:

> "But what does inclusion mean in practice? Does it mean that the local school should provide for 100 per cent of its local pupils, for 99 or 98 per cent, or some other proportion? Does it mean that all pupils should be educated together in the

> same class or in the same school, and with the same teacher? Should particular schools include particular pupils, thus enabling pupils to attend mainstream though not their local school? Does it include on-site or off-site units?" (Evans & Lunt, 2002, p.3)

Armstrong et al. (2010) further ask questions such as: What does it really mean to have an education system that is inclusive? Who is in need of IE and why? What could be the advantages of IE? What would help schools to be more inclusive? What common values is IE advocating and by which criteria should its successes be measured?

Engelbrecht (2006) believes that the meaning, definition and implementation of IE is culturally determined and depends on the political values and processes of a specific country or state. Thomas (1997) suggests that IE must be part of the heart of any society, which treasures and supports fraternity and equality of opportunities. In European countries (Nilcolm, 2006), the USA (Downing, 2008; Beukelman & Mirenda, 2009; Jordan et al. 2009), Australia (Van Kraayenoord, 2007) and the UK (Miles & Singal, 2010), IE is about including all learners with diverse educational and learning needs in regular classrooms, irrespective of the type and severity of the learning problem, and such learners are to be provided with the necessary support they require. Ainscow et al. (2003) reiterate that IE is an educational practice that provides equal access to the curriculum, belonging, participation and achievement in the general classroom for all. It is considered as paramount to regard IE as an educational reform that supports and welcomes diversity among learners in schools (Ainscow & Sandill,
2010) and that it should be seen as an effective way whereby all learning needs of each child are addressed effectively (Downing, 2008). Considering the definition of IE as provided by the above authors, it becomes apparent that in Europe, the USA and Australia all learners are included in the same schools and in the same classrooms. To ensure quality education for these learners, the state ensures that these schools have all the required services such as psychological services, physiotherapy, occupational therapy, and speech and language therapy.

Furthermore, Ainscow et al. (2003) caution that IE is not about dumping children with learning barriers in a regular classroom, but an educational practice that provides equal access to the curriculum, belonging, participation and achievement in the general classroom that will accommodate the educational needs of all learners. Dumping learners, particularly those in need of additional support or those with some sort of disability, in schools without providing them with the support they require will result in their academic and social exclusion and this will be a setback for IE. Nilcolm (2006) asserts that IE should be seen as a practice whereby all children attend the same classes and where everyone respects their right to participate in similar activities, to learn and to build relationships. In terms of participation, Sandkull (2005) adds that IE is an educational process of addressing and responding to the diverse learning needs of all learners, increasing participation and reducing exclusion.

South African researchers Engelbrecht and Green (2001) believe that IE is not about making special accommodations for learners with disabilities in a system designed for others, it is about designing education for all children in schools. It is also not placing a learner with learning difficulties in a regular school, and letting him work on a different task (Ainscow, 2000). Since no learner should be denied access to the curriculum on any grounds including disability, language of communication or learning difficulties (Engelbrecht, Oswald & Forlin, 2006), IE is grounded on the paradigm of human rights and social justice within the discourse of EFA (Miles & Ahuja, 2007). Engelbrecht (2006) as well as Lomofsky and Lazarus (2001) also point out that in South Africa, IE was introduced within the principles of democracy, namely human dignity, freedom and equality redressing previous deficiencies. Similarly, Walton (2011) asserts that the focus of IE in South Africa should be on perusing inequality and social justice through identification and elimination of impediments in all children so that they can access the curricula, facilities and culture of their local school. IE is therefore aligned to political and social issues related to human rights for all children (Reyner, 2007) with the belief that education is the basic human right and the foundation of more than just the society (Ainscow & Sandill, 2010).

Various authors use typologies and metaphors to describe the significance and implications of IE. For example, Ainscow, Booth and Dyson (2006) developed the following typology to define IE as:

- a concern with disabled students and other categories having special educational needs
- a response to disciplinary exclusion
- developing the school for all
- EFA
- a principle approach to education and society

Walton and Lloyd (2011), on the other hand, use metaphors to analyse the implications of IE in countries like South Africa by defining IE as a goal, a building, a process and as hospitality. There is a close link between these four metaphors. Based on the various factors at play in the South African context, IE is a goal that will not be realised soon. In the policy document of IE, a time-frame of 20 years was proposed for the implementation of IE in South Africa (DoE, 2001). More than 15 years after the proposed implementation trajectory, the South African education system still experiences persistent challenges that delay IE (DBE, 2015). One of the challenges relates to teachers' inability to differentiate the curriculum to eliminate learning barriers, despite the provision of various both pre- and in-service teacher-training programmes (Pasensie, 2012). Consequently, most learners with learning barriers are still unable to access quality education, which further demonstrates the dichotomy of exclusion in our schools.

According to Phasha (2016), IE practices are not new in Africa since they have always been embedded in the African way of life. In other words, IE has always existed among African communities, grounded on the ubuntu philosophy. The principle of ubuntu involves treating others with sensitivity, respect, and dignity, which resonates with the international and national framework of IE (Phasha, 2016). Taking into consideration the history of the South African education system, which was grounded in segregation, the system's transformation toward greater inclusiveness required various changes in order to accommodate all learners. A major change was the adoption of an inclusive policy, which required a plan, resources and instruments for monitoring the implementation process. This implied

that IE could not be implemented immediately; rather, it was a process that would ensure that all learners would finally be accommodated in one education system. IE implies hospitality, which in this case describes a place that welcomes diversity and addresses the learning needs of all learners. Johnstone (2010) therefore stipulates that in order for all learners to access the curriculum, the educational environment needs to be welcoming and accessible. In emphasising what IE is, Walton and Nel (2012) focus more on the whole-school approach by highlighting that IE is about the restructuring and improvement of the school system, gearing it for meeting the diverse needs of all learners with appropriate support.

The debate of what IE entails also features in other African countries. In Zimbabwe, for example, IE is informally about the identification or elimination of learning barriers and participation in settings such as schools, homes and other community locations (Mutepfa, Mpofu & Chakaita, 2007). In Nigeria, inclusion is regarded as a practice that mandates the education system to equalise educational opportunities for all learners, regardless of their physical, sensory, mental, psychological or emotional disabilities (Ajuwon, 2008). In Botswana, IE aims to ensure that:

- all learners have equal educational opportunities;
- all learners with special educational needs be socially integrated with their peers in ordinary schools;
- comprehensive assessment is done, followed by individualised instruction;
- early identification and intervention ensure the maximum success of the rehabilitation process;
- all children with special educational needs become productive members of the community;
- employment opportunities for learners with special needs is enhanced; and that
- support and active participation of the children's parents and community through an education and information programme is advocated (Abosi, 2000)

The Botswana policy shares sentiments with the South African approach on IE as regards early identification of learning barriers in all learners to ensure their access to education irrespective of the types of schools. Nakken and Pijl (2002) regard IE as an educational practice that facilitates interaction among all learners in schools,

including those with diverse learning needs. The authors base their views on findings from their study which indicates that most parents believe that interaction among learners who develop typically and those with learning barriers lead to the change in attitudes about diversity. Participation and learning of all learners within the same learning environment is further supported by Vygotsky's (1978) social constructivist theory, which states that knowledge is constructed through social influences and interactions within one's environment. In other words, children experiencing some sort of learning and participation barrier can understand and learn about the environment through interaction with other learners. In contrast, some authors reveal that not all learners with diverse needs experience positive effects in inclusive schools; some may experience negative effects such as bullying and exclusion (Hodson, Baddeley, Laycock & Williams, 2005).

Given the various definitions and explanations of how IE is conceptualised by the body of literature, it is clear that the understanding of this educational practice is context-based and therefore fabricated differently. For the purpose of this study, IE is viewed as an approach that caters for all learners regardless of their educational background, disability or any other form of condition that can negatively affect their development, learning and participation. It is also about having an educational system that welcomes diversity in all its educational settings, an educational system that has zero tolerance for exclusion and ensures that the various learning needs of all learners are met. I furthermore conceptualise the trajectory of IE in South Africa as gleaned from the literature study. This conceptualisation is illuminated by the following questions: What is IE? (Evans & Lunt, 2002); Who requires IE?; What is the rationale for IE?; What could be the benefits of IE in schools?; What aspects are required for the implementation of IE in schools? (Armstrong et al., 2010).

For the purpose of this study, I believe that the implementation of effective IE requires well-formulated policies, resources, a variety of structures and stakeholders such as trained teachers, accessible schools, parents who are involved in their children's education and support services. Figure 2.1 presents my conceptualisation of IE, based on questions asked by Evans and Lunt (2002) as well as Armstrong et al. (2010), namely for whom, why, by whom and how.

Figure 2.1: Conceptualising IE in South Africa

- Who is IE geared for?

Learners in South African schools are quite diverse in terms of language, place of origin, cultural practices, abilities, family backgrounds, socio-economic status and needs (Landsberg & Matthews, 2016). As a result, IE in South Africa is culturally and contextually driven for all learners in all educational settings. These settings include preschools, primary schools, secondary schools and higher institutions.

- Why was IE introduced?

In the past, learners who experienced learning barriers were denied access to schools because of negative beliefs and attitudes, lack of teachers' skills and knowledge on addressing the learning needs of all learners, lack of resources, lack of professional support, policies and legislation. The aim of IE in schools is to improve participation and educational opportunities for all learners (Walton, 2011).

Furthermore, IE eliminates learning barriers to ensure that all learners are provided with support to access curriculum and quality education. Lindsay (2003) postulates "it is championed as a means to remove barriers, improve outcomes and remove discrimination".

- Who is responsible for IE?

The rhetoric of IE demands that all stakeholders (Walton & Nel, 2012) such as the school management teams, school governing bodies, district-based support teams, school-based support teams (Geldenhuys & Wevers, 2013), parents, peers, community members and the teachers support and maintain quality education for all learners (DoE, 2001).

- How should IE be implemented?

Due to the diversity in South African schools, the implementation of IE is a question of ethos and attitudes; and IE is more than integration (Evans & Lunt, 2002). It requires the following: ubuntu which is an African philosophy that refers to humanness (Venter, 2004; Kamwangamalu, 2007); positive attitudes by teachers and other learners; collaboration between all stakeholders; quality teacher training and development; availability of teaching and learning resources; availability of professional support services; ability to differentiate the curriculum (Grant & Gillette, 2006).

2.3 UNDERSTANDING IE IN SOUTH AFRICA WITHIN BRONFENBRENNER'S ECOLOGICAL SYSTEMS THEORY

Like the international education systems of countries such as the UK (Evans & Lunt, 2002) and USA (Beukelman & Mirenda, 2009), South Africa's educational system has undergone intense changes in past years. One of the major transformations that took place was the introduction of the IE system, which appeared to be the key movement to respond to diversity and learning support among all learners in schools (Flem et al., 2004). Slee (2001) views IE as exhibiting a democratic education, stating that it is focused on the individual learner whose development and learning is indirectly or directly influenced by different systems within the child's environment.

Bronfenbrenner's ecological systems theory (1979) takes all systems within the developing child's context into account and is therefore the appropriate theoretical framework to understand the complexity of influences, interactions and interrelationships between the learner and the systems connected to him (Swart & Pettipher, 2011). Bronfenbrenner (1979) explains his theory by saying:

> "The ecology of human development involves the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by the relations between these settings and by the larger context in which the settings are embedded" (p. 21).

Bronfenbrenner's model focuses on the understanding of the relationships between the developing individual and the integrated, multi-level ecology of human development (Bronfenbrenner, 2005), which implies the developing person, the environment, and the reciprocal interaction between these two, which manifest in various systems. "This ecological environment is conceived as a set of nested structures, each contained inside the next like a set of Russian dolls" (Bronfenbrenner, 2005, p.50)

According to this theory, a range of contextual factors can influence human development and education. These factors can be the home or school or other contexts that represent the immediate setting of the developing child. For the purpose of this study, a learner in these settings "is a developing person who is viewed not merely as a tabula rasa on which the environment makes its impact, but a growing, dynamic entity that progressively moves into and restructures the milieu it resides" (Bronfenbrenner, 1979, p.21)

For the purpose of my study, these individuals are to be developed and educated within an IE system that will allow them to become future responsible adults in the society. However, various aspects and processes are required for this goal to be achieved, for example the acquisition of knowledge through the school curriculum, which is the focus of this study. The systems of the ecological systems theory represent various layers that play a crucial role towards the learner's development,

learning and participation. Nel, Nel and Hugo (2013) suggest that in the context of IE, Bronfenbrenner's theory is largely concerned with the understanding of complex influences, interactions and interrelationships between the learner and all other systems related to the learners' cognitive development. The theory avers that there are layers or levels of interacting systems resulting in change, growth and development. Bronfenbrenner (1994) reiterates that to understand human development, one must consider the entire ecological system in which growth occurs.

Bronfenbrenner's ecological systems theory (1979, 1994) can therefore be used as a tool to enhance understanding of the complexity of influences that affect the implementation of IE. By identifying the interrelationships between and within the systems, a better understanding of the scope of IE in South Africa can be gained. For the purpose of my study, the analysis and exploration of studies on the different aspects of these systems include: the evolution of IE; policies and legislation that informed the development of an IE policy; stakeholders in its implementation, learners' diversity and their subsequent learning support; and the curriculum in an inclusive setting. Figure 2.2 depicts how the structures of the model, namely the microsystem, mesosystem, exosystem, macrosystem (Bronfenbrenner, 1979) and the chronosystem (Bronfenbrenner, 1994) are presented in this study.

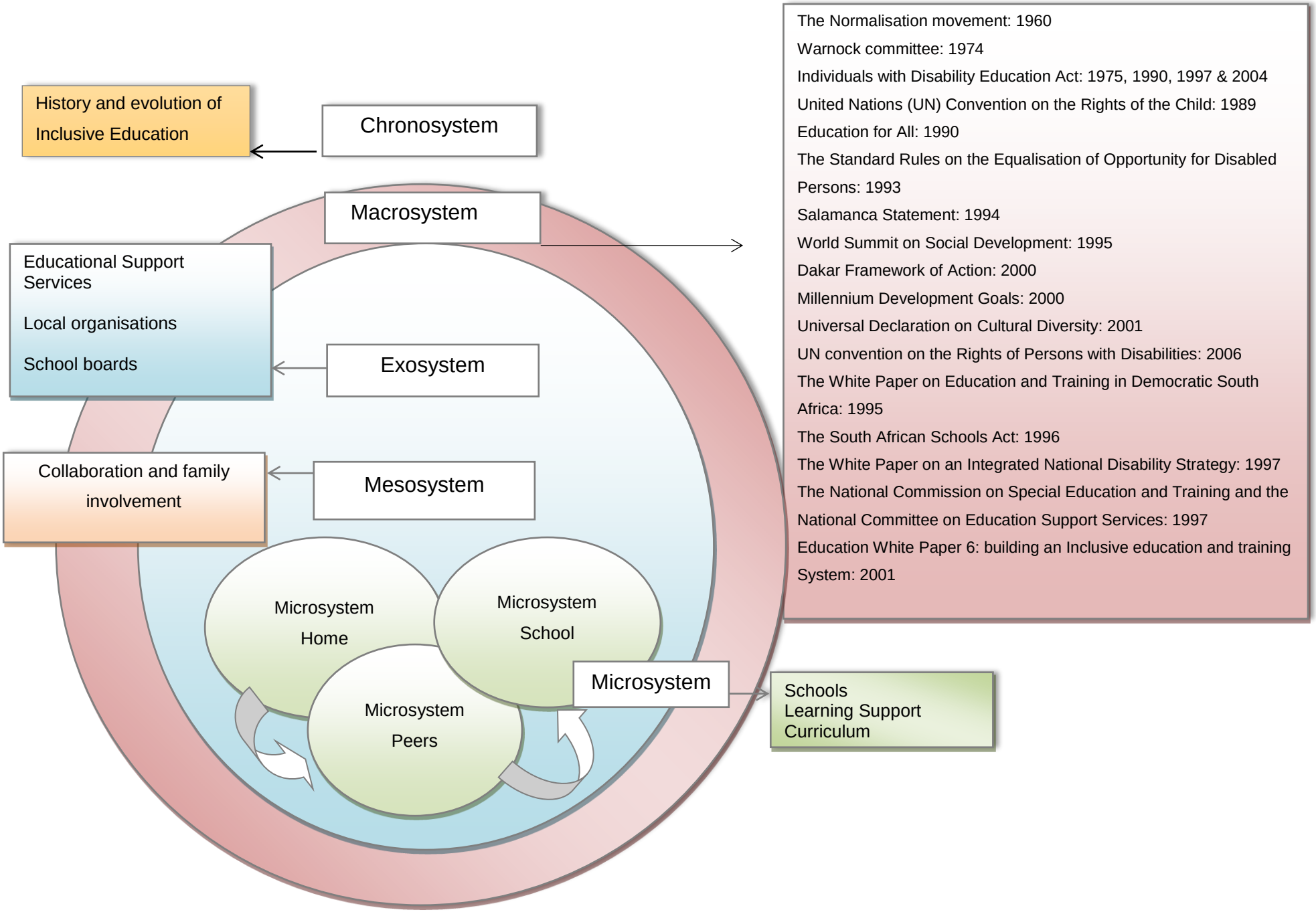

Figure 2.2: Variables in different systems that contribute to the development of IE in South Africa

Bronfenbrenner's ecological systems theory suggests that there are layers of interacting systems that result in transformation or change, growth and development. The analysis and discussion of different systems for this review of the literature range from the outer system towards the centre. The first outer level of the figure shows the chronosystem that represents the historic evolution of IE using international and national lenses. The second layer is the macrosystem, which captures larger social and political policies, legislation and movements influencing the development of IE.

The exosystem is discussed next, assisting in exploring aspects that are not directly involved in the implementation of IE, but nevertheless influence the development of IE. These include educational support services, local organisations and school boards. Then follows the mesosystem, which is characterised by the interaction between two or more settings within the microsystems such as the home and the school or the school and the peers. In this study, the mesosystem will comprise aspects related to collaboration between families and schools. The microsystems, dealing with aspects of the learners' immediate settings, form the last part of this literature review. It entails the microsystems of home, school and peers. The chronosystem forms the basis of the discussion, providing the background needed to understand IE from an international and national perspective.

2.3.1 The chronosystem

According to Elder (1998), historical forces shape the social trajectories of family, education and work and influence behaviour and particular lines of development. History and the concept of time are entrenched in the chronosystem, which Bronfenbrenner (1994) defines as time-frames over the life course of an individual in family structure, socio-economic statues, employment, places of residence or the degree of pressure and ability in everyday life, which have much to do with the impact of changing societies on developing lives. He furthermore regards the chronosystem as a transition over time, which often serves as a direct impetus for developmental change. Swart and Pettipher (2011) affirm that the chronosystem encapsulates the dimension of time, describing how it relates to the interaction between the systems and their influences on an individual's life.

To understand the concept of IE in the context of the South African education system, it is imperative to explore the transformation in the education domain over the past decade. This section of the literature study endeavours to outline the influences on the development of IE from international and national perspectives. It analyses international and national trends in special needs education, in which IE is rooted, by discussing the series of different practices that existed as well as the main issues that have arisen in the past years. As Reynolds and Birch (1982) point out, the whole history of education for exceptional students can be told in terms of one steady trend that can be described as progressive inclusion. Topping and Maloney (2005) concur, comparing IE with learning by stating that IE is a dynamic process, a journey and not a destination.

2.3.1.1 The roots of IE: An international and national perspective

Traditionally, learners who performed below or superior to the level of average children have been labelled as exceptional (Kauffman, 1981). The term “exceptional children” includes children who experience difficulties in learning as well as those whose performance is superior in the sense that modification in the curriculum and instructions are required to assist them to fulfil their potential (Heward, 2009). Educational provision for learners who were regarded as different in some or many areas of functioning was regarded as special needs education (Winzer, 1993).

Warnock (1978), in the report of the Committee of Enquiry into the Education of Handicapped Children and Young People, describes “special” as in special needs, as a means of access to the curriculum required by children with impairments of sensory or motor functioning, including visual, hearing, speech and physical disabilities. In the same report, the term “special educational needs” refers to an education system that caters for one or more of the following: special means of access to the curriculum through special equipment, resources; modification of the physical environment or specialised teaching techniques; the provision of a special or modified curriculum; and particular attention to the social structure and emotional climate in which education takes place (Warnock, 1978). According to Ainscow and Haile-Giorgis (1998) the traditional approach in the education of such learners was influenced by the Soviet science of “defectology”, which reflects the defects in a child

rather than in the environment. In other words, it defines children by their deficits, rather than by external factors. Kauffman (1981) asserts that special education originated in Europe in the nineteenth century and was later exported in the United States. In contrast, Warnock (1978) and Hodkinson and Vickerman (2009) point out that the first school for deaf children was established in Great Britain in the early 1760s, followed by a school for blind children that offered training in music and manual crafts, established in 1791, and education provision for children with physical handicaps in 1851. Table 2.1 outlines individuals who played a critical role in initiating special education in different areas.

Table 2.1: Initiators of special education (adapted from Kirk & Gallagher, 1983, p. 7)

Pioneer	Dates	Nationality	Major ideas on special education
Jean Marc Gaspard Itard	1775–1838	French	Training methods for children with mental retardation
Thomas Hopkins Gallaudet	1787–1851	American	Deaf children can learn to communicate by spelling and gesturing with fingers
Samuel Gridley Howe	1801–1876	American	Handicapped children can learn and should have organised education
Louis Braille	1809–1852	French	Blind children can learn through an alternative system of communication based on a code of raised dots
Alfred Strauss	1897–1957	German	Some children show unique patterns of learning disabilities that require special training and are probably due to brain injury

Children with special needs were educated in segregated environments such as state developmental centres and segregated schools (Donder & York, 1984). These educational programmes for learners with special needs were authorised by legislation without considering teaching relevant skills to teachers, administrators and supervisors (Grzynkowiaz, 1979). During the years from 1817, many states in America and in Europe established residential schools for deaf, blind, intellectually impaired and orphaned children (Kirk & Gallagher, 1983). Gradually, the

segregation of children in special schools became regarded as unacceptable as the system demonstrated social marginalisation and denial of opportunities for those who were viewed to be failures within the ordinary schools (Armstrong et al., 2010). In other industrialised countries, such schools for learners in need of additional support remained a subject of debate based on the appropriateness of having such a separate system from a human rights perspective and from the point of view of effectiveness (Ainscow & Haile-Giorgis 1998).

In 1954, the Supreme Court of the United States found the isolation of these children to be unconstitutional and mandated the closing down of separate schools that were based on differences among learners. Various court cases led to the closing down of many segregated schools. Some of them were reduced in size, and as a result most of the children gradually moved to self-contained or general schools (Meyer & Kishi, 1985). Rustemier (2002) supported the court's rulings in his publication entitled "Social and Educational Justice", which emphasised that segregated schooling demonstrated discrimination, was damaging to individuals and violated the rights of the child. Social integration and equal opportunities for learning and participation in such schools were therefore compromised.

In the early 20th century, around 1910, the British education system introduced the concept "integration", whereby children with special needs were placed in segregated classes in public schools (Winzer, 1993). Pijl and Meijer (1991) define "integration" as a collective noun for all attempts to avoid a segregated and isolated education for pupils with special educational needs, yet these children were still isolated in special classes. The notion of integration was emphasised in both developed and developing countries (O'Hanlon, 1995). In 1920, dissatisfaction with integrated classes was evident (Winzer, 1993), causing demands for more radical changes in the education systems in many countries (Slee, 1996). By the end of the 1980s, integration became synonymous with poor delivery and practice and a system that failed to address the needs of children in schools (Ainscow, 1995). In 1990, a paradigm shift in thinking from integration to inclusion took place in the United Kingdom and in other countries (Thomas & Vaughan, 2004) where the aim was to restructure schools and classrooms to respond to the needs of all children (Ainscow, 1995; 1998).

In 1994, the World Conference on Special Needs Education took place in Salamanca, Spain, where the Salamanca Statement was issued. The statement emphasised the urgent need for an educational policy shift from exclusion in education towards an IE programme that would adequately meet the learning needs of all children, youth and adults, especially those who were vulnerable to marginalisation (Ajuwon, 2008). The statement was signed by representatives from 92 governments and 25 international organisations (UNESCO, 1994). According to this framework, schools should accommodate all children in one education system regardless of their physical, intellectual, social, emotional, linguistic or other circumstances (UNESCO, 1994).

In South Africa, the education of children with complex educational needs reflected the trends in other countries. The history of the South African education system demonstrates that education of the majority of children was severely neglected (Engelbrecht, 2006) and characterised by separation and segregation (Walton, 2011), which was mainly based on race, language of communication, ethnicity, place of origin, socio-economic background, disabilities and cultural practices. In the early sixties, education of children regarded as having special needs was influenced by the American model, which categorised children according to the type of disability and placed them in special schools. Moreover, these schools were segregated along racial lines and mostly provided for white children (Lomofsky & Lazarus, 2001). Black learners received “Bantu Education”, which provided them with limited opportunities to acquire skills in mathematics and science (Asmal & James, 2001). Walton and Lloyd (2011) stated that a well-resourced special education system catered only for white learners, while black learners who needed extra support did not attend school or attended schools with no learning support. As a result, special needs education was rooted not only by the apartheid principles that imposed segregation along racial lines, but by legislation and policy that separated “ordinary” learners from learners categorised as having “special needs” (Muthukrishna & Schoeman, 2010). The institutionalisation of apartheid laws in every aspect of South African life after the apartheid government came into power in 1948 had a particularly significant impact on learners who needed additional support (Engelbrecht, 2006). In education, apartheid education policies perpetuated white supremacy by giving white learners a better quality education than that given to

other races, which resulted in educational disparity and inequality (Engelbrecht et al., 2006). This disparity has affected further education and employment opportunities for most of the black learners in South Africa.

According to Swart and Pettipher (2011), support services were also allocated along racial lines, namely schools for white, coloured and Indian children. Swart and Pettipher (2011) add that learners experiencing learning barriers were not only segregated based on their racial status, but also by policy and legislation, which allocated learners without learning problems to mainstream schools while learners identified as having "special needs" had to be educated in special schools. In 1996, the then minister of education in South Africa, Professor Kader Asmal, appointed the National Commission on Special Needs and Training (NCSNET) and the National Committee for Education Support Services (NCESS) to investigate the delivery of education for children with special needs in South Africa (DoE, 2001). The dominant findings from the two bodies included (DoE, 2001):

- Specialised education and support have predominantly been provided for a small percentage of learners with disabilities within special schools and classes.
- Specialised education and support were provided on a racial basis, with the best human and physical and material resources reserved for whites.
- Most learners with disability have either fallen outside of the system or been "mainstreamed by default".
- The curriculum and education system as a whole have generally failed to respond to the diverse needs of the learner population, resulting in massive number dropouts, push-outs and failures.
- While some attention has been given to the schooling phase with regard to "special needs and support, the other levels or brands of education have been seriously neglected".

NCSNET and NCESS further identified the following factors as learning barriers for most South African children: an education structure that does not respond to diversity among learners; socio-economic factors such as crime that can prevent children from accessing schools; the HIV/AIDS epidemic; teachers' attitudes; an inflexible curriculum; an inaccessible and unsafe learning environment; inappropriate

and inadequate policies; inappropriate language of learning and teaching; inadequate support services; a lack of parental involvement and inadequately and inappropriately trained education managers and teachers (DoE, 1997). After 1994, when the first democratic government in South Africa came into power, one of the first responsibilities of the new government was to transform the general education system, previously determined by the apartheid laws, into one unitary, non-racial system (Lomofsky & Lazarus, 2001) to ensure equal delivery of quality education for all learners. The introduction of the IE policy in 2001 (DoE, 2001) played a significant role, discussed in more detail as part of the macrosystem. The South African government has since been committed to transforming educational policy to address the imbalances and neglect of the past and to bring the country in line with international standards of recognition of human rights (Muthukrishna & Schoeman, 2010).

Based on the literature reviewed within the chronosystem, it becomes clear that the concept of IE is far from new and has its origins in the field of special needs education and integration. It is also evident that there were pioneers who explored ways of amending exclusion practices in education and became influential towards provision of education to learners with various educational needs. It coincided with the rise of the international and national civil movements that questioned segregated and integrated education systems, gave voice to, and mandated the development of IE in all countries, including South Africa.

2.3.2 The macrosystem

The macrosystem consists of the belief systems, bodies of knowledge, material resources, lifestyles, opportunity structures, hazards and life course options embedded in each of these broader systems (Bronfenbrenner, 1994). Lerner (2005) further points out that the macrosystem includes the superordinate levels of the ecology of human development that involve macro-institutions and public policies. According to Reyner (2007), the first step in exploring educational policies is to consider the influence and history of knowledge that is context-relevant. Therefore, the macrosystem in this study addresses some of the key influences, such as

international and national policies, legislation and movements that shaped the provision of IE globally and in South Africa.

2.3.2.1 International policies, legislation and movements that played a key role in IE

After many years in which children experiencing learning barriers were excluded, policies, legislation and movements emerged with the aim of eliminating discrimination and readdressing equality (see Table 2.2). Pijl (2010) believe that in some countries IE has been initiated by parents of children with disabilities. On the other hand, Khatleli, Mariga, Phachaka and Stubbs (1995) maintain that the education of children with diverse learning needs was initiated by countries' disability movements and later joined by parents' organisations. Reactiveness and the participation of parents in initiating inclusion became a mechanism to reduce their frustration, caused by their children's segregation from access to learning. Armstrong et al. (2010) assert that in the UK, the development of IE was influenced by ideas for a fair society that mandated the abolition of the system that discriminated against learners experiencing learning barriers in schools. The shift to abolishing isolating policies in the UK and in other countries was intended to honour each individual as a valued member of society and also to maintain human dignity for all.

Table 2.2: International policies, legislation and movements mandating the elimination of exclusion

The Normalisation movement
Warnock Committee
Individuals with Disabilities Education Act (IDEA)
United Nations (UN) Convention on the Rights of the Child
Education for All
The Standard Rules on the Equalisation of Opportunities for Disabled Persons
Salamanca Statement
World Summit on Social Development
Dakar Framework of Action

Universal Declaration on Cultural Diversity
UN Convention on the Rights of Persons with Disabilities

From the literature, it is evident that all these policies, legislation and movements had a major influence on the evolution and development of IE internationally. Table 2.2 shows that IE is not a recent phenomenon. It began to emerge as early as 1960 and has since been driven by countless legal measures, policies and movements. To understand the evolution and development of IE, the ideologies, perceptions and influence on IE of the policies listed in Table 2.2 are examined.

(i) Normalisation movement

The Normalisation movement, spearheaded by the Swedish scholar Bengt Nirje, originated in Scandinavia in 1960 (Culham & Nind, 2003). Deiner (2010) regards it as one of the driving forces of social and educational policies that stipulated that children who required special services should not be isolated from normal life experiences such as education. In Parmenter's (2001) opinion, the movement is the most significant event of the era in the context of life changes for persons with diverse abilities. Normalisation focuses on commonalities between children rather than their differences in abilities and suggests that the aims of education should be the same for all children, where all have the right to equal access to participation in society (Hodkinson & Vickerman, 2009). Since normalisation dictates the elimination of separate institutions and mandates the provision of equal opportunities for all children in all community settings such as schools for all children (Salend, 2011), Carr, Dunlap, Horner, Koegel, Turnbull, Sailor, Anderson, Albin, Koegel and Fox (2002) believe that the principle of normalisation leads to the inclusion of all people in all natural settings. In the South African context these natural settings refer to playgroups, community churches, schools, ECD centres and employment sites. Culham and Nind (2003) further add that normalisation and inclusion have in common a suggestion of a new beginning in how services and education should be provided to all children, including those with disabilities.

(ii) Warnock report

Margaret Thatcher, the then minister of education in the UK, appointed the Warnock committee in 1973, to investigate special education in England, Scotland and Wales (Reyner, 2007). One of the major findings of the committee's third report on special educational needs was that there was an urgent need for the government to review special needs education policies, particularly the concept of inclusion − to gain an understanding of the link between social disadvantage and special needs education. The report further stated that socially deprived children tended to have more educational difficulties. Some of the recommendations made by this committee included the elimination of categories such as schools for blind, delicate or socially maladjusted children (Johnstone, 2010), and that children's special needs should be identified and where possible met within ordinary mainstream schools (Hodkinson & Vickerman, 2009).

Although the Warnock report was criticised for its recommendation of integration in mainstream schools, Thomas and Vaughan (2004) believe that it had a major influence on the national thinking on how special education should change. The report radically changed the conceptualisation of special educational needs, introducing the notion of special educational needs to integration, which later became known as the "inclusive" approach, based on common educational goals for all children regardless of their abilities or disabilities, namely independence and enjoyment. Since the publication of the Warnock report, various acts and legislation have been changed to include all children in a common education framework

(iii) The Individuals with Disabilities Education Act

The Individuals with Disabilities Education Act (IDEA) was passed in the USA in 1975 and amended numerous times since in 1990, 1997 and 2004 (Wade & Zone, 2000). In line with the Normalisation movement, the IDEA legislation mandated free and appropriate education for all learners including those experiencing learning difficulties. IDEA advocated six principles: zero reject, non-discriminatory evaluation, free and appropriate education, procedural due process ,collaboration with family and finally student participation during decision-making (Salend, 2011). Since IDEA

was passed, several movements and acts about appropriate education of children experiencing learning barriers emerged.

(iv) The UN Convention on the Rights of the Child

The UN Convention on the Rights of the Child has also contributed towards the development of IE (Ainscow, Farrell & Tweddle, 2000), in particular Article 2, which declares:

> "State parties shall respect and ensure that the rights set forth in the present Convention to each child within their jurisdiction without discrimination of any kind irrespective of the child's or his or her parent's or legal guardian's race, color, sex, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status" (UNICEF, 1989, p.500)

To ensure that equal access to education becomes a reality, Article 28 of the Convention also instructs that primary education must be compulsory and free for all children (UNICEF, 1989) regardless of their diversity in terms of their learning.

In December 1993 the UN Standard Rules on the Equalisation of Opportunities for Persons with Disabilities saw the light, underpinned by the UN International Year of Disabled Persons (Mittler, 2000). The Standard Rules "calls for all countries to have a clearly stated policy to IE that is understood in schools that accommodates learning needs for all the children by providing the following: a flexible curriculum as well as additional adaptations; quality materials, on-going teacher training and teacher's support" (Thomas & Vaughan, 2004. p.139). In relation to education, Rule 6 of this organisation is significant (Hodkinson & Vickerman, 2009) as it charges states to recognise the principle of equal educational opportunities for children with disabilities in an integrated setting (Armstrong et al., 2010).

(v) Education For All Declaration

In March 1990, the First World Education Forum was held in Jomtien, Thailand, and participants in this conference consisted of the UN agencies, Ministries of education and officials from 155 governments and 1 500 delegates from non-governmental organisations (Chabbott, 2013). The aim of the forum was to ensure that every child

obtains access to quality education, because an increasing number of countries were acknowledging that large numbers of marginalised children were still excluded from the education system (Miles & Singal, 2010). The forum made a public commitment to the Education for All Declaration to meet the basic learning needs of all learners in school (Mittler, 2000). According to Peters (2007), EFA reaffirmed the notion of education as a fundamental human right for all children. Furthermore, the delegates approved a Framework for Action that provided targets and strategies for addressing the basic learning needs of all as an investment in the future. EFA targeted the basic learning needs for every child in ensuring quality education and there was a significant emphasis on inclusivity in schools. Although the concept of IE was not used during that time, this conference was a landmark in the thinking about and development of IE.

(vi) Salamanca Statement

The major movement towards IE took place in 1994 in Salamanca, Spain. Representatives of 92 governments and 25 international organisations attended the conference and all agreed to advocate for educating all learners in regular schools within an inclusive orientation (UNESCO, 1994). The Salamanca Statement on Principles, Policy and Practices in Special Needs Education affirmed the adoption of inclusivity in regular schools as follows:

> "regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all, moreover they provide an effective education to the majority of children and improve their efficiency and ultimately the cost-effectiveness of the entire education system" (UNESCO, 1994, p. ix)

According to Peters (2007), the Salamanca Statement conceived IE with the following assumptions: Learners come to school with diverse needs and abilities and it is the responsibility of the education system to be responsive to all learners; the academic curriculum and instruction should be flexible and relevant, an accessible environment should be created, and teachers should be equipped to address the educational needs of all learners; and lastly, progress in general education is a

process evidenced by schools and communities working together to create citizens for an inclusive society who are educated to enjoy the full benefits, rights, and experiences of societal life.

The Statement also argues that regular schools with an inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society, and achieving education for all (Thomas & Vaughan, 2004). Mittler (2000) points out that the significance of the Salamanca Statement is that it succeeded in reminding the governments that children experiencing difficulties and disabilities must be included in EFA, and that children with learning difficulties should now be seen as part of a larger group of the world's children who were previously denied their right to education. Moreover, it clarified the philosophy and practice of inclusion. In addressing diversity in schools, the Salamanca Statement further recognised the uniqueness of each child and their fundamental rights to education and declared that "every child has fundamental right to education and must be given an opportunity to achieve and maintain an acceptable level of learning" (UNESCO, 1994, p.viii)

(vii) World Summit for Social Development

In March 1995, world leaders and the representatives of various non-governmental organisations (NGOs), mainly organisations for disabled persons, attended the World Summit for Social Development in Copenhagen, Denmark (Mittler, 2000). Participants of this summit made a triple pledge to fostering social integration overriding objectives of development and eradication of poverty as well as unemployment (Mittler, 2000), which I regard as the predominant factors that hinder access to curriculum and development, particularly in countries like South Africa. The agreement, which closely relates to IE, is Commitment 6(f) committed in ensuring: equal educational opportunities for people, which include children, youth and adults with disabilities, in integrated settings, taking full account of individual differences and situations (UN, 1995).

(viii) The Dakar Framework of Action

In April 2000, 1 100 delegates from 180 countries attended the World Education Forum in Dakar, Senegal (UNESCO, 2000). The aim of the forum was to assess

progress in measures taken based on the World Education Forum on EFA which took place in Jomtien, Thailand in 1990 (Sperling, 2001). The forum's aim was to analyse why the goal of EFA remained elusive, and to renew commitments to turn this vision into a reality (UNESCO, 2000). The Dakar Framework of Action again identified IE as a key strategy to address marginalisation and exclusion in relation to the Millennium Development Goals (Peters, 2007). The forum extended the Salamanca Statement by adopting Goal 3 and 6 of EFA, which aimed at:

> "Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes. Improving every aspect of the quality of education, and ensuring their excellence so that recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills" (UNESCO, 2000, p.16)

The framework also included the concept of IE as a mandate to provide the right to education for all the children regardless of their background, attainment or disability (UNESCO, 2000)

(ix) Universal Declaration on Cultural Diversity

In November 2001, two months after the attack on the World Trade Center in the USA, the Universal Declaration on Cultural Diversity was adopted by the 185 member states of UNESCO representatives which took place at a general conference in Paris. The aim of the declaration was to support peace worldwide, preserve cultural diversity as a process of assuring the survival of humanity; and to prevent discrimination (UNESCO, 2002) in all settings of human participation, including schools. In addressing the policy of IE and participation for all, article 2 of the Convention maintains that:

> "In our increasingly diverse societies, it is essential to ensure harmonious interaction among people and groups with plural, varied and dynamic cultural identities as well as their willingness to live together. Policies for the inclusion and participation of all citizens are guarantees of social cohesion, the vitality of civil society and peace. Thus, defined, cultural pluralism gives policy expression to the reality of cultural diversity. In dissociable from a democratic

framework, cultural pluralism is conducive to cultural exchange and to the flourishing of creative capacities that sustain public life" (UNESCO, 2002, p.4)

Gay (2010) defines cultural diversity as "the common heritage of humanity" which is embodied in the uniqueness and variety of the identities of the groups and societies making up humankind. These include diversity based on individual characteristics, social characteristics and cultural characteristics (Armstrong et al., 2010).

Immigration of families from neighbouring countries such as Zimbabwe, Mozambique, Nigeria, Ghana and Lesotho has caused a steep increase in cultural diversity in South African schools. It is therefore fundamental that all schools adopt the IE approach, which celebrates cultural diversity in the learner population and furthermore ensures that all the learners are provided with equal learning opportunities.

(xi) UN Convention on the Rights of Persons with Disabilities

The UN Convention on the Rights of Persons with Disabilities was adopted by the United Nations General Assembly on 13 December 2006 (Hendricks, 2007). The Convention came into effect in 2008 and serves as one of the key international legally binding human rights instruments of the UN (Armstrong et al., 2010). Article 24 of the Convention mandates governments to recognise the rights of disabled people to good quality basic education, ensuring an IE system at all levels and lifelong learning (Chataika et al., 2012). It should be noted that provision of quality education for people with disabilities has been part of debates for many decades; however, this trajectory encountered several challenges such as initiating the paradigm shift from exclusion to inclusion, making schools accessible for learners with disabilities and again ensuring accessibility of support services to such learners.

2.3.2.2 South African policies, legislation and movements towards IE

During the past years, in South Africa's quest to implement IE, international policies such as the Salamanca Statement (UNESCO, 1994) were consulted to enable access to quality education for all children. In aligning itself to international standards, the South African government reformed its overall education system, making significant attempts to address previous educational imbalances

(Engelbrecht & Green, 2001). The South African government transformed the educational system within a framework of social justice, quality, equality and human rights and influenced by various national policies, legislation and movements, presented in Table 2.3. Starting in the 1990s, these policies aimed to address segregation and discrimination in children experiencing learning barriers in schools.

Table 2.3: Policies, legislation, and committees towards IE in South Africa

The White Paper on Education and Training in Democratic South Africa
The South African Schools Act
The White Paper on an Integrated National Disability Strategy
The National Commission on Special Education and Training and the National Committee on Education Support Services
Education White Paper 6: Building an Inclusive Education and Training System

These policies, legislation, and committees will now be discussed in more detail:

(i) The White Paper on Education and Training in Democratic South Africa

In February 1995, the South African Department of Education published the White Paper on Education and Training in Democratic South Africa, developed in consultation with stakeholders such as teachers and other educators, learners, parents, religious and other community leaders, education and training NGOs, and officials in the education departments charged with educational transformation (DoE, 1995).

Mestry and Ndhlovu (2014) identify open access to quality education and redress of educational inequalities as the main themes of this policy document. In addressing the issue of inequality, the white paper (DoE, 1995) committed itself to improving quality, equity, productivity and efficiency as one of its strategic plans on education transformation (DoE, 1995). The white paper subscribed to the value and principles of the Education and Training Policy, and drew attention to education and training as the basic human right (DoE, 1995).

(ii) The South African Schools Act

The South African Schools Act (SASA) (DoE, 1996) embodies the principle of IE by asserting the rights of all learners to equal access to basic and quality education (Green, 2001). Lomofksy and Lazarus (2001) state that this legislation demonstrates the elimination of exclusion. Engelbrecht et al. (2006) further maintain that SASA endorses the right to access to education for all learners without discrimination and that no child may be denied access to any school on the grounds of disability, language or learning difficulties. In SASA, the Minister of Education also instructed the following: free compulsory education for the first seven years of schooling for all learners irrespective of their socio-economic background and again respecting the rights and wishes of the parents towards the school placement of their children (DoE, 1996).

(iii) The White Paper on an Integrated National Disability Strategy

The white paper was published by the Office on the Status of Disabled People. Its objective was to guide the government with respect to inclusion of people with disabilities in all legislation, policies, and programmes (Yeo & Moore, 2003). The White Paper on an Integrated National Disability Strategy (DoE,1997) was developed within the Bill of Rights in South Africa's Constitution and was further informed by the findings of the National Commission on Special Education and Training and the National Committee on Education Support Services (DoE,1997). The aim of the white paper was to promote and protect the rights of people with disabilities. Formerly, the issues of disabled people were addressed from a medical deficit model in which disability was regarded as a welfare matter. The white paper called for a change in strategies to a social model for disability based on the premise that society must change to accommodate and address the diverse needs of all its people, including children (Lomofsky & Lazarus, 2001).

(iv) The National Commission on Special Education and Training and the National Committee on Education Support Services

The National Commission on Special Education and Training (NCSET) and the National Committee on Education Support Services (NCESS) (DoE,1997) recommended in their reports that the South African education system must foster

education for all, by promoting and nurturing the development of IE and enabling equal participation for all learners (DoE, 1997). The NCSET emphasised that a paradigm shift had to be made from a focus on special needs to identifying and addressing barriers to learning and participation (Muthukrishna, 2001). To provide quality education for all South African children, the report further proposed a number of approaches. They included developing an integrated system of education, infusing special needs and support services throughout the system and pursuing the holistic development of centres of learning to ensure a barrier-free physical environment and a supportive psycho-social learning environment. Moreover, the curriculum had to be flexible to ensure access for all learners. Promoting the rights and responsibilities of parents, educators and learners was essential. Effective developmental programmes for educators, support personnel and human resources were essential, together with fostering holistic and integrated support provision through inter-sectoral collaboration. Finally, a community-based support system and funding strategies had to be developed to ensure redress for historically disadvantaged institutions (DoE, 2001)

(v) Education White Paper 6: Building an Inclusive Education and Training System

In responding to the joint report of the NCSNET and the NCESS (DoE,1997), the ministry of education published Education White Paper 6: Building an Inclusive Education and Training System (DoE, 2001) in July 2001 with the aim of transforming the education system to be more democratic and inclusive (Engelbrecht et al., 2006). According to Howell and Lazarus (2003), the white paper provides a framework for systematic change, building an education system that will respond to the learning barriers experienced by most South African children. It is one of the key educational policies in the transformation of the South African education system towards inclusivity. The Department of Education committed itself to providing educational opportunities to all learners, in particular those experiencing learning barriers (DoE, 2001). Bronfenbrenner's ecological systems theory (1979) therefore identifies not only the environmental factors that can affect the learner's learning and development, but also the characteristics of the developing person (Bronfenbrenner, 1979). To establish IE and training system, the white paper endorses the following principles (DoE, 2001):

- Each child has his own strengths and abilities.
- All children can learn and all children need support, regardless of their differences in age, gender, ethnicity, language and disability.
- Education structures, systems and learning methodologies must meet the needs of all learners.
- Everyone needs to acknowledge and respect differences among learners.
- Learning does not only occur in formal settings, but also in informal settings such as in the home and community.
- Attitudes, behaviour and methods need to change to meet the needs of all learners.
- Maximising participation of all learners and minimising barriers to learning are essential in all schools.

The white paper (DoE, 2001) further envisages the following initiatives that will enable the education system to become more inclusive:

- Introducing an inclusion model to school management teams, governing bodies and professional staff at mainstream schools, for early identification of learning barriers and intervention in the foundation and intermediate phases.
- Mobilising large numbers of out-of-school learners and youth into schools. These learners include those with disabilities and those who are vulnerable due to other forms of conditions.
- Converting primary schools into full-service or inclusive schools which will accommodate the learning needs of learners in need of moderate levels of support.
- Establishing district-based support teams that will provide professional support to the designated schools. These teams should comprise curriculum experts, IE officials, psychologists, therapists, social workers, learning support educators, school governance and management officials as well as circuit managers and infrastructure officials.
- Launching an advocacy and information programme in support of the inclusion model, focusing on the roles, responsibilities and rights of all learning institutions, parents and local communities, highlighting the focal programmes and reporting on their progress.

- ❖ Transforming special schools into resource centres geared towards providing support to learners in need of intensive educational support.

In ensuring that IE becomes a reality, the South African education system further developed guidelines (Table 2.4) that inform the roles of different stakeholders on addressing learning barriers and supporting all children in schools.

Table 2.4: Guidelines for the implementation of IE in South Africa

Guideline document	Focus of the guideline
Guidelines for Inclusive Learning Programme	Provides guidelines to teachers on how to develop inclusive learning programmes that are flexible for all learners (DoE, 2005)
Conceptual and Operational Guidelines for Full-service Schools	Provides guidelines on the operation of full-service schools on providing quality education to all the children (DoE, 2005, 2010)
Conceptual and Operational Guidelines for District-based Support Teams	Reveals the roles and responsibilities of the district-based support teams for the purpose of the implementation of IE (DoE, 2005)
Guidelines to Ensure Quality Education and Support in Special Schools and Special Schools as Resource Centres	Provides guidelines and strengthens special schools for effectively supporting learners in need of a high level of support (DoE, 2007).
The National Strategy on Screening, Identification, Assessment and Support: School pack	Provides guidelines on how to screen, identify, assess and support learners experiencing learning barriers in schools and in early development centres (DoE, 2008).
Guidelines for Inclusive Teaching and Learning	Provides guidelines on the understanding of various learning barriers experienced by learners in school, and how to address those barriers (DoE, 2010).
Guidelines for Full-service Schools	Provides a practical framework for education settings to become inclusive: accommodating diversity, whole school development, collaboration, professional development, support provision, evaluation of learners' need support, inclusive curriculum, flexible teaching and inclusive classroom practice, support on behaviour, physical, material resources and transport, family and community networks and participation in the district support network (DoE, 2010).
ACTION PLAN TO 2014: Towards the Realisation of Schooling 2025	Provides information about the government's plans on developing better schooling for all learners (DoE, 2010).

Guideline document	Focus of the guideline
Guidelines for Responding to Learner Diversity in the Classroom	Provides teachers, principals, subject advisers, administrators, school governors and other personnel guidelines on how to respond to the diverse needs of learners in school and in the classroom (DBE, 2011).

Despite the many strategies and guidelines developed by the Department of Education, the South African education system still experiences some challenges to implement IE. These challenges include lack of skill and expertise in teachers and members of district-based support teams in minimising barriers experienced by most learners in schools, the negative attitudes of teachers towards inclusion of learners with disabilities in mainstream schools and a lack of funding for converting ordinary primary schools into full-service schools (Walton & Nel, 2012). Although most of the schools experience challenges in the implementation of IE, Walton (2011) found that some of the public and independent schools were willing and committed to implementing IE. These schools are managed by principals and school management teams who are committed in reducing exclusion on the basis of socio-economic status, different learning needs, language differences and culture; school managers who mobilise human, technical and monetary resources to support full inclusion efforts (Walton, 2011).

In addressing barriers towards the implementation of IE in South Africa, the focus should be on improving the quality of teaching in inclusive schools. The number of full-service schools must increase, with at least one teacher trained in the identification and provision of support to learners with special needs. Members of school-based support teams must be functioning. In addition to the initiatives announced by the Department of Education, Walton (2011) points out that for South African schools to be inclusive, classroom teachers have to be trained, parents' involvement is vital, schools must share resources, and networking with government departments and the NGOs and the universities is critical.

IE in South Africa is now in the 16th year of its proposed 20-year implementation trajectory. Considering the abovementioned prerequisites, it is obvious that despite intense advocacy and development of numerous strategies, progress remains a

challenge. According to the report on the Implementation of Education White Paper 6 on IE 2013-2015:

> "An estimated 400 000 vulnerable children (including children with disabilities) are currently out-of-school and do not have access to quality education and support. The main reason is that they are not identified early enough and also do not have access to support services that will ensure that they are admitted to school and supported in school once they are admitted" (DBE, 2013, p. 52)

The success of the education system in the provision of quality education for all its learners requires extraordinary efforts from all the stakeholders. The degree of change towards IE is remarkable considering the journey it embarked on at the macro-level. The above discussion makes it clear that the development of IE is considered fundamental for the elimination of inequality and discrimination in all countries. Although the approaches in each policy and movements differ, the main purpose is to ensure access to quality education and elimination of segregation in all schools. For example, the Normalisation movement (1960) mandated the elimination of separate institutions. It was followed by the Warnock commission's report (1974) that supported an integration approach. Although the Warnock report was widely criticised, it opened an extensive debate that led to the development of IE worldwide. Since then, the international and national organisations embarked on a journey towards the elimination of social and educational discrimination based on race, gender, socio-economic status, languages and abilities.

2.3.3 The exosystem

This section examines aspects of the exosystem, which comprises the third level of the ecological model. According to Bronfenbrenner (1979) the exosystem consists of influences or events that influence the microsystem, but occurs in settings that do not include microsystem members. It is a system that do not involve the developing person as an active participant, but in which events occur that affect or are affected by what happens in the setting containing the developing person. He further posits that the development of a child is affected not only by what happens in the environments in which children spend most of their time, but also in other settings to which they have limited access (Bronfenbrenner 1979). Such settings and events

may include the parent's workplace, parent's circle of friends and their social networks as well as the activities of the local school board (Bronfenbrennner, 1976). Swart and Pettipher (2016) add social services, the education system and local health care services as other aspects of the exosystem. In this study, the settings and events that do not involve the learner as an active participant fall into three categories, namely educational services, local organisations and local school boards (Bronfenbrenner, 1986). The adapted variables of IE in the exosystem are diagrammatically presented in Figure 2.3.

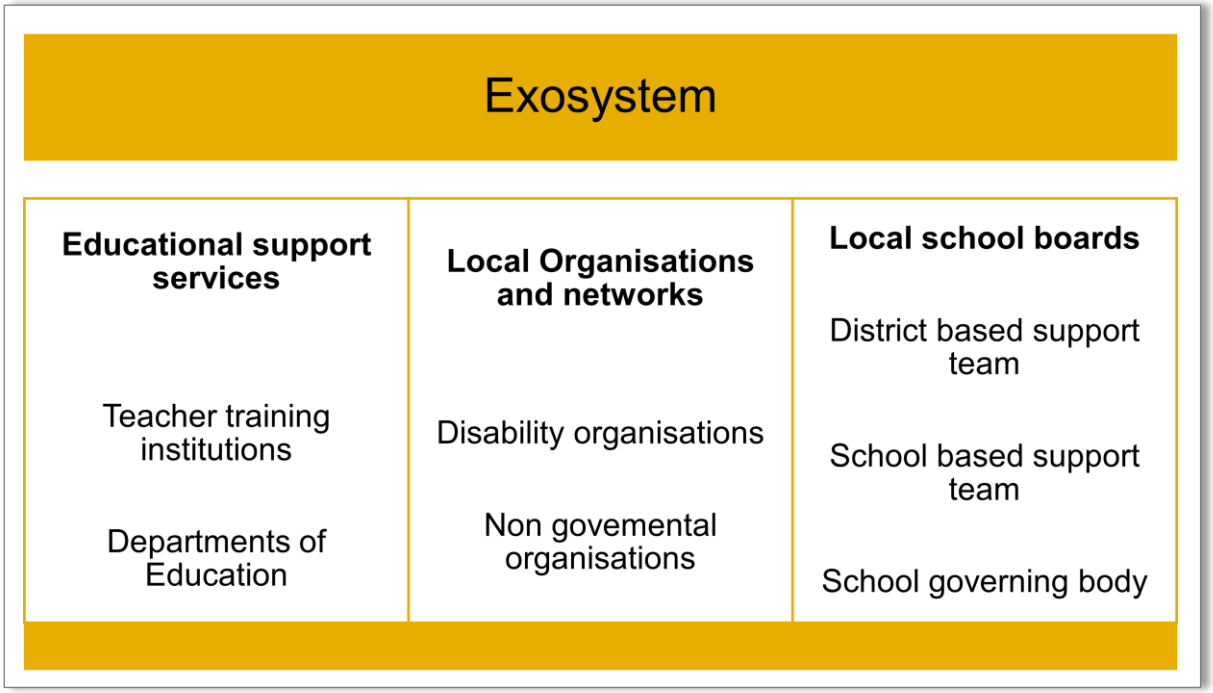

Figure 2.3: Adapted variables of IE within exosystem of the ecological model

2.3.3.1 Educational services

A traditional adage says, "it takes a village to raise a child" (De Witt, 2016.p.264). It is a relevant saying in the current study, implying the presence of various bodies including educational services that play essential roles in the delivery of quality education for all learners in all schools. These role players evolve from the systems where teachers are generated and produced to the organisations that are in control of the provision of schooling and quality education for learners in an entire state, country or society. Educational services that are discussed in this part of my chapter include teacher training institutions and the support services at departmental level and in schools.

2.3.3.1.1 Teacher training

The importance of professional development for a broad understanding and implementation of IE in schools should not be underestimated (Armstrong et al., 2010). The South African report on the implementation of IE (2013-2015) contends that the failure of the education system to improve the quality of teaching and learning in schools can only be addressed if teachers acquire the skills required to teach learners with diverse learning needs (DBE, 2015). Several studies have been conducted and documents produced on the role of teacher training for preparing teachers who will ensure inclusion of learners with diverse educational needs in their schools (Grant & Gillette, 2006; Horne & Timmons, 2009; Forlin, 2010). According to Hawkins (2009), the purpose of such teacher training is to provide teachers with the skills and dispositions to meet learners' diverse abilities and background knowledge effectively. The 48th session of UNESCO's international conference in 2008, "IE: The way of the future" concluded with the delegates recommending that teacher training institutions should:

> "Train teachers by equipping them with the appropriate skills and materials to teach diverse learner population and meet the diverse needs of different categories of learners through methods such as professional development at the school level, pre-service training about inclusion, and instruction attentive to the development and strengths of the individual learner,….. support the strategic role of tertiary education in the pre-service and professional training of teachers on IE practices through inter alia, the provision of resources,…….. encourage innovative research in teaching and learning processes related to IE" (UNESCO, 2008, p.5)

Horne and Timmons (2009) suggest that without suitable training, teachers cannot do their best for learners in schools. In addition, various researchers have found that one of the challenges faced by many countries is the lack of teachers who are prepared to teach in inclusive schools (Florian & Rouse, 2010; Sharma, Forlin, Deppeler, Yang, 2013). To ensure that teacher training institutions produce teachers who will be able to meet the learning needs of all learners in schools, Armstrong et al. (2010) state that teacher-training institutions should ensure that the dichotomy between regular and special education is eliminated. It implies that successful IE

requires newly qualified teachers to have a basic understanding of inclusive teaching (Mittler, 2000). Furthermore, the European Agency for Development in Special Needs Education (2011) also emphasises the need for teachers who are equipped to not only provide quality learning opportunities for all, but also education for an inclusive society. Training and preparing teachers therefore are one of the key issues for realising an IE system in which teachers can differentiate the curriculum to meet the learning needs of their learners.

Fisher, Frey and Thousand (2003) have identified the skills that teachers need for effective implementation of IE. These skills include knowledge and understanding of collaborative teaming, curriculum differentiation, understanding and use of assistive technology, positive behaviour support, and content instruction. Winter and O'Raw (2010) add that teachers need to be competent and confident in their ability to teach all learners, regardless of their learning abilities. Therefore, both pre- and post-service teacher training is fundamental to developing the skills to teach successfully in inclusive settings. In addition, teachers need a common vision, language and set of instructional and technical skills to work with the needs of diverse learners (Swart & Pettipher, 2016). They need to be able to differentiate the curriculum and their pedagogy (Forlin, 2010), which is the key focus of this study. As a result, professionals and the institutions that produce such teachers must ensure that they provide them with optimal training and experience about curriculum differentiation during their teaching.

Numerous studies have to date investigated teacher training in IE worldwide (Forlin & Hopewell, 2006; Gash, 2006; Grand & Gillette, 2006; Stella, Forlin & Lan, 2007; Forlin, 2010). In their explorative study on pre-service teacher preparation for inclusion in higher institutions, Harvey et al. (2010) found that higher institutions could better facilitate training efforts concerning inclusion in their pre-service teacher education programmes through coordinating course requirements, providing faculty awareness on special education and collaborating and providing more experiences in special education. In South Africa, various higher education institutions have incorporated inclusion theory and practice in their curriculum for the pre- and in-service training of teachers and other relevant professionals (Lomofsky & Lazarus, 2001). This implies that the curriculum in such teacher training programmes can

provide candidates with IE theory together with strategies to implement it practically in their classrooms.

Addressing the diverse needs of all learners in schools through IE is a global trend (Ainscow, 2000). Facilitating effective professional teacher development will ensure a positive experience of IE (Boyle, Scriven, Durning & Downes, 2011). Furthermore, Hawkins (2009) proposes ongoing professional development, which should consist of key components such as honest reflection regarding responsive instruction and a thorough understanding and exposure of variances between the traditional and differentiated learning environment. Practically, teacher-training institutions need to ensure that the pre- and in-service programmes they offer will produce teachers who will have an understanding of and relevant experience to serve the purpose of IE. This could be attained through the integration of research, theory and practice. The following section will provide an overview of the FP teacher-training programme offered in some South African higher education institutions.

(a) Foundation Phase teacher training programme

Quality education in the early years is a basic right of every learner. It was found that success in high school is directly related to good early education and effective teacher training (Barber, Mourshed, & Whelan, 2007). Matsuura (2007) agrees and advocates for properly trained teachers equipped with the appropriate skills to teach young children.

In ensuring sustainable quality early education, South African Higher Institutions were mandated to offer teacher training programmes with the aim of producing well-qualified teachers for the FP. According to the DHET (2011), the FP caters for children whose ages range between 5 and 12 years, or Grade R–3. The primary purpose of this programme is to ensure that student teachers acquire knowledge and competence for teaching this age group, drawing from a broad range of general knowledge. The programme will support them and enable them to implement the national school curriculum (Spaull & Kotze, 2015).

(i) Delivery of FP teacher training programmes in South Africa

During the mid-1990s, South African universities focused mainly on training secondary school teachers. The training of primary school teachers, thus in the FP and intermediate phase, was left to the teacher training colleges, whose quality was regarded as poor (Green, 2011). Many of the teachers who used to teach young children had not in fact been educated and trained professionally to specialise in this pedagogy (Fourie & Fourie, 2015). The majority of FP learners in most South African schools therefore experienced low performances in various learning areas and this had a major impact on learners' achievement in the higher grades.

The situation only began to change in 2001, when the concentration of all teacher education provision in the university sector began to produce good quality FP teachers on a more consistent basis (Green, 2011). There are 22 public universities in South Africa and currently, 13 of these higher education institutions offer FP teacher training programmes (Green, 2011). This programme is offered at the initial teacher education level and as continuing professional development (DHET, 2011), as presented in Table 2.5.

Table 2.5: Foundation Phase teacher training programmes (DHET, 2011)

Initial teacher education for FP	Continue professional development
• Bachelor of Education degree	• Advanced Diploma in Education • Postgraduate Diploma in Education • Bachelor of Education Honours degree • Master of Education degree • Doctor of Education degree

The provision of sufficient numbers of good teachers for the nation's FP classrooms appears to be one of the critical strategies that could be employed to improve learning outcomes in the FP and beyond (Green, 2011). However, the results obtained in the Annual National Assessments (DBE, 2014) indicate that most of South African learners in the FP underachieved in both mathematics and literacy. Poor subject matter knowledge and pedagogical content knowledge are regarded as some of the factors that contribute to low performance of learners, particularly in the

FP (DBE, 2011). In order to address this shortcoming, the, DHET (2011) mandated that the initial FP teacher training programme should be able to:

(a) Offer student teachers extensive and specialised knowledge of early childhood learning to teach reading, writing and numeracy

Not all learners are provided with rich learning opportunities for literacy development in their early years, particularly in the South African context (Cunningham, Zibulsky & Callahan, 2009). This could be due to lack of teaching and learning resources, teachers' inability to differentiate the curriculum, and a lack of properly trained teachers. It is critical that the FP should be in a position to provide all learners with the fundamental skills and knowledge required for their transition to later phases. It is therefore the responsibility of the FP teacher training programmes to provide adequate professional development for building student teachers' knowledge in the domains of early reading, writing and numeracy or mathematics.

(b) Prepare student teachers to specialise in First Language teaching in one of the official languages together with First Additional English Language teaching

South Africa is a multilingual society consisting of 11 official languages. According to the language policy, schools are mandated to use learners' first language in the FP before transition to English as the language of instruction in the upper grades (Taylor & von Fintel, 2016). In an attempt to ensure access to FP education for all learners who emerge from different language groups, the structure of the FP initial teacher training programme is also designed to prepare student teachers to specialise in First Language teaching in one of the official languages together with First Additional English Language teaching (DHET, 2011). This is a fundamental aspect, as it attempts to ensure that learners in this phase acquire concepts that are cognitively taxing using their mother tongue before they can translate such concepts into their first additional languages.

(c) Provide student teachers with learning opportunities that will prepare them to work with Grade R learners

To accomplish the goal of producing good teachers for young children, the FP teacher training programme aims at preparing teachers to also be able to work with Grade R learners who are between four and five years of age (DHET, 2011). In South Africa, children of this age group are accommodated either in schools or in Early Childhood Development (ECD) centres where their learning is facilitated mainly through play. ECD has strived so long and hard for curriculum to include play to young children's learning and development (Wood, 2010). Preparing student teachers for ECD activities enables them to develop and strengthen children's perceptual skills and competency in spoken language that will form a basis for the later development of number sense and literacy (DHET, 2011).

(d) Ensure that student teachers acquire skills and knowledge for early identification and addressing of barriers to learning, as well as the ability to differentiate the curriculum

Because the learner population is so diverse, FP teachers need to acquire the skills and knowledge required to assist all learners for their effective learning (Cunningham, et al., 2009). This also includes learners who experience learning difficulties or those in need of additional support for effective learning and participation. In order to be able to assist all learners, FP teachers must be able to understand and identify the various learning barriers experienced by many learners in schools. This ability is a significant factor to ensure inclusivity in all schools. Teachers must further acquire the knowledge to address such learning barriers, including the ability to differentiate the curriculum in order to ensure that all learners are included in their school and class activities.

(e) Incorporate teaching practice in order to provide student teachers with actual teaching experience in schools

According to Ingersoll (2012), teaching is a complex task and teacher preparation is rarely sufficient to provide all the knowledge and skills necessary to ensure successful teaching; a significant portion of this knowledge can only be acquired in the school settings. Therefore, many universities globally are now insisting that students combine teaching practice with academic work to encompass a crucial area in FP teacher preparation. By exposing students to effective teaching experience, the FP teacher training programme incorporates work-integrated learning, which

takes place in functional schools and can include aspects of learning from practice as well as learning in practice (DHET, 2011).

The following section will provide an overview of the content of such a teacher-training programme in IE at the university under study, entitled: BEd (Hons) in Learning Support which is embedded within the Foundation Phase teacher training.

(ii) Background of BEd (Hons) in Learning Support

Effective teacher-training courses that take diversity into account have become a central focus in many countries (Forlin & Chambers, 2011), including South Africa. In this section, I provide a bird's-eye view of the structure and content of the BEd (Hons) in Learning Support, which served as the main criterion for participation in this study. According to the Department of Higher Education and Training (DHET) (2015), the degree is a Continuing Professional Development programme that is offered at a postgraduate level at one of the major South African universities. Its main purpose is to provide FP (grades 1−3) teachers who have completed basic teacher qualifications with further training that will equip them with strategies and skills to teach all learners, including those with barriers to learning in schools. This programme is offered using the infusion approach, meaning that information about IE and learning support is provided to students through different modules rather than a single module). The programme consists of three fundamental, three core and four elective modules, outlined in Figure 2.4. In total, there are 10 modules in the programme (Appendix 8).

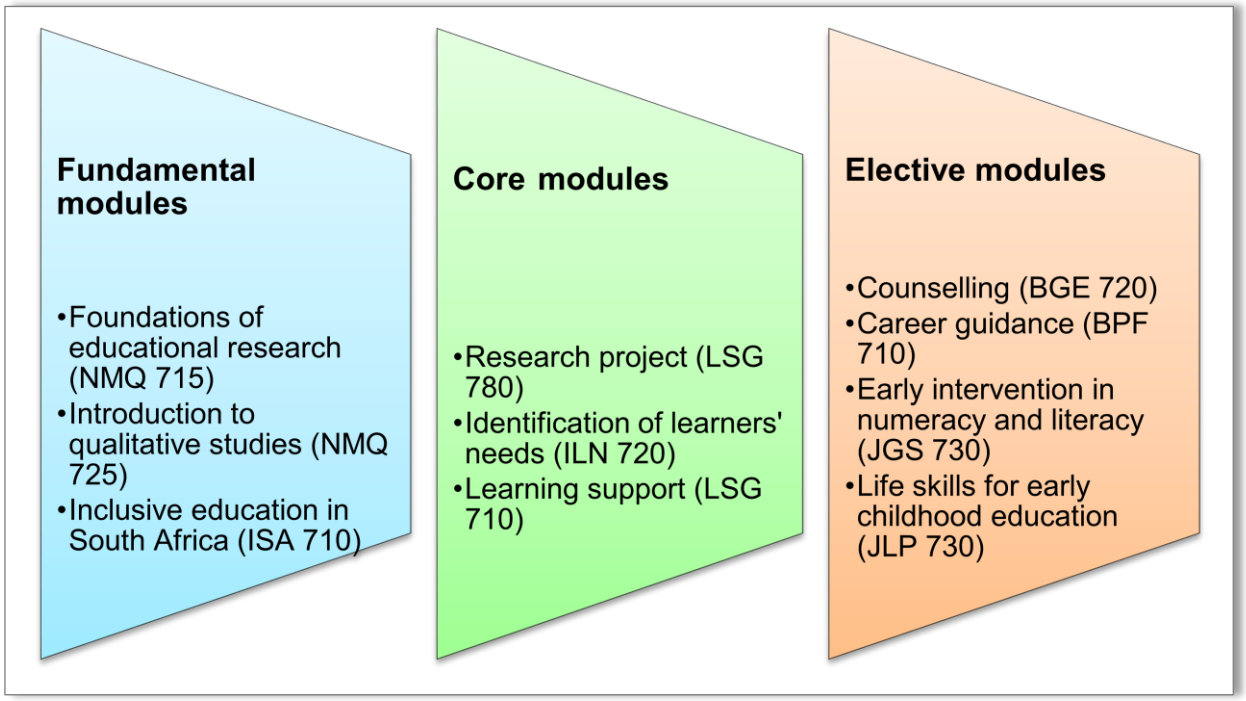

Figure 2.4: Modules offered in the BEd (Hons) in Learning Support

According to the yearbook (2015) of the institution's faculty of education, the fundamental modules serve as the academic basis of the programme. The core modules are essential for the programme and the elective modules form part of the programme, but can be selected on an elective basis.

(a) Fundamental modules

- Foundations of educational research = NMQ 715

This module covers the nature of educational enquiry, such as contexts of research, science, research ethics, truth, rationality, quantitative and qualitative modes of enquiry, research processes and planning for research, research management and writing a research report.

- Introduction to qualitative research = NMQ 725

This introduces students to the statistical techniques in the educational research process, that cover the following: basic concepts and principles, survey methodology and questionnaire design, classification and graphical representation of data, descriptive measures, and data-processing procedures in quantitative studies.

- Inclusive education in South African = ISA 710

The content of this module include: a framework for IE; implications of inclusion; the identification and assessment of barriers to learning; policies pertaining to IE; the asset-based approach; socio-ecological model of human development; theoretical perspectives in early childhood education and the FP.

(b) Core modules

- Research project =LSG 780

To complete this module, students are required to conduct a research project in the field of IE and learning support. This research is of a limited scope, using either the quantitative or qualitative research methods. At the end of the projects, students must write a research report and present a research paper in a team.

- Identification of learners' needs = ILN 720

In this module, a comprehensive overview of the South African curriculum is provided. The module explores curriculum modification, alternative assessment procedures, multilevel teaching, designing a multilevel lesson, assessment for school readiness and the Foundation Phase.

- Learning support = LSG 710

This module orientates students on the neurological interpretation and processing of the reading process in the brain; the impact of perception (motor, visual and auditory) on the integrated learning process; learning support strategies (sound and word recognition); reading habits, extension of eye span and reading speed

and reading motivation. It provides a practical learning support model that focuses on assessment, and guidelines about devising a supporting programme for individual needs.

(c) Elective modules

There are four elective modules. To complete the programme, students have to choose two of the four elective modules presented below.

- Counselling = BGE 720

The module focuses on counselling theories and skills specified for behavioural, emotional and career difficulties; management approaches to behavioural, emotional and career problems; assessing the impact of the counselling as well as child and play therapy.

- Career guidance = BPF 710

The module focuses on theoretical approaches to guidance and counselling; the professional profile of the careers educator or practitioner; career guidance needs in South Africa; national and international indicators in career guidance; career guidance content; diversity, individual and group-based career guidance.

- Early intervention in numeracy and literacy = JGS 730

The module seeks to equip student teachers with theoretical knowledge and practical skills in dealing with numeracy and literacy in early childhood education and the FP. Its content is mainly inquiry-based on critical stance issues raised globally and nationally on the mediation and facilitation of literacy and numeracy in the FP classroom. Students will acquire skills that will enable them to support learners in the acquisition of mathematical and literacy concepts and processes.

- Life skills in early childhood education = JLP 730

This module aims at equipping teachers with social, personal and global skills to guide and assist learners in early childhood education and the FP. After completion

of the module, students will be able to facilitate Life Skills to learners to enable them to participate as responsible citizens in the life of local, national and global communities.

To complete the BEd (Hons) in Learning Support successfully, it is compulsory for students to complete the three fundamental and three core modules and two elective modules. In line with the structure of the FP curriculum in schools, most of the FP teachers who enrolled elected the modules on early intervention in numeracy and literacy and life skills. The programme may be done part-time or full-time and entails weekly classes of three and a half hours each. Full-time students attend lectures every week, usually on Fridays. Part-time students attend classes on two Fridays in a month, also three and a half hours each. Table 2.5 presents the structure of the programme on a full- and part-time basis.

Table 2.6: Structure of the BEd (Hons) in Learning Support

One-year enrolment	**Modules**		**Year 1**	**Two year enrolment**		**Year 1**	**Year 2**
	Fundamental		3		Fundamental	3	
	Core		3		Core		3
	Elective		4		Elective	1	1

The study explores teachers' abilities to differentiate the curriculum as centrally covered in the module about identification of learners' needs (ILN 720).

2.3.3.1.2 Various education departments

After the Salamanca Statement (UNESCO, 1994), the primary focus in all education systems worldwide has been on providing quality education for all learners in their schools. Efforts to make IE a reality are therefore driven at the national or ministerial level. In most of the countries, the responsibilities of the schools lie with the ministries and the national departments of education. In South Africa, the tasks of the ministry and the Department of Basic Education are to structure the country's education system to ensure that it functions appropriately to accommodate the diversity of the learner population (DoE, 2011). These tasks are accomplished

through developing and reinforcing policy, strategies, standards and guidelines, and through providing funding.

In 2001 the South African National Department of Education drove the transformation of education in South Africa by adopting Education White Paper 6: Building an Inclusive Education and Training System: 2001 (DoE, 2001). To ensure the implementation IE through the white paper, the Department of Education further introduced strategies to ensure equal access to curriculum for all learners. These strategies include the National Strategy on Screening, Identification, Assessment and Support (SIAS) (DoE, 2008); Guidelines for Full-service/Inclusive Schools (DoE, 2009) and Guidelines for Responding to Learner Diversity in the Classroom (DoE, 2011). Geldenhuys and Wevers (2013) add that the DoE was responsible for embarking on policy reviews, changes and implementation to ensure equal, non-discriminatory access to education for all, tracking progress on the implementation of IE in South Africa and making recommendations on the norms and standards needed to ensure that obligations in terms of IE are complied with.

2.3.3.2 Local organisations and social networks

According to Reyner (2007), social networks refer to formal and informal action groups that may include affiliation to friendship, support and interest groups related to a particular aspect. Commenting on the role of these networks in IE, Mittler (2000) states that no school can succeed without building partnerships with its local community, parents and other agencies. These networks are the groups and stakeholders who have an interest on IE and in ensuring quality education for all learners. They include various NGOs and parent support groups, for example, the National Academy for Parenting Practitioners in the UK, which serves as a national centre that provides advice on parenting and parenting support (Ashdown, 2010).

In South Africa, parents have been advocates of IE since 1990, promoting the inclusion of all learners in schools (Engelbrecht et al., 2005). Such advocacy groups include parents of learners experiencing different learning needs and community-based bodies that are engaged in educational provision for all learners in schools. Additionally, there are numerous NGOs that conduct projects to improve IE in

schools, such as the Primary Open Learning Pathway, which focuses on curriculum differentiation for overage learners so that they can be integrated in age-appropriate classes (Lomofsky & Lazarus, 2001). These NGOs or charitable bodies offer knowledge, interests and expertise in different areas. Organisations with a special interest in learners with specific conditions include Down Syndrome South Africa, Autism South Africa, Disabled People South Africa, American Council for the Blind, American Association of People with Disabilities, Association of People with Disability-India, British Epilepsy Association and the National Autistic Society. These bodies support the inclusion of learners in need of additional support in schools and share knowledge and expertise in their respective fields to ensure that such learners are enabled to learn and participate effectively in schools and community settings.

2.3.3.3 Local school boards or school governing bodies

Being effective and meeting the diverse learning needs of all its learners, schools need the involvement of various stakeholders within the school and from the community (DoE, 1996). One of these role players is the local school board or school governing body. The terms “local school board”, “school committee” or “school governing body” are widely used in discussions in the field of education. Merriam-Webster’s online dictionary (n.d.) defines a local school board as a group of individuals who are in charge of local or community schools. In America and Britain, the concept *local school board* is used while South African uses the term *school governing body* (SGB).

In South Africa, SGB members are elected by the community and comprise the principal of the school and co-opted members who are elected from the body of parents of learners at the school, educators, a member of the non-teaching staff and senior learners (DBE, 2015). In terms of SASA, the role of the SGB includes: promoting the best interest of the school to ensure that all learners receive quality education; establishing the vision and mission of the school; agreeing on the learners’ code of conduct; providing support to all staff members in the school; managing school properties such as the buildings and hostel (DoE, 1996).

Regarding the implementation of IE, Muthukrishna (2006) confirms that an SGB is a subcommittee that monitors and ensures IE practices at the school. Some of its responsibilities are to facilitate community involvement and create constructive

partnerships to make the school responsive to learners' diversity and access community support services. SGB members contribute to the development of school policies that safeguard the interests of all learners and ensure that no learner is excluded from participating in class or school activities (Geldenhuys & Wevers, 2013) regardless of their learning difficulties. To further ensure effective implementation of IE, the DoE has introduced two additional bodies, the district-based support team (DBST) and the school-based support team (SBST).

i) District-based support teams and school-based support teams

Given the transformation of education through the introduction of IE, the South African department of education established DBSTs and the SBSTs as strategies to reduce the learning barriers experienced by most of the learners in schools and to support teachers on the issue of curriculum differentiation. The DBST is a group of officials in the departmental districts who are responsible for promoting IE through training, curriculum delivery, distribution of resources, addressing learning barriers and general management (DoE, 2005). This team comprises staff from provincial, regional and national offices as well as from special schools (DoE, 2001). To ensure that the diverse needs of the learner population in all the schools in the district are met, DBSTs further include individuals with expertise in fields such as health services, social development, early childhood development, finance, transport services, disability groups and curriculum (DBE, 2015). The 2013-2014 document on the implementation of Education White Paper 6 on IE (DBE, 2015) reported that in total, there were 1 690 DBST members in 80 districts in South Africa.

The Department of Education introduced SBSTs as a strategy to strengthen IE at institutional or school level. The SBSTs work in partnership with the DBSTs and other relevant support providers to identify and meet the needs of the learners and the school (DoE, 2005). These teams usually comprise educators with specialised skills such as learning support, representing different levels such as the FP (DoE, 2005). Parents of learners at the school, educators and in some instances learners might also be included in the teams (Muthukrishna, 2006). Table 2.6 presents the primary roles of the support teams at the district and school levels.

Table 2.7: Roles of DBST and SBST (adapted from Muthukrishna, 2006; DoE, 2005)

District-based support teams		School-based support teams	
DISTRICT-BASED SUPPORT TEAM	• Establish community approach to support services • Construct capacity of support teams at school levels • Facilitate assessment of the needs of the system and learners • Initiate educator development programmes at school level to ensure that schools respond to learners' diversity • Perform consultative roles in supporting schools • Assist schools to access community support services • Facilitate development of competencies within the community it serves • Facilitate intersectoral services coordination and collaboration • Build capacity and awareness of governing bodies with regard to issues of learning and participation barriers	SCHOOL-BASED SUPPORT TEAM	• Identify and address learning barriers • Assess support required by the school and the learners • Develop programmes for educators and parents • Access community support services • Provide required training to be implemented in classrooms • Evaluate and monitor progress on IE • Draw resources needed from within and outside the school

The traditional responsibilities of the DBSTs and SBSTs outlined in Table 2.6 demonstrate the significance of the role players in the implementation of IE in South African schools. When examining the composition of the respective teams, it is evident that the DBST serves as a foundation and support towards effective SBST to meet diverse learning needs of all learners in schools. The exosystem discussed in this chapter highlights vital resources that play a fundamental role to ensure the best educational outcomes for all learners in schools. They work within educational

support services, parent support groups and local school boards. The discussion makes it clear that the knowledge and skills from each of the resources significantly contribute to supporting teachers on inclusive practices such as differentiating the curriculum.

2.3.4 The mesosystem

In his theory of the ecology of human development, Bronfenbrenner (1979) conceptualises the mesosystem as a level that involves the interrelations among two or more settings in which the developing person actively participates, such as the relations between a developing child and their home, schools, neighbourhood and peer group. This level is significant because it emphasises not only the interaction within the immediate setting, but also the interconnection between them that influence the child's development. Bronfenbrenner (1979) further reports that such relations are formed when the developing child moves from the home environment into a new setting such as the school and the neighbourhood. For instance, in South Africa, the mesosystem of a four-year-old FP child will include the interaction between the home and the preschool, the interaction between the home and peers in the neighbourhood and finally the preschool and the peers. Conversely, the mesosystem of an eight-year-old FP learner includes interaction between the home and the primary school, the home and neighbourhood peers and the school and peer group. The interaction of the systems of these learners is diagrammatically presented in Figure 2.5.

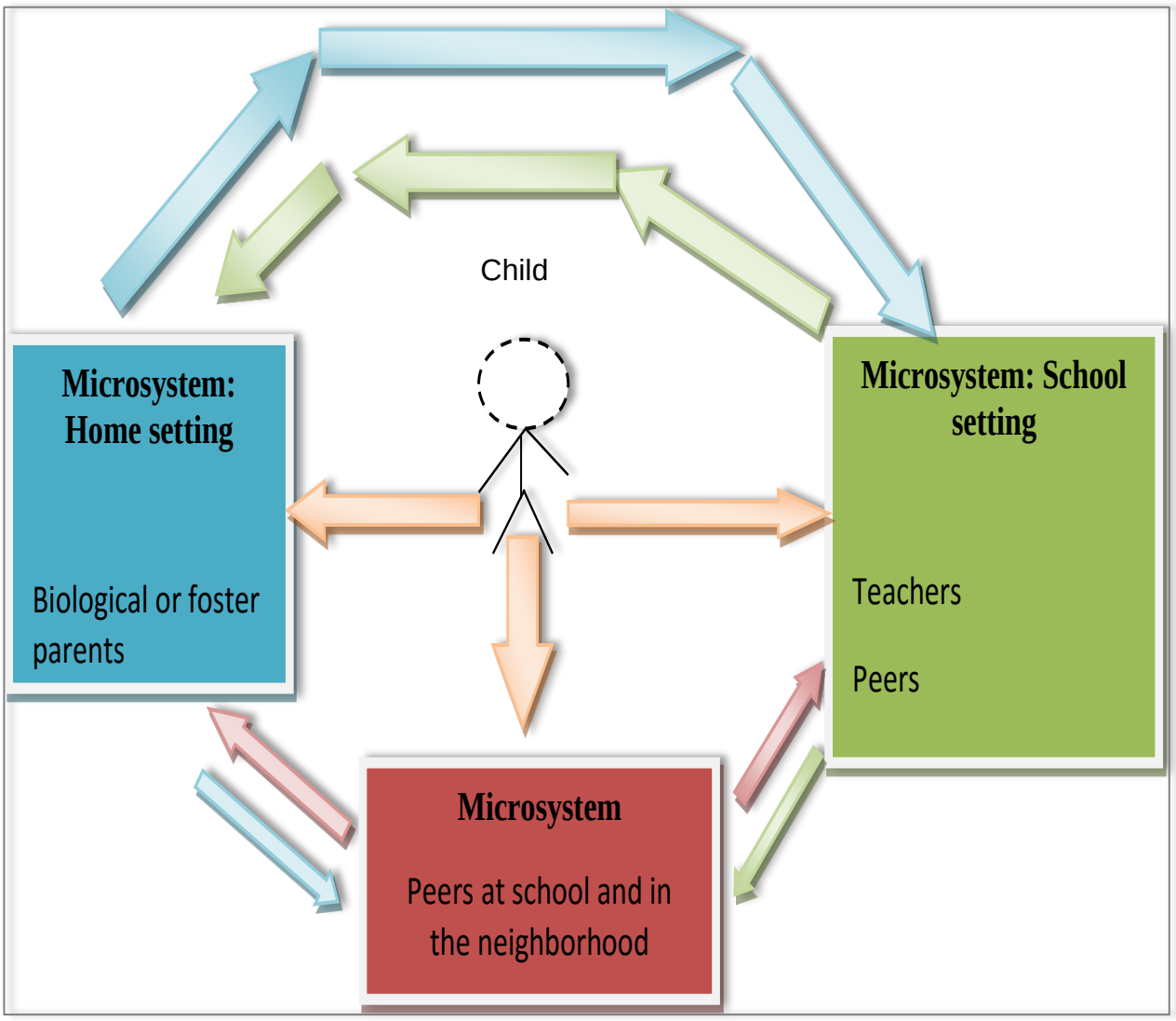

Figure 2.5: The components of the mesosystems of a typical eight-year-old South African child in an inclusive setting

Figure 2.5 presents an example of the mesosystems of a typical South African eight-year-old child in a context where he has direct interaction with the variables in each setting. At the centre is a child who grows up within a family environment where he exclusively interacts only with family members, such as parents and siblings. However, the context of families is quite diverse, and may include single-parent homes, nuclear or extended homes (Westling & Fox, 2009). Ashdown (2010) suggests that the term "parents" can refer to anyone who is the primary caregiver of the learner. The arrows in the diagram represent the growing child who expands his interaction to other settings such as the neighbourhood and the school. At school, the learner interacts with peers, teachers, other professionals such as therapists, the school nurse and social worker, the school bus driver, school administration and

house parents. These settings comprise the mesosystem, which is characterised by the linkages and interrelations between two or more settings containing the learner or developing child (Bronfenbrenner, 2005).

Bronfenbrenner (1979) later added further types of interconnection between the different settings of a learner: multisetting participation, intersetting communication and intersetting knowledge. Multisetting participation occurs when a learner engages in a similar activity in more than one setting. It can be a home and a school as well as the home and peers in the neighbourhood.

Intersetting communication refers to the messages conveyed from one setting to another, for instance between a teacher and parent about establishing and implementing IE at the school. This type of communication can be conveyed in various forms, such as letters and a child's message books. Moreover, communication can be one-sided or reciprocal, i.e. only from the teacher or parent or both.

Intersetting knowledge refers to the information that exists in one setting about the other. This information can be obtained through intersetting or other sources of information. For example, a parent may learn more about IE at the school that her child attends. On the other hand, the teacher may learn about the role of parents' involvement and participation in IE. The teacher can also learn more on how to facilitate a parent-teacher partnership on IE. Frankel (2004) argues that IE is a complex process that involves coordinated participation at all levels such as the home and the school.

(i) Home and school partnership towards IE

Educational policies recognise the importance of positive home-school relationships and partnerships in IE (Mittler, 2000). Different researchers have pinpointed a healthy collaboration and interaction between the families of the child and the professionals at the child's school as one of driving factors to inform the success of IE in schools (Flem et al., 2004; Salend, 2004). Xu and Filler (2008) believe that family involvement also includes the context of an individual's decision to participate in an event, including their relationship with other individuals, the history of an event and the available intrafamilial resources that may be used to support participation.

Engelbrecht (2006) further regard involvement of families as of the prerequisites of successful IE. Thus, development and implementation of IE requires participation, involvement and interaction between professionals at schools and members of the learner's family. As mentioned in the IE policy document, one of the principles of IE in South Africa is to acknowledge that learning also occurs in the home context (DoE, 2001) and that providing quality education for all learners can only be successful with home-school partnerships.

Some authors indicate that parental involvement is one of the elements that contribute to the positive outcomes of IE in children who are in need of extra support to learn effectively in school (Soodak, 2004). This implies that the parents and teachers of the child together play a significant role in the development and implementation of IE. In the same way, Engelbrecht et al. (2006) emphasise that partnership and interaction between teachers and parents form the cornerstone of IE. Because parents are regarded as primary stakeholders in the success of IE (Soodak, 2004), family involvement must be supported at all times (Jeynes, 2005). According to Swart and Pettipher (2000), this partnership between the home and the school implies that both parties are equally important and are expected to contribute their expertise in a collegial and trusting manner towards the achievement of shared goals.

Parents' involvement is not a fixed event, but is dynamic and varies according to the context, the discipline from which the collaborative team members are drawn, the resources parents bring to the interaction and finally the needs of the family and the child (Xu & Filler, 2008). This implies that parents need to be clear about their role, responsibility and contribution towards IE in schools. The contribution of parents in parent-teacher partnerships for IE has been explored by several studies. For example, Hornby (2010) believes parents can serve as sources of information, collaboration, resources and policy. Epstein (2010), in her model of the family-school partnership, identifies the following six types of family-school involvement and partnership: parenting, communicating, volunteering, home learning, decision-making and collaborating with the community.

(a) Parenting

According to Epstein (2010) the aim of parenting in the school-family partnership is to assist families with parenting skills, family support, understanding child development, and setting home conditions which will support development and learning at each age and grade level. Several activities can facilitate effective parenting, including parent education and courses or training for parents, family support programmes and other services, as well as meetings to help families understand schools and to help schools understand families.

(b) Communicating

Communication between schools and families plays a critical role in ensuring the provision of quality education in children. The study conducted by Engelbrecht *et al.* (2006) found that parents prefer more communication from the school on issues such as the progress of their children. Schools can communicate with families regarding variables such as school programmes and student progress (Epstein, 2010. She emphasises the creation of two-way communication channels between school and home. Communication can include weekly or monthly folders of learners' work sent home for review and comments, regular schedule of useful notices, memos, phone calls, newsletters and other communication tools (Epstein, 2010). Salend (2011) states that every effort must be made to seek the family's input, which can translate into quality inclusive practices and policies that address the needs of the child and their family. Through home-school partnerships, parents can receive information regarding specific aspects of IE such as the philosophy and goals of IE, the role of different professionals and the roles of the family. Furthermore, schools can provide families with guidelines that will assist them to focus on the strengths rather than the defects in a child (Salend, 2004).

The family on the other hand can provide the school with valuable information that can assist professionals in supporting the child with quality education. Downing (2008) suggests that family members can provide information during the assessment process, identify priorities of the child and the family, and provide input during the development of an individual educational plan.

(c) Volunteering

Several studies highlight the benefits of home-school interaction. For instance, Walton (2011) believes that some parents have knowledge and skills that can provide schools with valuable information on IE. Hornby (2010) mentions that some parents serve as volunteers in schools and act as teachers' aides, assist in the classroom and prepare teaching and learning materials, while others may have special skills such as providing support to parents or access to parent support groups. Families can contribute to school management activities, by serving on school governing bodies and assisting with the administration of school fees (Walton, 2011).

(d) Home learning

Schools may provide information and guidelines to families about how to aid learners at home with homework and other curriculum-related activities, for instance information on the skills required for learners in all subjects at each grade. Alur (2010) regards parents as partners in the inclusive process. Professionals need to understand that they too have a great deal to learn and should acknowledge the expertise of parents in an inclusive classroom. Westling and Fox (2009) add that for a home-school partnership to be successful, professionals need to collaborate with family members with the minds that are willing to learn.

(e) Decision-making

Parents can contribute towards decision-making by participating in bodies such as SGBs. To illustrate, Walton (2011) found that parents played an important role in school management, particularly in the administration of school fees, by electing and serving on SGBs. According to Swart, Engelbrecht, Eloff, Pettipher and Oswald (2004), parents in South Africa are now considered integral partners in ensuring a more inclusive system, where all role players share responsibility for the outcomes and decision making.

(f) Collaborating with the community

Collaboration involves bidirectional relationships were partners influence one another (Westling & Fox, 2009). In an IE context, true collaboration erases boundaries between families, communities and schools to create seamless partnerships that aims towards the implementation of IE in schools (Swart et al., 2004). Collaboration is a creative partnership between all the role players, who work together to identify learning barriers and learning needs and decide on various ways to address learning barriers (Swart & Pettipher, 2006). In a comparative study by Yssel, Engelbrecht, Oswald, Eloff and Swart (2007), it was established that parents could become advocates of IE.

Blue-Banning, Summers, Frankland, Nelson and Beegle (2004) indicate that communication, commitment, equality, skills, trust and respect are some of the factors that contribute to effective family-school partnerships. A positive home-school partnership results in a learner's progress, mutual learning, integrated planning and mutual respect among team members (Soto, 2002).

However, a number of factors that can hinder effective family-school interaction. Salisbury (2006) identifies communication, perception and attitudes, professional constraints, logistical constraints and unwelcoming settings as factors that can limit parents' participation with professionals in inclusive schools. Calls for sharing the responsibility in providing equal education opportunities for all learners echo across all nations. In this study, the mesosystem stressed the aspects that play a crucial role in the learner's development, learning and participation in an inclusive setting. It is clear that for a teacher to be able to address the learning needs of all learners effectively, their support cannot take place in isolation. Support does not depend only on the teacher; the teacher needs to know and understand the learner's abilities and the role of parents as partners in the education situation. This can only be possible through effective involvement and collaboration between the school and home. Although there is still a gap in interaction between families and schools, Wood (2009) believes that parents are increasingly realising that they also have an important role to play in the education of their children and should not leave it only in the hands of the schools.

2.4 CONCLUDING REMARKS

Chapter 2 captures the definition and conceptualisation of IE from both international and national angles. The many factors that play a role in the realisation of inclusive practices are identified. If the factors embedded within the various systems described by Bronfenbrenner (1979) are not accounted for, the diverse needs of learners will not be successfully addressed in schools.

Including learners in need of additional support in schools is not a recent phenomenon. The discussion on the chronosystem addressed the evolution and the history of IE through international and national lenses. In the macrosystem, the key national and international policies, legislation and movements that played a significant role in IE were explored and discussed.

The literature further presented the exosystem, which represents the settings where learners entitled to quality education have no direct interaction with all the elements of the system. The variables discussed in the exosystem included: educational services such as teacher training institutions, ministries of education and UNESCO; parents' circles of friends, the networks that comprise of various disability organisations and parent support groups, and finally the local school boards.

The mesosystem showed the impact of positive and quality interrelationships between the various microsystems in relation to IE. These links exist between the home and school; the school and peers and the home and peers. The literature further identified the characteristics of each of the microsystems that can promote or hinder the implementation of IE. As one of the major roles of the school relates to the differentiation of the curriculum, and the success of IE depends on this skill, Chapter 3 is devoted to curriculum differentiation, which for the purpose of this study represents the microsystem.

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CHAPTER 3: A MICROSYSTEMIC PERSPECTIVE ON CURRICULUM DIFFERENTIATION

> *"More to the point, the old images of effective classroom are anachronistic in terms of today's students and their needs. Not only do learners compose an increasingly diverse group, but thye are also young people who live in a world of personalization – at least outside of school"* (Tomlinson & Imbeau, 2010, p.3)

3.1 INTRODUCTION

Chapter 3 continues to trace, identify and explore imperative facets within Bronfenbrenner's ecological systems theory. It focuses on facilitating a better understanding of all aspects related to IE within the microsystem. The microsystem constitutes the centre of the ecological model and represents the core which influences and is influenced by all other systems, including curriculum differentiation. The discussion starts with Bronfenbrenner's (1979) definition of the microsystem, and then shifts to the aspects within the systems that play a major contribution to the notion of IE which mandates differentiation of the curriculum in schools.

The following sections discuss curriculum differentiation as a strategy to ensure that all learners can access learning and participation.

3.2 THE MICROSYSTEM

Bronfenbrenner (1979) explains microsystems as patterns of activities, roles and interpersonal relations experienced by the developing child in a particular setting with particular physical and material characteristics. In other words, the system represents an individual and his immediate context and it is characterised by direct, interactional processes such as familial relationships and close friendships (Bronfenbrenner, 1994). Examples of this context or settings are home, school, classroom and peer groups (Bronfenbrenner, 2005). The microsystem of a young child may comprise their home environment with parents and siblings; another microsystem may be the school environment, with teachers and peers (Smith, Cowie & Blades, 2003). In this study, the microsystems consist of children's homes, peers and schools that play a crucial role in ensuring the active learning and participation

of an individual learner in schools. Within the context of IE and inclusion, the microsystem is characterised by aspects such as the overall quality, the makeup of the class, the ways that teachers arrange the classroom, and their teaching strategies (Odom & Diamond, 1998), together with the differentiation of the curriculum to make learning accessible to all learners. In other words, the developing person is always seen at the centre of concentric circles. In view of this study, the developing person is the FP learner who must access the curriculum in the inclusive classroom. The context of the immediate settings is characterised by events and the individuals closest to the child that should support the child with the feeling of belonging, love and support (Swart & Pettipher, 2011).

3.2.1 Microsystem: Home context

The definition of the concept “home” is complex, as it may signify a much wider range of meanings commonly used on daily basis (Sixsmith 1986). Benjamin (1995) views a home as a spatially localised, significant and physical structure and conceptual system for the ordering, transformation and interpretation of the physical and abstract aspects of domestic daily life at several simultaneous spatio-temporal scales, normally activated by the connection to a person or community such as a nuclear family. The nuclear family consists of parents, traditionally a wife and a husband and their children (Berns, 2012). Due to the diversity of families’ compositions, Ashdown (2010) suggests that the term “parents” can apply to anyone who is the primary caregiver to the learner which can be the mother, the father or both, foster parents, other family members such as aunts, uncles, and grandparents.

Families are fundamental primary educators and play a key role in educating and supporting their children towards learning, development and participation in their daily activities. The family as a primary setting provides the developing person with learning opportunities. A healthy family provides the child with shelter, nourishment, protection, nurturance, affection, and a variety of opportunities that have a significant impact on the child’s development (Berns, 2007). An additional dimension to the aforementioned issues is that families are the major contributors towards children; development in all domains. However, some families can become a risk factor towards development and learning. Such negative elements include drug abuse,

unsupported child-headed households, poverty, family violence and homelessness (Swart & Pettipher, 2011). Holborn and Eddy (2011) have revealed that in some African countries, South Africa included, many learners are growing up in unsafe and unsecured families, some affected by poverty and others burdened by the effects of the HIV/AIDS pandemic

3.2.2 Microsystem: Peers

The constructive approach, as one of the prominent movements in IE, emphasised learning as a social process, stressing peer-to-peer learning and support (Downing, 2008). Once the child moves to the neighbourhood, childcare centre or the school, they are exposed to many children and peers from the neighbourhood and interaction with their peers begins. According to Berns (2007), a peer is a person who is about the same age, usually born in the same year, in the same class or age grade. The significance of peer interaction in the development of learners has been found to be crucial for learning, participation and development (Geldenhuys & Wevers, 2013). In this regard, Bronfenbrenner (1979) maintains:

> "Active engagement in, or even more exposure to, what others are doing often inspires the person to undertake similar activities on her own, A 3 year old child is more likely to learn to talk if others around her are talking especially if they speak to her directly" (p.6)

Peers play a role in providing the necessary support to learners in need of additional support for effective learning in schools. The study by Swart et al. (2004) found that peers provided formal and informal assistance to children in need by helping them in activities such as peer tutoring and providing a buddy system. Smith et al. (2003) identified additional benefits of peer relations in a developing child, such as assistance in solving tasks more effectively, maintaining companionship and ensuring that the child is not lonely, and helping the child to engage in more intense and shared activities. Each child needs to feel a sense of belonging and be accepted by peers, which provides learning opportunities. It must, however, be noted that as much as peer relations is beneficial to the growing person, it can also be accompanied by negative actions such as bullying, which is a major concern in the field of education and learning support.

3.2.3 Microsystem: Schools and classrooms

The microsystem in Bronfenbrenner's ecological systems theory (1974) constitutes an immediate setting where proximal processes are played out, a system where learning takes place. Berns (2012) defines the school as a setting in which learners learn about their society and teachers facilitate the development of various skills in learners. These settings can function as socialisers to societal norms (Cusher, McClelland & Saffort, 2012) and promoting schools for all. The ideology of schools for all implies the inclusion of all learners in a social, academic and cultural community (Flem et al.,2004). Schools and classrooms are the part of the microsystem of the Bronfenbrenner model that can produce or inhibit the learning and development of the child (Bronfenbrenner, 1994). This may be associated with classroom environment, teaching strategies, relationships with other learners, classroom management, teachers' attitudes as well as the curriculum.

Inclusive schools are different from ordinary schools since they welcome a diverse learner population. This diversity includes learners with learning difficulties, highly advanced learners, learners whose first language is not English, learners who underachieve due to complex reasons, learners from diverse cultures or poor socio-economic backgrounds, learners who fall within the template of grade-level expectations, learners with various interests and preferences, learners who are motivated and unmotivated (Tomlinson et al., 2003). To ensure the effectiveness of inclusive schools, Swart et al. (2004) suggest that all role players in these schools must attend to the rights of all learners and that such responsibilities must be shared among all school professionals. Winter (2006) characterises inclusive schools and classrooms according to the contextual features presented in Table 3.1.

Table 3.1: Contextual characteristics of inclusive schools (adapted from Winter, 2006)

School context
❖ All learners in school feel welcomed to be part of a school community ❖ Fundamental services are integrated into regular activities throughout the school day ❖ All learners are actively encouraged to be participate in extracurricular and social events at school ❖ All learners are provided with opportunities to share their talents and passions ❖ Individual educational support plan meetings actively involve learners and include time to reflect on learners' success while incorporating their interests and strengths into the present level and goals
Classroom context
❖ Learners sit and learn together and isolation is eliminated ❖ All learners are encouraged to participate in class activities ❖ Teachers provide various ways for learners to participate in class activities ❖ There is evidence of active learning ❖ All learners are working on the same curriculum at different levels of complexity ❖ Learners support one another ❖ Each member of the teaching team expresses ownership for all learners

In South Africa, one of the strategies in the development of a single, inclusive system whereby all learners will have access to education and support was the transformation of ordinary mainstream schools into full-service schools or inclusive schools (DoE, 2001). These schools promote the ethos and principles in line with the United National Declaration of Human Rights (UN,1993), outlined in Figure 3.1.

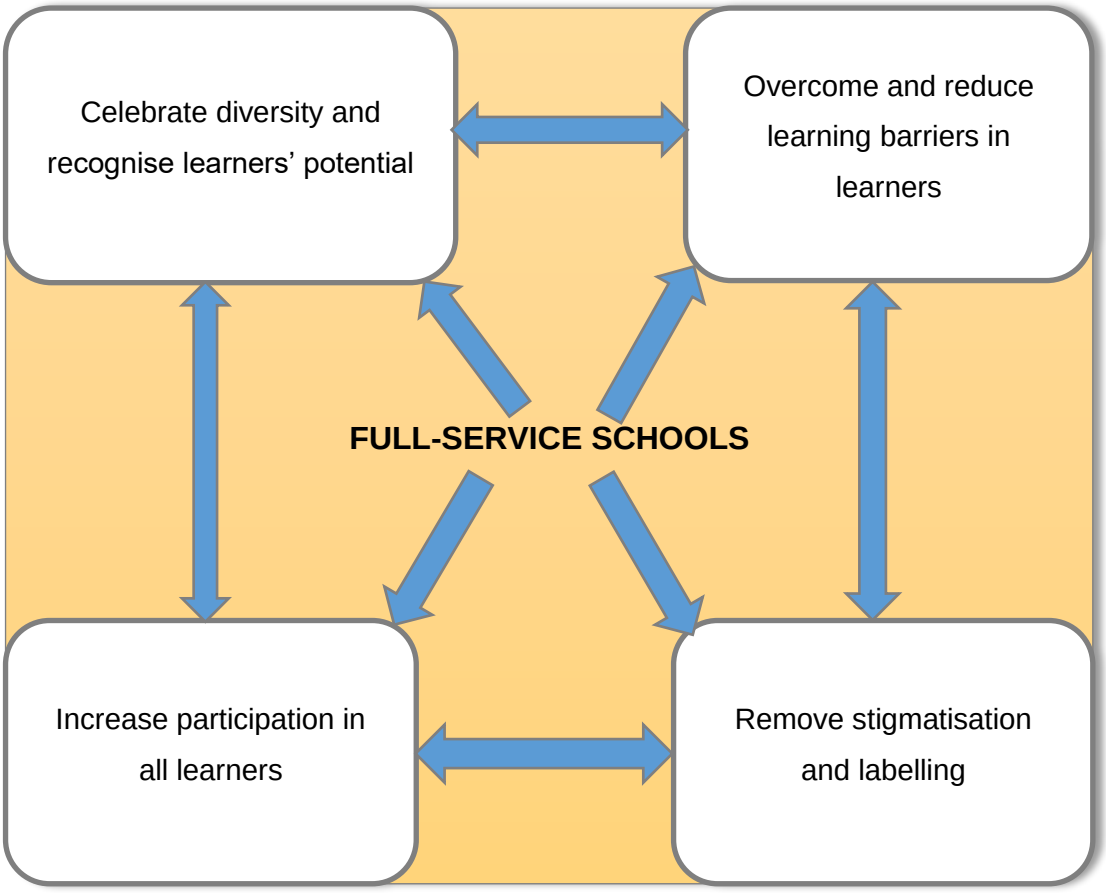

Figure 3.1: Ethos and principles of full-service schools

Currently the South African education system has already converted 791 out of 20 000 mainstream primary schools into FSS (DoE, 2015). The goal for the development of FSS is to strengthen IE in South Africa (DoE, 2010) by providing educational access for learners in need of low, moderate and high levels of support (Nel, Nel & Lebeloane, 2013). The Draft National Strategy on SIAS (DoE, 2005) defines FSS as:

> "Ordinary schools which are specially equipped to address a full range of barriers to learning in an inclusive education setting. In addition to their ordinary learner population they will become accessible to most learners in an area who experience barriers to learning and provide the necessary support. In the implementation stages these FSS will be models of institutional change which reflect effective inclusive cultures, policies and practice" (p.9)

Mahlo and Condy (2016) identify the role of FSS as schools that change themselves proactively by tending to learning obstructions and expanding cooperation for all learners. They make progress toward all learners to accomplish get to, value, quality and social-equity training. In these schools, everyone focuses on taking responsibility for the education of all learners. All teachers have the information and aptitudes to support all learners, and in turn teachers are supported to ensure that they demonstrate the ability to dispose all obstructions to learning experienced by learners, so that learning can be realised. In order for the FSS to accommodate a wide scope of adapting needs in ensuring realisation of IE in South Africa, the Department of Basic Education has prepared these schools to demonstrate the following characteristics (DBE, 2010):

- Equipped and supported by the DBST to provide for a broad range of learning needs
- Organised in relation to structures, practices, pedagogy, and culture to cater for all learners
- Understand that barriers to learning are not only intrinsic, but can also be systematic or extrinsic
- Have additional support programmes for teaching and learning
- Prepared to address daily challenges through capacity building and ongoing institutional development among educators
- Capacitated to ensure that all learners' need are addressed
- Provide individualised support actions that include Braille for learners with visual problems, sign language for learners that are deaf or hard of hearing, and augmentative and alternative communication for learners with severe speech difficulties
- Demonstrate good leadership
- Promote collaboration and partnerships among all members of the school community
- Admit learners from the community regardless of their abilities and background without imposing any discrimination
- Know and understand how to differentiate the curriculum
- Have a good infrastructure and the materials and resources to manage a diverse learner population.

In South Africa, FSS are also characterised by the concept of ubuntu, the African philosophy that says “I am because we are, or I am fully human in relationship with others” (Walton, 2011). Ubuntu advances the benefit of everyone of society and incorporates humanness as basic component in the sense of seeing human needs, interest and dignity as fundamental to human growth (Venter, 2004). Ubuntu serves as a guideline in addressing variances among learners in an African education discourse including the differentiation of the curriculum. Furthermore, Phasha (2016) believes that inclusive schools should demonstrate the following characteristics: a feeling of having a place, cohesiveness and collaboration that security individuals together, coordinate correspondence that is open, impartial circulation of impact and power, ingenuity, adjustment and critical thinking competence.

3.2.3.1 Provision of learning support in schools and in the classrooms

Learners serve as a key source of information about the way in which schools can best support their learning (Porter, 2011). Hence, the identification of learning barriers in learners becomes a crucial step towards addressing their needs because they can all learn and they all require support (DoE, 2001). Puntambekar and Hubscher (2005) found that “support” is used synonymously with the concept of “scaffolding”, referred to by Wood, Bruner and Ross (1976) as the process whereby an adult assists a learner to learn effectively, carry out learning tasks or achieve goals which would be beyond their unassisted efforts.

Boyle et al. (2011) assert that providing support is vital because children learn differently. Teachers therefore need to utilise fully differentiated approaches and a variety of strategies to adapt lessons and effectively plan to cater for all learners’ learning abilities. Weeks (2013) define learning support to any form of help, assistance and guidance given to a learner who experiences barriers to learning and to enable such learners overcome their learning barriers. McLoughlin (2002) aligns learning support with teachers’ acknowledgement and response to the learners’ learning needs by providing an effective intervention during the learning process. According to Nel et al.(2014), learners with learning difficulties lack the necessary skills to achieve academic success and these learners form the majority of those who experience learning barriers. Barriers to learning refer to any obstacle that

prevent learners from accessing the curriculum (Swart & Pettipher, 2016). Puntambekar and Hubscher (2005) believe that learning support might be permanent or temporary, meaning that some learners will require support only until they master the content while others may need continuous support. Various factors cause learning barriers. These factors may arise from internal or external aspects, and are called intrinsic and extrinsic barriers (DoE, 2005). The types of intrinsic and extrinsic barriers to learning are outlined in Table 3.2.

Table 3.2: Extrinsic and intrinsic factors that result in barriers to development, learning and participation (adapted from Nel et al.,2013; Swart & Pettipher, 2016)

Intrinsic factors causing learning barriers	Extrinsic factors causing learning barriers
Intellectual impairments	Language of learning and teaching
Attention and hyperactivity	Poverty and unemployment
Visual impairments	Inflexible curriculum
Hearing impairments	Drug and alcohol abuse of parents
Physical disabilities	High rate of HIV/AIDS
Speech and language difficulties	Illiteracy of parents
Epilepsy	Teachers inadequately trained about learning support
	Lack of sufficient support services
	Negative attitudes about the implementation of IE
	Lack of parental recognition and involvement
	Lack of or inadequate provision of support services

These learning barriers are found to be common in most of the South African learners and it is therefore crucial for teachers to be able to identify the relevant barriers and provide the learners concerned with the necessary support (DoE, 2008; Nel et al., 2013). Vygotsky (1978) defines a teacher from a psychological point of view as the director of the social environment in the classroom, the governor and guide of the interaction between the educational process and the learner. This

implies that the teacher needs to understand the learning barriers experienced by learners, which will determine the type of learning support such learners require. For example, some learners will need with extra classes, more time to complete the tasks, improved learning and teaching support materials, parental involvement, individual attention, active involvement in sports activities, and other services that support the emotional needs of learners. For teachers to be able to support learners with various educational needs in an inclusive classroom, they should be prepared to accept ownership of developing and strengthening their learners' diverse abilities and addressing their learning needs, as well as ensuring their participation and success (Oswald & Swart, 2011). However, addressing a wide range of diverse needs of learners in schools presents challenges such as adequate funding and physical as well as human resources (Savolainen, Engelbrecht, Nel & Malinen, 2012). Yet, failure to provide support on the part of the teacher will lead to failure to build on the knowledge that the child brings to the classroom and possibly failure of such a child in the school setting (Smith et al., 2003).

As transformation in society and schools evolves, effective teachers in inclusive classrooms will have to learn to develop classroom routines that attend to learners' variances in readiness, interests and learning profiles. Such procedures may be referred to as "differentiating" the curriculum and instruction (Tomlinson, et al., 2003), which is fundamental to addressing various learning needs in a classroom context (Westling & Fox, 2009). In order to support learners in schools, teachers must also be supported through education departments and learning support units. Again, it requires consultations with principals and other support staff (Boyle et al., 2011). In South Africa, the school management team, members of the SBST, members of the DBST, SGB, as well as officials from the provincial department of education are positioned to serve as support systems for teachers.

3.2.3.2 The school curriculum

The school curriculum plays a fundamental role in the discourse on the policies that may assist in reducing inequalities in a society (Ayalon, 2006). UNESCO (2014) defines a curriculum as:

> "what is learned and what is taught (context); how it is delivered (teaching-learning methods); how it is assessed (examples, tests and examinations); and the resources used (e.g. books used to deliver and support teaching and learning" (p.13)

In 2011, the South African Department of Basic Education (DBE) developed the Curriculum and Assessment Policy Statement (CAPS) as part of educational transformation within the education system. CAPS aims to ensure that all learners irrespective of their abilities acquire the necessary knowledge and skills in a way that are meaningful to their lives (DBE, 2012). Although the schools aim to ensure accessibility of the curriculum to every learner, teachers often are not able to differentiate the curriculum in such a way that all learners can have equal access to it (Dixon, Yssel, McConnell & Hardin, 2014).

Tomlinson, et al. (2003) point out that heterogeneity is one of the major characteristics of modern schools in terms of abilities, language, and culture. Hence, the CAPS is embedded within the principles of human rights, social justice and inclusivity (DBE, 2012:5), which oblige schools to differentiate the curriculum to address the various learning needs of all learners in school. Learners with various abilities include those with giftedness (Tomlinson, 2004); sensory disabilities (Downing, 2008); autism spectrum disorder (ASD) (Simpkins et al., 2009); attention-deficit hyperactivity disorder (ADHD) (Mastropeiri & Scruggs, 2010); intellectual impairments, learning disabilities, and developmental delay learning disabilities (Salend, 2011); physical disabilities (Kruger & Smith, 2016); and communication difficulties (Uys, 2016). Despite the many factors associated with disability, there are other sources of classroom diversity that need to be considered when planning differentiation of the curriculum. These include learners from culturally and linguistically diverse groups, which also determine how a teacher teaches and how learners learn (Gay, 2010).

George (2005) further states that most effective teachers have always recognised that learners are different and require special adaptation of their learning experience to fit their unique learning needs, abilities and attitudes. Curriculum differentiation is essential in such heterogeneous classes. A number of researchers indicate that in order for schools to ensure accessibility of the curriculum for all its learners, teachers

are required to respond to these educational needs by differentiating the existing school curriculum (Noble, 2004; Salend, 2011; Landsberg & Matthews, 2016;). Patton (2005) points out that this notion of the differentiation of the curriculum must occur irrespective of whether learners are educated in inclusive schools or in special schools.

3.3 CURRICULUM DIFFERENTIATION

Each learner learns differently and therefore requires approaches to assist them in grasping the learning content (Downing, 2008). Differentiation of the curriculum is a common practice worldwide (Terwel, 2005) and forms a key principle of IE (Deng, 2010; Walton, 2013). In the literature, many terms surface when describing the concept of curriculum differentiation, for instance, differentiated instructions (Tomlinson, 2003; Rock et al., 2008; Hawkins, 2009); curriculum adaptation and curriculum augmentation (Lee et al., 2006); curriculum modification and curriculum differentiation (Tieso, 2003; Terwel, 2005). For the purpose of this study the term “curriculum differentiation” is used because it is in line with significant policies from the DoE such as the National Strategy on Screening, Identification, Assessment and Support (SIAS) (DoE,2008); Guidelines for Full-service Schools (DoE,2010) and Guidelines for responding to learner diversity in the classroom (DBE, 2011). In defining the concept of curriculum differentiation, Gregory and Chapman (2013) use a school uniform as metaphor to illustrate that “one size doesn’t fit all”.

In South Africa, curriculum differentiation is mainly informed by the diversity of learners. It recognises the uniqueness of each learner according to their language of communication, place or origin, cultural and religious practices, socio-economic status, circumstances of the family, learning style and learning needs, irrespective of the child’s abilities. It is a mindset or philosophy that enables teachers to plan strategically to meet the diverse needs of their learners so that they can achieve targeted learning outcomes (Gregory & Chapman, 2013).

UNESCO (2004) views curriculum differentiation as the process of modifying or adapting the curriculum based on the different ability levels of the learners in one class, to ensure that none of the learners are excluded from learning and participation during class activities. In other words, it involves the alteration of the

content, instruction, and assessment to meet unique needs of learners in schools (George, 2005). Teachers should therefore modify their teaching methods and strategies, teaching and learning resources, assessment methods, learning activities and learners' products (Wehmeyer, Lance & Bashinski, 2002; Tomlinson et al., 2003; Lee et al., 2006; Westling & Fox, 2009) to provide learning opportunities for each learner in the classroom and to meet their learners' diverse learning needs to facilitate their success (Tomlinson, 2009).

Curriculum differentiation in other words involves the modification of the learning environment, teaching methodologies, teaching strategies and the content of the curriculum to take into consideration the ability level, interests and background of a learner (DBE, 2011). The DBE further indicates modifying the pace of the curriculum as one of the curriculum differentiation strategies. In further clarifying what curriculum differentiation entails, Gregory and Chapman (2013) reveal that differentiation of the curriculum is not a new practice, but needs conscious effort on the teacher's part to analyse available information to make a decision on what is working and what needs to be adjusted.

3.3.1 Significance of curriculum differentiation in classroom context

Curriculum differentiation has long been identified as the most logical way to respond to learners' diversity in their learning environment (Hawkins, 2009), as it promotes the progress of each learner in a general curriculum (Lee et al., 2006). There are other compelling reasons to support the differentiation of the curriculum in classrooms that are characterised by a diverse learner population. To illustrate, Tomlinson and Alla (2000) believe that differentiation of the curriculum maximises learners' growth and facilitates individuals' success. Downing (2008) affirms that schools nowadays accommodate extremely diverse groups of learners who represent a wide range of ethnicity, languages, customs, experiences and ability levels. The needs of these learners are unique and require differentiation of the curriculum to meet them.

Differentiation of the school curriculum acknowledges that each learner learns differently and the school curriculum needs to be adjusted to promote different learning styles during the learning process (Vassiliki, Marita & Eleni, 2011). Nel et al.

(2013) again suggest curriculum differentiation as a strategy to address various ways of teaching that not only focus on transferring information, but also on ensuring that learners participate actively in their learning where they are able to apply what they have learnt. Walton (2011) further specifies that curriculum differentiation enables all learners to experience success, prevents occurrence of learning gaps among learners, provides opportunities for cognitive development, reduces challenging behaviour in learners and is a means to make inclusion a reality.

3.3.2 Challenges of the implementation of curriculum differentiation in the classroom

Although curriculum differentiation is being regarded as a mandate of IE to respond to learners' variances, Tomlinson, et al. (2003) warn that its implementation in schools is still limited due to the following factors:Teachers are not aware of their learners' interest and their diverse learning needs.

- Teachers regard diversity as a problem rather than a strength of the modern classroom.
- Teachers believe that differentiation of the curriculum falls outside their responsibility.
- Teachers think that differentiating the curriculum will expose their learners' differences.
- Teachers regard curriculum differentiation as not feasible in terms of preparation of learners to quality adult life.
- Teachers are resistant to using various strategies of curriculum differentiation.
- Teachers demonstrate insensitivity when addressing cultural and racial issues when they teach a diverse learner population.

According to the report titled "Changing teaching practices, using curriculum differentiation to respond to students' diversity" (DoE, 2004) most teachers believe that since the existing curriculum is prescribed by the educational authorities, it is impossible for them to make any changes to meet their learners' learning needs (UNESCO, 2004). Hawkins (2009) further affirms that although the issue of curriculum differentiation been recognised as the most coherent approach to react to

diversity among learners in schools, it has failed to become common practice in the classroom due to teachers' lack of confidence, efficacy and perseverance.

The lack of the implementation of curriculum differentiation in schools is also due to the inability of teachers to appreciate and welcome diversity among their learners; teachers lack knowledge about their learners' developmental needs (Rachmawati, Nu'man, Widiasmara, & Wibisono 2016). In addition, excessive workloads and responsibilities, demands for substantial coverage of curriculum content and challenging behaviour by some of the learners in classrooms make it difficult for teachers to differentiate the curriculum (Rock et al., 2008). George (2005) adds that many teachers appear to be willing to proceed with the traditional teacher-directed, whole-class instructional model, posing a real professional dilemma. Other barriers to curriculum differentiation include teachers' lack of managerial skills to implement what they know and, again, many teachers' lack confidence in more than one area (Tomlinson, 2005). Walton (2013) adds that differentiation of the curriculum can be difficult to achieve with only one teacher in the classroom.

3.3.3 Effective implementation of curriculum differentiation in classrooms

Implementation of curriculum differentiation is a complex process; it relies on skilful teachers for its planning and implementation (Dixon et al., 2014). However, it must be noted that each time when a teacher meets the individual needs of her learners, they are differentiating the curriculum (Gregory & Chapman, 2013). Walton (2013) suggests that where possible, schools must use the services of community members who would like to give their time and skills to the schools as class assistants and learning support educators.

Tomlinson et al. (2003) state that the goal of every teacher is to ensure that each learner learns effectively and the differentiation of the curriculum is therefore a subject that teachers can no longer ignore. It is of the outmost importance to the teachers who implement curriculum differentiation to ensure that the learning environment and opportunities exclude no child (Algozzine & Anderson, 2007). Landsberg and Matthews (2016) maintain that teachers need to acquire skills to differentiate the curriculum that will ensure that the different learning needs of all

learners in their classrooms are met. Tomlinson et al. (2003) point out that as transformation in schools evolves, effective teachers will have to learn to develop skills on curriculum differentiation that address learners' variances. Tomlinson (2005) further proposes that effective differentiation of curriculum should have the following characteristics:

- It is proactive as opposed to receptive,
- employs flexible use of small teaching-learning groups in the classrooms,
- changes pacing as a method for tending to learner needs,
- fluctuates the materials utilised by individual learners and little gatherings of learners in the classrooms,
- is knowledge-centred and
- learner-centred.

Curriculum differentiation "is a philosophy of teaching purporting that learners learn best when their teachers effectively address variances in readiness level, interest, and learning profile" (Tomlinson & Imbeau, 2010). In another article, Tomlinson (2004) mentions that it also entails differentiating the content, process, product, and learning environment. In other words, learners' readiness, interest, and learning profile will determine differentiation of the content, process, product and environment (Figure 3.2).

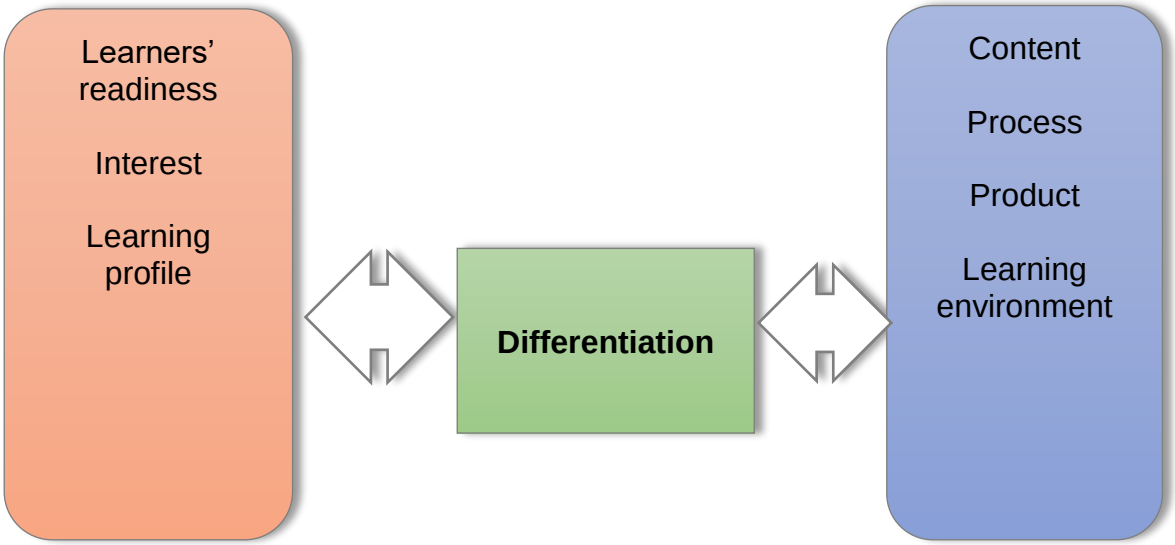

Figure 3.2: Factors that determine differentiation of the content, process, product and learning environment (adapted from Tomlinson, 2004)

3.3.3.1 Determining factors for differentiation of the curriculum

Tomlinson & Imbeau (2010) views readiness level, interests, and learning profiles as important and indispensable factors in achieving curriculum differentiation. These three factors will now be discussed in detail.

(i) Readiness level

Tomlinson and Imbeau (2010) define learners' readiness as "a student's current proximity to specified knowledge, understanding, and skills". Learners serve as important sources of information about the ways in which schools can best support their learning and participation in the curriculum (Porter, 2011). This implies that curriculum differentiation enhances the learning experience for all learners by meeting them "where they are" and providing them with the necessary support to extend their learning (Buteau & True, 2009). Santangelo and Tomlinson (2009) regard readiness as a broader and deeper paradigm that is shaped by prior learning, life experiences, attitudes towards schooling as well as cognitive and metacognitive proficiency.

According to Tomlinson et al. (2003), the approach to readiness is derived from Vygotsky's (1978) zone of proximal development (ZPD), which various authors regard as a major principle of curriculum differentiation (Downing, 2008; Hawkins, 2009; Hoover & Patton, 2005). ZPD refers to the distance between the actual developmental level as determined by independent problem-solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978).

Tomlinson et al. (2003) further define ZPD as a point of required mastery where the child cannot effectively function independently, but can succeed with scaffolding or support. Scaffolding refers to the process in which an adult or knowledgeable person assists the child or a novice to solve problems or carry out tasks that they would not be able to achieve on their own (Puntambekar & Hubscher, 2005). The authors identify the following key elements of scaffolding: It is goal-oriented; guided by a learner's readiness level, based on continuous assessment, interactive between an adult and a learner, determines differentiation of support and facilitates independence.

Regarding learners' readiness level, Tomlinson (2005) advises that when differentiating the curriculum in response to learners' readiness level, the teacher must ensure that the work allocated to learners must be at an appropriate level of challenge, thus not too difficult or too easy, to ensure that they do not become frustrated or bored. Tomlinson (2005) further notes that learners experience improvement in terms of achievement and attitude if there is a match between the task and the learner's readiness level.

(ii) Learners' interest

Learners' interest is "that which engages the attention, curiosity, and involvement of a student" (Tomlinson & Imbeau, 2010). Interest is one of the aspects that evokes the notion of motivation in learning and plays a key role in the learner's academic achievement (Tomlinson et al., 2003). Interest gives rise to the motivation to learn (George, 2005) and serves as a guideline when designing learning tasks that will tap the motivation of particular learners (Tomlinson, et al., 2003). If a learner is interested in a topic or subject, their desire to be involved will engage them and as a result learning takes place more easily and attention spans are longer (Gregory & Chapman, 2013).

Walton (2013) highlights the interaction between the teacher and learners as one of the methods that can provide teachers with an opportunity to understand their learner's interests, likes and dislikes. She further suggests significant roles that families can play in providing valuable information to the school about their children's preferences. Furthermore, learners' interests can be determined through interviews, where a teacher develops a short list of questions such as "what do you like to do during weekends?" to be used in such interviews (UNESCO, 2004.p.28). If teachers differentiate the school curriculum according to learners' existing interests, it will promote engagement and participation and help learners to connect what is being taught with things they already know (Santangelo & Tomlinson, 2009). Tomlinson (2005) pinpoints the following benefits of responding to learners' interests:

- Tasks and questions that match learners' interest are likely to promote learners' engagement, satisfaction, creativity and independence.

- ❖ Tasks that are interesting to learners are more likely to improve their attitudes with regard to learning, sense of competence and their achievement in learning outcomes.

(iii) Learners' profile

The successful and efficient teacher is one who knows their learners and is aware of their learning needs as well as their desires (De Witt, 2016). One of the critical aspects for teachers when differentiating the curriculum is a basic understanding of their learners' individual profiles which regard as the first step towards curriculum differentiation (Rock et al.,2008). According to Downing (2008), a learner's profile provides information on the learner's skills, likes, and means of communication to understand their learning needs. It further provides information to identify the strengths, preferences, personal characteristics, cultural, linguistic, experiential background and challenges of the learners and their families (Salend, 2011).

Learners' profiles can be obtained by consulting documents that contain learners' backgrounds, circumstances, medical history, family and schooling history (Walton, 2013). They can be obtained from family members and other individuals who play a significant role in the life of the learner (Salend, 2011). There are various ways of obtaining information from the families. Downing (2008) mentions the Map Action Planning System (MAPS) approach, which asks the following questions:

- ❖ Who is the learner?
- ❖ What is the learners' history?
- ❖ What is your dream about the learner?
- ❖ What are your concerns about the learner?
- ❖ What are the learners' strengths and abilities?
- ❖ What are the learner's needs?

Information gathered during the MAPS process can lead to a support plan that includes differentiation of the curriculum (Downing, 2008). One of the important reasons for understanding learners' learning profiles is to allow learners to learn in neutral and efficient ways (Santangelo & Tomlinson, 2009).

Knowing the learning styles of each learner plays a critical role in the planning of teaching and learning activities (De Witt, 2016). Tomlinson (2005) affirms that understanding the learning styles of learners improves learning achievement in a wide range of cultural groups. Again, understanding various approaches to learning across cultural groups guides teachers' awareness of how to develop a learning context that is flexible enough to work for a range of learners (Tomlinson, 2005). Pertaining to the learners' learning styles, multiple intelligence elements such as linguistic, logical, bodily, kinaesthetic, musical, special, intrapersonal and interpersonal have become an extensively used framework for teachers to identify their learners' strengths and styles of learning to guide their implementation of curriculum differentiation (Noble, 2004).

3.3.3.2 Parts of the curriculum to be differentiated

The aim of inclusive teaching is to support maximum learning and participation for all learners through the differentiation of the content, process, product and learning environment that are part of the curriculum. This section discusses the differentiation of these parts of the curriculum.

(i) Differentiation of the content

Content of the curriculum consists of what is been taught and the way learners access learning materials (Tomlinson, 2009). The DBE (2011) explains content as what the learner is expected to learn, which includes the facts, concepts and skills the learner acquires in the learning environment (DBE, 2011). It includes what the teacher intends to teach and how learners will achieve a level of knowledge and understanding. Teachers sometimes select the content based on the learner's needs and sometimes as prescribed by educational authorities (UNESCO, 2004).

Westling and Fox (2009) insist that differentiation of the curriculum does not change the content of the curriculum, but involves presenting the content in a way that all learners can comprehend and participate in. Since the content can be differentiated to meet the individual needs of learners, Tomlinson (2009) advises that it is preferable for the content to remain constant for all learners, with teachers differentiating how the learners access specific content. Santamaria (2009) asserts that differentiation of the content implies the teaching of the same concepts to all

learners while adjusting the degree of complexity for the academic diversity of learners. Other authors use the concept of multilevel teaching, which refers to a teaching pedagogy whereby one concept or topic is presented to the learners at various levels of complexity (Walton, 2013). This implies that the teacher provides learners with the same curricular areas but at varying levels of difficulty (Salend, 2011). For example, during Life Skills, one of the four learning areas in the FP curriculum, learners who function at a high level can record the types and number of vehicles that pass through an intersection per hour while the low-functioning groups can draw a picture of what they saw at an intersection (DBE, 2011).

Algozzine and Anderson (2007) recommend that as opposed to fluctuating the learner goals and bringing down execution desires for a few learners, instructors may separate the substance by utilising textbooks or short stories at different perusing levels. Another example of content differentiation is where a teacher allows learners with more ability to work on the application of a concept, whereas learners who find the curriculum content challenging may be working with definitions, comparisons or contrasts, or summarisations of the same concepts (Santamaria, 2009).

(ii) Differentiation of the process

“The word process is often used as a synonym for activities”, Tomlinson and Imbeau (2010) say, while UNESCO (2004) refers to it as the technique or instructional strategies that the teacher uses to present information to the learners and how the learner makes sense of the content (Tomlinson & Imbeau, 2010). Differentiation of instructional strategies refers to the manner in which the teacher teaches or presents new information to meet the needs of individual learners (Salend, 2011). This includes strategies such as small group instruction, cooperative learning, demonstrations, using peers or adults to read aloud to the learner as well as the use of multisensory approaches.

In order to match learners’ readiness, interest and learning profile in the learning process, Rock et al. (2008) advise teachers to use the “what methods fit?” question approach as guideline to plan for differentiation. An answer to this question will provide teachers with differentiated teaching and learning activities that match their

learner's interests, learning preference, communication style and ways of demonstrating their learning (Aliakbari & Khales Haghighi, 2014). For example, in a history class, one learner might be unable to read the history textbook but can arrive at the same understanding of the content by watching a video (Westling & Fox, 2009). Another strategy to differentiate the learning process, especially when the content is challenging, is through peer tutoring where learners can work with each other to improve their performance (Mastropieri & Scruggs, 2010). Pridmore (2007) suggests that when learners are engaged in collaborative groupwork and peer learning, the differentiated curriculum can provide a valuable interaction of curriculum content, objectives and process, which will enable the teacher to cover the curriculum in the given time.

Walton (2013) further proposes provision of extra assistance outside classroom hours, and giving individual feedback and encouragement on classroom performance. Other strategies that can be used to facilitate the differentiation process can include dividing the class into four ability groups or dividing them into mixed-ability groups, in which learners with more experience help those with less experience (UNESCO, 2004). Walton (2013) advises that ability grouping must be flexible and should strictly not be given names such as "tortoises", "goats" or "cheetahs" to discriminate between the ones that need more help and those who can move ahead (p.127).

From the above discussion it becomes evident that teachers need to consider a vast number of instructional strategies for their heterogeneous classrooms. The strategies (Figure 3.3) include cooperative learning, peer tutoring, demonstrations, aided language stimulation and a multisensory approach, which will each be discussed in detail.

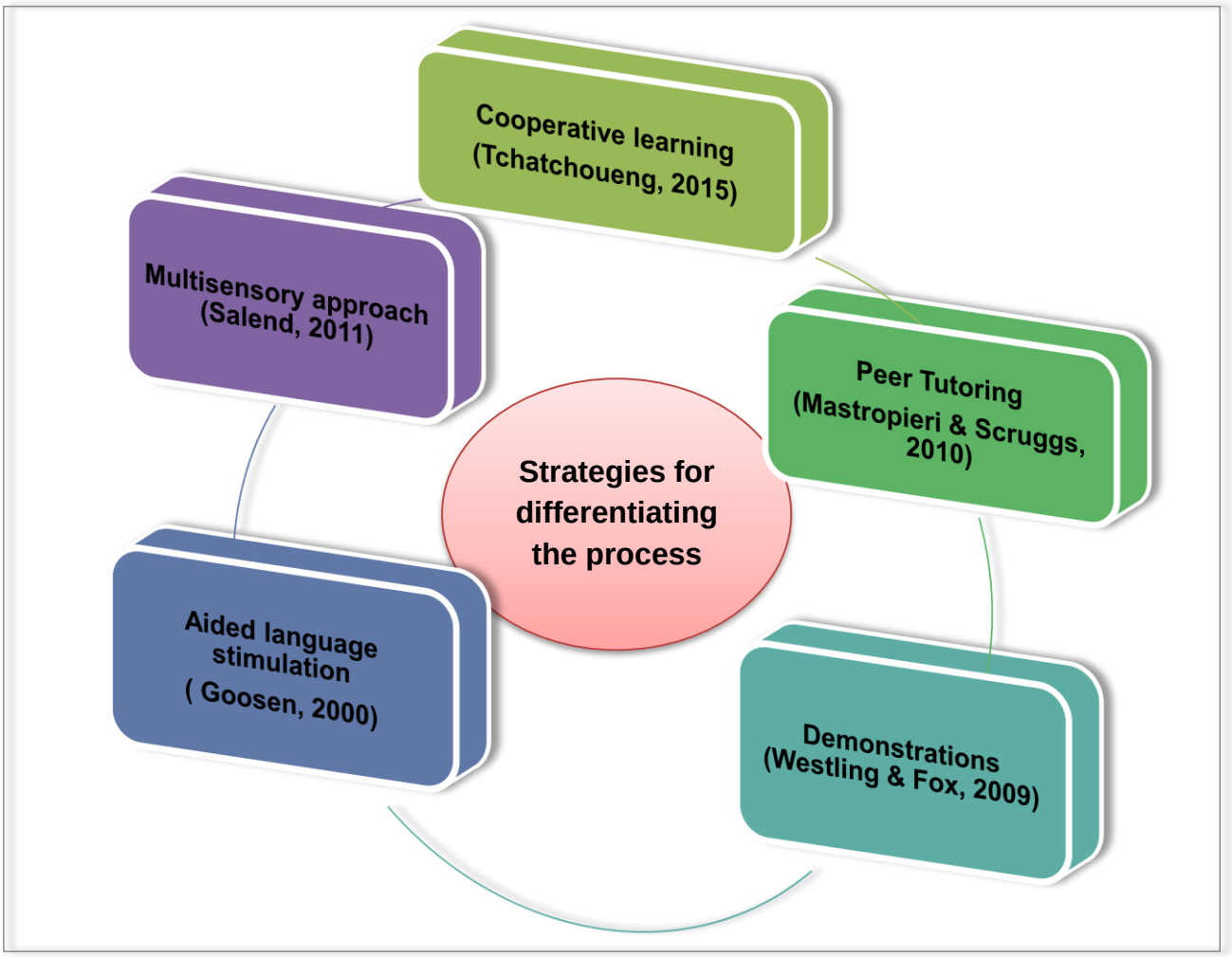

Figure 3.3: Strategies to differentiate process to meet the needs of heterogeneous classrooms

- ❖ Cooperative learning

South African schools are positioned as the centre of the community where learners from the neighbourhood learn play together from the early years. This is closely associated to cooperative learning. In cooperative learning, the teacher uses small, heterogeneous groups of learners to work together to achieve common learning goals (McMaster & Fuchs, 2001). Downing (2008) defines cooperative learning as a departure from the traditional teaching approach, in which learners work independently, to a cooperative learning approach where learners assist one another in the learning process. Tchatchoueng (2015) describes it as a teaching pedagogy that allows learners to work together with a strong interest in their own and others' learning and in achieving a common goal.

“In cooperative learning, students work with their peers to achieving a shared academic goal rather than competing against or working separately from their classmates” (Salend, 2011). One of the aspects that needs to be taken into consideration in teaching is that in the African cultures, learners are used to working in groups and not as individuals (Venter, 2004). Cooperative learning is therefore considered a sound approach for diverse classrooms like current South African classrooms (Landsberg & Mathews, 2016.p.108).

Landsberg and Mathews (2016) suggest that when using this strategy, grouping of learners can be homogeneous or heterogeneous. For instance, for a homogeneous group, learners with limited proficiency in English can be grouped together and receive direct, face-to-face assistance from the teacher to complete the task (Algozzine & Anderson, 2007). Westling and Fox (2009) point out that the use of groupings promotes effective learning and participation. Tchatcoueng (2015) points to the benefits of cooperative learning, stating that using a heterogeneous grouping strategy is innovative since it does not stigmatise and isolate learners with various learning barriers, including those with a lack competency in the language of learning and teaching, those who are affected by home factors and those with learning disabilities.

Mastropieri & Scruggs (2010) state:

> “Cooperative learning groups usually range from two to six students. The groups should be larger when materials are scarce, or when limited time is available to complete the activities. If students are younger or inexperienced with cooperative learning activities, the group size should be smaller. Students should not work in groups of four or more if they have not mastered the pre-skills of group work” (p.190).

During cooperative learning, learners reach consensus on a common goal and each learner is assigned a specific role to play for a particular task (Gregory & Chapman, 2013). Furthermore, each learner contributes to the learning task based on their knowledge and skills (Wood, 2009). For example, during Mathematics, learners can embark on an activity where they classify and categorise different shapes (DBE, 2015). Some researchers (Salend, 2011; Tchatchoueng, 2015; Landsberg &

Mathews, 2016) identify the following elements of cooperative learning: Positive independence, individual and group accountability, appropriate use of cooperative skills or interpersonal skills, positive independence, face-to-face promotive interaction, learners' reflection and group processing.

Positive independence

Positive independence is a learning process where each learner believes that the achievement of one learner is an achievement for all the learners, and that the failure experienced by one learner is a failure for all the group members (Landsberg & Mathews, 2016). In other words, during cooperative learning each learner is concerned not only about their own achievement, but the achievement of other learners in a group as well (Tchatchoueng, 2015).

Individual and group accountability

During cooperative learning, individual and group accountability are built in as an important aspect within the learning process (Gregory & Chapman, 2013). Individual accountability implies that each group member is responsible for contributing to the group based on the expected outcomes (Salend, 2011). In other words, each learner in a group is accountable for the completion of assigned task in order for the group to achieve learning outcomes (Tchatchoueng, 2015).

Appropriate use of interpersonal skills

One of the co-features of cooperative learning is the facilitation of cooperative and social skills (Landsberg & Mathew, 2016). Interpersonal skills are those skills that are previously learnt and include turn-taking, addressing other members politely, respecting other learners' views, and accepting instructions from others (Tchatchoueng 2015). Interpersonal skills are used appropriately when learners encourage and assist one another during the learning process (Salend 2011).

Group processing

"Group processing is about learners reflecting on their work, and finding ways to improve one another's skills in as well as getting content knowledge" (Tchatchoueng 2015). It is often achieved by having groups reflect on the learning products they created and the processes they used (Salend, 2011). Group processing includes describing contributions that were helpful and behaviour that needs to be changed to improve the functioning of the group (Landsberg & Mathew, 2016).

- Peer tutoring

Wood (2009) emphasises that peer tutoring is one of the valuable resources that teachers should not overlook. Over the years, learners have been used as peer tutors, cross-age tutors, data collectors, peer buddies or peer helpers and the effects have been impressive (Downing 2008). During cooperative learning, the teacher can assign a peer to assist learners who have difficulties in understanding the content (Wood, 2009).

Peer tutoring has various advantages, including facilitating interaction between learners with various needs; using learners' insights about how to make learning more cooperative and less competitive; and providing experiences related to caring and being cared for (Wood 2009). Gregory and Chapman (2013) confirm that during peer tutoring, learners often communicate with one another using a different language from that of the teacher, making their way of explaining information easier for their peers to understand. However, Downing (2008) cautions that as much as peer tutoring serves as one of the teaching strategies to meet the learning needs of heterogeneous classrooms, no learners should ever be forced to assist other learners.

- Demonstration method

Good teaching depends on how the content is transmitted to all learners. An approach that guarantees that all learners internalise knowledge, is through demonstration as a way of differentiating the learning process. During the demonstration, learners watch how another person, an adult or another peer, handles and completes tasks (De Witt, 2016). In other words, learners learn or acquire knowledge through watching a teacher or another learner performing an

activity. Demonstration has been found to be more directive as the teacher does the project and the children watch (Deiner, 2010).

- Multisensory approach

Teaching strategies that address a variety of learning preferences and styles should be a fundamental consideration when differentiating instruction. Learners learn through many senses, and teachers need to use numerous modes to enhance oral presentation and provide multisensory input for learners (Wood, 2009). For example, Salend (2011) states that teachers can teach aspects such as letters or words using a combination of visual, auditory, kinaesthetic and tactile modalities.

Effective teaching or instruction in a class of learners with diverse learning needs requires relevant teaching and learning materials to allow all learners to succeed within the same curriculum. These include FM systems (Westling & Fox, 2009), language cards, a boardmaker programme, software for reading, books on tape, and adapted worksheets (Mastropieri & Scruggs, 2010). Salend (2011) adds that the teaching and learning materials used in a classroom setting should accommodate learners with different learning styles, providing them with a variety of tactile, visual and auditory inputs. In the South African context, the use of multisensory teaching should not be limited to the commercial resources provided by the schools, but should be seen as an opportunity for teachers to explore natural resources that could be accessed from the community and the school environment.

- Aided language stimulation

Aided language stimulation (ALS) is a teaching approach where the teacher uses speech, gestures and pictures to enhance the interaction and participation of all the learners, including those who present with complex speech difficulties (Goosen, 2000). In other words, the teacher does not rely only on speech during teaching, but uses multiple modes of communication such as pointing, gestures and pictures. ALS allows learners who cannot express themselves to participate by pointing to pictures or graphic symbols during the teaching and learning process (Dada & Alant, 2009). In FP, ALS can be used in many class activities such as literacy, numeracy and life skills, where the teacher talks and points to pictures to enhance comprehension.

(iii) Differentiation of the product

Differentiation of the product serves as the most observable means of differentiation, revealing the content and the process through which learning occurs . It refers to the output through which learners demonstrate what they have learnt (Aliakbari & Khales Haghighi, 2014), which enables the teacher to determine whether the set goals have been achieved (De Witt, 2016). In other words, during the differentiation of the product, teachers use various forms of assessment that allow learners to demonstrate and apply what they have learnt and apply knowledge and skills after significant instruction (Santangelo & Tomlinson, 2009). It involves rethinking the traditional practice where all learners complete the same assessment task at the same time (DBE, 2011). Walton (2013) postulates that the significance of the differentiation of the product not only exposes learners to what they do not know or they cannot do, but to allow them to demonstrate what they know and what they can do. Furthermore, it challenges all learners at all levels so that they can make a decision, be responsible for their own learning and have an opportunity to demonstrate what they know through products determined by their learning preferences, interests and strengths (Algozzine & Anderson, 2007). In addition, Tomlinson and Allan (2000) contend that differentiating the product also:

- Encourages learners to demonstrate what they have learnt in various ways;
- Allows various working arrangements such as working alone or in groups;
- Encourages the use of various resources in preparation of the product;
- Allows the use of various assessment methods;
- Provides product assignment at varying degrees of difficulty, determined by the learners' readiness.

Fidan, Cihan and Özbey (2014) list various ways of differentiation of the product based on learners' readiness, interests and learning profile. This includes strategies such as the use of multiple-choice questions, gap filling, taking advantage of open-ended questions and open-book tests. Other forms of differentiating the products include the use of group assessment activities, allowing assessment activities to be taken orally as well as in written form, allowing extra time to complete the assessment task, using aids and technology (DBE, 2011). Gregory and Chapman

(2013) suggest giving an oral instead of written answer or engaging in a centre experience as some of the strategies to differentiate the product.

(iv) Differentiation of the learning environment

The learning environment does not only refer to the physical setting of the class but also the emotional context in which learning occurs (Tomlinson & Imbeau, 2010). The learning environment is one of the significant aspects of the promotion of achievement for all learners (Aliakbari & Khales Haghighi, 2014). Differentiation of the learning environment is an essential step towards effective learning for all learners (Fidan et al., 2014). Gregory and Chapman (2013) maintain that in differentiated learning environments, learners feel safe and secure, which also allows them to take risks and express their understanding or lack of understanding. For example, teachers can organise the teaching and learning environment by modifying the classroom setting to allow clear access to teaching boards and other resources. The learning environment can also be modified to allow learners to move freely between tables and groups. According to Tomlinson and Imbeau (2010), effective differentiation of the learning environment presents with the following characteristics:

- The teacher is responsive to the needs of all learners in all domains.
- All learners feel secure and safe, both physically and affectively.
- The teacher provides each learner with the necessary support.
- Individual differences are welcomed and accepted.
- Learners learn to support and respect one another as learners.
- Both the teacher and learners share decisions about daily classroom routines, management and classroom operation.
- Physical arrangements are flexible to meet the needs of each learner.
- A range of resources is available to support teaching and learning.

It is critical that the learning environment should contain features that should not hinder learning but ensure that each learner feels welcomed, accepted and respected.

3.4 CONCLUDING REMARKS

In this chapter, the elements of the microsystem were discussed. As suggested by Bronfenbrenner's ecological systems theory (1979), these aspects are crucial for the development and learning of learners. It is therefore apparent that the characteristics of each setting can either facilitate success or hinder IE in schools. For instance, a lack of or inadequate family involvement and partnership in the education of their children will cause a serious setback in effective access to quality education for their children. For learners to learn and participate effectively in any activity such as cooperative learning, they need to experience a feeling of friendship and belonging. In other words, every learner must feel welcomed by their peers for their own development, learning and participation.

The role of teachers in ensuring access to the curriculum for all learners irrespective of their diverse learning needs cannot be overemphasised, since they are the key individuals responsible for the provision of the necessary support to all learners in schools. The major aspect of learning support is curriculum differentiation, which is strongly embedded in IE pedagogy. A vast amount of the literature supports the need for and significance of the differentiation of the curriculum. Without differentiation of the content, process, product, and learning environment, IE will fail. The successful implementation of curriculum differentiation not only requires teachers' understanding of learners' readiness level, interests and learning profile but also the availability of support to teachers in schools.

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CHAPTER 4: RESEARCH METHODOLOGY

> *"When they plan a research project, researchers need to identify whether they will employ a qualitative, quantitative, or mixed methods design. This design is based on bringing together a worldview or assumptions about research, the specific strategies of inquiry, and research methods"* (Creswell, 2009, p.20)

4.1 INTRODUCTION

Bronfenbrenner's ecological systems theory (1979) examines layers of interacting systems which result in change, growth, and the development of the learner (Nel et al., 2013). In chapters 2 and 3, literature was presented through the lens of Bronfenbrenner's ecological systems theory (1979) to investigate the relevant factors within the various systems that affect IE as the foundation of curriculum differentiation. The aim of this study was to devise teacher training guidelines for curriculum differentiation that would contribute to addressing the diverse learning needs of all learners in schools, particularly in FP classes.

Chapter 4 describes the research methodology employed to explore the differentiation of the curriculum in ensuring access to education for all learners in full-service schools. The research methodology employed to answer my research questions is discussed in detail. The description begins with the research paradigm that guided this study and the research approach and type adopted. It goes on to describe the research sites where the study took place, the sampling method for the selection of participants, and the data collection and analysis strategies. The trustworthiness of the study and the ethical standards that steered it were crucial aspects. Figure 4.1 outlines the research design, showing the interlinked procedural methods employed in the study.

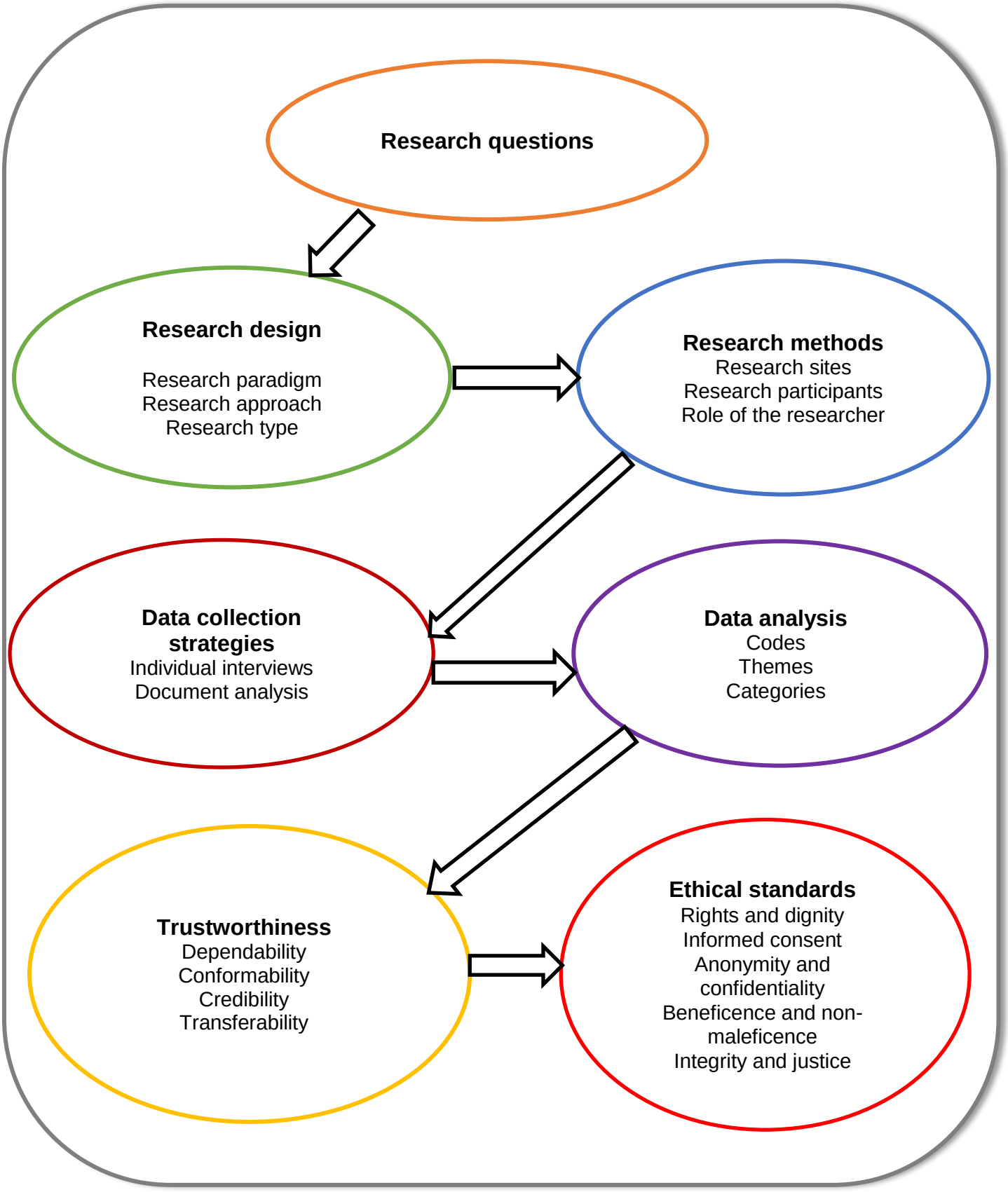

Figure 4.1: Overview of the research methodology

4.2 RESEARCH QUESTIONS

Research questions arise from the things that individuals are curious about, things that are unknown, but need to be known (Bertram & Christianse, 2014). The research questions are fundamental to determining the type of research to be conducted, its design, the manner in which the sample is created, the way the research data is collected and analysed and finally how the results are reported (Bless, Higson-Smith & Sithole, 2013). The research questions are crucial for structuring the research project; they give direction and coherence and keep the researcher focused (Punch, 2013). The research questions asked in this study determined my paradigm, approach and methods to find answers that could inform teacher training guidelines for curriculum differentiation for the BEd (Hons) in Learning Support.

According to Merriam (1998), the choice of a research design needs an understanding of the philosophical orientation of the kind of research one is undertaking. In this regard, Creswell (2012) posits that philosophical worldviews are influential on the research process. To ask the research questions that were pertinent to this study, I considered Jansen's (2010) recommendations about the characteristics of research questions (Table 4.1).

Table 4.1: Characteristics of research questions

Characteristics of research questions	How they guided the research questions of the study
Concise	Research question for this study centred strictly on the issue of interest, namely the differentiation of the curriculum in full-service schools.
Clear	The question was formulated to ensure that it was clear and could also be understood by individuals who outside the fields of IE and FP.
Operationalisable and open-ended	The question was formulated in such a way that the research could be executed or implemented. Curriculum differentiation is actually discernible but because it is still not widely practised, the focus was on full-service schools.
Elegant	Although the question formulated for this study consisted of

Characteristics of research questions	How they guided the research questions of the study
	a reasonable number of words, it conveyed the rich meaning of the phenomenon under study.
Timely	The question was asked to address critical issues at a time when the South African Department of Basic Education is attempting to make the curriculum accessible for all learners. In South Africa, the IE policy was developed in 2001. However, most learners still experience challenges in accessing the school curriculum, which is a real educational predicament.
Puzzle features and theoretically rich	The main research question leads to other questions that focused on unravelling a deep puzzle in the literature, namely the issue of curriculum differentiation as a strategy to meet the diverse learning needs of learners in schools.
Grammatically correct and self-explanatory	The questions that guided this study did not require further elaboration because they were asked in a manner that explained itself.

Against the background of Jansen's (2010) set of characteristics, I formulated the following research questions (see 1.3.2).

Primary research question

What are the constituent elements of teacher training guidelines for curriculum differentiation in a Foundation Phase programme?

To answer the primary question, three secondary research questions were generated (see 1.3.2).

Secondary research question 1

What are the official policies that inform curriculum differentiation in addressing diverse learning needs of learners in schools?

Secondary research question 2

How do FP teachers understand and experience the implementation of curriculum differentiation to support learners with diverse learning needs as part of IE practice?

Secondary research question 3

How effectively does teacher training on learning support in the Foundation Phase prepare teachers to differentiate the curriculum to support learners with diverse learning needs?

Since most qualitative research dwells on the issue of "how" and "what" questions (Niewenhuis, 2010), both the primary and secondary research questions in this study dictated that responses or answers be presented in words and not in numbers. They therefore needed appropriate research questions that would facilitate seeking the answers.

The research methodology of the study is now discussed by referring to the research design and research methods.

4.3 RESEARCH DESIGN

The research design is a plan and procedure for research that spans the decision from broad assumptions to detailed methods of data collection and analysis (Creswell, 2009). The plan describes the procedures followed, using the "w" questions: when, from whom, and under what conditions the data would be obtained (McMillan & Schumacher, 2010). Thomas (2009:71) views it as a plan that bears the following considerations: What is it that the researcher tries to achieve? Does the researcher want findings to be used practically? What resources, time and money do the researcher have available? What kind of access does the researcher have to the people or the situation he/she will focus on? What kind of expertise can be called in to support the researcher? On the other hand, Monette, Sullivan and De Jong (2008) explain the research design as a plan that outlines how observations will be made and how the researcher will carry out his/her research project. The research design,

in other words, defines the planning of the steps that the researcher will track when conducting research that will finally answer the research questions.

My research design determined the appropriate research method to be used in this study, the strategies followed to capture information and the techniques to be used for analysing my data. I selected my research design along the dimensions suggested by Durrheim (2004), which comprise the research paradigm, research approach and research type.

4.3.1 Research paradigm

Guba and Lincoln (1994) view a research paradigm as:

> "A set of basic beliefs (or metaphysics) that deals with ultimates or first principles. It represents a worldview that defines, for its holder, the nature of the world, the individual's place in it, and the range of possible relationships to that world and its parts as for example, cosmologies and theologies do." (p.34)

Chilisa and Kawulich (2012) suggest that paradigms provide guidelines for asking certain questions and using appropriate approaches to systematic enquiry. In other words, paradigms are shaped by the focus area of the researcher and lead to the research approach of a study. Thomas (2009) explains paradigms as shared thoughts in a particular community of investigation, the thinking habits of a researcher and rules of procedures. Denzin and Lincoln (2008) point out that paradigms differ in their assumptions and criteria for evaluating research. Gitchel and Mpofu (2012) concur, asserting that paradigms make different assumptions about the nature of reality and how best to understand it.

The key philosophical convention that underpins qualitative research is the interpretivist paradigm (Morgan & Sklar, 2012). Unlike positivism, which insists that the scientific method is the only way to establish the truth, interpretivists seek to understand the world by relying as much as possible on the views the participants convey to the situation (Creswell, 2012). Since I was interested in understanding how teachers differentiated the curriculum to meet the diverse needs of their learners in full-service schools, I situated my study within the interpretivist paradigm (Denzin & Lincoln, 2008). This framework provided me with the lens through which

the results of the study could be interpreted (Ferreira, 2012), while recognising that social reality is constructed and interpreted by the individuals who participate in the social world themselves according to the ideological positions they hold (Scotland, 2012). The key strength of the interpretivist paradigm is that it helped me to understand the viewpoints and experiences of the teachers who were driving curriculum differentiation in schools (McDevitt & Ormrod, 2013).

The interpretive paradigm is characterised by a concern for individuals and seeks to understand the subjective world of human experience (Cohen, Manion & Morrison, 2011). With my empirical study, I wanted to make sense of the feelings and experiences of FP teachers on the differentiation of the curriculum in schools. Thomas (2009) indicates that in the interpretive paradigm, researchers use their own interest and understandings to help interpret the expressed ideas and behaviour of others. This approach gave me an opportunity to understand the experiences of teachers using curriculum differentiation to handle the learning needs of their learners in the natural context, namely their classrooms. Since the proponents of the interpretivist paradigm argue that human experience can only be understood from people's viewpoints (Morgan & Sklar, 2012), my interpretation of the data assisted me to understand how FP teachers applied differentiation of the curriculum to meet the diverse learning needs of their learners in schools.

While embedding my research within the interpretivist paradigm, I observed that reality is subjective; it resides in people and is constructed by people who experience it (Creswell, 2009). To enrich my data further, I interpreted my participants' verbal and non-verbal communication. The latter included smiles, gestures, pointing, nodding and shaking heads, to which Beukelman and Mirenda (2009) refer as unaided modes of communication.

4.3.2 Research approach

When selecting a research approach there is no right or wrong method (Silverman, 2010). The determining factor of the research approach is the purpose of research and the type of data that will achieve this purpose (Durrheim, 2004). The paradigm I employed also played a role. As my study was situated within the interpretivist paradigm, qualitative research was the most appropriate approach. Morgan and

Sklar (2012) indicate that the main philosophical tradition underpinning qualitative research is interpretivism, since human experience can only be understood from people's viewpoint. Quantitative researchers use numbers to collect data and analyse data statistically, while qualitative researchers study issues in depth, openness and detail, as they identify and attempt to categorise information emerging from the data (Durrheim, 2004).

Curriculum differentiation is one of the most significant methods for dealing with learners' learning differences and their concomitant needs (Tomlingson et al., 2003). However, the body of knowledge and research about the effect of teacher preparation for curriculum differentiation in the FP is limited. Since the purpose of my research was to obtain a rich in-depth description of how teachers in the FP perceive curriculum differentiation to deal with the learning needs of their learners who experience learning difficulties, a qualitative approach was deemed the most appropriate approach to gathering data. Nieuwenhuis (2010) claims that a qualitative research approach is concerned with understanding the process and the social and cultural context that underlie the behavioural patterns of individuals. This ties into my study, as the particular cultural context of my participants (see 4.4) had a determining influence on how curriculum differentiation was implemented. According to McMillian and Schumacher (2006), the significance of qualitative studies is to generate theory and to improve educational practice. Table 4.2 illustrates how my study meets the requirements of qualitative research, as proposed by a broad spectrum of researchers such as Ary, Jacobs, Razavierh and Sorensen (2006), Merriam (2009) and Nieuwenhuis (2010).

Table 4.2: Characteristics of qualitative research

Rich and descriptive (Merriam, 2009; Nieuwenhuis, 2010) Whereas quantitative research focuses on the scope and breadth of the information provided, qualitative researchers' emphasis is on the quality and the depth of information (Nieuwenhuis, 2010). To collect rich and descriptive data about the differentiation of the curriculum, I employed in-depth individual face-to-face interviews with nine teachers. They had all completed a BEd (Hons) programme in Learning Support at one of the major South African universities and were employed in nine full-service schools in three different contexts, i.e. rural, township and former Model C. Apart from their contextual differences, these schools were located in three different South African provinces. I chose to work with these teachers because they were a unique group specialised in learning support and were tasked to ensure access to learning for all learners.
Natural setting (Bogdan & Biklen, 1992; Creswell, 2009; Nieuwenhuis, 2010) Qualitative researchers collect data at the site where the participants experience the problem being investigated (Creswell, 2009). This means that research is conducted in a real and natural context. Bogdan and Biklen (1992) suggest that qualitative researchers go to the setting under study, because they are concerned with the context and because the history of such settings needs to be understood. I believed that the notion of curriculum differentiation could best be understood in the setting in which it transpired, and therefore physically visited participants in their natural settings, i.e. in their classrooms in three rural, three township and three former Model C schools.
Human researcher is the key instrument (Bogdan & Biklen, 1992); Creswell, 2009; Nieuwenhuis, 2010) Unlike quantitative research, the qualitative approach regards researchers as research instruments in the process of data collection (Nieuwenhuis, 2010). In other words, researchers are the primary investigators who collect data themselves (Creswell, 2009). Because I chose a qualitative approach, I collected data myself without employing any research assistance. I entered the participants' natural settings, namely the nine primary schools (three rural, three townships and three urban schools) to collect data from the teachers through semi-structured interviews.
Concern about context and meaning (Creswell, 2009) During the entire research process, my focus was on understanding events, action, and the process from different contexts attached to the topic under investigation (Babbie & Mouton, 2001). I was specifically interested in the viewpoints of teachers about differentiating the school curriculum. To ensure that I obtained rich and descriptive data (Nieuwenhuis, 2010), I probed deeper into my participants' experiences and their understanding of curriculum differentiation during the individual interviews (Creswell, 2008). During the interviews, I ensured that the data from my participants was accurately captured by using a high-quality voice recorder, repeating or modifying the questions and asking participants to repeat their answers to the questions to obtain valid data (Creswell, 2008). Where

some of the participants preferred to co-switch languages, they were given the opportunity to do so. For instance, some participants chose to express themselves in their first language, which was Setswana. My focus was on questions such as: What do you understand by the concept of curriculum differentiation? How do you differentiate the curriculum in addressing diverse learning needs of your learners in your class? What aspect of the curriculum do you differentiate?

Multiple sources of data (Creswell, 2009, McMillan & Schumacher, 2006)

Qualitative researchers in the field of education and social sciences use multiple methods and multiple sources of data (Punch, 2013). Data collection strategies include interviews, observations and document analysis (McMillan & Schumacher, 2010). Because I wished to understand how teachers differentiated the curriculum in their FP classrooms, I did not rely on a single method of enquiry only but employed various data collection strategies. Two such strategies were used, namely semi-structured face-to-face interviews and document analysis in the different contexts i.e. in three rural, township and former Model C schools as well as the university.

Inductive data analysis (McMillan & Schumacher, 2006) and deductive data analysis (Bertram & Christiansen, 2014)

There are two broad approaches to analysing qualitative data (Bertram & Christiansen, 2014). One is inductive data analysis, whereby the findings of the research emerge from the frequent, dominant or significant themes inherent in the raw data (Nieuwenhuis, 2010). In contrast to the inductive method, the researcher has a clear set of concepts beforehand for the deductive approach and uses it to set themes and categories (Bertram & Christiansen, 2014). This study made use of deductive data analysis, which means that data themes and categories were formulated beforehand, based on the literature and experience.

Emergent design (Creswell, 2009; Lichtman, 2010)

The qualitative research process is not fixed. This implies that the initial research plan cannot be prescribed as it may change or shift after the researcher starts with data collection (Creswell, 2009). In other words, the researcher does not follow one specific way of doing things during the entire research process (Lichtman, 2010), but makes changes based on the context. This approach enabled me to change the format and the sequence of my interview questions as I went through them with each participant. As I progressed through my ever-changing background and based on my experience, some of my interview questions were modified to provide me with rich data. For instance, in one of the interviews, the participant (TT1) mentioned how she almost fought with a teacher of her sister's daughter because she realised that the school that her sister's daughter attended, ignored the learning needs of learners. As a result, the whole interview had to be modified as I probed deeper to understand how the problem was addressed.

4.3.3 Research type

Selection of a research type depends on whether one's study uses a qualitative, quantitative or combined research paradigm (Bertram & Christiansen, 2014). Currently, there are five common research types integrated into specific qualitative research: natural studies research, phenomenology, grounded theory, ethnography and the case study (Nieuwenhuis, 2016). Based on the qualitative research design in which this study was entrenched, the research type that was considered the most appropriate was the case study. According to Yin (2014), a case study is rooted in the interpretivist approach. Rule and John (2011) define a case study as a systematic and in-depth investigation of a particular instance in its context, to generate knowledge. Creswell et al. *(*2007 define it as an "… exploration of a bounded system (a case) or multiple bounded systems (cases) over time through detailed, in-depth data collection involving multiple sources of information-rich in context".

Rule and John (2011) suggest that a case might be a person, a programme, a process or a series of developments investigated over time and in depth, according to McMillan and Schumacher (2006). This study involved nine FP teachers who taught in FSS and who had completed the BEd (Hons) in Learning Support at the university under study. These participants were drawn from three rural schools, three township schools and three former Model C schools. Yin (2014) specifies primary types of case study designs such as single and multiple case studies. In other words, the researcher chooses one or several cases and investigates them in depth (Rule & John, 2011). McMillan and Schumacher (2010) add that a multiple case study involves two or more cases, described and matched to provide an understanding of a specific phenomenon. This study consisted of a multiple case study. According to Stake (2006), multiple case studies investigate a particular phenomenon (or group of phenomena) at a number of different sites. In this study, the case was the implementation of curriculum differentiation in FSS. These schools were situated in three different contexts:

- A case study on the implementation of curriculum differentiation in rural full-service schools

- A case study on the implementation of curriculum differentiation in township full-service schools
- A case study on the implementation of curriculum differentiation in former Model C full-service schools.

Using a multiple case study design provided me with insight into the curriculum differentiation as part of IE practice, by exploring the aspects of each site that play a role in the differentiation of the curriculum. The exploration and description of a case take place through detailed, in-depth data collection methods, involving multiple sources of information that are rich in context). Hence, I used more than one method of data collection that included semi-structured individual interviews with the teachers from rural, township and former Model C schools, as well as document analysis.

4.4 RESEARCH METHODS

Research methods involve the forms of research sites, research participants, data collection strategies, the role of the researcher, data analysis, interpretation of the research, trustworthiness, and ethical considerations (Creswell, 2009). There are various methods that a researcher can consider for gathering information. However, it was fundamental to select a research method that would be the most appropriate to answer my research questions (Bertram & Christiansen, 2014). This section begins with a detailed picture of the sites where the study was conducted, going on to provide a detailed description of the participants in the study. The discussion then validates and attempts to justify strategies used to collect data focuses on the role of the researcher. I further describe the data analysis strategies used in this research, and finally, trustworthiness and the ethical considerations that underpinned my empirical work.

4.4.1 Research sites

This study was conducted in three of South Africa's nine provinces. These provinces vary in size, population distribution, dominant language of communication and economy. The names of the provinces according to their size are: Northern Cape, followed by Eastern Cape, Western Cape, Free State, Limpopo, North West,

KwaZulu Natal, Mpumalanga and Gauteng. This study was conducted in nine public FSS, respectively located in rural, township and urban settlements. As discussed in Chapter 3, FSS are ordinary schools that have been converted into full-service schools to accommodate learners in need of low, medium and high levels of support (Nel et al., 2013). This implies that the learners in these schools present with various learning needs.

4.4.1.1 Research sites in rural settlements

Schools A, B and C are located in rural areas in two provinces. Schools A and B are found in North West while school C is located in Mpumalanga. Kilian, Fiehn, Ball and Howells (2005) define a rural area or settlement as an area that is usually unplanned, poorly serviced and characterised by scattered distribution of the population. The governance of land in these rural villages lies within the powers of chiefs, traditional leaders and councillors.

Each rural community has its own language of communication, for instance the dominant language in the Mpumalanga village where school C is located, is IsiNdebele, while Setswana dominates in the areas where schools A and B are. In South Africa, the underlying principle of the Language in Education Policy is to use the home language as the language of learning and teaching (LOLT), especially in the early years of schooling, while providing access to an additional language (DBE, 2010). According to Tshotsho (2013), the main validation for the use of the first language or mother tongue as LOLT in the FP is to ensure that skills that are cognitively taxing should first be delivered in learners' own languages for a period of three years, so that these learners could benefit from the support of their mother tongue − and they can only change to the second additional language when they have acquired the necessary language and cognitive skills. However, the education language policy does not prescribe which of the 11 official languages should be used but rather leaves the choice of LOLT to parents and SGBs, also known as school boards (Taylor & Coetzee, 2013).

The LOLT in school C is isiNdebele, while Setswana is used in schools A and B. Most people in these two rural areas are unemployed, earn low wages and rely on social grants. However, there is also a middle class that includes business owners,

teachers, health professionals, police personnel and other government officials. With regard to the conditions of the schools, there has been a significant improvement in teachers' professional development programmes since the dawn of the new democracy in 1994. All teachers in these schools have basic teacher's qualifications. In addition, some of those teachers have other postgraduate qualifications such as advanced certificates in education (ACE) and honours degrees, mainly in educational management, and are fully appointed in their positions on a full- or part-time basis by the DBE. In these schools, only the participants of this study had completed the BEd (Hons) in Learning Support. Furthermore, two of these schools were engaged in establishing their SBSTs (see 2.3.3.2), while the other one has only a school management team and the SGB. Figures 4.2 and 4.3 show the provinces where the schools are situated as well as photographic images of the areas.

Figure 4.2: North West province: Location of schools A and B

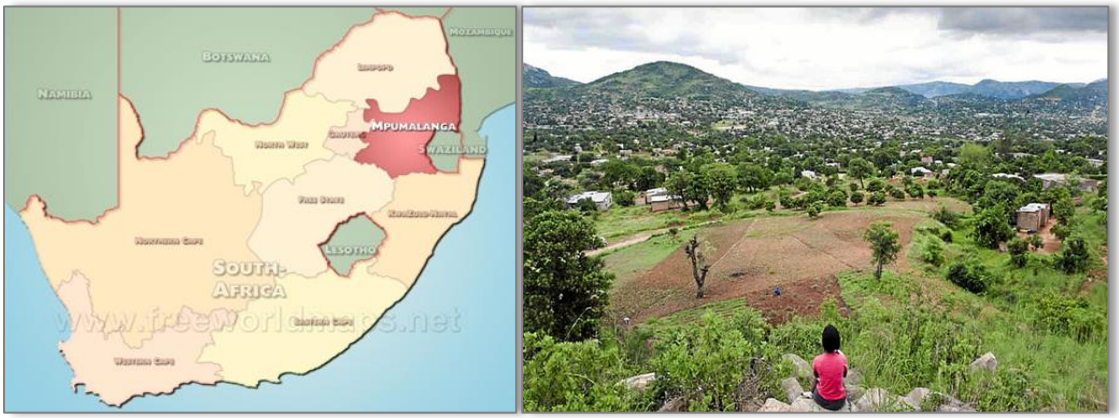

Figure 4.3: Mpumalanga province: Location of school C

4.4.1.2 Research sites in township settlements

Schools D, E, and F are located in three townships situated in the province of Gauteng. The term "township" commonly refers to an urban residential area that

during the apartheid era were reserved for non-white South Africans, namely Africans, coloureds and Indians who lived and worked in towns and in areas designated for whites only (Pernegger & Godehart, 2007). The townships were created to separate non-whites from the whites and are still located in city peripheries (Jürgens, Donaldson, Rule & Bähr, 2013). The majority of township residents are poor and unemployed, while others fall within the low- and middle-income groups (Pernegger & Godehart, 2007). There are many immigrants in these townships, which have migrated from neighbouring areas such as Zimbabwe, Malawi and Mozambique, as well as migrants from Somalia and Nigeria, who migrated into these areas mainly for business purposes.

The townships in which this study was conducted are therefore quite diverse in terms of languages, social, cultural and economic characteristics. For instance, the dominant languages in the township where schools D and E are located, include Setswana, Tsonga and Venda. In school F's area, the prevailing languages are Sepedi and Zulu. Since the schools are located not far from the cities, they have a good infrastructure such as buildings and playgrounds and also receive good municipal services. These services include clean water and electricity. However, similar to the rural schools, limited teaching and learning materials are available. All teachers in these schools have basic teacher's qualifications and have been appointed full time by the DBE. With regard to continued teachers' professional development, most of the teachers have a postgraduate degree in educational management. Schools E and F each had one teacher who had a BEd (Hons) in Learning Support. In school D, two teachers had completed this programme. The three schools have SBSTs. Figure 4.4 shows the province where the township schools are situated and a photographic image of the area.

Figure 4.4: Gauteng: Location of schools D, E and F

4.4.1.3 Research sites in urban settlements

Schools G, H, I and the university under study are located in urban areas in Gauteng (Figure 4.5). According to Statistics South Africa (2001), there is no single definition of an urban area that would apply to all countries. For statistical purposes, most countries including South Africa use a combination of total population and population density to define an urban area. Pernegger and Godehart (2007) point out that urban areas are typically densely populated, with opportunities for employment, access to quality education, healthcare and other services such as water, electricity and sanitation. In the apartheid era in South Africa, the urban areas, namely the cities and towns and their residential suburbs, were systematically designed to separate races and classes (see 2.3.1.1). In other words, before the new democracy, these urban areas were specifically designed for the white population. After 1994, non-white citizens began to move into these areas, most of them categorised as middle and high class. The province of Gauteng is regarded as the most powerful economic performer, with the strongest growth in job opportunities (Kilian et al., 2005) in South Africa, which also benefits people from the neighbouring countries.

Under the apartheid system, the so-called former Model C schools in the urban areas admitted only white learners. After 1994 and the transformation of the South African government, these schools began to accept learners from other racial groups. In comparison to the rural and township schools, the former Model C schools are seen to be better equipped and managed. They are in fact regarded as the country's best schools, with great facilities such as sports fields, libraries, computer rooms, well-equipped classrooms with teaching materials such as smart boards, data and overhead projectors as well as human resources. All the

participating schools (G, H and I) maintain a single LOLT, which is mainly English, in all the grades.

Teachers in these schools have basic teacher's qualifications and most of them also have postgraduate qualifications such as a BEd (Hons) and Master's in Education. Teachers in these schools are employed full-time by the Department of Education. Due to the financial status of these schools, some teachers are employed by the SGB to eliminate overcrowded classes.

Figure 4.5: Gauteng Province: Location of schools G, H, I and the university under study

4.4.1.4 School types

All the schools that participated in this study were classified as FSS based on Education White Paper 6 (DoE, 2001). As indicated earlier, there are currently 791 FSS in South Africa (DBE, 2015). According to the Draft National Strategy on SIAS (DoE, 2005), FSS are:

> "Ordinary schools which are specially equipped to address a full range of barriers to learning in an IE setting. In addition to their ordinary learner population, they will become accessible to most learners in an area who experience barriers to learning and provide the necessary support. In the implementation stages, these full-service schools will be models of institutional change which reflect effective inclusive cultures, policies and practice" (p.9)

The report on the implementation of Education White Paper 6 on IE (2015) states that currently there are 791 FSS in South Africa. As Table 4.3 shows, the number of FSS in each province varies in terms of the total number of learners at each school.

Table 4.3: Number of full-service schools per province, adapted from the report on the implementation of Education White Paper 6 on Inclusive Education (DBE, 2015)

Province	Number of full-service schools
North West	150
Western Cape	147
Mpumalanga	140
Free State	132
KwaZulu Natal	101
Gauteng	74
Eastern Cape	26
Limpopo	17
Northern Cape	4
TOTAL	**791**

The above table 4.3 indicates the total number of full-service schools in South Africa. North West has more FSS compared to other provinces, followed by Western Cape. Northern Cape province demonstrates to have fewer FSS (DBE, 2015). The *Guidelines for Full-service Schools* (DoE, 2010) indicate that one of the characteristics of such schools is that they should be fully equipped with regard to materials and resources to meet the diverse learning needs of their learners, also to support neighbouring schools.

The selected research sites were appropriate for my research problem and the purpose of my study (McMillan & Schumacher, 2006). All the schools had one or more FP teacher who had completed the BEd (Hons) degree in Learning Support at the participating university. Classes in each school operated from Grade R to

Grade 7. Since my research was conducted by adhering to ethical standards, all the participants and their sites were provided with pseudonyms. Table 4.4 outlines the pseudonyms of the schools that participated in the study and their distribution per district.

Table 4.4: Names and district distribution of schools that participated in study

RESEARCH SITES					
Rural primary schools	School A	**Township primary schools**	School D	**Former model C primary schools**	School G
	School B		School E		School H
	School C		School F		School I
Gauteng province					
School D		District 3			
School E		District 4			
School F		District 3			
School G		District 3			
School H		District 3			
School I		District 5			
Mpumalanga province					
School C		District 2			
North West province					
School A		District 1			
School B		District 1			

All the schools that participated in this study were further classified according to the quintile ranking of all South African public schools. The quintile ranking strategy is used to analyse socio-economic factors and the community surrounding the schools (Dieltiens & Meny-Gibert, 2012) to determine the financial support to be provided to those schools by the government. According to SASA, the government is required to provide funding to all public schools in the country. It is based on the National Norms and Standards for School Funding (NNSSF) policy, which provides a quintile ranking system to address equity and justice in all public schools. According to the NNSSF,

public schools are classified as quintile 1, 2, 3, 4 and 5. Schools ranked quintile 1, 2 and 3 serve the poorest communities and are declared no-fee schools. This implies that learners in these schools are not supposed to pay fees for their enrolment in school, giving such schools a priority allocation for a higher state subsidy than schools ranked quintiles 4 and 5 (Mestry & Ndhlovu, 2014:3). The rural and township schools that participated in this study are classified as quintile 1 and the former Model C schools as quintile 4. Quintile 4 schools are not declared no-fee schools, meaning that learners pay full school fees or a certain portion for their enrolment in school. Since the disadvantaged schools have a predominance of learners with diversity, this quintile system could assist them to improve human as well as physical resources and to achieve equity and equality (Lomofsky & Lazarus, 2001).

4.4.2 Research participants

The first step in the process of my research was to consider people who would provide information that would answer my research question (Creswell, 2008). In this study, I explored how teachers who completed a BEd (Hons) programme in Learning Support implemented the concept of curriculum differentiation as a strategy to meet the diverse learning needs of their learners during class activities. It was not practically possible to select all the teachers who had completed the programme for answering my research question. I therefore considered another appropriate approach for selecting the participants for this study. The two major methods of selecting research participants are probability and non-probability sampling (Creswell, 2009). The sampling of my participants depended on the rigour this study required, and the characteristics and availability of the target population (Creswell, 2008).

The idea behind qualitative research is to purposively select participants that will best help the researcher understand the problem being investigated and answer the research question (Creswell, 2009). Instead of probability sampling, this study employed the non-probability purposive sampling method because the participants were available, convenient to access and suitable for answering my research question (Denzin & Lincoln, 2000; Polkinghorne, 2005; McMillan & Schumacher, 2006; Nieuwenhuis, 2010). In purposive sampling, the researcher intentionally

selects participants with the purpose of obtaining information and to represent a phenomenon being studied (McMillan & Schumacher, 2006; Nieuwenhuis, 2016).

The criteria used as the basis for sampling are the key aspect of purposive sampling (Nieuwenhuis, 2016). The teachers selected for the study complied with the following criteria:

- They were employed in full-service schools.
- They taught in the FP.
- They had completed the BEd (Hons) programme in Learning Support at the university under study.
- They had been in teaching positions for at least one year.
- They had learners with diverse learning needs in their classrooms.

As the selection criteria indicate, the potential participants were no longer at the university. I therefore had to obtain personal information and contact details of the participants from the university administration department to identify participants who had completed the programme. Nine teachers from nine full-service rural, township and former Model C schools were selected as participants. This group of participants was unique because they had been assigned to implement curriculum differentiation as one of the strategies of addressing the learning needs of learners who needed additional support for their effective learning and participation. A bio-data account and the pseudonyms that describe the schools and teachers are presented in Table 4.5.

All the teachers were women and had basic undergraduate teacher qualifications. They had further completed the BEd (Hons) degree in Learning Support from the university under study. These teachers were furthermore recruited for participation because they all taught in full-service schools (see 4.4.1.4), had more than one year's teaching experience and had learners with various learning needs in their classrooms. The participant's profiles are presented in Table 4.5, which provides their professional and background information and the pseudonyms of the schools and teachers.

Table 4.5: Participants' profiles

Teacher pseudonyms	Gender	Teacher training qualifications	Current studies	Number of teaching years	Total number of learners in school	Total number of learners in class	Total number of learners in need of additional support	Other responsibilities in school
RT1	Female	JPTD, ACE (SN), BEd (Hons)	None	23	265	27	3	Cultural activities and music
RT2	Female	PTD, ACE (management), BEd (Hons)	None	31	210	24	9	None
RT3	Female	BEd, BEd (Hons)	None	3	500	37	7	Sports
TT1	Female	PTD, ACE (SN), BEd (Hons)	None	7	900	44	10	Music
TT2	Female	DE, ACE (SN), BEd (Hons)	None	18	1 600	45	12	Member and coordinator of SBST. Serves on the DBST.
TT3	Female	BEd, BEd (Hons)	MEd	3	1 439	46	5	Sports. Former member and coordinator of SBST
FMC1	Female	PTD, ACE (SN, BEd (Hons).	None	17	1200	44	12	Sports

Teacher pseudonyms	Gender	Teacher training qualifications	Current studies	Number of teaching years	Total number of learners in school	Total number of learners in class	Total number of learners in need of additional support	Other responsibilities in school
FMC2	Female	BEd, BEd (Hons)	MEd	4	1 340	43	20	Coordinator of school feeding scheme
FMC3	Female	DE, ACE (SN), BEd (Hons)	None	19	960	42	6	Member and coordinator of the SBST

Key to participants' professional qualifications

ACE (SN) = Advanced Certificate in Education (Specialising in Special Needs) – Postgraduate certificate

ACE (Management) = Advanced Certificate in Education (Specialising in Management) – Postgraduate certificate

BA = Bachelor of Arts – Undergraduate basic general degree

BEd = Bachelor of Education – Undergraduate basic teacher's qualification

BEd (Hons) = Bachelor of Education (Honours) in Learning Support – Postgraduate degree

DE = Diploma in Education – Undergraduate basic teacher's qualification

JPTD = Junior Primary Teacher's Diploma – Undergraduate basic teacher's qualification

MEd = Master in Education – Postgraduate degree

PTD = Primary teacher's diploma – Undergraduate basic teacher's qualification

From Table 4.5, it is evident that the nine participants all held basic teacher's qualifications, namely primary teacher's diplomas and bachelor's degrees. Furthermore, they all had the BEd (Hons) in Learning Support, which was the main criterion for participation in this study.

4.4.3 Data collection

According to Bertram and Christiansen (2014), data refers to the information the researcher collects to obtain answers to particular research questions. In qualitative studies, the researcher uses various techniques for gathering information, which include field notes, interviews, document analysis, video recording and observations (Cohen et al., 2011). The current study employed semi-structured interviews with nine FP teachers in three different settings together with document analysis. These two strategies provided me with an opportunity to gather rich and detailed information on the phenomenon being investigated, which was the differentiation of the curriculum in FSS.

4.4.3.1 Semi-structured interviews

In the semi-structured interviews, I asked questions so that the participants could explore how they applied curriculum differentiation in their classrooms. The semi-structured interview for the study consisted of predetermined questions that allowed for probing and clarification of answers (Nieuwenhuis, 2010). Such interviews are viewed as major modes of data collection in qualitative research and are designed to exchange information between the researcher and participants (De Vos, Strydom, Fouché & Delport, 2011). The interviews were therefore the primary data collection strategy of the study. This technique yielded direct quotations from participants about their experiences, opinions, feelings and knowledge (Patton, 2002) of curriculum differentiation. The interviews enabled me to explore all avenues that emerged during the interview process, and the participants could provide a complete picture of curriculum differentiation in their classrooms.

Before the data collection began, the participants were contacted telephonically to secure an appointment for the first visit. I introduced myself, explained the study and asked them if they would be willing to participate – the participants then signed the letters of informed consent (Appendix 4). In subsequent visits, the phenomenon of

curriculum differentiation was investigated in interviews with the participants. This was done to explore to what extent the curriculum was differentiated to address the diverse learning needs of learners in FP classrooms. The investigation examined the teachers' knowledge of differentiation of the curriculum as part of IE practice and sought to determine how they implemented curriculum differentiation in their classroom context. I also enquired about their knowledge of the various documents that inform curriculum differentiation in schools. Since the teachers were the key informants, I ensured that their answers were as detailed as possible, by asking open-ended questions, followed up by probing questions. In the last visit, the three participants from each context were visited for member checking to ensure the credibility of the study.

The aim of the interviews was to see the world through the eyes of the participants as teachers as they were a valuable source of information (Nieuwenhuis, 2010). Each interview lasted for approximately 45 minutes. They enabled me to gain a full and detailed account from the participants about the experience under study (Polkinghorne, 2005). To capture complete data on how teachers approached curriculum differentiation as a way to address diverse learning needs in schools, all the interviews were audiotaped and transcribed verbatim (Nieuwenhuis, 2010; Silverman, 2014). The interview schedule contained predetermined questions about the phenomenon being investigated (see Appendix 7). My interviews were further guided by Creswell's (2012) guidelines about using a quiet environment and asking open-ended questions.

(i) Locating a quiet and comfortable area

Interviews with all nine teachers were conducted in their classrooms after school. The standard operational time for all the schools was from 07:30 to 14:45 on Mondays to Thursdays and from 07:30 to 14:00 on Fridays. Interviews were therefore conducted after school when all the children had left the premises. I firstly established trust by introducing myself in detail and discussing ethical issues before commencing with the interviews.

This was done in a friendly, soft tone of voice.

(ii) Using open-ended questions, probing to obtain more information

The aim of the interviews was to collect rich and descriptive data on the phenomenon being investigated (Maree, 2010). In line with the interpretivist paradigm, I ensured that I obtained the maximum amount of data about curriculum differentiation in schools by asking open-ended questions and avoiding those that could elicit yes or no answers. My techniques included probing, clarification and paraphrasing to saturate my data, making sure that participants provided a full picture of the subject being studied (Creswell, 2009; Nieuwenhuis, 2010).

4.4.3.2 Document analysis

As a qualitative researcher, I was expected to draw upon multiple sources of evidence (Niewenhuis, 2010). I therefore used document analysis as another data collection strategy for this study. Document analysis is a systematic review of printed or electronic documents (Bowen, 2009). In this study aimed to shed light on teacher training and the notion of curriculum differentiation in schools. Official documents regarded appropriate for producing rich information and answering my research question included:

- The yearbook of the faculty of Education (2015) of the university under study
- Study guides for the ISA 710 and ILN 720 modules of the BEd (Hons) in Learning Support programme
- Education White Paper 6: Building an Inclusive Education and Training System (2001)
- The National Strategy on Screening, Identification, Assessment and Support: School pack (2008)
- Guidelines for Full-service Schools (2010)
- Curriculum Assessment Policy Statement (CAPS) for Languages (2013)

In my analysis of these documents, I kept in mind Bowen's (2009) findings that documents can provide background information as well as insights into a specific programme or event. The documents in question provided in-depth information on the structure and content of the BEd (Hons) in Learning Support programme, which aims to prepare teachers to provide learning support to all learners in schools by

means of curriculum differentiation. I further used them to gain more information about implementing curriculum differentiation in FSS as a strategy to ensure that each learner can access school.

4.4.4 Data analysis

Data analysis involves a range of approaches, processes and procedures whereby researchers extract explanations, understanding or interpretation from the collected qualitative data (Nieuwenhuis, 2010). According to Creswell (2009), data analysis is about making sense of the out of the data i.e. collecting open-ended data and developing an analysis from the information supplied by the participants. It involves reducing the large volume of raw data, identifying significant patterns and constructing a framework for communicating the essence of what the data reveal (De Vos et al., 2011). In other words, it is about how the researcher organises the data collected from the participants to locate significant findings. At the commencement of the data collection process, it was important to consider advice by McMillan and Schumacher (2006) that data analysis is an ongoing process incorporated into all phases of the qualitative research process.

Going through the research process, I realised that it was impossible to interpret unorganised data, as McMillan and Schumacher (2006) have pointed out. I therefore made sure that my data from the rural, township and former Model C schools in the study was well organised. I began by transcribing all the individual interviews from the audio tapes. It was important to transcribe the data verbatim myself, rather than employing assistance, because I could also include non-verbal communication observed during the data collection process. This stage is regarded as a cutting and sorting process (Nieuwenhuis, 2010). I sorted the data according to the sources, namely data collected from the teachers in the relevant rural, township and former Model C schools.

There are two fundamental approaches to analysing qualitative data, namely inductive and deductive data analysis (Bertram & Christiansen, 2014). In inductive data analysis, the researcher uses detailed readings of the raw data to derive concepts, themes, or a model through interpreting the raw data. On the other hand, the deductive analysis approach sets out to examine whether the data is consistent

with the prior assumptions, theories or hypotheses constructed by an investigator (Thomas, 2006). Deductive data analysis is usually useful in studies where researchers are already aware of probable participant responses (Burnard, Gill, Stewart, Treasure & Chadwick, 2008). In other words, in the inductive approach, data emerges from the data, while in the deductive approach the researcher starts with a set of categories, which is then used to structure and organise the data (Bertram & Christiansen, 2014). Although qualitative researchers generally adopt the inductive approach (Hyde, 2000), Pope, Ziebland and Mays (2000) mention that the deductive data analysis approach is increasingly being used in qualitative research (Pope et al., 2000).

The aim of the study was to explore how the FP teachers who completed the BEd (Hons) programme in Learning Support implemented curriculum differentiation to address the diverse learning needs of the learners in their classrooms. Deductive data analysis was relevant to this study for the following reasons. In the first instance, this study positioned itself to find answers to significant questions and to confirm or negate assumptions (Thorne, 2000) pertaining to the FP teacher training programme and differentiation of the curriculum in FSS. In the deductive approach, themes and codes are preselected based on previous literature, previous theories, assumptions or the specifics of the research question (Gale, Gemma Heath, Cameron, Rashid & Redwood, 2013). In this research, I was already aware of probable participant responses (Thorne, 2000) and therefore imposed my own structure resulting from the literature as well as my assumptions and then used these to analyse the interview transcripts (Burnard, Gill, Stewart, Treasure & Chadwick, 2008).

The analysis of data for this study therefore started in a deductive way with the themes that emerged as important aspects from my assumptions and literature review on the issue of curriculum differentiation and teacher training. In fact, these themes were identified before the data was categorised and I searched for data from the text that matched the themes (Nieuwenhuis, 2010). For example, various studies in the literature on curriculum differentiation discussed teachers' understanding of the implementation of curriculum differentiation in schools. As a result, the concept of "understanding" turned into one of the themes of this study.

4.4.5 Role of the researcher

Qualitative researchers are central figures in the research process due to their active involvement in the conception, collection and analysis of data and writing the research study (Mantzoukas, 2004). As a researcher, I therefore assumed the responsibility of becoming a research instrument (Nieuwenhuis, 2010). I made sure that I demonstrated self-control by eliminating any biases and explicitly focusing on the views and experiences of my participants to ensure the credibility of my research findings (Nieuwenhuis, 2007). As an interpretive researcher, I continually reflected on how my values, beliefs, and assumptions, both past and current, influenced the way in which I interpreted the inquiry process (Taylor & Medina, 2013).

4.5 TRUSTWORTHINESS OF THE STUDY

It was crucial to ensure that the findings and interpretations were accurate throughout. Qualitative and quantitative researchers frequently use terms such as validity, trustworthiness and reliability to describe the accuracy of their studies (Creswell, 2008), The terms in research depend mainly on the research paradigm in which a study is embedded (Bertram & Christiansen, 2014). Since this study was rooted in the interpretivist approach, the concept of trustworthiness (Guba & Lincoln, 1994), a critical aspect throughout the research process, was adopted to describe the accuracy of the research process. To ensure trustworthiness in this study, various strategies were constantly applied, including credibility, transferability, dependability and conformability (Lincoln & Guba, 2003).

4.5.1 Credibility

Credibility implies the degree to which the findings represent a credible conceptual interpretation (Lincoln & Guba, 2003). The following strategies were employed to this end: triangulation, prolonged engagement with participants, member checking and maintaining the role of the researcher.

Qualitative researchers triangulate between different data sources to enhance the credibility of their studies (Creswell, 2008). Triangulation is the process of corroborating evidence from different sources of information, methods, theories and types of data (Di Fabio & Maree, 2012). Gathering information on the issue of

curriculum differentiation in schools was impossible without using multiple sources of evidence. The semi-structured individual interviews with the nine teachers in the three different contexts, namely the rural, township and former Model C schools in three South African provinces, were triangulated with the document analysis. This enabled me to create a complete, holistic picture of the phenomenon being investigated.

Again, in making sure that the data was correctly presented without any distortion, I became a key research instrument (Creswell, 2009), collecting and transcribing the data myself. While collecting the data I prolonged my engagement with the participants, firstly to ensure that they gained my trust so that they were open to answering questions honestly. A prolonged engagement with the participants allowed in-depth interviews that continued until data saturation was achieved. During the data collection process, a high-quality voice recorder was used to ensure that all participants' voices were captured. I preferred this method to jotting down notes during interviews (Bertram & Christiansen, 2014).

As suggested by Lincoln and Guba (2003), to further ensure the credibility of my study I conducted member checking by submitting transcripts, feedback and conclusions to my participants to eliminate obvious mistakes made during transcription (Creswell, 2009). Member checking to determine the credibility of this study was conducted by three participants (TT3, FMC1 and RT2), who verified the data and ensured that the parts in Setswana had been accurately translated into English. I further considered Maree's (2010) recommendations that findings are significant outcomes of the study. I therefore arranged with the participating schools that I would send copies of my study to each school and district that participated in this study, to verify the correctness of my findings and interpretation.

4.5.2 Transferability

Transferability refers to the extent to which the research findings can be applied in other settings or with other respondents (Babbie & Mouton, 2001). It is about how the findings can be extended or applied to other contexts (Lincoln & Guba, 2003), meaning other settings similar to the one where the study was conducted thus in rural, township and former Model C school sites. Guba and Lincoln (1984) identified

purposive sampling and a thick description of the research process as strategies to ensure transferability of the study. Creswell (2009) states that the quality of qualitative research lies in the description and themes developed in the context of the research sites. This was done by providing a rich description of the sampling procedure and the theoretical framework used in this study, together with the research sites, data collection strategies and analysis. In other words, a thick description was provided by Bronfenbrenner's ecological systems theory (1979) that informs curriculum differentiation as a key factor in the implementation of IE as well as the entire research process. Researchers who conduct studies in the field of curriculum differentiation should therefore be able to decide whether or not the results can be generalised (De Vos et al., 2011).

4.5.3 Dependability

According to Guba and Lincoln (1985), credibility without dependability is non-existent. Qualitative research must provide its audience with evidence that if the same study were to be repeated with the same participants in the same context, its findings would be similar (Babbie & Mouton, 2001). One of the strategies to ensure dependability of a study is through an audit trail (Guba & Lincoln, 1985) whereby the researcher requests a person outside the research project conduct a thorough review of different aspects of the research. To ensure the dependability of the current study, the transcripts were given to my supervisor to check their accuracy. Secondly, I asked my former colleague, currently a lecturer at one of the higher institutions, to review the research questions and data collection process, transcripts, and findings of the research (Creswell, 2009). This reviewer was outside the field of IE and learning support and was therefore not familiar with the study.

4.5.4 Confirmability

Confirmability is concerned with determining that the data and interpretations of the research results are not fabrications of the researcher's imagination, but have resulted from the data (Tobin & Begley, 2004). It refers to the objectivity of the data collected and the absence of research error (Di Fabio & Maree, 2012), ensuring that the results have been derived from the data collected from the participants rather than from the opinion of the researcher. As discussed previously, the confirmability

for this study was ensured by submitting transcripts to my supervisor, an external reviewer and to one participant from each of the research sites to make sure that the data had been captured correctly. This process also ensured that findings for this research were not subjective or biased by my thoughts and experiences.

4.6 ETHICAL CONSIDERATIONS

Ethics in research refers to the principles of right and wrong that a particular group accepts (Bodgan & Biklen, 1992). It mandates engagement in reflection on morals with regard to whether the act which we attempt is good or bad, and how it influences our basic quest for meaning, the manner in which we search for humanity, and our attempts to construct human society (Cohen et al., 2007). Consideration of research ethics was a critical part of most of the research process, starting before the recruitment of my participants and continuing during data collection, data analysis and interpretation. In other words, ethics were vital during this study. Before the data collection process began, I was obliged to comply with ethical standards by obtaining permission to undertake my research from the ethics committee of the university at which I had enrolled. After the permission was granted, I further applied for permission from the Gauteng, North West, and Mpumalanga departments of education, the schools concerned and the participants.

While I prepared for data collection, my basic assumption was that ethical practice involved more than following a set of ethical guidelines and handling anticipated ethical dilemmas that might arise during the data collection process (McMillan & Schumacher, 2006; Creswell, 2009). I adhered to principles of research outlined by Elias and Theron (2012): rights and dignity, informed consent, confidentiality and anonymity, beneficence and non-maleficence, integrity and justice.

4.6.1 Rights and dignity

Researchers should always respect individuals' dignity and right to privacy and confidentiality (Di Fabio & Maree, 2012). The right to privacy means that an individual has a right not to take part in the research, not to answer any questions, not to be interviewed, not to have their classrooms be intruded on or not to share their documents (Cohen et al., 2011). In this study, special care was taken not to treat my participants like objects. I maintained the values and norms affecting human

dignity. This means that their rights and dignity were respected throughout the research process. Respecting the research sites was another significant aspect of the data collection process. The primary schools had to be assured that their daily activities and settings would not be disturbed (Creswell, 2009). They therefore received a letter of informed consent (Appendix 3) of their right to withdraw from the study without being reprimanded. Participants were visited after school hours when it was convenient, making sure that their teaching and co-curricular responsibilities were not interrupted. I further took extreme measures and special care of my research documents such as contact details of my participants and their schools, transcripts and tapes of my audio recorders.

4.6.2 Informed consent

The dignity and rights of the participants were directly linked to the informed consent of my participants (Flick, 2014), which was a crucial ethical aspect of my study. Informed consent is defined as the procedure in which potential participants have a right to indicate whether they would participate in the study after being informed of facts that would likely to influence their decision (Diener & Crandall, 1978). The essential purpose of ethics is to protect the wellbeing of the research participants; hence the universities demand that all social research involving human participants be reviewed by the institutional research committee before data collection begins (Wassenaar, 2006).

Since my research focused primarily on human subjects (McMillan & Schumacher, 2006) who were teachers in FSS and former students of the university under study, approval to conduct this research was obtained from the Dean of the Faculty of Education and the ethics committee of the university (Appendix 6). Prior to data collection, I further applied for permission to conduct research to the relevant schools from the Gauteng, Mpumalanga and North West education departments, which was granted by their ethics sections (Appendix 1 & 5). Before I proceeded with data collection, the participants were contacted telephonically, inviting them to participate in the study. Furthermore, letters of invitation and consent forms were provided to the participants and their schools (Appendix 2 & 3).

My participants were provided with sufficient information about the nature of my study research, which included the aim of research, the reason why they were potential participants for this study, data collection methods to be used, the use of an audio recorder, the time frame of the data collection and dissemination of data (Appendix 3). This was to ensure that individuals fully comprehended the details of the research and would be able to make a voluntary, thoroughly reasoned decision about their participation (De Vos et al*.,* 2011). Participants were clearly informed that participation in this study was strictly voluntary and that they might withdraw from the study at any time of the research process without being reprimanded.

4.6.3 Anonymity and confidentiality

The major consideration in the protection of research sites and participants' interest in this study was protecting their identity (Babbie & Mouton, 2001). This means that confidentiality and the anonymity of my participants were of extreme significance. The principle of anonymity implies that information provided by participants should in no way reveal their identity (Cohen et al., 2011). To ensure anonymity in this research, pseudonyms were used instead of participants' real names and the names of the research sites (the schools and the districts) both during transcription and the final text of this thesis. Their real names are not conclusively linked to the data and are known only to the researcher and her supervisors. During my study, it was vital that any information that the participants provided or divulged during the research process would be treated with confidentiality. To further adhere to anonymity and confidentiality, the data generated from my participants has been stored in a password-protected file at the University of Pretoria where the study was registered.

4.6.4 Non-maleficence and beneficence

The basic assumption in this study was the autonomy of the participants within their broader context of human relations (Mugweni, 2012). The participants in this study were treated as human beings in their social and professional settings. The research therefore strictly adhered to the principle of non-maleficence, which is the total absence of harm to the research participants (Wassenaar, 2006) either physically or psychologically. Physical harm or injuries to participants were unlikely due to the nature of this research. However, some questions that participants may be asked in

some studies can produce unpleasant effects (Babbie & Mouton, 2001). In ensuring non-maleficence towards my participants during the research process, I interacted with them in a respectful and professional manner, taking care not to pressure them and asking questions that would not make them feel embarrassed or uncomfortable or negatively affect their self-esteem.

Beneficence is about maximising the possible benefits of the study (De Vos et al*.,* 2011). This is in line with Leedy and Ormrod's (2005) suggestions that when working with human participants, researchers should also consider the potential benefits the study might offer. This research offers decided benefits to the research participants, because the findings highlighted issues on the implementation of curriculum differentiation in FSS schools. Copies of this thesis are available at the university where this study was registered. They were also provided to the schools and the district offices that guide the teachers, the schools, and members of the DBST on how to support the implementation of curriculum differentiation in schools.

4.6.5 Integrity and justice

Throughout this research, the integrity of my research was promoted by accuracy, honesty, and truthfulness in the conduct of this study (Elias & Theron, 2012). This means that I ensured that I did not cheat or misinterpret information. Justice in general requires that people get what is due to them (Wassenaar, 2006:68) and since my study was to explore the issue of differentiation of curriculum, I selected participants to whom the research focus applied. During the data collection process, I informed my participants about issues relevant to them, and strictly honoured my appointments. When the situation demanded it, I would contact the involved participants telephonically to agree on a suitable date for another appointment. My appointments with my participants were explicitly explained, giving the time and the duration of the visit, as well as the number of times when the data would be collected.

In my study, I promoted fidelity and responsibility by establishing trust and collaboration with my participants. I supplied my full contact details and the institution at which I was registered to them, their schools and districts. I further clarified the purpose of my research and the process to be followed. To maintain the

justice of my research I ensured that my findings and access to my final thesis were made available to my participants, their schools and districts.

4.7 CONCLUDING REMARKS

Differentiation of the school curriculum as a strategy to ensure access to education by all learners emerged as one of the critical facets of the IE movement. My contribution to improving the implementation of IE was to interrogate teachers on how they implemented curriculum differentiation in their classrooms. Conducting this study was a comprehensive process that required a clear understanding of all aspects of the research, namely how curriculum differentiation was being implemented in nine FSS in three South African provinces, namely Gauteng, Mpumalanga and North West.

This study employed a qualitative multiple case study approach. On the basis of the steps required for qualitative studies, Chapter 4 described the general guidelines and procedure adhered to during this study. These included a discussion of the research design that was adopted, together with the research paradigm and the approach type. The description of the research methods focused primarily on the research sites where the study was conducted and the research participants. In other words, a detailed description of the nine FP teachers and their sites was provided. The discussion further included the justification of the strategies for data collection and analysis. Next was the discussion of the strategies used to enhance trustworthiness, which includes credibility, transferability, dependability and confirmability. The ethical measures that were imperative for my research formed the last aspect of the discussion.

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CHAPTER 5: FINDINGS AND INTERPRETATION

"Beginning qualitative data analysis can seem like exploring a new territory without an easy-to-read map" (Silverman, 2011, p.57)

5.1 INTRODUCTION

IE is regarded as a key movement to ensure access to quality education for all learners, regardless of their variances (see 2.3.3.2). One of the vital aspects of IE practice is differentiation of the curriculum. Curriculum differentiation is a research-based model of inclusive classroom practice that aims to ensure maximum learning and participation for all learners, including those with diverse learning needs (see 3.2.2.2). Similar to other research conducted in this field (see 3.2.2.2), this study explored the notion of curriculum differentiation in nine public primary schools in three different provinces, thus three rural schools, three township schools and three FMC schools (see 4.4.1).

Chapter 4 of this thesis provided a comprehensive description of the choice and justification of the research design and methodology embarked upon in responding to the primary and secondary research questions of the topic under study. This included the research paradigm, research approach, research type, research sites, research participants and strategies used to collect data (see 3.3 and 4.4). Chapter 5 presents the analysis and interpretation of the data collected during my empirical work from nine participants, which included nine teachers from nine public primary schools (see 4.4.3). Although there is no single right way of analysing qualitative data (Leedy & Ormrod, 2005), I considered the advice by Nieuwenhuis (2010) that data collection, processing, analysis and reporting are intertwined. This guideline allowed me to resume analysis of my data concurrently with the data collection process. As discussed in Chapter 4, the data for this study was collected through semi-structured face-to-face individual interviews (see 4.4.4.2) which aimed to answer the main research question of this study:

What are the constituent elements of teacher training guidelines for curriculum differentiation in the Foundation Phase programme?

In this chapter, the data is analysed and interpreted. I first present the biographical data of my nine participants, who were teachers in public primary schools. This is followed by a comprehensive analysis of my data and presentation of the findings of this study. In order to maintain the anonymity of the research participants and research sites, codes as well as pseudonyms were allocated to the transcribed responses. Table 5.1 presents the codes and pseudonyms allocated to the research sites and participants.

Table 5.1: Codes and pseudonyms of participants and research sites

Code for teachers	Pseudonyms of research sites – schools	Pseudonyms of districts that support the schools	Description of the research sites
RT1	Primary school A	District 1	Rural school
RT2	Primary school B	District 1	Rural school
RT3	Primary school C	District 2	Rural school
TT1	Primary school D	District 3	Township school
TT2	Primary school E	District 4	Township school
TT3	Primary school F	District 4	Township school
FMC1	Primary school G	District 4	Former Model C school
FMC2	Primary school H	District 4	Former Model C school
FMC3	Primary school I	District 5	Former Model C school

5.2 BIOGRAPHICAL DATA

The biographical information of my participants allowed me to shape the analysis of data supplied by the research participants individually. It also gave an indication of their professional backgrounds in relation to their role, understanding and knowledge of implementing differentiation of the curriculum to address diverse learning needs. My research was a multiple case study, which McMillan and Schumacher (2010) describe as a type of study that involves two or more cases, described and matched to provide an understanding of a specific phenomenon (see 4.3.3). The participants

in this study displayed diverse characteristics and experiences, as described in this section.

5.2.1 Case study 1: Rural schools

As discussed in Chapter 4, schools A, B and C were classified as quintile 1 schools, which means that they serve the poorest communities and are declared no-fee schools (see 4.4.1.1). Learners in these schools do not pay school fees. In addition to exclusion from paying school fees, the learners in these schools are provided with all learning materials, such as stationery and textbooks. The schools in the study were located in rural areas in two of the nine South African provinces (see 4.4.1.1). Schools A and B were located in the province of North West, while School C was situated in Mpumalanga. Schools A and B were both in one district, i.e. district 1, and were therefore supported by the same DBST (see 4.4.1.4).

5.2.1.1 Participants' data

Interview questions 1, 2, 3, 4, 5, 6 and 7 (Appendix 7) were asked to obtain the participants' biographical information, presented in Table 5.2. It included personal information, age, marital status, teaching experiences, academic and professional qualifications, their other roles and responsibilities in their schools, number of learners in their class and number of learners in need of additional learning support, and the total number of learners in their schools.

Table 5.2: Biographical information of participants from rural schools

Pseudonyms for teachers	Gender	Teacher training qualifications	Current studies	Number of teaching years	Total number of learners in the school	Total number of learners in class	Total number of learners in need of additional support	Other responsibilities in school
RT1	Female	JPTD, ACE (SN), BEd (Hons)	**None**	**23**	**265**	**27**	**3**	**Cultural activities and music**
RT2	Female	PTD, ACE (Management), BEd (Hons)	**None**	**31**	**210**	**24**	**9**	**None**
RT3	Female	BEd, BEd (Hons)	**None**	**3**	**500**	**37**	**7**	**Sports**

Professional teacher's qualifications

ACE (SN) = Advanced Certificate in Education (Specialising in Special Needs) – Postgraduate certificate

ACE (Management) = Advanced Certificate in Education (Specialising in Management) – Postgraduate certificate

BEd = Bachelor of Education – Undergraduate basic teacher's qualification

BEd (Hons) = BEd (Hons) in Learning Support – Postgraduate degree

JPTD = Junior Primary Teacher's Diploma – Undergraduate basic teacher's qualification

PTD= Primary Teacher's Diploma – undergraduate basic teacher's qualification

(i) Participant RT1

RT1 is a Grade 1 teacher in School A and she is 50 years old. RT1 is married and has three children. She does not live in the area where her school is situated. Her residence is in a township 80 km from the school. She has been teaching for 23 years. RT1 completed her Junior Primary Teacher's Diploma in Education (JPTD) at one of the teacher training colleges. After spending ten years in the teaching field, she became interested in special needs education. Her passion for specialised education prompted her to enrol for an Advanced Certificate in Education (ACE), specialising in Special Needs education, in 2002. After completion of her ACE programme, she was employed in school A. In 2010 she enrolled for the BEd (Hons) in Learning Support at the university under study. She completed the programme in 2013. At her school, she is also responsible for music and sports. RT1 has 27 learners in her Grade 1 class. She regards three of her learners as being in need of additional support for their effective learning and participation. School A has 265 learners who are from the local community.

(ii) Participant RT2

RT2 is a Grade 2 teacher in School B and she is 59 years old. She is not married and has one child. She lives in the area where her school is located. She has been teaching in the same school for 31 years. Apart from her teaching career, RT2 is also involved in an informal business where she sells clothes in the community. RT2 completed her Primary Teacher's Course (PTC) at one of the teacher training colleges in her province in 1982. In 2003 she enrolled for an ACE programme specialising in leadership and management. In 2009 she enrolled for her BEd (Hons) degree in Learning Support with the university under study, which she completed in 2011. She has 24 learners in her class and nine of them are regarded as needing additional support. School B has 210 learners from the local community.

(iii) Participant RT3

RT3 is a Grade 2 teacher in School C and she is 28 years old. She is not married and has no children. RT3 lives in the same area where her school is situated. She has been teaching for three years. RT3 registered for an undergraduate programme, the BEd (Foundation Phase) in 2008. After completion of the BEd, she was

employed in school C. In 2013 she further enrolled for a BEd (Hons) in Learning Support with the university under study, which she completed in 2014. At her school, she is also the coordinator of sports. She has 37 learners and seven of them need additional support for their effective learning and participation. School C has 500 learners who are all from the local community.

5.2.1.2 Discussion

The biographical information of teachers in rural schools reveals that all the teachers have adequate academic and professional qualifications to teach in the FP. These qualifications include PTD, BEd and ACE (SN).In the classroom context, RT3 has more learners than RT2. RT3 has fewer learners in need of additional support, in comparison with RT2. Although RT3 has more learners in her class than RT1 and RT2, I therefore conclude that a high number of learners needing additional support is not determined by the total number of learners each class accommodates.

5.2.2 Case study 2: Township schools

Schools D, E, and F were located in three townships in Gauteng (see 4.4.1.2). Schools D and F were supported by district 3, while School E fell in district 4 (see 4.4.1.4). As discussed in Chapter 4, all the township schools that participated in this study fell in the quintile 4 category (see 4.4.1.4), which means that they served poor communities. However, the parents are required to pay a once-off registration fee of R100. Since the schools serve poor communities, learners are provided with learning materials, including stationery and their textbooks.

Table 5.3: Biographical information of participants from township schools

Pseudonyms for teachers	Gender	Teacher training qualifications	Current studies	Number of teaching years	Total number of learners in the school	Total number of learners in class	Total number of learners in need of additional support	Other responsibilities in school
TT1	Female	PTD, ACE (SN), BEd (Hons)	None	7	900	44	10	Music
TT2	Female	DE, ACE (SN), BEd (Hons)	None	18	1 600	45	12	Member and coordinator of SBST. Serves on DBST.
TT3	Female	BEd, BEd (Hons)	MEd	3	1 439	46	5	Sports. Former member and coordinator of the SBST.

Professional teacher's qualifications

ACE (SN) = Advanced Certificate in Education (Specialising in Special Needs) – Postgraduate certificate

BEd = Bachelor of Education – Undergraduate basic teacher's qualification

BEd (Hons) = BEd (Hons) in Learning Support – Postgraduate degree

DE = Diploma in Education – Undergraduate basic teacher's qualification

MEd = Master's in Education – Postgraduate degree

PTD= Primary Teacher's Diploma – undergraduate basic teachers' qualification

(i) Participant TT1

TT1 is a Grade 2 teacher in School D and she is 53 years old. She is married and has three children. She lives in a newly developed village that is 15 km from her school. After she completed her PTD in 1999, she experienced numerous challenges in securing permanent employment within the department of education, for 11 years. In 2010 she finally got a permanent position in school D. During the time she was attempting to secure permanent employment, she improved her qualification by enrolling for an ACE (SN), which she completed in 2009. In 2011 she enrolled for a BEd (Hons) in Learning Support, which she completed in 2014. At her school, she is also responsible for music. She has 44 learners in her class and 10 of those learners are regarded as needing additional support. School D has 900 learners from the local community. TT1 gets most of her teaching support from the coordinator of the SBST. She has a good working relationship with her and they have both completed the BEd (Hons) in Learning Support.

(ii) Participant TT2

TT2 is a Grade 3 teacher in School E and she is 55 years old. TT2 is not married and have two children. She lives in another township, not far from her school. She has been teaching for 18 years. In 1993, she studied for a Diploma in Education (DE) with one of the teacher training colleges. After she completed her DE in 1996, she was unemployed for two years. In 1998 she was appointed as a Grade 1 and a Grade 2 teacher respectively at a public primary school, where she taught for eight years.

When TT2 joined school E, the principal of the school insisted that all teachers needed to be familiar with the IE policy. This mandated TT2 to enrol for an ACE programme in special needs. She completed the ACE programme in 2010. In 2011, she enrolled for a BEd (Hons) in Learning Support, which she completed in 2013. In addition to her teaching activities, she is also the coordinator and an active member of the SBST. Due to her passion for IE, she was further appointed by her district office to assist the Inclusive and Special Schools unit (ISS) at the district, where she serves on the DBST. She provides support to neighbouring schools with regard to early identification, assessment and support. One of her future intentions is to enrol for a Master's degree in Learning Support. Her class consists of 45 learners and 12

of these learners need additional support. School E has 1 600 learners from local and neighbouring communities.

(iii) Participant TT3

TT3 is a Grade 1 teacher in School F and she is 27 years old. TR3 is married and has one child. She lives in the township where her school is located. TT3 has been teaching for three years. In 2009, TR3 enrolled for a BEd (Foundation Phase), which she completed in 2012. She then enrolled for a BEd (Hons) in Learning Support, which she completed in 2014. She is currently studying for her Master's in Education (MEd) at the same university where she completed both her undergraduate and her first postgraduate degrees. Apart from her teaching activities, she served as a member and coordinator of the SBST (See 2.3.3.2) for a year. This position was later occupied by one of the heads of departments (HOD) at the school. She has 46 learners in her class and five of those learners need additional support. Her school is school F, which has 1 439 learners from the local community.

5.2.2.1 Discussion

Reflecting on the biographical data of teachers from the township schools, it became evident that the schools have more learners in comparison to the rural schools. For example, School E has 1 600 learners. Considering the fact that there are other primary schools in the township where School E is positioned, I conclude that its high number of learners is due to the credibility of the school in the local and neighbouring communities – hence it accommodates learners from more than one neighbourhood. On the other hand, School F has 1 439 learners from its local community**.**

The biographical information of teachers in the township schools reveals that all the teachers have sufficient academic and professional qualifications to teach in the FP. These qualifications include DE, PTC, ACE and BEd. Additionally, they all have completed a BEd (Hons) in Learning Support at the university under study, which was one of the criteria for participation in this study. Considering the results, I aver that these teachers also have knowledge and understanding in terms of curriculum differentiation. TT3 has furthermore enrolled for an MEd, which I believe will qualify her to be even more knowledgeable in ensuring the accessibility of the curriculum for all her learners. In the classrooms, TT2 has more learners than TT1and TT3 (see

Table 5.1). With regard to the overall number of learners in need of additional support, TT3 has fewer learners in comparison with TT1 and TT2. Figure 5.2 visually presents the number of learners the three teachers accommodate in their classes.

5.2.3 Case study 3: Former Model C schools

Schools G, H, and I were located in three urban areas, all in Gauteng (see 4.4.1.2). Schools D and H were supported by district 3 while School E fell under district 5 (see 2.3.3.2). Learners in these schools came from middle-class communities; hence, the schools fell in the quintile 5 category (see 4.4.1.4). Quintile 5 implies that learners pay annual school fees. The amount of the school fee is determined by the SGB. However, parents who cannot afford school fee can request a discount or exemption from school fees. Depending on their financial status, they can be allowed to pay no school fees, thus receiving full exemption or a certain percentage of the fees (partial exemption). Similar to the rural and township schools, learners in these FMC schools are provided with stationery and textbooks.

Table 5.4: Biographical information of participants from former Model C schools

Pseudonyms for teachers	Gender	Teacher training qualifications	Current studies	Number of teaching years	Total number of learners in the school	Total number of learners in class	Total number of learners in need of additional support	Other responsibilities in school
FMC1	Female	PTD, ACE (SN), BEd (Hons)	None	17	1 200	44	12	Sports
FMC2	Female	BEd, BEd (Hons)	MEd	4	1 340	43	20	Coordinator of school feeding scheme
FMC3	Female	DE, ACE (SN), BEd (Hons)	None	19	960	42	6	Member and coordinator of SBST Serves also at the cluster of the district

Professional teacher's qualifications

ACE (SN) = Advanced Certificate in Education (Specialising in Special Needs) – Postgraduate certificate

BEd = Bachelor of Education – Undergraduate basic teacher's qualification

BEd (Hons) = BEd (Hons) in Learning Support – Postgraduate degree

DE = Diploma in Education – Undergraduate basic teacher's qualification

MEd = Master's in Education – Postgraduate degree

PTD= Primary Teacher's Diploma – undergraduate basic teachers' qualification

(i) Participant FMC1

FMC1 is a Grade 2 teacher in School H and is 42 years old. FMC1 is married and has two children. She lives in a township 40 kilometres from her school. She has been teaching for 17 years. In 1998, she was employed as an FP teacher in one of the township schools. In 2011 she left the township school to join school H. FMC1 completed PTD in 1997 at one of the teacher's training colleges. In 2006 she enrolled for an ACE in Special Needs, which she completed in 2007. In 2012, she further enrolled for a BEd (Hons) in Learning Support, which she completed in 2014. FMC1's class consists of 44 learners and 12 of those learners need additional support. Information with regard to other school activities was not clearly stated. Her school has 1 200 learners who are from local and neighbouring communities.

(ii) Participant FMC2

FMC2 is a Grade 1 teacher in School G and she is 25 years old. FMC2 is a young teacher who is not married and has no children. She has been teaching for 4 years. She passed matric or Grade 12 in 2007. In 2008, she enrolled for the BEd Foundation Phase), which she completed in 2011. In 2012 she further enrolled for a BEd (Hons) in Learning Support, which she completed in 2013. At her school, she is responsible for the mentoring of class leaders. She is currently studying for an MEd. There are 43 learners in her class and she regards 20 of her learners as being in need of additional support for their effective learning and participation. Her school has 1 340 learners from the local and neighbouring communities.

(iii) Participant FMC3

FMC3 is a Grade 3 teacher in School I and she is 45 years old. She originally hails from Zimbabwe. The deteriorating economic conditions in her country forced her, her husband and two children to relocate to South Africa in 2008. She currently lives in a township situated not far from her school. She has been teaching for 19 years, thus 11 years in Zimbabwe and eight years in South Africa. In 1995, she enrolled for the diploma in education at one of the teacher training colleges in Zimbabwe. At her school, FMC3 is the coordinator and an active member of the SBST (see 2.3.3.2). FMC3 obtained her ACE (SN) in 2012. In 2013, she enrolled for a BEd (Hons) in Learning Support, which she completed in 2014. She intends to enrol for a master's degree with specialisation in IE. She has 42 learners in her class and she regards six

of her learners to be in need of additional support. Her school has 960 learners all from the local community.

5.2.3.1 Discussion

When I reflect on the data of the teachers from the three FMC schools, it becomes apparent that School G has more learners than School H and I. School I has the smallest number of learners of the three schools. Although schools G and H serve learners from more than one community, the total number of learners is lower than that of township schools E and F.

The biographical information of teachers in FMC schools shows that all the teachers had appropriate academic and professional qualifications to teach in the FP. These qualifications included DE, PTC, ACE and BEd. In addition, all three teachers had completed a BEd (Hons) in Learning Support at the university under study, which was one of the criteria for participation in this study. Taking this data into consideration, I conclude that all these teachers also had knowledge and understanding of the implementation of curriculum differentiation. Because FMC2 was also studying for an MEd, I consider her to be more knowledgeable about curriculum differentiation. In the classroom context, FMC2 had more learners than FMC1 and FMC3 (see Table 5.1). FMC3 had fewer learners in need of additional support in comparison to FMC1 and FMC2.

5.2.4 Synthesis of biographical information

The analysis of the biographical data indicates that all the teachers who participated in this study had formal qualifications, namely undergraduate and postgraduate degrees, to teach in the FP. Additionally, they had all completed a BEd (Hons) in Learning Support (see 3.2.3.1), which allows them to teach in FSS. Furthermore, two of the teachers were studying for their MEd (see Table 5.2). Three of the participants had served in the SBST at their schools. In fact, two were still coordinators and full members of their SBST, while one had served on the team for one year. Based on this data, it is obvious that all the participants had acquired knowledge and skills about the notion of curriculum differentiation for ensuring access to the curriculum for all the learners they taught.

5.3 THEMES AND CATEGORIES

My data collection was an evolutionary process as I had to read, re-read and refine my interview questions; examine my raw data and identify gaps that obliged me to re-visit and follow up with my participants, for example to verify their quintiles. Furthermore, during my data collection and analysis process, I kept in mind the advice provided by various researchers about the stages of the data analysis process (see 4.4.5). One of them advised collecting and analysing data simultaneously. Although it was fascinating to examine the raw data, I had to ensure that I clearly discerned the data that would result in findings that were truthful and appropriate for answering my research question. As discussed in Chapter 4 (4.4.5), there are two fundamental approaches to analysing qualitative data, i.e. inductive and deductive (Bertram & Christiansen, 2014).

Although inductive data analysis is common in qualitative studies (Nieuwenhuis, 2010), this study employed the deductive approach (see 4.4.5), which is increasingly being used by qualitative researchers (Pope et al., 2000). According to Burnard et al (2008), deductive data analysis is usually useful in studies where researchers are already aware of probable participant responses. Thomas (2006) states that deductive data analysis is usually useful in evaluation research projects. This study explored how the BEd (Hons) in Learning Support programme had prepared teachers for curriculum differentiation, and how they implemented it to address the diverse learning needs of their learners. It was therefore appropriate to consider the deductive approach to analyse data for this research.

Unlike the inductive approach where the themes emerge from the data, in the deductive approach the researcher imposes their own structure or theories on the data and then uses them to analyse the interview transcripts (Burnard et al., 2008). As Nieuwenhuis (2010) suggests, I initially identified the key topics that emerged as important aspects from my literature review about curriculum differentiation (see 2.3.3.2 and 3.2.3), which I then used to determine my themes. These topics provided guidelines on what to look for when conducting my fieldwork and linked my participants' quotes to appropriate themes. Table 5.5 lists the themes that were extracted.

Table 5.5: Research themes, categories and subcategories

THEME 1: Identifying learning barriers	
Category 1	Manifestation of learning barriers in learners
Category 2	Learning barriers resulting from intrinsic factors
Category 3	Learning barriers resulting from extrinsic factors
THEME 2: Understanding curriculum differentiation	
Category 1	Clear understanding of curriculum differentiation
Category2	Limited understanding of curriculum differentiation
Category3	Lack of understanding of curriculum differentiation
THEME 3: Implementing curriculum differentiation	
Category 1	Application of theory into practice
Category 2	Challenges of differentiating the curriculum
Category 3	Official documents that guide implementation of curriculum differentiation
THEME 4: Teacher preparation	
Category 1	Acquired knowledge and skills of curriculum differentiation
Subcategory 1	Identification of learning barriers
Subcategory 2	Use of various teaching methods
Category 2	Teachers' frustration

In the section that follows, I present a comprehensive rather than a case by case discussion of the themes and subthemes. To ensure easy and clear understanding of the actual words articulated by my participants during individual interviews, all voices are presented in an indented and italic form. Some of the participants expressed themselves in their mother tongue, in particular the Setswana-speaking teachers. Although I made every attempt to provide a true rendering of the meaning of Setswana words expressed during interviews and translated them into English for easy understanding, I found it to be a challenging process. In both Setswana and English, there were some vocabulary items that did not exist in the other language,

for example a word such as “tsatsarakg”, which can be described as being forward, and was difficult to translate.

5.4 THEMATIC ANALYSIS

5.4.1 Theme 1: Identifying learning barriers

No school can function in the absence of a learner population and learners are therefore the most significant beneficiaries in all our schools, regardless of the school type. Education White Paper 6: Building an Inclusive Education and Training System (DoE, 2001) instructs all teachers to ensure that all learners access quality education by providing them with the necessary support (see 3.2.3.1).

One of the fundamental aspects guiding curriculum differentiation is the learners’ learning profile, which provides teachers with information such as learners’ abilities, strengths, preferences and learning needs (see 3.3.3.3). Hence, De Witt (2016) asserts that the successful and efficient teacher is the one who is aware and understand his learners’ abilities as well as their learning needs and desires. This is aligned with the content of the ISA 710 module, which focuses on training teachers to acquire knowledge and skills for identifying learning barriers and their causative factors in learners (see 2.3.3.2.1 (ii), bullet 3).

5.4.1.1 Manifestation of learning barriers in learners

As indicated in Chapter 4, schools that participated in this study are regarded as FSS, namely ordinary schools that are specially equipped to address a full range of barriers to learning in an IE setting (DoE, 2005) (see 4.4.1.3). Learning barriers experienced by learners in these schools may arise from factors within the learner, such as impairments, psychosocial problems, different abilities, socio-economic problems and environmental factors (DoE, 2005). My aim of exploring this theme was to gain a deeper understanding of FP learners who would benefit from the differentiation of the curriculum. I further wanted to determine teachers’ knowledge of their learners’ abilities as well as their learning needs (see 2.3.2.6 and 3.3.3.3), which forms the foundation of curriculum differentiation. The data I obtained from the participants was fundamental to my study, because the views of the teachers

regarding their learners were vital for understanding barriers experienced by learners as well as their diverse learning needs (see 2.2 and 3.2.3.1).

Modern classes nationwide are characterised by diversity in terms of abilities and learning needs (Tomlinson et al., 2003) and South Africa is not an exception (see 2.1, 2.2 and 2.3.3.3). Through interviews and interaction with all my participants, it became apparent that most of their learners in these FSS experienced common learning barriers (see 3.2.3) that manifested in difficulties with reading, writing, mathematics, comprehension and understanding instructions. However, the learners identified by their teachers were those learners with intense or serious barriers due to intrinsic factors such as physical disabilities, attention-deficit hyperactivity disorder or autism, and learners affected by HIV and AIDS. In expressing difficulties with reading and writing, participants stated:

> **RT2***: The one, one he can't write, he is struggling to write even to copy, so I don't think he can go to the next class.*

To voice more on her learner's inability to write, she further elaborated by stating*:*

> **RT2**: *Mokwalo wa bona ga o thlagelle sentle (their handwriting is not legible). When I said kwala b* (When I instruct them to write b), *they don't write b they write d instead of b.*

Reading is language-based, in other words, there is a relationship between reading and oral language (Nel & Nel, 2013). Inability to read can also cause difficulties in understanding instructions and the effective use of oral language. RT3, TT2 and FMC2 concurred with RT1 experiences with this, saying:

> **RT3***: Most of them they cannot read and write not even to spell their names. Some of them cannot even copy. Mam I don't even know how to explain …*

> **TT2***: Reading and interpreting, if they cannot read they can't understand instructions. Reading and writing is a problem. They cannot copy work from the board.*

FMC2*: I think that one is the main one because they cannot read, write sentences, constructing sentence, you can see some of the information like the instructions they don't understand.*

Although TT2 did not elaborate on what she implied by "interpreting", I conclude that some of her learners found it difficult to understand the written instructions. She therefore meant that learners struggled to comprehend or understand her instructions. It is also apparent that the inability to write will also result in an inability to copy written text from the board. Some participants therefore stated that some of those learners could not copy from any source.

The teachers indicated that reading and writing were not the only academic difficulties experienced by their learners. Some of their learners faced learning problems in mathematics, which they described by saying:

FMC3: *Some have problems in math that is numeracy.*

RT3*: Mathematic is worse. Most of these children cannot count, they struggle.*

RT1*: And counting also is a problem.*

TT3: *Mam most of them fail numeracy, numeracy is difficult for them, they can't.*

Participant TT1 did not specify the learning problems displayed by one of her learners, but stated:

Also it affects mental (intellectual functioning). Because he is not performing, he is going to repeat (2015).

The response from TT1 implies that the learner experienced learning problems in most of the learning areas. Based on the CAPS (DBE, 2012), the curriculum for the FP comprises the following learning areas: home language, first additional language, life skills and mathematics (see 3.2.3.2). Taking into cognisance all the learning areas in the FP, it becomes clear that most of these learners perform well only in life

skills. Life skills is a learning area that focuses on the personal, social, intellectual, emotional and physical growth of learners, together with the way in which these skills are integrated (DBE, 2012).

According to RT2 and TT1, some of these learners would have to repeat their current grade, namely Grade 2. In other words, these learners would not be promoted to the next grade in the following year. Participants RT2 and TT1 did not mention any strategies or plans to support the learners so that they could achieve the required outcomes. This is a cause for concern, especially because the two participants had completed their BEd Honours in Learning Support, in which the notion of curriculum differentiation is one of the fundamental components of the programme. Reflecting on several laws and policies within the macrosystem of the ecological systems theory of Bronfenbrenner (see 2.3.2), I regard these utterances as contradictions to the principles of IE (see 2.3.2.6 and 2.3.2.2.5). It is also against the mandate of the responsibilities of the FSS (see 2.3.2.2.5; Table 2.3; 3.2.3).

5.4.1.2 Learning barriers resulting from intrinsic factors

According to Bojuwoye, Moletsane, Stofile, Moolla, & Sylvester (2014), the teacher needs to understand the learning barriers that will determine the type of learning support the learner requires. Empirical data from my participants revealed that learners who were regarded to be in need of additional support were those learners who experienced learning barriers caused by some intrinsic factors (see 3.2.3.1). Intrinsic factors are factors found within the learner, such as disabilities, and do not emanate from the environment or the social context. I acknowledge that the notion of categorising types of problems in children has become unacceptable in the IE field (see 2.3.2.2.3). I nevertheless agree with Nel et al. (2013) when they contend that it is also vital to mention and understand medical information, which is necessary to understand disabilities and illnesses and plan differentiation of the curriculum and support for such learners.

The participants identified a number of key intrinsic factors that caused learning difficulties:

- Physical disabilities
- Intellectual impairments

- ADHD
- Dyslexia
- Autism
- Epilepsy

Although the teachers mentioned some of the disabilities experienced by their learners, others acknowledged that they were not qualified to diagnose the disabilities in children, particularly impairments such as autism and epilepsy. In expressing sensitiveness with regard to the issue of diagnosis, FMC2 and TT3 said:

> **FMC2:** *Because we not qualified to say what we think but I think some of them have mild autistic traits and epilepsy traits.*

> **TT3:** *… the first one I think she is physically disabled. I know we are not supposed to label without getting proper diagnosis from other professionals.*

On the other hand, some participants named the types of disabilities and further described their learners' physical and behavioural characteristics. For instance, TT1 described some of her learners' condition by stating:

> *The other one Learner L, as I can see him he has ADHD. He is so hyperactive, he can read, he cannot write, he has a problem in term of attention, lack of attention, he can attend little bit and after that he is gone. He likes to move around and around. He has a problem in terms of attention, lack of attention, he can attend little bit and after that he is gone. I think is ADHD and dyslexia for Learner L. I just think that because he is unable to write he has dyslexia.*

In describing another learner's problems, she added:

> *He is not writing anything, he writes but just to get finish, his handwriting is not good.*

In line with my ethical standards, I gave TT1's learner a pseudonym, "Learner L", because he was regarded as having ADHD. According to the American Psychiatric

Association (2013), ADHD is a “persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development”. Reflecting on TT1’s explanation, it is apparent that she knew and understood ADHD as a condition that affects a learner’s attention. She describes how learner L moves around the class during class activities and notes that he is inattentive. Such behaviour will obviously affect his learning and participation; he is therefore regarded as a learner experiencing some learning difficulties.

TT1 mentioned dyslexia as another condition possibly present in Learner L. In other words, Learner L presented with ADHD as well as dyslexia. Smythe (2011) states that defining dyslexia is a challenge, and concurs with Tamboer, Scholte and Vorst (2015), who define dyslexia as a neurological disorder characterised by poor reading and spelling abilities despite adequate intelligence, motivation and schooling. TT1 did not refer to any records to confirm dyslexia in Learner L and as a result, I was not convinced that Learner L had dyslexia.

The participants identified other intrinsic factors that caused barriers to learning in their learners. For instance, RT1, TT1 and TT3 said:

> **RT1**: *Is speech and the other one, Sorry … is physically disabled. He is using a wheelchair, he has this foot club, club foot, he is walking like this* [demonstrates how the learner walks] *so he is using a wheelchair.*

> **TT1:** *He can talk but he is slumbering, he is sort of ... can I say mm disabled. Ke gore leoto la gagwe le letsogo la gagwe la right, le na le phosonyana, O a hlotsa* [demonstrating a stiff movement of the right side of the body] *(In other words his right leg and arm has a problem, he limps). Also it affect mental. Because he is not performing, he is going to repeat.*

> **TT3***: The first one I don’t know the type of you know but I think she is physically disabled. The mother explained “gore” (that) she got a stroke during prenatal while she was pregnant. The child was affected by the stroke and so when she was born she just came like this* [demonstrating bending her right leg and arm]*. The leg is not functioning so well. She walks with her toes and*

the hand is just bent like this [demonstrating bending her right leg and arm]*. So she find it difficult to balance the book and with her right hand. She is fine she can grab a pencil-like thing* [demonstrating grabbing pen] *but the balancing and stability. Because when you write you must get your hands like this* [demonstrating holding a pencil] *and then so you can be able to write within the lines. Even when she talks, I find difficult to understand what he is saying, his speech is not well developed, I think she needs speech therapy.*

Evaluating the descriptions provided by RT1, TT1 and TT3, I noted that the three learners mentioned in the above discussion presented with cerebral palsy (CP). Kruger and Botha (2016) describe CP as a physical impairment that is neurologically related and comprises the following characteristics: paralysis, weakness, incoordination and functional deviation of the motor system. To illustrate the learner's condition, TT1 demonstrated the physical features of the affected side of the learner's body. According to Westling and Fox (2009), CP is classified according to motor symptoms and the parts of the body that are affected. Based on her demonstration, it is apparent that the child had spastic CP. According to Westling and Fox (2009), it is the most common type, representing 60% of all forms of CP.

I further deduced that the two learners in TT1's and TT3's classes presented with hemiplegic CP. In hemiplegic CP, the left or the right side of the body (leg, arm or face) is affected (Kruger & Botha 2016). Conversely, RT1's learner had quadriplegic CP, using a wheelchair for mobility, which implies that all four limbs were affected. The three participants mentioned speech difficulties as the major problem experienced by their learners with CP. Beukelman and Mirenda (2009) postulate that speech difficulties are common to all people with CP. Learners who cannot verbally express themselves find it difficult to participate in learning and class activities, because they cannot be understood.

With regard to the learners' profiles, TT3 provided a better description of her learner's condition. In her description, she also demonstrated her understanding of the roles of families in providing learners' information for support (see 2.3.4.3). Westling and Fox (2009) point out that families and parents can provide critical information about the learner's strengths and learning needs. Hence, TT3 partially

made use of MAPS (see 3.3.3.3), one of the approaches used to glean a learner's profile from parents or other members of the family. TT1 had more to say about her learners' conditions:

> **TT1***: … I mean that he is not coping, he is not doing anything, ehhh … even if you talk to him you say just tell me your name or about daily news he can't talk. The other ones are lazy on reading, lazy on doing things.*

TT1 used the concept "*not coping*" which is broad and can have various meanings. However, she clarified the learning problem by stating that the learner was not participating in any activity and also could not express himself verbally. She then used the term "lazy" when referring to the difficulties experienced by her other learners. In reflecting on her statements, I understand that one learner was not participating in any class activity, either because of an inability to hear, i.e. auditory impairment, or an inability to understand the language of communication, indicating that his language was different from the language of teaching (see 2.3.1.1).

Another cause of his lack of participation could be that the learner experienced difficulties in expressing himself verbally (see 3.2.3.2). The other learner was also not participating in class activities, including reading. The reason for his lack of participation was not known and TT1 therefore said the learner was "lazy". Considering her assumption of laziness, I understand that the learner found it difficult to perform most of the activities in class due to a lack of support.

In South Africa, one of the strategies for implementing curriculum differentiation as an IE mandate was the development of SIAS (DoE, 2008). The main focus of this strategy is to assist teachers so that they can identify learning barriers in learners and at the same time determine the nature and level of the support set for learners who experience barriers to learning (see 2.3.3.3). With regard to available support in schools, TT1 mentioned her school had a functional SBST (see 2.3.3.2, Table 2.5) that worked closely with the DBST (see 2.3.3.2). However, in evaluating TT1's statement, it is apparent that there was a gap between the teachers and the support teams, which is a real concern.

As regards the description of learners' problems, this study found that some of the teachers were not even aware of suitable terms for defining the barriers experienced by some learners in schools. For example, RT2 explained the conditions of some of her learners by saying:

> *They are slow learners. Mind wa gagwe ga o ready ke gore a kaba a le mo sekolong se (Her mind is not ready, this implies that she does not belong to this school). Ka nako e nngwe ngwana, O ke gore ga ke tsebe gore ke dirise lefoko le lefeng ke gore. O half (sometimes I don't know how to explain it. She is half, in other words she is not fully developed).*

In further elaborating on the problems of learners whom she classified as "slow learners", she said:

> *Our parents ba tlisa bana ba ba ka bang go re ba ye special school (our parents bring learners who belongs to the special schools); but bana ba ba weak ga re ba ba tle kwano, bana ba o ka reng bana le dithaloganyo tse di weak ga re ba nyake mo (we don't want learners with weak minds, learners who appears to have weak minds we don't want them here).*

Based on the above narrative referring to "slow learners and weak mind", I deduce that the learners described by RT2 experienced intellectual impairments. According to the American Association on Intellectual and Developmental Disabilities (AAIDD, 2013), intellectual disability originates before the age of 18 years and is characterised by a significant limitation in both intellectual functioning and adaptive behaviour, which includes many everyday social and practical skills. According to Swart and Pettipher (2016), labels such as "slow learners" are used in the medical model (see 2.3.2.2.3). This model was used to identify a deficit in a child and to refer learners and their families to specialised environments or schools (Nel et al., 2013). In other words, some learners were regarded as unfit for regular schools. RT1's response that some of her learners were not fit to be in FSS is strongly embedded within the medical model. When RT2 refers to these learners as slow learners, it implies that without curriculum differentiation these learners would find it difficult to complete any given task due to their limited intellectual functioning. I reflected again

on one of the principles of IE, namely that all children can learn and all children need support (see 2.3.2.2.5). Such learners need additional support for their effective participation in school. I assert that they would benefit from the implementation of curriculum differentiation.

RT2 and all other teachers, particularly those in FSS, play a key role in ensuring that all learners are included in the school curriculum (see 2.3.2.2.3). However, her response indicated a negative attitude and discrimination. When teachers adopt negative attitudes towards diversity, they will find it difficult to voluntarily differentiate the curriculum to deal with various learners' learning needs.

Teachers who do not welcome diversity and lack knowledge of their learners' developmental needs constitute barriers towards the implementation of curriculum differentiation in schools (Rachmawati et al., 2016). If curriculum differentiation is not applied, learners who experience learning difficulties due to factors such as autism, intellectual disabilities, ADHD, dyslexia, CP and epilepsy will fail to achieve their academic expectations. Figure 5.1 summarises the intrinsic factors that caused learning difficulties in the learners of the participants in the study.

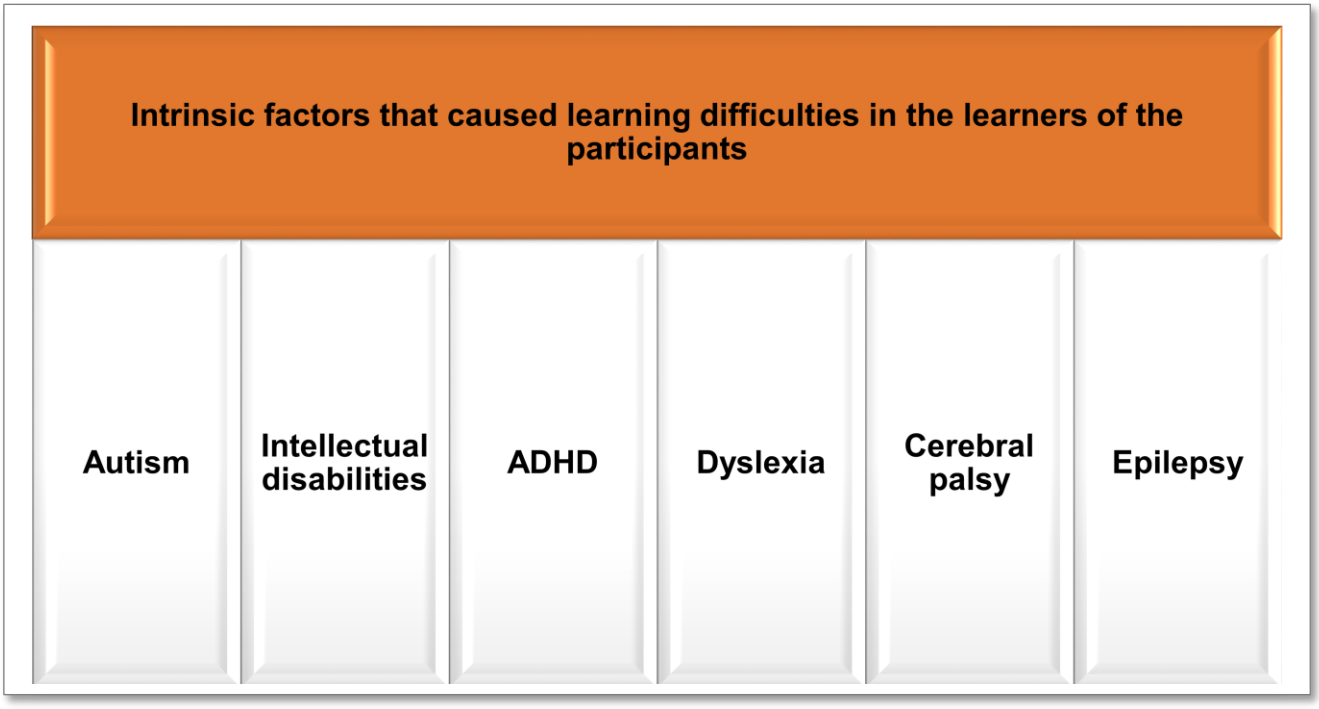

Figure 5.1: Extrinsic factors that caused learning difficulties in the learners of the participants in the study

5.4.1.3 Learning barriers arising from extrinsic factors

Data from my participants further revealed that some learners failed to achieve the expected outcomes due to extrinsic or external factors (see 3.2.3.1). Extrinsic factors are factors present in the learners' environment (Swart & Pettipher, 2016). In other words, they are the cause of learning barriers emerging from the learner's social context and the learner has no control over them.

The main extrinsic factors that caused learning difficulties as identified by the participants include:

- Poverty
- Lack of parental involvement of participation in school activities
- Language of teaching and learning

Responses during the individual interviews with the teachers (RT3, TT2, and FMC3) portrayed poverty as one of the external negative forces that prevented their learners from achieving the expected learning outcomes:

> **RT3**: *You know what mam, most of my learners are from very poor backgrounds, their parents are not working and they rely on grants. And you know money for the grant is too little, it is only for the basic things. They come to school hungry and cannot concentrate and fortunately we have a feeding scheme but sometimes we run out of funds and during those months you find that we don't have anything to give them*

> **FMC3:** *Emm* [pause] *Some of them have problems with home background, problem with where they come they have poor socio-economic status from their homes.*

> **TT2:** *In our community, there are lot of dropped out because of crime, substance abuse, poverty, stuff like that.*

Poverty can have extremely negative effects on access to quality education in learners. As discussed in Chapter 3, it is one of the risk factors that can severely affect the development and learning of a learner (see 3.2.1) – hence it featured as

the main item on the agenda of the global summit which took place in September 2000 (see 2.3.2.9). Poverty, particularly in South Africa, is caused by factors such as unemployment, low income and inadequate education. The three participants revealed that some of the learners they taught came from homes affected by poverty to the detriment of their effective learning, namely families with poor economic status. As TT2 pointed out, it is obvious that poverty results in school dropouts. Most of these learners' family members are involved in crime and substance abuse, which has a tremendous effect on school-going children. Although eradication of poverty worldwide was one of the millennium goals set at the global summit in 2000 (see 2.3.2.9), many South African learners still come to school with empty stomachs (TT3).

A hungry learner will obviously have trouble concentrating and paying attention in any given task. The South African DBE provides financial support to public schools. Since the rural schools in the study fell in the quintile 1 category (see 4.4.1.4), the government provides such schools with greater financial aid. RT3 indicated that her school conducted a feeding scheme, which is a programme where learners are provided with small amounts of food daily to relieve their hunger. This is one of the characteristics of FSS, namely that they will make provision for a school nutritional programme where hunger has been identified as one of the learning barriers in learners (see 3.2.3).

To improve the standard of living and to eliminate poverty, the South African government introduced child support grants and disability grants in 2002. This conforms to RT3's statement that some of her learners relied on monthly child support grants. The grant amounts to R350 per child per month and in some families, the grant is insufficient to meet their basic needs. However, one should bear in mind the proverb that says "*half a loaf is better than no bread".*

The participants also pointed out that besides the hardships of poverty, the lack of parental involvement was another factor causing learning barriers in learners. The participants expressed their concern about the lack of parental involvement in school, saying:

TT1: *Again the support that I am talking about is eh ... they need support from home because we give them the homework, they need encouragement they need assistance and the encouragement. Some of the parents they don't care about the kids. You call them to talk about the kids. They don't come.*

FMC3*: I ask them to do some work at home. You find that the work is not done, I ask the learner to finish it at home and when he comes back the next day the only to find that the work has not been done. So I have a problem with parental involvement. There is no assistance at home.*

The mesosystem of the ecological systems theory of Bronfenbrenner (see 2.3.4) highlights the significance of the interrelations between two or more settings containing the learner or the developing child. These settings include families, peers and schools, viewed as vital role players in the child's development and learning (see 2.3.4.1, 3.2.1, 3.2.2 and 3.2.3). The active involvement of parents or families and the broader community in the teaching and learning process is central to effective learning and development (DoE, 1997). There has always been a strong recognition of positive home-school relationships and partnerships in schools (see 2.3.4.1).

Although the involvement and participation of families or parents are regarded as strategies to ensure quality education in learners (DBE, 2010), participants in this study were perturbed by the lack of parental involvement, which affected the expected achievement of their learners. In some South African schools, parents are generally not actively involved in the development of learners that experience barriers to learning and perceive learning as the sole task of the school (Geldenhuys & Wevers, 2013) TT1 stated that even when she invited parents to school, they did not come. Seemingly, some of the parents were just not interested in collaborating with the teachers in the education of their learners. Bronfenbrenner's ecological systems theory suggests that events at home can affect the child's progress in school (Bronfenbrenner, 1986). As mentioned in Chapter 2, there are various factors that can serve as barriers to parents' participation (see 2.3.4.7)**.** RT3 remarked:

> **RT3:** *Some of the problem you find that these children are orphans because their parents died of HIV and they turn to look after their little brothers and sisters. Other family members just go and check them le gona (and again) sometimes.*

Many learners in South Africa have lost parents due to AIDS and related illnesses. Some of these learners will live with their grandparents or other family members. In cases where such learners have no family members to take care of them, they have no option but to stay by themselves. They are regarded as child-headed families, where the eldest child takes care of his or her siblings, which is an extremely challenging situation. TT2 remarked:

> *Most of the families are child-headed. If it is not Granny who look after the kids or the kids are by themselves. In our community, there are lot of dropped out because of crime, substance abuse, poverty, stuff like that.*

Where some learners have no parents, other learners live with both parents, their mother and father. However, when fighting and abuse take place in such families, the emotional trauma experienced by such learners negatively affects their well-being and eventually their ability to learn. Participant FMC2 commented on such emotional trauma and the emotional well-being of learners:

> *I think what I have learned most is how much of … of the child's emotions affect their work. I had kids where the parents used to beat each other in front of the children. That child couldn't learn last year he was with me. And I picked it up that there is something wrong and I phoned the mother and she actually came in with blue eyes and a big swollen lip and said this is my husband does every day and well for he was actually doing well he slacked then and totally regressed. He ended up repeating and he is still with me again this year.*

In modern, industrialised societies, there are exosystems that are especially prone to affecting the development of the child, primarily through their influences on family processes (Bronfenbrenner, 1986). The social factors that can impede family

participation and partnership with the school are quite diverse (see 2.3.4.7). In this study, incomplete family structures owing to HIV/AIDS, dysfunctional families and community influences have emerged as some of the factors contributing towards lack of parental involvement in the learning of learners. In addition to poverty and lack of parental involvement, participants in the study have further identified the learning barrier that is caused by LOLT (RT1, FMC1 and FMC2). The following responses portray *RT1's* views on challenges with regard to LOLT:

> *We have also the foreigners, who are staying here, we also have the Pedis, the Tsonga but because of maybe our LOLT again that is the problem, because we want them to do one language that is Setswana and even at eeh our district, we normally start them with this home language and we say our home language is Setswana, we don't consider those other languages and that is the barrier again.*

LOLT refers to the language medium in which learning and teaching, including assessment, takes place (DBE, 2013). South Africa is a multicultural society with 11 official languages. As a result, schools accommodate learners who are linguistically diverse (see 3.3.1). The South African language policy maintains that children are expected to begin intensive learning in their own language and that the second language introduced only in Grade 4 or 5, thus from the intermediate phase (Tshotsho, 2013:39; Taylor & Coetzee, 2013).

School A where RT1 was employed, is embedded in a Batswana community, which denotes Setswana as the dominant language in the area (see 4.4.1.1). RT1 demonstrated a clear understanding of the South African language policy. She stated that they normally started learners with their mother tongue, Setswana. In other words, the LOLT in School A, especially in the FP, is Setswana. RT1 stated that she also had learners whose first languages were not Setswana but Sepedi, Tsonga and other African languages. She therefore regards their LOLT as one of the learning barriers experienced by some of her learners. Based on the language discrepancy, it becomes obvious that learners who cannot use languages that they are most familiar with (usually the home language), are disadvantaged and unlikely to achieve to the best of their ability.

Other participants (FMC1 & FMC2) concurred that some of their learners faced challenges with regard to the LOLT:

> **FMC1:** *Firstly let me say the language barrier. From the three that I am talking about, two are from the rural area school and the other one is from Congo. So they battle with the language English as a medium of Instruction.*

> **FMC2:** *Because most of our learners are second language learners. They all 90 percent of the school are African language learners. So English is for them actually their second language. So we teaching them in their second language so a lot of the staff that we do we need to bring down to their level where you use more actions where you have to show them what needs to be done because they aren't actually understanding the word that you say.*

FMC1 and FMC 2 are employed in schools G and H respectively (see 4.4.1.3 and Table 4.3). These are the FMC schools (see 4.4.1.3), located in urban areas. It is quite common in South Africa that African parents who are economically privileged send their children to the FMC schools, where they will be fully exposed to the English language. Lafon (2009) asserts that the end of apartheid (see 2.3.1.1 and 4.4.1.2), opened a door to parents in South Africa and offered them the freedom to enrol their children in any FMC schools, as long as the schools accepted them. Hence, the FMC schools under study accommodate the majority of African learners, whose mother tongue is not English (see 4.4.1.3). Participant FMC2 noted that 90% of learners in her school were Africans from different townships, whose first languages were not English. On the other hand, FMC1 stated that some of her learners that experienced learning difficulties originated from rural areas and from other African countries such as the Congo. The main reason for this trend is that the English language is perceived as the global language with the potential to prepare learners for better future opportunities; hence many African parents put their children in FMC schools. However, RT1 and RT2 clearly declared LOLT as the main barrier to learning in most of their learners. As explained in Chapter 4, the South African language policy states that learners must be taught in their mother tongue during their early years (see 4.4.1.1). However, it goes without saying that in the FMC schools English is used as LoLT from Grade 1. Since teaching and learning for many

of these learners take place through a language that is not their first language, this contributes to their learning breakdown. Figure 5.2 summarises the extrinsic factors that cause learning difficulties in participants' learners.

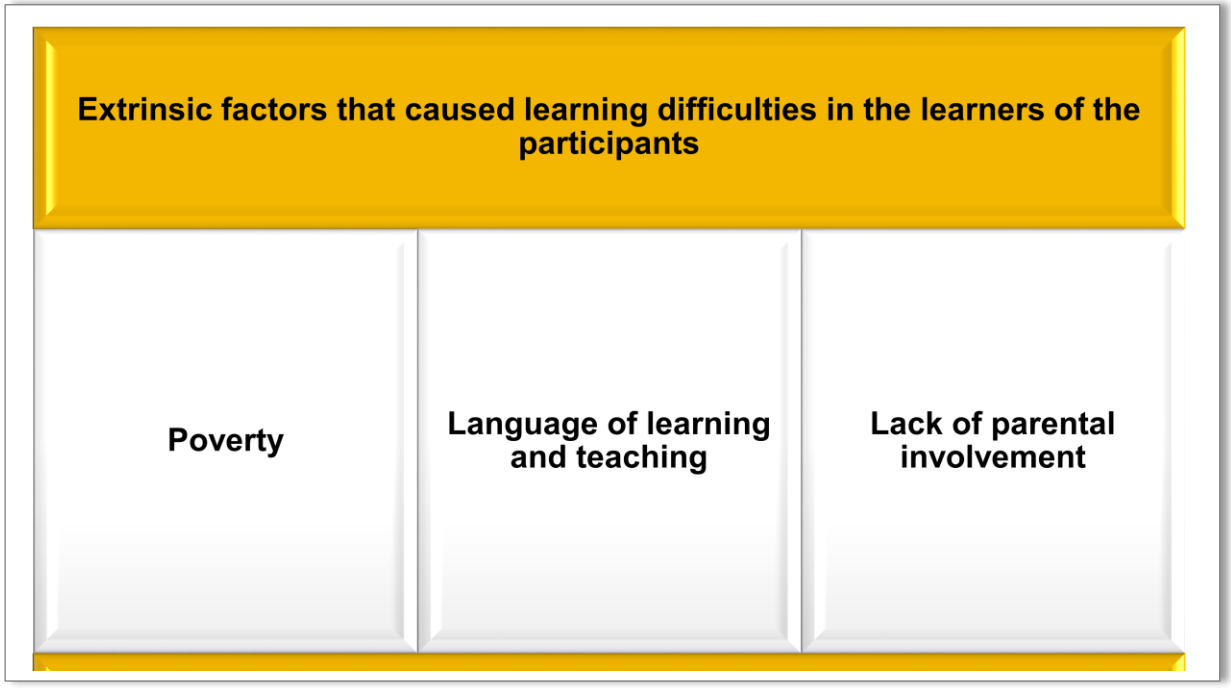

Figure 5.2: Extrinsic factors that cause learning difficulties in participants' learners

5.4.2 Theme 2: understanding of curriculum differentiation

The second theme related to participants' understanding of curriculum differentiation. In other words, my aim of exploring this theme was to determine participants' understanding of the concept of curriculum differentiation in schools. It also aimed to explore teachers' understanding of the elements of the curriculum that can be differentiated to address the diverse learning needs of learners. During the study, I found that some of the teachers showed a clear understanding, others displayed limited understanding, while yet others proved to have no understanding of this concept. The understanding of what curriculum differentiation entails is therefore classified into three participant categories, namely those with a clear understanding, those who have a limited understanding, and those who lacked an essential understanding of what curriculum differentiation involves.

All the teachers had completed the BEd (Hons) in Learning Support and were employed in FSS, also known as inclusive schools. They therefore had the

opportunity to be knowledgeable and competent on the notion of curriculum differentiation (see 3.2.3). Based on the outline of the ILN 720 module, the concept of curriculum modification/differentiation is one of the topics where teachers are trained on the issue of curriculum differentiation. The disparity in terms of teachers' understanding of curriculum differentiation implies that teachers had different views of their commitment to the differentiation of the curriculum.The following thematic discussion focuses on three categories: clear understanding, limited understanding and lack of understanding.

5.4.2.1 Clear understanding of curriculum differentiation

Knowledge and understanding of curriculum differentiation are some of the critical skills that teachers need to ensure the effective implementation of IE (Fisher, Frey & Thousand, 2003). Teachers are therefore expected to understand that they teach heterogeneous classes where the learners have different learning needs and abilities but still need to access the same curriculum (see 3.2.3.2), particularly when they are employed in FSS (see 3.2.3).

The analysis of the data revealed that only two participants, TT2 and FMC3, demonstrated a clear understanding of what the concept of curriculum differentiation entailed (see 3.2.2.2). They also understood the various aspects of the curriculum to be differentiated, the factors that determine curriculum differentiation and all the processes involved in the differentiation of the assessment process (see 3.3.3.2.3). In addition, these two participants clearly understood the significance of differentiating the curriculum in schools, namely to ensure that all learners can learn and participate (see 3.3.3.2.2). In defining curriculum differentiation, TT2 stated:

> *I understand it as having accommodations, adaptation to include them in subject matter not like what's the word? Include all of them irrespective of their barriers. You try to devise some means that all of them must cope.*

TT2's response also acknowledged diversity in the learner population, which requires the differentiation of the curriculum. She indicated that curriculum differentiation is a means of ensuring that all learners participated in the curriculum

irrespective of learning barriers they might experience. In elaborating on curriculum differentiation, she added:

> *At the end of the day, let's say this is term 3 and we are at the end of term 3, we want them to have completed the tasks, but they cannot all complete the task at the same time at the same place, … we need them to complete all of them so we need to come up with the means that if this one is an oral learner we give the work that will suit his ability he can cope. At the end of the day work must be done irrespective of the barrier of the learner.*

In line with Tomlinson et al. (2003) who reveal that one of the major characteristics of modern classes is heterogeneity in terms of learners' abilities, TT2 displayed an understanding of diversity among learners by referring to oral learners, who require differentiation of the curriculum. Her response indicated that teachers should know their learners, in other words, each learner's profile, which would determine the type of differentiation required to meet the needs of such learners. TT2 added:

> *As I said earlier, a learner who is an oral learner will always struggle with the written work … we start identify such learners as early as January that is the beginning of the year.*

TT2 clearly understood that a one size fits all approach (Ferguson, 2008) was not possible in inclusive schools (see 3.2.3). She also mentioned the aspect of pacing (Gadzikowski, 2013) as another strategy to differentiate the curriculum (see 3.2.2.2):

> *Sometimes it is a question of time. Our periods run 30 minutes, so slow learners, the learner will …. read the questions over and over and over again and the time she understand the work, the time will no longer be on her side anymore and then she will come back and tell you that the work was not done when you ask the reason why she will tell you that the bell rang. She needs that kind of the learner, needs additional time. So those are the learners we see after school hours.*

Participant FMC3 expressed her understanding of the term curriculum differentiation as a panelbeating process:

> *Curriculum differentiation ... I think I will use my own term here, ha..ha..ha* [laughing]*, I think is the panel beating of activities to suit every learner in the class when they are doing the same ... the same activity. Let's say the learners are doing the same activity then I try to … to ... make a point that everyone fit I will make sure that everyone even those with learning barriers do the same activity according to their levels. Make sure that everyone participates. I panel beat.*

Panel beating is a technical term which is usually used in the motor industry. It implies correcting all areas that are not intact or that need to be repaired. In this context, Participant FMC3 stated that if the content of the subject taught or the teaching strategies does not meet the needs of individual learners, then that particular aspect needed to be panelbeaten, implying the need to differentiate. She added:

> *I downgrade the activity. I also give them less I don't give them more work. I give them less questions but within the same concepts. Example if is a language, I cover the whole passage but ask those learners less questions. Some learners I give them extra time. Other I guide them during assessment. If they have to complete the work. There are some learners that I can see that they have problems you know when I am marking their books, I can see that they copy work incorrectly. Then what I do I make them sit next to the chalkboard, they come and sit at the front. I also make use of what we call the buddy system. I make them sit with someone to sit with them so that they can help the others.*

This participant's response demonstrates her understanding of various aspects of the curriculum, including teaching strategies, assessment, pacing and learning environment, as highlighted in Figure 3.3. TT2 also highlighted pace also as one of the aspects she differentiated; FMC3 said:

That kind of the learner, needs additional time, so those are the learners we see after school hours.

According to the participants' data, TT2 and FMC3 were members of the SBST in their schools (see table 5.3 and 5.4). TT2 served on the DBST where she also supported schools in the neighbourhood to address the learning needs of the learners. Their experiences and involvement in both the SBST and DBST have contributed immensely towards their understanding of curriculum differentiation. Both participants stated that they attended workshops that included training in curriculum differentiation:

TT2: *As a member of the SBST we attend lot of workshops that help us to assist the school so that teachers can help learners who experience barriers.*

FMC3: *As members of the SBST we have also attended workshops where we were taught on how we can differentiate the curriculum.*

However, neither of the participants referred to the BEd (Hons) in Learning Support or other teacher's training qualification as contributing towards their knowledge and understanding of curriculum differentiation.

5.4.2.2 Limited understanding of curriculum differentiation

The analysis of the data shows that one participant, namely TT3, had some knowledge and understanding of what the concept of curriculum differentiation entailed. In explaining what curriculum differentiation is, TT3 said:

What I understand about curriculum differentiation is to adapt the curriculum, You … you, I do the intervention for the learners to access learning. I intervene, and then I break the content into smaller activities for those who are not intact for them to … to access learning as well, because they cannot just sit and do nothing because the content is too complex for them.

In understanding learners' abilities and their needs, TT3 mentioned the issue of planning:

Because you have to plan for them. Whatever you will be doing and then you need to know gore (that) this learners might not be able to access the content the same as the whole class.

Curriculum differentiation involves the modification of the learning environment, teaching methodologies, teaching strategies and the content of the curriculum to consider the ability level, interest and background of a learner (DBE, 2011) (see 3.2.2.2). According to TT3, curriculum differentiation was about breaking the content up for some learners. The learning content is one of the aspects to differentiate in meeting the diverse learning needs of learners in schools. She did not mention differentiation of teaching strategies and assessment as some of the aspects of curriculum differentiation. Although she regarded curriculum differentiation as breaking down the content, she also acknowledged that all learners must be provided with an opportunity to participate in all curriculum activities:

But last time we attended the workshop ya (of) SBST, they gave us a guidelines on how can make this learners access learning. Sometimes these workshops do help.

According to the biographical data, TT3 participated in the SBST in School F for a year before her new head of department (HOD) could take over the position (see 5.2.2.1). It is evident that because she participated briefly in SBST activities, this contributed to her limited acquisition of an understanding of curriculum differentiation.

5.4.2.3 Lack of understanding of curriculum differentiation

The analysis of data disclosed that the majority of the participants lacked understanding of what curriculum differentiation entailed, namely RT1, RT2, RT3, TT1, FMC1 and FMC2. Responses from the individual interviews with all six participants revealed that they displayed serious knowledge deficiencies in their understanding of curriculum differentiation in schools. All six participants had basic teacher's training as well as a BEd (Hons) in Learning Support. Furthermore, one of the participants was currently studying for an MEd degree in Early Childhood

Education. These participants taught learners with diverse learning needs. The lack of participants' knowledge of curriculum differentiation is evident:

> **RT2:** *Curriculum …* [laughing] *ka na ke eng, ga ke e itsi? (by the way what does it entails, I don't know what it is.) mmmmmmm …*
>
> **RT1***: Mmmmmmm … I am not sure.*
>
> **RT3***: I don't remember what is that, but I think we once attended a workshop and someone spoke about it … mmmmmmmm, No I cannot remember…*
>
> **FMC1:** *I mmm … is that in term of knowing the different between your English and you math and the life skills when you are teaching or just between when you are teaching one thing in in different manners?*
>
> **TT1***: Mmmmm, a ke itsi, se ke se thaloganyang ke (I don't know, but in my mind is) the differentiation of the curriculum, Nke o nhlalosetse gore ke eng (please explain to me what that is).*

Participant TT1, instead of responding to the question, answered by rephrasing the question and again asked me to explain what curriculum differentiation entailed. On the other hand, participant FMC1 provided a response that was not relevant to the question. Even though the same question was asked more than once, the response was unrelated to what she was asked:

> *To be honest I don't really apply what I have learned. I just came, when I remember what I have learned I will just think, OK this is what I read in the book. But I don't have those powers to can came and change whatever from what at school. I am just a PL1 teacher* [PL1 implies post level 1, which refers to a teacher who is at the basic level teaching position]

She continued:

> *Like for example, like now I have this point that the children in my class are not participating, I will not tell my boss.*

When asked who the boss is, she responded that:

She is the head of the department (HOD) for the FP.

In my understanding, the HOD had nothing to do with the question, because it did not inquire about the boss's role in the school. I recognised that FMC1 had no understanding of what curriculum differentiation was and that her remark about her boss avoided the question. Likewise, RT1 blamed the members of the DBST in her area:

> *Is just that sometimes in our area you can't just make like a lesson plan … you can't do it from yourself because of this learner, you will have to consult with the specialist. And normally they don't approve what you are telling them, they will just come and say no is not right. That is why sometimes even if you have a knowledge of something that you can help the children, you can't because when they come they will discourage you that's our problem.*

As has been stated in Chapter 3, for teachers to be able to support learners with various educational needs in an inclusive classroom, they should be prepared to accept ownership for learners with diverse abilities and needs and to ensure their participation and success (Oswald & Swart, 2011). It is clear from the above responses that participants RT1 and FMC2 failed to accept ownership of their classes, blaming their senior, the HOD, and members of the DBST for their failure to differentiate the curriculum. The role of the DBST is actually to support the schools in ensuring delivery of the curriculum to all learners, which includes the differentiation of the curriculum (see 2.3.3.2). It is therefore unlikely that the DBST would not allow teachers to demonstrate their proactiveness and ownership in ensuring learning and participation for all their learners.

The participants' responses in this section illustrate an extreme lack of knowledge on the meaning of curriculum differentiation. However, these participants taught in inclusive schools (see 3.2.3), and had also completed and passed the ILN 720 module in the BEd (Hons) in Learning Support that focuses on curriculum differentiation. They are therefore expected to know how to differentiate the curriculum and use various approaches to meeting the diverse needs of the learners (see 2.3.3.2.1 (ii), section 2). This matter needs attention. Responses such as: *by the way what does it entails; I don't know what it is; I am not sure; I don't remember*

what is; I cannot remember; is that in terms of knowing the different between your English and you math and the life skills when you are teaching show a severe lack of knowledge about the policy guidelines that mandate the differentiation of the curriculum in schools.

5.4.3 Theme 3: Implementation of curriculum differentiation

Bronfenbrenner's ecological systems theory (1979) identifies the microsystem as the system that is characterised by people closest to an individual and the reciprocal relationship between these people and the individual. These people play a key role in the learning of a child, such as their teachers. The teacher participants in this study completed an ILN 720 module in the BEd (Hons) in Learning Support programme (see 2.3.3.2.1 (ii), section 2), which is meant to enable them to meet all their learners' learning needs. This theme represents findings on how participants implemented curriculum differentiation as mandated by Education White Paper 6: Building an Inclusive Education and Training System; The National Strategy on Screening, Identification, Assessment and Support: School pack: and Guidelines for Full-service Schools.

5.4.3.1 Application of theory to practice

Although most participants initially demonstrated a lack of understanding of what curriculum differentiation entails, the empirical data presented in this theme shows that these teachers, although possibly unintentionally, do differentiate some areas of the curriculum during their class activities. In other words, they differentiate the curriculum to some extent without being aware that they are differentiating. For instance, the data in Theme 2 revealed that RT2, TT1 and FMC3 showed no understanding of the concept of curriculum differentiation. However, when I further explored how they assisted learners with various learning needs in their classrooms, it became apparent that they included cooperative learning and peer tutoring as strategies to differentiate the learning process (see 3.3.5). Cooperative learning is a teaching strategy where learners work together and assist one another so that they can achieve a common goal (Tchatchoueng, 2015). Cooperative learning is further facilitated by peer tutoring (see 3.3.5), which Gregory and Chapman (2013) define as

an activity where learners assist one another in a learning process. RT2 described how she used cooperative learning as a way of assisting her learners:

> *I am having three ability groups. Number one they are fast learners, Group number two they are the medium and number three are the ones who are having problems. So many times I take my times to sit next to them or to go around especially group three to shows them what they must write and after ke dirile bjalo I ask the faster learners to go and assist them, maybe they are afraid to talk with me that the faster learner they go and assist them how to write. I group them according to their abilities.*

Various authors, laws and policies on IE and curriculum differentiation recognise understanding of diverse learners' abilities as one of the key aspects in delivering quality education (see 2.3.2.1; 2.3.2.2; 2.3.2.6; 2.3.2.11; 2.3.2.2.2; 2.3.2.2.5; 2.3.3.2; 2.3.4.7; 3.2.3.1; 3.2.3.2 and 3.3.3.3). Evidence provided by RT2 indicates that this participant acknowledged diversity among her learners, hence she grouped them according to their abilities. According to Gregory and Chapman (2013), various grouping strategies can be used as part of curriculum differentiation. Examples of such groupings include heterogeneous and multi-age grouping. It is obvious that RT2 preferred homogeneous grouping as a way of assisting her learners, hence she had three ability groups. It is also clear that she provided more support to group 3 and requested clever learners to assist this group. In other words, group 3 received more attention than other groups, which might also be a shortcoming of a homogeneous grouping approach. Based on RT2's grouping strategy, I further reflected on the questions suggested by Walton (2013) (see 3.3.5). Other participants disputed RT2's approach of an ability grouping strategy:

> **TT3***: They sit two-two. I pair the clever child and the slower child.*

> **TT1:** *I consider children who performs very well., but I don't group them according to their abilities, Ke ya ba tlhakatlhakantsha, wena tseya o, wena tseya yo (I mix them, you take this one and you take this one). This kind of learners I usually gather them together and then take somebody "You two le ruta ba bangwe go bala … A ke re nna ga ba nkutlwe"(you two you must teach others to read because they seems not to understand me).*

TT3 preferred to group her learners in pairs, using mixed ability groupings. This means that a learner who struggles academically is grouped with one who demonstrates high intellectual functioning. Other participants shared TT1's mixed ability grouping strategy:

> **FMC3**: *I pair them with the clever ones so that they can help them in reading and doing other activities. Sometimes they sit two-two and sometimes I pair them four-four.*

> **FMC1***: But with me I don't actually like to put them in the same groups because I have experienced that when they are in their groups, let's say they are in the group of 4, group of 6 and they all can't; then they will just sit, they won't do anything. If it is a discussion they will not discuss, they will just look at each other. But if there is somebody clever there or two, they will try and push them to participate and they will end up participating.*

It was shown that RT2, TT3, TT1, FMC1, and FMC3 understood the significance of cooperative learning and peer tutoring as strategies to facilitate their class teaching and learning. Unlike RT2's homogeneous grouping approach, TT3, TT1, FMC1, and FMC3 preferred heterogeneous groupings (see 3.3.5). When we explored the rationale and benefits of cooperative learning, all the participants received it with a positive attitude by expressing that learners learnt better when they were taught and supported by other learners. Their responses support the observations by Gregory and Chapman (2013) (see 3.3.5, peer tutoring).

In addition to cooperative learning and peer tutoring as strategies to differentiate the learning process, participants RT1, RT2, TT3, FMC1 and RT3 stated that during their teaching they used demonstrations (see 3.3.5) and various resources (see 3.3.6) to assist learners who needed additional support. Participants described their strategies as follows:

> **RT3:** *In my class I try to help my learners, like example when I teach about animals I practically show them which animal I am talking about and show them how the walk and produce their sounds. You see in our village there are animals so I don't have a problem in referring to what we have. I also use*

some resources for example in math I ask them to get small stones outside for counting. But I don't use them for all learners but the ones who perform low I know that when they see the number and use those small stones to count and they will understand much better.

Community resources such as live animals and small stones, usually present in South African rural context, play a vital role to facilitate learning and understanding in some learners, hence RT3 used it as one of her teaching strategies. Apart from what RT3 used, the following participants described other resources:

TT3: *They emm need to do maybe addition … Eeee fourteen plus six (14 + 6). That is too challenging for them. What I will do I will draw objects so that they will count what they see so that it does not become abstract for them. Or I give them the concrete objects like bottle tops or the counters for them to see. They can't do that on their own, they need to see, they need to touch and feel. You know they need practical.*

RT1*: Like when we come to math, I must use the concrete object when I am dealing with the one who is having learning barriers and the other one when I say one-two-three-four-five, I know she will write or will but this one I must sit with her and say you know what you see this one is a maybe is a pin (showing one pin) is one, here is my one (demonstrate by writing one) and I am going to write that one here and show him or her that this is my one.*

The results in this category further reveal that some teachers attempted to meet their learners' diversity by differentiating the curriculum content (see 3.3.4) and product through various assessment strategies (see 3.3.6). In terms of the content and product differentiation, participants described some strategies they employed:

FMC3: *I want each learner to experience success to certain extent. At least they have tried. I also give them less I don't give them more work. I make my questions less. I give them less questions but within the same concepts. For example I give them less. Example if is a language, I cover the whole*

passage but ask those learners less questions. Some learners I give them extra time.

RT2*: Gobane geke ba fa tiro ga ke ba fe tiro ka go swana (I give them work at different levels). Ke ba fa mafoko a ma.. a popota, a kere, ke re ba kwale ka apaya, ka bua, ka ja, sekolong (I give them the difficult word construct sentences which must include the words " cook", " speak", "eat", "school"). The faster learner they will be able to write sentences about this words, ke ya sekolong ka terene (I go to school with a train), mme o apaya dijo tse dimonate (My mother cooks nice food). Shorter sentences are "ke ya bua (I speak), ke ya ja (I eat). Group 1 and 2 they are going to elaborate these sentence, Ke ja le mme dijo tse dimonate (I am eating food with my mother at home), the slow one they said "I eat", group two "ke ja di jo le mme (I eat with my mother)", 5 words, group one "ke ja dijo le mme kwa gae" (I am with my mother eating food). Group 1 they say "Ke ja" (I eat).*

Because the data from RT2 is somewhat complex, I start by unpacking it for the sake of understanding and clarity. Based on her learners' various abilities, RT2 states that she gives her learners activities at different levels. For example, learners will be asked to construct sentences that must include the word "eat". To complete this activity:

- Learners whom she regards as low-performing will construct short sentences, such as "I eat"
- The next group, which she regards as group 2, the moderate group, will write: "I eat with my mother"
- The last group, which according to her are high-performing, will write longer sentences such as "I eat delicious food with my mother"

The result shows that to a certain extent, some teachers vary their content and the learners' assessment activities, to which various authors refer as learners' products (see 3.3) within the curriculum to maximise their learners' learning and participation. Walton (2013) suggests that one of the rationales for the implementation of curriculum differentiation is to ensure that each learner experience success, which is

in line with FMC3's response: "*I want each learner to experience success to a certain extent. At least they have tried*".

TT3 did not elaborate much on how she differentiated the two aspects of the curriculum, but RT2 and FMC3 outlined that they ensured that they provided their learners with the same content but differentiate the workload and complexity demanded by the product as determined by their learners' abilities. At the same time, teachers need to keep in mind Tomlinson's (2005) advice: when teachers differentiate the curriculum, they must take cognisance that the work allocated to the learners is at an appropriate level of challenge. It must not be too difficult or too easy to ensure that they do not become frustrated or bored (see 3.3.3.1). In other words, teachers need to ensure that when they differentiate the content and the product, they must at the same time maintain the standard of the expected outcomes of the learning area. In the context of such differentiation of the learning product, FMC2 said:

> *Everybody has to do the same assessment; everybody has the same things done in the same way.*

Pasensie (2012) postulates that many teachers still fail to implement differentiation of the curriculum despite the provision of inclusive programmes in pre- and in-service teacher training. FMC2's response takes us back to the "one size fits all" approach, which defines the traditional way of teaching (see 2.3.3.2 and 3.2.3.1). Participant FMC2 response is a clear indication that she does not take diversity among her learners into consideration. Her response becomes a real concern, especially when this practice is implemented in the context of FSS, because I found it to contradict the elements that characterise an FSS (see 3.2.3). Furthermore, more than 15 years after the introduction of IE, the South African education system still experiences persistent challenges because teachers are unable to differentiate the curriculum (see 2.2).

5.4.3.2 Challenges of differentiating the curriculum

Although curriculum differentiation is regarded as significant in ensuring that all learners achieve their learning outcomes (see 3.3.2), some participants confessed to experiencing challenges due to their class structures, time allocation and support

from their DBST. Accordingly, participants TT3 and FMC3 indicated that sufficient time was one of their major barriers towards the implementation of curriculum differentiation:

> **FMC3**: *My first challenge is usually our periods are 30 minutes. And you would find that my learners with learning barriers will not be finish in 30 minutes. The bell rings before they are done. So I face lot of a challenge because they are slow, they are naturally slow. I have the time problem.*

> **TT3:** *Time, time, time for planning. They need time. Time for downgrading the content, time for intervention with those learners. Because it takes time for them to understand exactly what you are trying to teach.*

Providing learners with extra time to complete the assessment task or class activities serves as one of the aspects that define curriculum differentiation (see 3.3.3.6). Participants viewed limited time as a challenge to differentiate the curriculum. I reasoned that the responses from the teachers about time implied concerns about time for planning of the differentiation of the content and the learning process and also the time required for learners to complete the curriculum tasks. Walton (2013) argues that differentiation of the curriculum can be difficult to achieve in conditions where there is only one teacher in the classroom (see 3.3.2). Another factor is that the curriculum content must be covered substantially (Rachmawati et al., 2016).

Participants not only experienced challenges in terms of time frames; they moreover indicated challenges from overcrowded classrooms, particularly in township schools. TT3 and TT2 described their experiences, the two participants stated:

> **TT3:** *Iyoo so many things, overcrowding the context itself classrooms.*

> **TT2***:Overcrowding is also one of the challenges because you cannot give one on one attention.*

According to the Guidelines of FSS, these schools must have enough classrooms for the recommended teacher−learner ratio (DBE, 2010). A normal school classroom is designed to accommodate 35 learners, which means that any classroom with more than 40 learners is overcrowded. Measured against the teacher−learner ratio in

South African schools, TT3 and TT2 had the highest number of learners in their classrooms of all the participants. TT3 had 46 learners while TT2 had 45 learners (see Table 5.3), much higher than class numbers in the rural and former Model C schools. Although they had learners who needed extra support it must also be noted that other ability groups must not be ignored. It is critical for teachers to realise that overcrowded classes will always be a challenge facing South African public schools due to the following reasons:

- The escalation in learner numbers, which is a natural phenomenon (Masitsa, 2004).
- Migration of many people from rural areas to townships together with people moving into South Africa from poor neighbouring countries such as Zimbabwe, Malawi and Mozambique.

In order to ensure that learners understand the content, it is important for teachers to be able to use the relevant teaching and learning resources. I found this to be a real challenge in public schools, as TT3 said:

> *Not only the time, also the resources, we don't have resources in public schools. Lack of resources that is another challenge.*

Most of the teachers mentioned the lack of parental involvement as one of the extrinsic barriers experienced by their learners. Differentiating the curriculum requires understanding and support from the parents or families. The lack thereof is one of the problems experienced by the teachers. TT2 said:

> *Challenges are that parents are in denial, they will ask you "why are you treating my child differently, when they were writing the test, you made him sit even after the time, what message are you sending to other children about my child". So it is difficult because it starts at home, once we don't have parents' blessings. Even doing work with the child after school parents do not agree that we are taking the child after school. They will tell you Oh transport is leaving my child, I don't have means to come and pick up my child.*

Apart from the lack of parents' support in addressing the learning needs of learners, FMC3 added:

Another challenge is that I don't have parental involvement to and support.

The Guidelines for FSS clearly state that one of the characteristics that will differentiate these schools from other ordinary schools is that FSS will be fully equipped with relevant resources and materials to cater for learners with various needs. This includes resources such as adequate software and hardware suitable for supporting learning difficulties, visual materials, adapted worksheets and other learning materials and equipment (DBE, 2010). It again emphasises that in these schools there must be strong collaboration and support among the teachers and also between teachers and parents, which is one of the problems experienced by teachers in these schools. Sixteen years after the introduction of IE and five years after the development of the FSS guidelines, these teachers' experiences of the lack of resources and parents' support was still evident. These findings reveal the real problems faced by the South African public schools when they attempt to put curriculum differentiation into practice.

5.4.3.3 Official documents that guide implementation of curriculum differentiation

In the ecological theory, human development is found to be inseparable from the belief systems, bodies of knowledge, material resources, lifestyles, opportunity structures, and public policies that are embedded within the macrosystems (see 2.3.2). After the introduction of the main policy document on IE, namely Education White Paper 6: Building an Inclusive Education and Training System in South Africa, several official documents were developed to support the implementation of IE. These documents include:

- Education White Paper 6: Building an IE and training System
- Guidelines for Inclusive Learning Programme
- Guidelines for Full-service schools
- The National Strategy on Screening, Identification, Assessment and Support
- Guidelines for Inclusive Teaching and Learning
- Guidelines for Full-service Schools

- ❖ Guidelines for Responding to Learner Diversity in the Classroom

These documents were also developed as some of the strategies to address various learning needs of learners in schools, including curriculum differentiation (see 2.3.2.2.5, Table 2.4).

Empirical data revealed that most of the teachers (RT1, RT2, RT3, TT1, FMC1 and FMC2) did not use any of these official documents that guide the process of curriculum differentiation in schools. Participants explicitly admitted that they did not use the official documents:

> **RT3***: We don't have an official document Mam, as teacher you must just think what best you can do. I remember Education White Paper 6 in my honours class.*
>
> **RT1***: We have the policy documents. We normally have the … the … this one let me say they send us language policy and assessment policy how are you going to assess this the learners and the language policy, how are you going to use this language when you maybe present your ... your activities or your lesson plan.*
>
> **FMC2:** *We don't use any official documents. I think it helps a lot if we come from the University* [laughing] *and we have done Learning Support.*

The participants' responses revealed that they hardly used the official documents on the issue of curriculum differentiation as guidelines to meet their learners' academic needs. RT1 mentioned using the assessment and language policy (see 4.4.1.1). Other participants (RT2 and TT1) appeared to be confusing the official documents that guide curriculum differentiation with the CAPS, which is the school curriculum (see 3.2.3.2). According to Du Plessis (2012), CAPS is what the teachers teach (curriculum) and not the teaching methods. The participants remarked:

> **RT2***: Remember Mam, bjale ka ge re le mathitshere, re sebedisa CAPS (as teachers we make use of CAPS) e re bontshang learning areas tsa foundation phase (that guides us on foundation phases' learning areas). That is all that I use.*

FMC1: *We also have Education White Paper 6. We just follow policy documents for different subject. Like Math I have a policy document for that, English has its policy document. CAPS. For the children who needs to be supported we just follow on that from that policy document.*

Participant FMC1 reported having Education White Paper 6 at the school, but she did not mention if she used it or not. However, RT2 and FMC1 both unreservedly professed to be using only the CAPS. Some participants resorted to the notes they received from their teacher training workshops and the learning materials they used while they were studying for the BEd (Hons) in Learning Support. TT3 indicated that she also used the White Paper 6 policy document. However, the participants showed appreciation of materials from the programme and the workshops organised by their DBST and SBST:

TT3*: Emm … Emm … let me seeee … No we don't have. Is your responsibility as a teacher to see how can I lower this activities. We don't have official document, But last time we attended the workshop "ya" (of) SBST, they gave us a guidelines on how can make this learners how to access learning. Sometimes this workshops do help.*

FMC2: *We use the book "Barriers to learning" and all those readings we used. So when I look at my children I can see that this kid have spatial orientation problems then I go and look through my work and see that this can work and this cannot work. I used lot of materials I got from the University.*

TT3 indicated that she used Education White Paper 6 as well as other materials she had used in her BEd (Hons) in Learning Support programme.

On the other hand, FMC3 and TT2 were the only participants who indicated that they were using the National Strategy on Screening, Identification, Assessment and Support (SIAS) in addition to Education White Paper 6 (see 2.3.2.2.5) and the notes from their workshops:

FMC3: *Yes we have them Mam'. I make use of the SIAS policy. I also make use of Education White Paper 6. I have also attended workshops. I attended a workshop organised by our district where we were taught on how to*

differentiate the curriculum. We were given some notes that teaches us on how to differentiate the curriculum. I also make use of the content I used when I did my honours in Learning Support.

TT2*: I normally use Education White paper 6, also other documents from the district and the other one is called SIAS.*

This result confirms that the teachers were ignorant of the important official documents that mandate implementation of curriculum differentiation to meet the diverse learning needs of their learners in the class. It is important for teachers to recognise that to be a teacher means being a researcher, and a lifetime learner (Landsberg & Matthews, 2016). For teachers to be able to differentiate the curriculum, they must continuously examine important literature, including official documents such as:

- Education White Paper 6: Building an Inclusive Education and Training System
- Conceptual and Operational Guidelines for Full-Service Schools
- The National Strategy on Screening, Identification, Assessment and Support
- Guidelines for Responding to Learner Diversity in the Classroom (see 2.3.2.2.5).

This is in line with Gregory and Chapman's (2013) research, which revealed that differentiation of the curriculum needs conscious effort on the teacher's part to analyse available information and make a decision of what is working and what needs to be adjusted.

5.4.4 Theme 4: Teachers' preparation

According to Bronfenbrenner's ecological systems theory (1979), there are various layers of interacting systems that result in transformation or change, growth and development (see 2.2). The exosystem comprises two or more settings, one of which does not contain the developing person, but in which events take place that indirectly influence the processes within the immediate settings in which the developing person lives (Bronfenbrenner, 1979 & 1994). The exosystem in this study is represented by the teacher-training institution that offers a BEd (Hons) in Learning

Support (see 2.3.3.2) to prepare teachers for meeting the learning needs of their learners in schools.

My aim of exploring this theme was to determine whether the BEd (Hons) in Learning Support, in particular the module Identification and Assessment of Learners' Needs (see 4.4.2.1.2) that trains teachers on curriculum differentiation, has prepared teachers to differentiate the curriculum to address the diverse learning needs of their learners in school. Teacher training institutions as one of the elements of the exosystem are crucial to the training and preparation of teachers to ensure effective learning through inclusive teaching (see 2.3.3.2). The empirical data revealed that few of the teachers had acquired the skills and knowledge for differentiating some areas of the curriculum, namely the content and process. The data further revealed the challenges experienced by participants when applying their acquired knowledge and skills.

5.4.4.1 Acquired knowledge and skills of curriculum differentiation

Teacher-training institutions are vital for the realisation of IE where teachers are educated and trained to be able to differentiate the curriculum, which is the strategy for meeting the diverse academic needs of their learners in schools (see 2.3.3.2). The data from the interviews revealed that although some participants claimed that the programme enabled them to differentiate the curriculum, they were unable to provide a detailed explanation of what they had learnt about curriculum differentiation. Participants pointed out the impact of the BEd (Hons) in Learning Support:

> **RT3***: Ijo Mam, it did prepare me and I even want to register for Master's degree in Learning Support. I know how to teach children with learning barriers. I know what Inclusive education is and different learning barriers in schools. I remember in one contact session we were taught Inclusive education policy and different barriers to learning.*

> **FMC1***: It did help me because when people are talking, I am familiar to what they are talking about. If I were to be an HOD one day, I will apply that. If*

somebody having a problem like my cousin child having a problem, I can assist them and tell them what to do.

One of the purposes of teacher training institutions is to provide teachers with the skills and dispositions to effectively meet a diverse learner population's abilities (Hawkins, 2009). Although two participants, RT3 and FMC1, mentioned how they had benefited from the programme, they revealed nothing in terms of the acquisition of knowledge and skills in the differentiation of the curriculum. RT3 even intended to enrol for the Master's programme in learning support, while FMC1 believed that she was ready to serve as the HOD, who is part of the school management team.

5.4.4.1.1 Identification of learning barriers

Some participants mentioned identification and understanding of various learning barriers as a skill and knowledge they acquired from the BEd (Hons) in Learning Support programme. TT2 also compared her knowledge before and after completion of the BEd (Hons) in Learning Support programme by saying:

So after completing this after having done Learning Support and all that I can easily follow up upon such learners I don't give up. I used to give up on the learners, when the learner say "Madam I didn't do the work". I took it that he has just been rude or ignorant. After I have completed this programme I now know how to make follow up. I am passionate now. Because of the passion, getting to know exactly what is happening in a child, and not only about the academic part of the learners. I turn to know about the home situation. That is the home situation and the school situation that the two are not separable.

RT1: *I start doing this honours, I wasn't aware that ehh, you must mmmmm you must at least when you have this learners with barriers in you class, how will you deal with them. So at least now the little mmmm … the little information that I have even though I cannot do it officially but at least I can help them like I was saying that I just steal this information and when I prepare my lesson plans, mm*

> **RT2***: You know I don't know what to say … E mpreparile* (It has prepared me*) to be able to teach my learners, gore ke itsi gore ngwana o thloka eng* (so that I can identify the needs of the learner) *especially in mind. Gore ke kgone go bona gore ngwana o o bokoa ka eng mo dilong tse tsohle* (to understand the child's limitations in every system)*.*

According to Walton (2011), the focus of IE is to identify and eliminate any impediments in all learners so that they can access the curriculum. The above verbatim reports show a reluctance to mention the ability to differentiate the curriculum as one of the most important skills acquired in the BEd (Hons) in Learning Support programme. Participants RT1 and TT2 only mentioned identification of common learning barriers experienced by learners in school as the skills they had acquired in the programme. However, this should only be the starting point. Teachers should be able to identify learning barriers experienced and to link the barriers with the type and level of support that the learners will need, namely differentiation of the curriculum.

One of the strategies to ensure that all South African learners access quality education in schools was the development of the SIAS strategy (see 2.3.3.3), which aims to provide guidelines on how to screen, identify, assess and support learners experiencing learning barriers in schools (see 2.3.2.2.5, Table 2.4). Furthermore, one of the aspects suggested by the social model (see 2.3.2.2.3) is that screening and identification cannot be separated from teaching and learning, which inform the process of curriculum differentiation. If I consider that identification and elimination of learning barriers by differentiating the curriculum are inseparable, there was a clear gap when I reflected on TT2's and RT1's responses.

5.4.4.1.2 Use of various teaching methods

In addition to the ability to identify learning barriers, some participants further indicated that the programme allowed them to acquire various teaching methodologies:

> **RT2:** *E nthutile (It taught me)the different methods of teaching.*

TT1: *As experience ye ke e kereileng (I acquired) from my studies … gore (that) we can do this and this and this and this so that the kid can move. Ge a palelwa re mo djikisa ka mo, ge a pallwa re mo potisa ka mo (If the learner finds it difficult to learn, we try this, if he still can't we try this).*

TT3: *Yaa, ya ... very much, because although is difficult to differentiate the curriculum. I remember that when you are having an ADHD how to handle that child. Different deficiency that we have learned and the strategies that we can use to help this learners.*

Participant FMC2 compared herself to other teachers who did not complete the BEd (Hons) in Learning Support, and maintained that she regarded herself as more knowledgeable in identifying problems experienced by learners in school:

FMC2: *There are so many teachers that I know that cannot look at children and decide OK, "I think they have this problem, I think they don't have spatial orientation". But you have to be able to know that to be able to know when you look at the child. When I did my practice teaching I taught at School K and there was an autistic child within the mainstream setting. And if you knew nothing about autistic children you would have found that child so overwhelming. Because you didn't know what an autistic child is you don't know the behaviour and characteristics and how to help them. I mean I can say 90 percent of our kids are ADHD but if (you) know nothing about ADHD you have no idea how to help the child, how to make their learning situation easier and how to actually benefit them.*

FMC3: *When we were at the university we were taught so many strategies on how to differentiate the curriculum. We were given lot of activities to do it practically when we were given tasks for every grade on how to differentiate the curriculum in different grades. Now I know how to differentiate the curriculum for my learners who experience barriers to learning.*

The report compiled by NCSNET and NCESS (DoE, 1996) states that inadequately and inappropriately trained teachers are the main impediment when implementing

the school curriculum (see 2.3.1.1). One of the resolutions taken in addressing this problem was the introduction of various teacher-training programmes, including the one under study, the BEd (Hons) in Learning Support. The role of these teacher-training institutions is to equip teachers to address the various learning needs of their learners through the differentiation of the existing school curriculum (see 2.2). This includes differentiation of teaching methods and strategies, teaching and learning resources, assessment methods, learning activities, learning environment and learners' products (see 3.3).

During the interviews, participants claimed that they had learnt various teaching methods and strategies, one of the areas to be differentiated. Gay (2010) asserts that for teachers to be able to teach all learners, regardless of their differences, they need to recognise and incorporate the personal abilities of learners into their teaching methods and strategies (see 2.1). The responses of TT3 and FMC2 support this view. I found various factors that guide the differentiation of the curriculum (see 3.3.3) lacking in the teachers' responses. In summary, identifying and using a variety of teaching methods are the key skills that the participants identified as having acquired from the BEd (Hons) in Learning Support programme.

5.4.4.2 Teachers' frustration

The teachers reported frustrations due to the bureaucracy of their support structures within the education system. Some participants were not allowed by their seniors to implement what they had learnt from the BEd (Hons) programme. In other words, these seniors appear to be barriers to the implementation of theory into practice by some participants. My interviews with two teachers, RT1 and FMC1, revealed that their seniors did not recognise the knowledge and skills they had acquired from the programme. In other words, their seniors or support structures did not allow them to implement what they had learnt from the BEd (Hons) in Learning Support. RT1 stated:

> **RT1***: Is just that sometimes in our area you can't just make like a lesson plan … you can' t do it from yourself. You will have to consult with the specialist. And normally they don't approve what you are telling them, they will just come and say "no …. is not right, we have shown you how to do this or we have*

taught you how to do this or we have workshopped you how to do this" That is why sometimes even if you have a knowledge of something that you can help the children, you can't because when they come they will discourage you that's our problem. I think they feel like oooooo … what you undermine their … their way of helping you or what, I don't know, like I remember one day when I was still attending the lessons I came with the lesson plans ... and then I have shown them you know what this is what I am studying and I can use this one and but they said no not here.

Cochran-Smith (2003) suggests that teachers' training institutions should produce teachers who in addition to knowing what to teach and how to teach, also know how to make decisions that are informed by theory and research. If such teachers are prevented from making decisions on how to make learning possible for all learners, it becomes a central concern. RT1's frustration was so strong that she even suggested a meeting between the university concerned and the ministry of education about the issue of disallowing graduates to demonstrate what they have learnt:

So I think maybe the university if they can sit with the MEC neh or the district official maybe if they call or a call a workshop and shows them. "You know what we have students who have done this programme. Why can't you sometimes give them a chance maybe or to work with them to share information or knowledge of what they were doing ee ... not thinking of they are undermining you or what just to see maybe you can work something out together".

On the other hand, FMC1 mentioned the power struggle with the head of the department (HOD) for the FP, who was also a PL1 teacher:

To be honest I don't really apply what I have learnt. I just came, when I remember what I have learnt. But I don't have those powers to can come and change whatever from what at school. I am just a PL1 teacher, like for example, me. … But because I came back from school, I did not do anything about it, It ended there. And it demotivated me in such a way. I mean, it is not easy. Who am I, who am I to come and tell them that I have to do this and

that? Who am I, as a PL1 teacher, I have an HOD, I have to hear everything from an HOD. Sometimes you can like maybe if an HOD didn't do that course, you cannot say no we are supposed to do this way.

According to the Meijer (2005), teachers need support to use their pedagogical skills and knowledge to meet the learning needs of their learners. To ensure access to education for all learners, the South Africa education system has strengthened school management teams and established the SBST as well as the DBST to ensure that teachers receive the necessary support (DoE, 2001). If teachers feel undermined by their support structures, it will be impossible for them to provide their learners with the support they need. FMC1 expressed her appreciation at being one of the participants in this study and hoped that a solution will be reached regarding power struggles with the authorities. She stated:

Mam like the day I saw that your topic [laughing] *I just say "Hey at least someone wants to do something, want to do the follow up", because I don't think I am the only one. And people might not tell you the honest truth wherever you going that I am not doing it. So, I feel like, why do I have to learn? Yes you can go and study and excel at school and get distinctions but when you came back to the school, you cannot do it* [implement what you have learnt].

To ensure that all learners learn effectively in the classroom context demands the involvement of several role players (see 2.2, 2.3; 2.3.2.2.5), including the teacher, the school management team (see 2.3.2.2.5), the SBST and the DBST (see 2.3.3.2).

All these role players are mandated to provide maximum support to the teachers so that they can provide learners with the necessary learning support. Since the participants had completed the BEd (Hons) programme in Learning Support, they were therefore expected to demonstrate their acquired knowledge and skills in their classrooms, in other words, to apply curriculum differentiation as a way of providing necessary support to learners in need. According to the hierarchy within the school context, the teacher who is at the lowest level reports to the HOD who reports to the deputy principal, the highest authority being the principal of the school.

As discussed in Chapter 2, the aim of teacher training programmes like the one under study is to prepare teachers who will ensure the inclusion of learners with diverse academic needs in their schools (see 2.3.3.2). However, RT1 and FMC1 expressed feelings of confusion and uncertainty about the benefits of the postgraduate programme that they had completed, as they experienced limited support at their schools. They felt that they received limited support. FMC1 felt that she failed to differentiate the curriculum because of lack of support from her HOD, while RT1 also regarded her DBST as a seeming obstacle that always stopped her from applying what she had learnt. If such teachers feel frustrated due to obstruction and a lack of support from the people who are mandated to support them, they have a genuine concern that needs to be attended to.

5.5 SYNTHESIS: KEY FINDINGS PER THEME

Participants in this study provided a wealth of data. It allowed me to explore how teachers who had completed the BEd (Hons) in Learning Support at the university under study (see section 2.3.3.1) and who taught in the FP (see section 2.3.3.1 par 7) understood and implemented curriculum differentiation as a framework to support learning in FSS classes (see section 3.2.3). Within the four themes identified, the participants expressed their own views, understanding and experiences of how they supported learners at their schools by differentiating the existing school curriculum. In this synthesis section, I provide a holistic interpretation based on the themes (see section 5.4.1, 5.4.2, 5.4.3 and 5.4.4), integrating the relevant literature, the theoretical framework (see sections 2.3–3.2) and the content of the specific module covering curriculum differentiation in the BEd (Hons) in Learning Support programme (see 2.3.3.2.1). My interpretation paves the way towards presenting the research conclusions, answering the research questions and making recommendations in Chapter 6.

5.5.1 Theme 1: Identifying learning barriers

Based on the literature (see 2.3.2.2.4 and 3.2.3.1) and the characteristics of FSS (see 3.2.3 and 4.4.1.4), I was not surprised that participants in this study encountered learners with a wide range of learning barriers that required differentiating the curriculum. One module in the BEd (Hons) in Learning Support,

namely, Inclusive Education in South Africa (ISA 710) (see 2.3.3.1 (a) par 3) is dedicated to informing student teachers in detail about the process of identifying learning barriers in their learners. This is in line with several findings that indicate that schools nationwide experience an increase in learners' diversity in terms of their languages, cultural practices, abilities and learning needs (see 1.7.2, 2.3.1.1 par 10 and 3.3.1). Learners in the participating schools were found to experience a wide range of obstacles stemming from intrinsic and extrinsic conditions that made learning and participation difficult for them and which the teachers were able to identify. The causative intrinsic factors identified by the participants include intellectual impairments, ADHD, dyslexia, autism, epilepsy, and speech and other physical disabilities (see Figure 5.1). In addition, the participants were able to detect poverty, lack of parental involvement and the language of learning and teaching as extrinsic factors and thus barriers to learning in their learners (see Figure 5.2).

Bronfenbrenner's ecological systems theory makes provision for not only the environmental influences that can inhibit the learners' learning, but also the characteristics of the developing person (see section 2.3.2.2 (v)). The learning barriers that the teachers identified, manifested in difficulties to achieve the expected learning outcomes in their academic activities, including reading, writing and mathematics (see 5.4.1.1). Since teachers in these schools are mandated to provide their learners with maximum support to ensure their effective learning, participation and achievement (see 3.2.3), it was satisfying that these teachers could easily identify learning barriers experienced by learners. I view it as a fundamental step towards the provision of learning support (see 2.3.2.2.5, 2.3.4.7 and 3.2.3.1) through curriculum differentiation.

5.5.2 Theme 2: Understanding of curriculum differentiation

Including learners with learning barriers in schools will be successful if teachers have sufficient knowledge and understanding of curriculum differentiation (see 2.3.3.1 (i) par 3), a topic area presented in Identification of Learners' Needs (ILN 720), one of the core modules of the BEd (Hons) in Learning Support programme. The module consists of six units (see 2.3.3.3.1.1 (i) (b)). This BEd (Hons) in Learning Support programme is designed to prepare student teachers to become effective teachers on the implementation of learning support through the differentiation of the curriculum.

The key assumption is that at the completion of this teacher' training programme, teachers will be able to understand and execute the implementation of inclusive teaching, including differentiation of the curriculum, to ensure access to learning and participation in learners, including those in need of additional support (see 2.3.3.2). For IE to be successful in schools, the education system must safeguard that teachers have a basic understanding of inclusive teaching to ensure access to education for all learners. Therefore, differentiation of the curriculum is a concept that teachers can no longer ignore (see 1.3; 2.3.3.2; 2.3.4.7 and 3.3.3). When I explored this theme, I was disappointed to discover that the teachers in the study did not understand what curriculum differentiation entailed. It is key in the delivery of IE in schools and is realised where teachers reject the "one size fits all" approach in inclusive classrooms. The best teachers have always recognised that learners in schools are unique, requiring differentiation of the curriculum to meet those diverse learning needs (see 3.2.3.2). Teachers' failure to understand the meaning of curriculum differentiation implies an inability to recognise the diverse learning needs of their learners, which will in turn affect the learning and participation of some learners.

5.5.3 Theme 3: Implementation of curriculum differentiation

Although participants reflected a lack of understanding of the concept of curriculum differentiation, it was surprising to note that to a certain extent they did put what they had learnt from the BEd (Hons) in Learning Support into practice. In other words, they unintentionally differentiated some areas of the curriculum.

Among all the four areas of the curriculum, namely the content, process, product, and learning environment (see 3.3.3.2 (i) (ii) (iii) and (iv)), the process is the aspect of the curriculum that most of the participants differentiated to make learning accessible to all their learners. These teachers differentiated the teaching and learning process by through cooperative learning and peer tutoring to ensure maximum learning and participation in all learners (see 3.3.3.2 (ii) and 5.4.3.1). Some participants differentiated their teaching by incorporating demonstrations and using various resources as a way to maximise learning in all their learners. For example, counters, bottle caps and small stones were the resources some participants used during mathematics activities. However, the teaching and learning

resources in these classes were not even close to sufficient for meeting the learning needs of all learners.

In terms of the differentiation of other parts of the curriculum, it was disappointing to find that teachers could not differentiate content, learners' assessment or products or the learning environment (see 3.3.3.6) during their class activities. There are various factors that limit teachers' ability to differentiate the curriculum to meet the diverse learning needs of their learners in schools (see 3.3.2). This study also found that the teachers found it difficult to implement curriculum differentiation (see 5.4.2.2 and 5.4.2.3) owing to a lack of or limited understanding of the concept. They were further hampered by contextual factors such as overcrowded classes, time limitations, together with a lack of support from their authorities (see 5.4.4.2), a lack of resources (see 5.4.3.2) and of parental involvement (see 5.4.1.3). Bronfenbrenner's ecological systems theory views the classroom as the microsystem that comprises aspects that can either produce or inhibit the learning and development of the learner (see 3.2.3). In accordance with the Guidelines for FSS, the classrooms of FSS must be provided with the required resources and materials to facilitate learning in all learners. Moreover, such materials must in turn be available to support neighbouring schools (see 3.2.3). It is cause for concern that there is an enormous disparity between the contents of the Guidelines for FSS document and what participants actually said in terms of the availability of resources and materials.

In addition to the Guidelines for FSS, various official documents including the Education White Paper 6: Building an Inclusive Education and Training System) were developed to guide schools and teachers on the implementation of IE. These documents also include differentiation of the curriculum (see 2.3.2.2 (v); Table 2.4; 5.4.3.3). These guidelines for the differentiation of the curriculum in schools are in line with the content of the BEd (Hons) in Learning Support that was completed by all participants (see 2.3.3.1 (i) (a)). However, it was most perturbing to learn that teachers did not use the abovementioned documents, particularly Education White Paper 6, which is the key policy for curriculum differentiation in schools.

5.5.4 Theme 4: Teacher preparation

The university under study currently offers the BEd (Hons) in Learning Support, which specifically prepares for handling IE correctly. The programme consists of 10 modules, thus three fundamental, three core and four electives (see 2.3.3.1 (i) 1). To complete the programme, students must undertake all the fundamental (see 2.3.3.1 (i) 1 (a)) and core modules (see 2.3.3.1 (i) 1 (b)). A further requirement is that students must choose two of the elective modules (see 2.3.3.1 (i) 1 (c)).

Bronfenbrenner's (1979) ecological systems theory takes into account the role of this kind of setting, such as the teacher-training institutions that have an indirect effect on the learning and development of the developing person by providing teachers with skills and knowledge to teach all learners in schools (see 2.3.3). The content of the programme under study, the BEd (Hons) in Learning Support, is explicitly oriented towards developing teachers' knowledge and skills to teach all learners including those with various educational needs in their classrooms. For instance, the Inclusive Education in South Africa (ISA 710) module deals with identifying and assessing barriers to learning and the policies pertaining to IE (see 2.3.3.1 (i) 1 (a)). Although the teachers in the study did not explicitly use the policies pertaining to IE, it was satisfying to discover that they could adequately use the knowledge and skills they acquired from the ISA 710 module (see 2.3.3.1 (i) (a)) to identify the learning barriers experienced by their learners, as well as the causative factors.

ILN 720, one of the core modules of the programme, is curriculum differentiation. The module covers issues related to curriculum modification, alternative assessment procedures, multi-level teaching, designing a multi-level lesson and assessment for school readiness (see 2.3.3.1 (i) (b)). The content of the module is designed to prepare teachers to implement differentiation of the curriculum in schools. However, it was perturbing to discover that the model excludes differentiation of the learning environment (see 3.3.3.2 (iv)), learners' interest (see 3.3.3.1 (ii) and learning profiles (see 3.3.3.1 (iii)) as determinants of curriculum differentiation.

5.6 CONCLUDING REMARKS

Chapter 5 presented an analysis and interpretation of the empirical investigation in terms of the four themes. The chapter began with the biographical information of the

participants and presentation of the key findings obtained from the data. The aim of the study was to explore how teachers who have completed the BEd (Hons) in Learning Support and who taught in the FP in rural, township and FMC schools understood and implemented curriculum differentiation to meet the diverse learning needs of their learners in full-service classes. Bronfenbrenner's ecological systems theory (1979), which makes provision for settings that directly and indirectly influence the development, learning, and participation of learners, was used as a foundation to facilitate the analysis of the themes generated from this study. In the context of the study, this theoretical framework indicates that the microsystem of schools and classrooms is considered the key aspect in facilitating access to the curriculum for learners. Moreover, the influence of the other systems is increasing: the macrosystem such as policies and legislation on IE; the exosystem that includes teacher-training institutions; and the mesosystem that consists of parental involvement.

The findings of the study indicate that the participating teachers were able to identify the types of learning barriers experienced by most of the learners. An awareness of learning barriers serves as a point of departure towards the implementation of curriculum differentiation in schools. However, the study revealed gaps in teachers' ability to understand and differentiate the curriculum in their classrooms to meet the diverse learning needs of their learners. Based on the data, it became apparent that contextual factors such as the lack of families' involvement and partnership, limited resources, insufficient time for preparation and overcrowded classes presented major setbacks in the implementation of curriculum differentiation in participants' classes. Furthermore, the findings revealed that some teachers received no support from their authorities, leading to disillusionment about the implementation of curriculum differentiation.

In Chapter 6, the research questions will be answered and recommendations will be made in relation to the findings made in Chapter 5.

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CHAPTER 6: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

"Teaching is a contextual, situational, and personal process; a complex and never-ending journey" (Gay, 2010, p.22)

6.1 INTRODUCTION

Chapter 5 thematically presented and analysed the findings of this research study to answer the research questions that underpinned the study. The research was undertaken within the interpretive paradigm, employing the qualitative approach which provided me with an opportunity to achieve the research aim, which was to illuminate implementation of curriculum differentiation in schools (see 1.4.1). The chapter will first of all present an overview of what the different chapters in the study entailed, then summarise and present the key findings obtained from the literature review and empirical data. The research questions will then be answered, followed by recommendations grounded on the key findings in this study, as well as suggestions for future research and limitations of the study.

6.2 OVERVIEW OF THE PREVIOUS CHAPTERS

In this overview I present a synopsis of the study by providing a brief summary of the first five chapters, drawing out salient issues that were significant to the study. This overview further serves as a background to the synthesis of the findings, recommendations, limitations, and conclusion of the research.

6.2.1 Chapter 1

Chapter 1 introduced the study. This chapter further provided the rationale, statement of the problem, the research questions and aims, and the definition of the key concept which formed the foundation of this research (see 1.2, 1.3, 1.4, 1.5 & 1.7). The chapter then outlined the preliminary literature review, which was embedded within the theoretical framework of Bronfenbrenner's ecological systems theory (1979). In addition, an outline of the research design and methodology were

presented as well as the measures to ensure trustworthiness and ethical consideration (see 1.8, 1.9, 1.10, .1.11, 1.12 and 1.13).

6.2.2 Chapter 2

This chapter explored the literature review embedded within the theoretical framework of Bronfenbrenner's ecological systems theory (1979). The chapter first introduced scholarly literature which focused on the conceptualisation of IE from international and national perspectives as a departure towards the implementation of curriculum differentiation in schools (see 2.2). From the literature review, it became evident that the policy on IE is differently understood and implemented in each context.

The chapter then provided an overview of the theoretical framework that underpinned the study. This was followed by a review of the literature, unpacked based on each of the ecological systems thus the chronosystem, macrosystem, exosystem, mesosystem and microsystem (see 2.3). From the literature, it became apparent that IE as a major transformation of education worldwide aims to ensure access to the curriculum for all learners regardless of their abilities, language, culture, socio-economic background and race. The results of the literature reviewed strongly revealed IE as the basics of curriculum differentiation, which is a strategy to provide equal learning and participation opportunities for all learners in schools. Similar to other educational transformation processes, IE followed an array of developmental milestones as proved within the chronosystem of the theory (see 2.3.1). For greater understanding of the phenomenon under investigation, the review of literature within the macrosystem explored the key international and national policies, legislation and movements that shaped the adoption of the principle of IE in all schools (see 2.3.2). The literature also explored various factors within the exosystem that contribute towards the principle of IE. This includes the purpose and the importance of teacher training and various support structures within the system (see 2.3.3). In addition, the literature shed light on the significance aspects, thus the home and the school rooted within the mesosystem of the theory.

6.2.3 Chapter 3

Chapter 3 continuously employed Bronfenbrenner's ecological systems theory (1979) as a lens to identify and explore imperative facets that play a crucial role in ensuring the learning, and participation of a developing learner in an inclusive classroom context. The chapter continued with the exploration of the literature begun in Chapter 2 but focused specifically on aspects within the microsystem that inform curriculum differentiation, in which the study is grounded. Review of the literature in this chapter explored the role of family, peers, school and teachers who serve as crucial role players in the realisation of IE. The discussion resumed with acknowledgement of the family as the primary context to support IE in schools (see 3.2.1). In addition to the responsibilities of the family towards inclusivity, the literature further discussed the peers who are also regarded as powerful partners in promoting IE through positive interaction with the developing learner (see 3.2.2).

Furthermore, Chapter 3 provides the discussion on the role of the school which is the context where teachers are obliged by the principle of IE to meet the diverse needs of their learners by differentiating the school curriculum (see 3.2.3). The literature identified and examined various concepts linked to curriculum differentiation (see 3.3). This includes the factors that determine curriculum differentiation and the different elements to be differentiated in ensuring equal participation of all learners in a classroom context (see 3.3.3.1 & 3.3.3.2).

6.2.4 Chapter 4

In Chapter 4, the research design and research method were discussed as they form the foundation of this study. This entails the concise explanation and justification of the research paradigm, research approach and the research type (see 4.3.1, 4.3.2 & 4.3.3). This chapter further provided a detailed discussion of the research methods, research sites, research participants, the strategies employed in data collection and analysis (see 4.4.1, 4.4.2, 4.4.3, 4.4.4). By employing the qualitative methods framed within the interpretive paradigm, I was able to access the life world of the participants in their full-service schools' context. Furthermore, this research approach assisted me to understand participants' knowledge, understanding and experiences of the phenomenon under study. The principles of trustworthiness for the study which were

considered and discussed included: credibility, transferability, dependability and confirmability (see 4.5). The chapter was concluded by justifying in detail the rights and dignity, informed consent, confidentiality and anonymity, beneficence and non-maleficence, integrity and justice as ethical aspects that were considered and adhered to through the study (see 4.6).

6.2.5 Chapter 5

In Chapter 5, the empirical results collected from the fieldwork and from relevant documents were analysed and interpreted. In presenting data in this chapter, I considered the literature reviewed as well as the theoretical framework of Bronfenbrenner's ecological systems theory that guided the study. Since this was a multiple case study research type, the chapter began with the presentation, analysis and interpretation of participants' biographical data (see 5.2). This data was presented case by case, thus individual case studies of the rural, township and former Model C schools (see 5.2.1, 5.2.2 and 5.2.3). The data was divided into four main themes with categories as presented in Table 5.5. The themes that were identified are: identifying learning barriers, understanding of the concept of curriculum differentiation, implementation of curriculum differentiation and teachers' training (see 5.4.1, 5.4.2, 5.4.3 and 5.4.4). Discussion in this chapter included verbatim quotations articulated by the participants. Since some of the participants particularly the Setswana speaking preferred to express themselves in their mother tongue, their utterances were further translated into English for better clarification.

6.3 SUMMARY OF LITERATURE FINDINGS

This section presents a summation of literature findings as discussed in chapters 2 and 3. Furthermore, it summarises the empirical findings which emerged in Chapter 5.

The key literature findings which emerged from Chapter 2 revolved around IE and curriculum differentiation as a strategy to meet the learning needs of a diverse learner population.

6.3.1 Literature findings relative to the conceptualisation of IE from international and national perspective

A large body of literature has demonstrated an increase in diversity in learner populations worldwide, including South Africa (see 1.6.2). Regardless of this diversity, the education system must still ensure that the learning needs of these learners are met in schools and in classroom settings (see 1.1). The key strategy to ensure that all learners are included in schools is through the implementation of curriculum differentiation, which is embedded in the framework of the IE policy (see 1.1 and 2.2). However, IE is found to be quite a complex concept that is understood and implemented differently in different contexts (see 1.6.1 and 2.2). Besides differences in its meaning both from an international and national viewpoint, it is seen as an educational practice that aims to ensure the following: welcoming and supporting diversity in schools, equal learning opportunities and access to the curriculum for all learners in schools, elimination of learning barriers among all learners, respect and social justice for all learners (see 2.2).

6.3.1.1 Literature findings relative to the evolution of IE

Education of learners in need of additional support has undergone various stages of transformation. Notably, these milestones were attempts to respond to the educational needs of learners with various forms of disabilities. Due to their differences, these learners were excluded from the education system until the 19th century where special needs education was introduced in Europe and the United States (see 2.3.1.1, par 3). This type of education was delivered in segregated environments, which came to be viewed to be discriminatory, unconstitutional and a violation of human rights. This resulted in various court cases, leading to the closing down of many segregated schools and the integration of these learners in the general education system.

The Salamanca Statement was instrumental in foregrounding of IE as a strategy to meet the learning needs of all learners, with a strong emphasis on inclusion regardless of learners' differences (see 2.3.1.1, par 7 and 2.3.2.6).

In South Africa, the provision of education for learners with complex learning needs followed similar trends as in other countries. However, due to the laws and principles

enforced under apartheid, education for learners with any form of disability was further separated on a racial basis (see 2.3.1.1, par 8). In 2001, the South African education system introduced the IE policy that mandated inclusion of all learners in schools regardless of their diversity (see 2.3.2.2.5).

6.3.1.2 Literature findings relative to the international and national policies, legislation and movements mandating elimination of exclusion of learners with learning barriers

After many years of segregation and discrimination of learners experiencing barriers to learning, several international policies, legislation, committees, and movements emerged with the purpose of eliminating discrimination of such learners in all settings, including schools (see 2.3.2.1.1−2.3.2.1.11). Although the focus and ideologies of these structures vary, the definitive aim was to readdress inequality and exclusion of children with diverse abilities who are viewed to be different from others. In line with international movements, South Africa also responded by initiating committees and developing policies which strove to eliminate exclusion and discrimination of accessing education by learners who experienced barriers towards learning (see 2.3.2.2.1−2.3.2.2.5).

6.3.2 Literature findings in relation to the aspects that play a crucial role in ensuring the implementation of IE in schools

The IE movement involves the participation of various stakeholders who are not directly in interaction with the learner but play a crucial role in ensuring access to the curriculum for all learners in all schools (see 2.3.3). These bodies include education services, teacher-training institutions, school boards, and external bodies (see Figure 3.2 and 2.3.3.3). Each state or country has its national or ministerial education departments. The roles of these structures are mainly to provide quality education for all the learners of that particular government at various levels through developing and reinforcing policies, strategies, standards and guidelines, as well as providing funding for the implementation of IE (see 2.3.3.1).

Teacher-training institutions are the other systems that were identified to be major contributing factors towards the success of IE worldwide. In other words, achievement and improvement in the quality of teaching and learning in schools can

only be addressed if teachers acquire the skills required to teach all learners (see 2.3.3.2). This goal can only be achieved through programmes offered by teacher-training institutions like the one under study that offers the BEd (Hons) in Learning Support (see 2.3.3.2.1). Other structures that have been acknowledged to play a crucial role in the accomplishment of IE are the formal and informal social networks that have a special interest in access to the curriculum for all learners. The main purpose of these structures is to share knowledge and expertise of their respective areas in ensuring effective learning and participation in schools and in other community settings (see 2.3.3.3).

6.3.3 Literature findings in relation to the partnership between schools and homes systems closest to the learner on IE

For every child to learn and participate effectively within inclusive settings, requires a healthy interaction between the schools and other systems that directly interact with the learner, including their families. The role and involvement of families in the implementation of IE must not be underestimated since they are the primary educators of the developing person (see 2.3.4, par 2). The involvement of families is a dynamic process and depends on the circumstances and the context in which it occurs (see 2.3.4.1). This implies that the roles and responsibilities of the families towards the schools and the roles of the schools towards the families need to be clearly stipulated. For instance, in order for teachers to differentiate the curriculum one of the factors to be considered is the learners' profile. The significant source that can provide the school with fundamental information is the family of a learner (see 3.3.3.1, ii). Further contributions that the families can provide the schools in achieving inclusive goals are provision of physical or human resources, facilitation of interaction between schools and communities, and participation in decision-making on school policies and other systematic matters (see 2.3.4.1 (i) (ii)−(vi)).

6.3.4 Literature findings relative to homes, peers, and schools as important role players in IE

Homes, peers and schools are found to be major factors in facilitating learning and participation in learners, particularly those perceived to be in need of support. The context of the immediate settings is considered by events and individuals closest to the learners and should support the child with the feeling of belonging and love (see

3.2, par 1). A healthy home environment provides learners with opportunities to learn and participate in various learning activities. It must be noted that families do not only present positive aspects; there are families that also pose a risk to the learning of the learners. These are families that expose learners to severe poverty, child-headed households, domestic violence, and child and drug abuse, which negatively affect learning in learners (see 3.2.2, par 3). IE also stresses the significance of healthy peer relationships in an inclusive setting. There are several roles that a peer can play to support an individual learner within inclusive settings, including the classroom (see 3.2.3, par 1). This includes providing additional support in learners in need through peer tutoring, also known as the buddy system (see 3.2.3, par 3). Peers can also support one another in solving daily activities, maintaining friendships, and engaging in more intense and shared activities to ensure that no learner feels lonely.

6.3.5 Literature findings relative to learning support in inclusive schools

Inclusive schools and classrooms are viewed as learners' immediate settings that welcome diversity and further ensuring equal quality education for all learners. The difference between an inclusive and ordinary school is that the central aim of inclusive schools is always to provide various ways to make sure that each learner is actively involved in all learning activities (see 3.2.3 par 2). In South Africa, one of the strategies in the development of a single, inclusive system in which all learners have access to education and support, was the conversion of ordinary mainstream schools to full-service schools (see 3.2.3 par 3 and Figure 3.1). These are the schools that are equipped to provide access to quality education for learners with a broad range of learning needs (see 3.2.3 par 4). Teachers in FSS are mandated to recognise the unique learning needs and abilities of their learners and consider the differentiation of the curriculum as essential in facilitating learning in such heterogeneous classes (see Figure 3.1).

6.3.6 Literature findings relative to curriculum differentiation as strategy to meet the needs of all learners

Curriculum differentiation has been described by numerous scholars in the field of IE as an approach that recognises the diversity in each learner's learning style and needs to differentiate the content, learning process, learners' products and the

teaching and learning environment (see 1.1, 3.3 par 1−3). Curriculum differentiation has been identified as the most coherent way to respond to learners' diversity in classes consisting of diverse learner populations: it promotes the progress of each learner; maximises learners' growth; facilitates individuals' success; ensures that all learners participate actively; prevents learning gaps among learners; provides opportunities for cognitive development, and reduces challenging behaviour in learners (see 3.3.1). Despite the clear benefits of the implementation of curriculum differentiation, some teachers still fail to differentiate the curriculum because of a disregard of diversity in their classes, resistance to using various strategies, a lack of confidence, efficacy and perseverance, excessive workload responsibilities and a lack of knowledge about their learners' needs (see 1.2, 3.3.2).

6.3.6.1 Literature findings relative to factors that determine differentiation of the curriculum

For effective differentiation of the curriculum, teachers need to consider factors such as learners' readiness level, learners' interest and learners' profile (see 3.3.3). The readiness level is aligned to the zone of proximal development of Vygotsky's (1978) theory of cognitive development (see 3.3.3.3 par 2). In other words, it refers to the current functioning level of the learner in terms of experience, knowledge, and understanding. Differentiating the content of the curriculum aims to ensure that learners are provided with tasks that are not too demanding or too simple. In other words, learning tasks and activities should match their readiness level (see 3.3.3.1 (i)). Understanding learners' interest and preferences is vital for differentiation of the curriculum. Interest in learners varies and is one of the aspects that govern motivation and engagement towards learning and participation in a particular activity (see 3.3.3.1 (ii)).

Another fundamental aspect that serves as the first step towards curriculum differentiation is the understanding of the learner's profile (see 3.3.3.1 (ii) par 1). A learner profile provides the teacher with information about the learner's strengths, preferences, personal characteristics, cultural, linguistic, experiential background, skills, likes, and the challenges of the learner and their family (see 3.3.3.1 (iii) par 1). This learning profile can be obtained through consulting important documents that

contain information on learners' backgrounds in terms of family and medical history (see 3.3.3.1 (ii) par 2).

6.3.6.2 Literature findings relative to parts of the curriculum to be differentiated

The major tenet of differentiation of the school curriculum acknowledges that each learner learns differently and as a result, it recognises that presentation of the learning content, teaching process, learners' products and learning environment needs to vary based on learners' readiness level, interest and learning profile (see 3.3.3.2).

The learning content comprises what the learner is expected to learn and skills expected to be acquired, such as concepts and facts (see 3.3.3.2 (i) par 1). Differentiation of the learning content implies the presentation of the same content to all learners while modifying the level of complexity for the diversity of learners. There are several ways to differentiate the content. For instance, learners with more cognitive ability can work on the application of a concept, whereas learners who cognitively function at a lower level would work with description or comparison of a similar concept.

Another aspect of the curriculum to be differentiated is the teaching process, which refers to the instructional strategies that the teacher employs to present the content to learners (see 3.3.3.2 (ii)). In other words, it is the teaching style in which the teacher presents the specific learning content. The learning content can be presented in class using various strategies such as aided language simulation approach, cooperative learning, demonstrations, buddy system or peer tutoring and multisensory approach (see Figure 3.2).

Differentiation of learners' product also serves as the most noticeable means of differentiation that discloses the content and the process by which learning occurred (see 3.3.3.2 (iii)). It involves the manner in which the learners demonstrate what they have learnt or the skill they acquired after learning took place. Learners' products or assessment activities again assist teachers to assess whether the learning outcome of a particular content has been achieved.

The learning environment does not only refer to the physical setting of teaching and learning, but also include the emotional, social, and psychological features that play a significant role towards learning and therefore refers to the environment in which teaching and learning occur (see 3.3.3.2 (iii)). Differentiating the learning environment is another way in which the teacher ensures that learners feel safe and secure during the learning process.

6.4 SUMMARY OF EMPIRICAL RESEARCH FINDINGS

This section presents a summary of the key empirical findings in terms of the four themes that were generated deductively, namely identifying learning barriers, understanding of curriculum differentiation, implementation of curriculum differentiation and teachers' preparation. Data from nine FP teachers who had completed the BEd (Hons) in Learning Support and were teachers in FSS, was analysed to determine how the aforementioned programme prepared them for the implementation of curriculum differentiation during their teaching activities for ensuring access to the curriculum by all learners in their full-service classes. Curriculum differentiation was investigated through the lens of the theoretical framework of Bronfenbrenner's ecological systems theory (1979).

Curriculum differentiation serves as the significant support strategy to ensure access to quality education by all learners. In order to implement the differentiation of curriculum, it is vital to be able to identify barriers experienced by learners, which will determine the type and level of learning needs they require. In other words, identification of learning barriers in learners serves as the fundamental factor towards differentiation of the curriculum. In this study, most participants demonstrated the ability to identify and understand the learning problems of their learners. Furthermore, they were able to demonstrate the ability to identify intrinsic and extrinsic factors contributing to learning problems.

In order for teachers to be able to differentiate the curriculum, it is crucial that they first have an understanding of what the concept curriculum differentiation entails. From the empirical data it emerged that although participants might be regarded as more knowledgeable in terms of differentiation of curriculum based on their qualifications and their school types, most of them lacked understanding of what the

concept of curriculum differentiation entails. Out of nine participants, only two participants who were also members of their SBST demonstrated a clear understanding of this concept.

This study has also explored how participants implement curriculum differentiation to ensure equal learning opportunities for all their learners. The empirical data showed that although most participants lack knowledge of what curriculum differentiation stands for, they do differentiate some aspects of the curriculum during their teaching unawares. In other words, they unintentionally differentiate the process to make learning accessible for their learners. On the other hand, limited time allocated for teaching, lack of resources and overcrowded classes were found to be barriers to the implementation of curriculum differentiation. Being a teacher requires innovativeness to facilitate learning and understanding during teaching. This was evident where some teachers used community assets such as live animals found in the rural context as well as those who used renewable resources such as bottle caps in township and FMC schools.

FSS have been mandated to accommodate learners with various learning needs. Effective teaching in these schools should also be guided by official policy documents such as Education White Paper 6: Building an Inclusive Education and Training System and other supporting documents. Teachers in these schools need to be fully aware of and use such document as guidelines to address the learning needs of their learners. This study found that out of nine participants, only three of them used the Education White Paper 6 policy and the National Strategy on Screening, Identification, Assessment and Support as guidelines to their implementation of curriculum differentiation.

This research has also explored how the teacher-training programme BEd (Hons) in Learning Support at the university under study prepared teachers to be able to differentiate the curriculum. The participants in this study met all the requirements to graduate with the BEd (Hons) in Learning Support. In other words, they completed all modules in the programme including the module on identification and assessment of learners' needs (ILN 720) that focuses specifically on the differentiation of the curriculum. From the empirical data, it is evident that some teachers have acquired knowledge on the identification of common learning barriers in learners which is an

area covered in the IE in a South African context module. Other positive aspects learnt from the programme are the use of various teaching strategies. In other words, the BEd (Hons) programme prepared participants only to be able to able to identify learning barriers as well as to use various teaching strategies to teach learners with diverse learning needs. Preparation towards the understanding of factors that informs differentiation of the curriculum as well as differentiation of other essential areas such as the content and the products was found lacking.

Challenges in relation to the implementation of theory into practice due to lack of teachers' support by their authorities within the education system were evident. Again, ensuring access to the curriculum requires strong collaboration and partnership among all the role players. This includes teachers, members of the school management team, parents, SBST and DBST. Equality and support of one another are crucial in such partnerships. If power struggles emerge with the authorities who are meant to support the teachers so that they can demonstrate what they have learnt from programmes such as the one under study, the realisation of education for all learners will be difficult to achieve.

6.5 RESEARCH CONCLUSIONS

The following section provides the research conclusions in accordance with questions formulated in Chapter 1 of the study (see 1.4.1). I present answers to each research question starting by answering the secondary questions and closing with the answer to the primary research question, which will ultimately provide a comprehensive research conclusion to this study.

The following secondary questions were posed to answer the main research question of the study and reach conclusions in respect of the research study (see 1.4.1).

6.5.1 Secondary research question 1

What are the official policies that inform curriculum differentiation in addressing diverse learning needs of learners in schools?

Effective implementation of curriculum differentiation as a key to the implementation of IE is clearly stipulated in several international and national policies. The most common international document is the Salamanca Statement (1994) that was welcomed by all the structures interested in inclusive practices worldwide (see 1.1; 2.3.1.1 and 2.3.2.6). In support of the statement, the South African education system introduced the Education White Paper 6: Building an Inclusive Education and Training System policy (see 1.3; 2.3.2.2.1 and 5.4.3.3). To ensure the success of such education in South Africa, the department of education has further developed strategies presented in the following official documents:

- Guidelines for Inclusive Learning Programme;
- Guidelines for Full-service Schools;
- The National Strategy on Screening, Identification, Assessment and Support: School pack;
- Guidelines For Inclusive Teaching and Learning; and
- Guidelines For Responding to Learner Diversity in the Classroom .

6.5.2 Secondary research question 2

How do FP teachers understand and experience the implementation of curriculum differentiation to support learners with diverse learning needs as part of IE practice?

Empirical data reveal that teachers are able to identify learning barriers in their learners, which is beneficial as it is linked to curriculum differentiation as one of the strategies to provide such learners with learning support (see 2.2 par 6, 2.3.2.2.5 par 2, 3.2.3.1, 5.4.1). However, they lack understanding of what the concept of curriculum differentiation actually means and therefore the curriculum cannot be differentiated effectively to meet diverse learning needs. This lack of understanding furthermore implies that teachers do not understand diversity in terms of learning needs, therefore impacting negatively on IE, as all learners do not get an equal chance to learning. Various factors in the education system pose as challenges in teachers' ability to differentiate the curriculum. These factors include overcrowded classes; lack of time for preparation, lack of collaboration and support from parents or families, lack of resources, and lack of support from the school management team and DBST (see 5.4.3.2). The abovementioned set of key findings that comprise

understanding and experiences of FP teachers towards differentiation of the curriculum in their FSS, answer the question asked with regard to curriculum differentiation in schools.

6.5.3 Secondary research question 3

How effectively does teacher training on Learning Support in the Foundation Phase prepare teachers to differentiate the curriculum to support learners with diverse learning needs?

The empirical findings of this study show that teachers who have completed a BEd (Hons) in Learning Support demonstrate the ability to identify learning barriers among learners as well as the different teaching strategies relevant to the differentiation of the curriculum in schools (see 5.4.1). Before the curriculum can be differentiated, specific foreknowledge must be in place; such knowledge and understanding of learners' interest and learning profile are found to be missing in the BEd (Hons) programme (see 2.1 par 2 and 3.3.3.1). Teachers again need to understand that the information on learners' readiness level, interest and profile underpins the process of differentiation, which involves the four pillars of the curriculum (see 3.3.3.2). Another gap found in the programme's content concerns the differentiation of the learning environment (see 2.3.3.2 par 5, 3.3.3.2 (ii)), which implies that various resources should be available to ensure differentiation, such as the use of assistive technology. This programme does not address this important aspect, although there is no doubt that within the IE orientation, most classrooms will have a learner with some form of disability. Again, the differentiation through the use of different types of resources such as assistive technology for learners with disabilities is conspicuously absent in the programme (see 2.3.3.2 par 3). The conclusion reached in answering this research question is that effectiveness of this teacher training programme, the BEd (Hons) in Learning Support, for preparing teachers on the following aspects can be questioned:

- The use of learners' interest and profile in determining the differentiation of the curriculum
- Differentiation of learning environment
- Differentiation of resources

- Practical implementation of the curriculum.

6.5.4 Main research question: What are the constituent elements of teacher training guidelines for curriculum differentiation in a Foundation Phase programme?

The preceding sections provided comprehensive answers to the three secondary research questions that underpin the study. Conclusions reached from the answers of the secondary research questions provide answers to determining constituent elements of teacher-training guidelines on curriculum differentiation for the FP (see 1.3, 1.5.1 and 5.1). The crucial answers to the primary research question are discussed based on the elements that should guide a preparation programme on training teachers to be able to differentiate the curriculum in schools. These elements are:

- Understanding and knowledge of various learning barriers existing among learners in schools;
- Understanding the concept of curriculum differentiation;
- Knowledge of learners' characteristics as a guide to differentiation of the curriculum;
- Putting differentiation of curriculum into practice;
- Continuous use of IE policies and official documents that guide curriculum differentiation.

These elements are now discussed separately.

In order for teachers to be able to meet the challenging needs of diverse classes, the teacher training programme needs to ensure that teachers are trained not only to understand various learning barriers experienced by their learners. They also need to acknowledge that diversity in these learners demands the differentiation of the curriculum (see 2.1, 3.2.3.1 and 3.3), which is the key strategy to address the learning needs they encounter in their classes.

Unintentional differentiation of the curriculum implies a lack of knowledge and understanding of the concept of curriculum differentiation, which can severely compromise the learning and participation of some learners (see 5.4.3.1) in class. In

other words, one of the necessary skills to be acquired by all teachers to be able to meet the diverse needs of their learners during class activities is to know and understand what curriculum differentiation implies (see 2.3.3.2 par 3, 5.4.5.2).

In ensuring that teachers deliver the school curriculum effectively to their learners, they must again understand and acquire skills to utilise their learners' characteristics as key informers as the foremost step in the process of curriculum differentiation (see 3.3.3.1). These unique features emerged on learners' readiness levels, interests and profile (see 3.3.3.1 (i)−(iii)). Furthermore, the process of curriculum differentiation requires a holistic approach that encompasses practical implementation of the following: differentiation of the content, differentiation of the process, which comprises the teaching and learning materials and sufficient time to complete tasks, differentiation of the products, and differentiation of the learning environment (see 3.3.3.2).

It is critical for teachers to take into consideration the IE policy and other official documents that inform curriculum differentiation, because as they serve as vital strategies to meet the learning needs of all learners in schools. As a result, teachers are required to continuously make use of the aforementioned documents in addition to their acquired knowledge from the teacher-training programme.

Although the abovementioned elements are found to be fundamental in the training of teachers on the notion of curriculum differentiation in schools, the teacher-training programme does not have any control over overcrowded classes, lack of time for preparation, lack of familial and parental involvement, lack of resources, and lack of support to teacher by the school management team (see 5.4.3.2), which present as major barriers to curriculum differentiation in schools.

6.6 RECOMMENDATIONS

In view of the key findings of this study, the literature review and the aims of the study, I therefore provide five sets of recommendations that are directed towards the National Department of Basic Education, to the districts, to schools, teacher-training institutions, and the researcher.

6.6.1 Recommendations for the National Department of Basic Education

The following recommendations are targeted to the National Department of Basic Education.

6.6.1.1 Recommendation 1: Implementation of policies

The National Department of Basic Education should ensure that all policies that mandate IE, as well other official documents including the Guidelines for Full-service Schools are implemented in practice to ensure that the learning needs of all learners are met. This could be realised by involving all people responsible for policy development, the district officials as well as the school management teams to contribute to identifying the gaps between the policies and their implementation.

6.6.1.2 Recommendation 2: Making IE policies available to teachers

The National Department of Basic Education and the schools should make sure that all policies on IE are made available to every teacher who is appointed permanently or temporarily in FSS. This will assist teachers to learn and understand more about their expectations and responsibilities in terms of addressing the learning needs of all learners in schools including the ability to differentiate the curriculum. In conjunction with White Paper 6: Building an Inclusive Education and Training System policy, the teachers' pack must also consist of the following: Guidelines for Inclusive Learning Programme; Guidelines for Full-service schools; The National Strategy on Screening, Identification, Assessment and Support: School pack; Guidelines for Inclusive Teaching and Learning; and the Guidelines For Responding to Learner Diversity in the Classroom.

6.6.2 Recommendation for districts

The following recommendation is targeted to the DBSTs that have been mandated by the White Paper 6: Building an Inclusive Education and Training System policy and the Conceptual and Operational Guidelines for District-based Support Teams to provide support to schools including the FSS.

6.6.2.1 Recommendation 3: Establishment and strengthening of School-based Support Teams

Since the FSS are obligated to cater for learners with diverse learning needs, the DBST should support these schools by: establishing the SBSTs in schools where this team is still non-existent and also strengthen the existing teams in schools where they have already been established. These will ensure that teachers are provided with support in addressing learning barriers in learners, which will also include the ability to understand and implement the differentiation of all parts of the curriculum to make it accessible to all learners in their classrooms. Furthermore, members of the SBSTs must rotate, meaning that each teacher in the school must serve on the team for a particular period so that they all gain hands-on experience on the responsibilities of the team.

6.6.3 Recommendations for schools

The following recommendations are targeted for full-service schools.

6.6.3.1 Recommendation 4: Establishing support networks in schools

The school must ensure that old and new teachers are supported by the school management team in ensuring that they implement their acquired knowledge and skills from pre- and in-service teacher-training programmes. Furthermore, more formal workshops at the schools should be conducted. This process will allow teachers to share their knowledge and skills and to learn from one another with regard to inclusive teaching practices such as curriculum differentiation.

6.6.3.2 Recommendation 5: Developing partnerships with parents

Teachers in FSS should intentionally create an opportunity to facilitate school-family partnerships to address some of the learning barriers experienced by learners and also to support families in crisis. This includes families that are child-headed, families experiencing extreme poverty and all types of abuse. Due to difficulties in getting parents to schools, teachers must deliberately identify opportunities where families can be reached, such as doing home visits or using settings such as churches and other community events.

6.6.3.3 Recommendation 6: Developing a community of practice between schools and communities

The no-fee paying schools must make use of available community resources such as retired teachers and graduates who are still seeking employment to serve as class assistants. This will minimise problems related to overcrowded classes that make it difficult to differentiate the curriculum and should enhance quality teaching where teachers are able to provide their learners who need extra support with individual attention.

6.6.4 Recommendations for the teacher training institutions

The following recommendations are targeted for the teacher training institution.

6.6.4.1 Recommendation 7: Strong inter-faculty and inter-departmental partnerships within the higher education institutions

The teacher-training institutions should establish strong collaboration within various departments and faculties within the institutions to strengthen the content of the teacher-training programme in particular where teachers need to be trained in particular areas of specialisation to cater for learners who are diverse in terms of their physical characteristics, learning abilities, socio-economic status, language and family background. This collaboration must be facilitated between the various departments within the faculties of education, teacher training, humanities, health, and disability centres or units within the universities. This process will enhance the quality of teacher training programmes like the one under study.

6.6.4.2 Recommendation 8: Strong collaboration between the teacher-training institutions, Department of Basic Education and the schools

In order to eliminate the mismatch between the needs of the teachers and the teacher-training programme, the teacher-training institutions must establish solid collaboration with the Department of Basic Education and the schools. This will ensure that the content offered in the programme responds to the needs of the Department of Basic Education and the schools. Individuals who will make a significant contribution to the content of the programme are the officials from the

National Department of Basic Education, members of the DBSTs, members of the SBSTs, and the teachers.

6.6.4.3 Recommendation 9: Postgraduate teacher training should include an on-site approach

Although teachers who have enrolled for the BEd (Hons) in Learning Support have completed their undergraduate teacher training programme, it is crucial for this programme be offered using both contact and on-site approach. This implies that teacher trainers should conduct classroom visits to provide student teachers with support towards their teaching. This will also ensure that these teachers acquire confidence in differentiating the curriculum to meet the needs of their heterogeneous classes.

6.6.5 Recommendations for the researcher

I am not convinced that my participants will necessarily change their teaching approach to include curriculum differentiation. The findings of this study have therefore made me realise that they need further on-site training, which will be pursued through participatory action research.

6.7 RECOMMENDATIONS FOR FUTURE RESEARCH

Based on the findings of this study, future research is recommended on the following issues.

6.7.1 Teacher's perceptions of the notion of curriculum differentiation in full-service schools

Since my study was based on the implementation of curriculum differentiation in the FP classes, it would be interesting to research more deeply into teachers' attitudes and perceptions on curriculum differentiation as a strategy to ensure accessibility of curriculum to all learners in schools in all phases, namely Intermediate, Senior and Further Education and Training (FET).

6.7.2 Implementation of curriculum differentiation in special schools as resource centres

This study was conducted in FSS that are meant to cater for learners with various learning needs, including a minority of learners with disabilities. It would be beneficial to explore how teachers who have completed the BEd (Hons) in Learning Support implement the differentiation of the curriculum in special schools as resource centres in meeting the needs of learners with various forms of disabilities.

6.7.3 Strategies to facilitate strong school and familial partnerships for quality teaching and learning in schools

The findings of this research revealed parental involvement as one of the challenges in the differentiation of the curriculum to meet the learning need of some learners in schools. Based on these findings, action research is recommended where teacher and parents develop strategies to facilitate the development of parental involvement and school-home partnerships that will not only assist the FSS, but public schools in general.

6.8 LIMITATIONS OF THE STUDY

In conclusion, it is necessary to acknowledge that this research on teacher-training guidelines for curriculum differentiation for the FP involved former students of only one teacher-training institution. However, my selection of participants from FSS in different contexts renders my research generalisable and trustworthy for wider relevance and application. I anticipate that the results of this study will contribute constructively towards the improvement of the BEd (Hons) in Learning Support teacher-training programme as well as classroom practice on the issue of curriculum differentiation in schools.

6.9 CONCLUDING REMARKS

Undertaking this research came with rewards as well as challenges that contributed greatly towards my growth as a teacher trainer, as a material developer, as community assistant, and as a researcher. Based on my various roles, I view this study as an essential step in recognising the gaps that need to be addressed by the teacher-training institutions, the Department of Basic Education, schools, and

teachers to ensure access to the curriculum for all learners in schools. Prior to this study, I always relied on the literature, which encompassed the IE policies, to learn more on the issues relating to IE and curriculum differentiation.

From this study, I gained direct information about different learning barriers experienced by their learners in schools; successes and challenges experienced by teachers in addressing the needs of these learners as well as the overall difficulties faced by the schools. Receiving this first-hand insight from teachers about the barriers and difficulties experienced by most of these learners and the problems experienced by teachers themselves was emotionally taxing. In particular, I felt deeply for learners from poor families, child-headed families, those who are exposed to any form of abuse, those who experience learning difficulties due to their low ability level and the teachers who receive no support from their seniors to differentiate the curriculum.

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APPENDIX 1: EXAMPLE OF A LETTER TO GAUTENG, MPUMALANGA, AND NORTH WEST DEPARTMENTS OF EDUCATION

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Research department
Gauteng Department of Education

REQUEST TO CONDUCT RESEARCH

Dear Sir/Madam

My name is Miss Gloria Ledwaba. I am presently enrolled for my PhD studies in the Department of Early Childhood Education at the University of Pretoria. The title for my study is: *A teacher training guidelines for curriculum differentiation in a Foundation phase.*

Schools are nationwide experiencing an increase in diversity with regard to the learner population and also learning needs. Differentiation of the curriculum (where teachers modify teaching methods, teaching and learning resources, assessment methods and learner activities in order to maximize the learning opportunities of each learner) is a valuable strategy to assist all learners including those with barriers to learning. Experience and research findings indicate that foundation phase teachers still experience much difficulty in applying curriculum differentiation to support learners in schools.

My study aims to collect data in school……which is under your department to establish what teachers' understanding of curriculum differentiation is and how they practically apply this strategy in order to address the diverse learning needs of their learners. I have identified Mrs X who is a teacher at the above mentioned school as she meets the following research criteria:

- She teaches in the foundation phase
- She has completed her BEdHons in Learning Support, where curriculum differentiation was also part of the programme.
- She has a year or more teaching experience.

Participation will involve a 45 minutes interview. Participation will furthermore be voluntarily and the participant may withdraw from the study at any time during the research. No incentives will be used in the study. The identity of the school and teacher will not be revealed.

I trust that my request will be considered favourably.

Yours sincerely
Raesetja Gloria Ledwaba

Signature …… Signature ……

Gloria Ledwaba Supervisor: Dr M.G. Steyn

Room 4-1.7, Level 4, Building
University of Pretoria, Private Bag X20
Hatfield 0028, South Africa
Tel +27 (0)12 420 1234
Fax +27 (0)12 420 5678
Email name.surname@up.ac.za
www.up.ac.za

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

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APPENDIX 2: EXAMPLE OF A LETTER TO THE PRINCIPALS OF THE SCHOOLS

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

The Principal: ----------

School: B Primary school

REQUEST TO CONDUCT RESEARCH

Dear Sir/Madam

My name is Miss Gloria Ledwaba. I am presently enrolled for my PhD studies in the Department of Early Childhood Education at the University of Pretoria. The title for my study is: A *teacher training guidelines for curriculum differentiation in the foundation phase.*

Schools are nationwide experiencing an increase in diversity with regard to the learner population and also learning needs. Differentiation of the curriculum (where teachers modify teaching methods, teaching and learning resources, assessment methods and learner activities in order to maximize the learning opportunities of each learner) is a valuable strategy to assist all learners including those with barriers to learning. Experience and research findings indicate that foundation phase teachers still experience much difficulty in applying curriculum differentiation to support learners in schools.

My study aims to collect data to establish what teachers' understanding of curriculum differentiation is and how they practically apply this strategy in order to address the diverse learning needs of their learners. I have identified one of your teachers **Mrs X** as she meets the following research criteria:

- She teaches in the foundation phase
- She has completed her BEdHons in Learning Support, where curriculum differentiation was also part of the programme.
- She has a year or more teaching experience.

Participation will involve a 45 minutes interview. Participation will furthermore be voluntarily and the participant may withdraw from the study at any time during the research. No incentives will be used in the study. The identity of the school and teacher will not be revealed.

I trust that my request will be considered favourably.

Yours sincerely
Raesetja Gloria Ledwaba

Signature ..... Signature .....

Gloria Ledwaba Supervisor: Dr M.G. Steyn

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

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APPENDIX 3: EXAMPLE OF A LETTER TO THE TEACHERS

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

2 June 2015

Teacher: .....

School: C Primary School

REQUEST TO CONDUCT RESEARCH

Dear .....

My name is Miss Gloria Ledwaba. I am presently enrolled for my PhD studies in the Department of Early Childhood Education at the University of Pretoria. The title for my study is: A *teacher training guidelines for curriculum differentiation in a foundation phase programme*.

Schools are nationwide experiencing an increase in diversity with regard to the learner population and also learning needs. Differentiation of the curriculum is a valuable strategy to assist all learners including those with barriers to learning. Experience and research findings indicate that foundation phase teachers still experience much difficulty in applying curriculum differentiation to support learners in schools.

My study aims to collect data to establish what teachers' understanding of curriculum differentiation is and how they practically apply this strategy in order to address the diverse learning needs of their learners in schools. I have identified you as a possible participant in the study as you meet the following research criteria:

Have completed a BEd (Hons) in Learning Support, where curriculum differentiation was also part of the programme.

- Have a year or more teaching experience.

Participation will involve an interview as well as document analysis. Participation will furthermore be voluntarily and you may withdraw from the study at any time during the research. No incentives will be used in the study. The identity of the school and yourself will not be revealed.

I trust that my request will be considered favourably.

Kind regards

Signature ..... Signature .....

Gloria Ledwaba Supervisor: Dr M.G. Steyn

Room 4-1.7, Level 4, Building
University of Pretoria, Private Bag X20
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Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

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APPENDIX 4: EXAMPLE OF CONSENT FORM

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

2 June 2015

CONSENT FORM

I,----------the teacher of grade ----------which is in the Foundation Phase undertake to voluntarily participate in the research to be conducted by Miss Raesetja Gloria Ledwaba from the University of Pretoria. I am aware that I can withdraw from participating at any time of the research process.

Name: .....

Signature:.....

Contact number:.....

Date:.....

Room 4-1.7, Level 4, Building
University of Pretoria, Private Bag X20
Hatfield 0028, South Africa
Tel +27 (0)12 420 1234
Fax +27 (0)12 420 5678
Email name.surname@up.ac.za
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Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

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APPENDIX 5: PERMISSION LETTERS TO CONDUCT RESEARCH FROM GAUTENG, MPUMALANGA AND NORTH WEST DEPARTMENTS OF EDUCATION

GAUTENG PROVINCE
Department: Education
REPUBLIC OF SOUTH AFRICA

For administrative use:
Reference no: D2016 / 205
enquiries: Diane Bunting 011 843 6503

GDE RESEARCH APPROVAL LETTER

Date:	11 August 2015
Validity of Research Approval:	11 August 2015 to 2 October 2015
Name of Researcher:	Ledwaba R.G.
Address of Researcher:	P.O. Box 2326; Northriding; 2129.
Telephone / Fax Number/s:	012 420 5516; 082 576 0279; 012 420 5595
Email address:	gloria.ledwaba2up.ac.za
Research Topic:	A teacher training model of curriculum differentiation for the Foundation Phase
Number and type of schools:	SIX Primary Schools
District/s/HO	Ekurhuleni East; Ekurhuleni West and Tshwane South.

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved. A separate copy of this letter must be presented to the Principal, SGB and the relevant District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted. However participation is VOLUNTARY.

The following conditions apply to GDE research. The researcher has agreed to and may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

CONDITIONS FOR CONDUCTING RESEARCH IN GDE

1. The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter;
2. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB);

Office of the Director: Knowledge Management and Research
9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7710, Johannesburg, 2000 Tel: (011) 355 0608
Email: David.Makhado@gauteng.gov.za
Website: www.education.gpg.gov.za

education
MPUMALANGA PROVINCE
REPUBLIC OF SOUTH AFRICA

Building No. 5, Government Boulevard, Riverside Park, Mpumalanga Province
Private Bag X11341 Mbombela 1200.
Tel: 013 766 5652/5615, Toll Free Line: 0800 203 116

Ofisi le Tenfomvo, Umnyango we Rhulo | Departement van Onderwys | Ndzawulo ya Dyondzo

Ms. Gloria Ledwaba
05 Bridgetown
Agulhas Road
Bloubosrand
RANDBURG
2125

RE: APPLICATION TO CONDUCT RESEARCH: MS G. LEDWABA

Your application to conduct research was received. I trust that the aims and the objectives of the study will benefit schools and improve our education. It therefore gives me pleasure to approve your application subject to you observing the provisions of the departmental draft research policy which is attached. You are also further requested to adhere to your University's research ethics as spelt out in your research ethics document.

In terms of the draft research policy data or any research activity can only be conducted after school hours as per appointment. You are also requested to share your findings with the relevant sections of the department so that we may consider implementing your findings if that will be in the best interest of the department. To this effect, your final approved research report (both soft and hard copy) should be submitted to the department so that your recommendations could be implemented. You may be required to prepare a presentation and present at the department's annual research dialogue.

For more information kindly liaise with the department's research unit @ 013 766 5476 or a.baloyi@education.mpu.gov.za.

The department wishes you well in this important project and pledges to give you the necessary support you may need.

MRS MOC MHLABANE
HEAD OF DEPARTMENT
11/9/15
DATE

MPUMALANGA
THE PLACE OF THE RISING SUN

Education and Sport Development
Department of Education and Sport Development
Departement van Onderwys en Sport Ontwikkeling
Lefapha le Thuto le Tlhabollo ya Metshameko
NORTH WEST PROVINCE

Private Bag X033,
Mmabatho
2735
Tel (018) 714-3905
Tel (018) 714-3906
Fax (018) 714-3912

OFFICE OF THE AREA MANAGER: MORETELE AREA OFFICE

ENQUARIES : **P.T. MSIMANGO** **TEL** : **012 714 3905**
EMAIL : portiatsietso@gmail.com

To : Ledwaba R.G
University of Pretoria

From : M.K.Z. Mosala
Area Manager

Date : 20 August 2015

Re: Permission to conduct research

This serves to inform you that your request to conduct research at **Makapanstad Primary School** in Moretele AO has been granted.

The collection of data is subject to the following conditions:

- That it should not interfere with teaching and learning at school
- The Department will receive a final copy of the research and summary of the research findings be made available.

Your co-operation in this regard will be highly appreciated.

Yours in education

Duly signed

M.K.Z Mosala
Area Manager

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APPENDIX 6: ETHICS CLEARANCE CERTIFICATE FROM THE UNIVERSITY OF PRETORIA

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA
Faculty of Education

RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE	CLEARANCE NUMBER: EC 15/04/01
DEGREE AND PROJECT	PhD Teacher training guidelines for curriculum differentiation in a Foundation Phase programme
INVESTIGATORS	Ms RG Ledwaba
DEPARTMENT	Early Childhood Education
APPROVAL TO COMMENCE STUDY	01 Jan 2012
DATE OF CLEARANCE CERTIFICATE	08 May 2017

Please note:
For Master's application, Ethics Clearance is valid for 2 years.
For PhD application, Ethics Clearance is valid for 3 years.

CHAIRPERSON OF ETHICS COMMITTEE: Prof Liesel Ebersöhn

CC Ms Bronwynne Swarts
Prof MG Steyn

This Ethics Clearance Certificate should be read in conjunction with the Integrated Declaration Form (D08) which specifies details regarding:

- Compliance with approved research protocol,
- No significant changes,
- Informed consent/assent,
- Adverse experience or undue risk,
- Registered title, and
- Data storage requirements.

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APPENDIX 7: INTERVIEW SCHEDULE

The purpose of this schedule is to solicit teacher's understanding and implementation of curriculum differentiation in their foundation phase classes

1. For how long have you been teaching in the Foundation Phase?
2. How many learners do you have in class?
3. How many of your learners need additional support for their effective learning and participation during class activities?
4. What type of learning barriers do your learners have?
5. What type of learning support do your learners need in order to learn effectively during class activities?
6. What is your understanding in terms of curriculum differentiation?
7. How do you experience curriculum differentiation in meeting diverse learning needs of your learners during class activities?
8. Which elements of the curriculum do you differentiate during class activities?
9. How do you differentiate the curriculum during your class activities for your learners?
10. What are the challenges that you experience when differentiating the curriculum?
11. Which official document guides you to differentiate the curriculum?

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APPENDIX 8: STRUCTURE OF THE BEd(HONS) IN LEARNING SUPPORT

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

BEdHons Learning Support Code : 09240046

Duration of study: 1 year
Total credits: 128
Contact:
Dr MG Steyn +27 (0)128423514
Mrs M Bruwer +27 (0)124205542

Programme Information

The BEdHons in Learning Support is aimed at Foundation Phase (Grade 1-3) and Intermediate Phase (Grade 4-7) teachers.

Admission Requirements

A candidate can be admitted if he/she holds one of the following qualifications:

- a Bachelor's degree and a teacher's diploma/Postgraduate Certificate in Education (eg BA + HED); or
- a four year composite degree in Education (eg BAEd); or
- an M+4 teacher's diploma; or
- an M+3 teacher's diploma and a Further Diploma in Education (FDE) or an Advanced Certificate in Education (ACE); or
- another academic qualification considered equivalent by the Dean for admission to a specific package. In this instance, the qualification will not be recognised for teaching purposes.

Additional Requirements

Selection is based on:

- Meeting the minimum academic requirements required for admission;
- Previous academic performance;
- Applicable academic and/or teaching background;
- Availability of supervision for the required research project;
- Proven academic potential which may include academic communication and computer application skills;
- Additionally, an interview may be requested;

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