EXPLORING EFFECTIVE TEACHING STRATEGIES FOR FOUNDATION PHASE TEACHERS IN MAINSTREAM PRIMARY SCHOOLS TO EFFECT INCLUSIVE EDUCATION

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DECLARATION

I declare that the entirety of this study is my own original work and I am owner of the copyright thereof. All sources used have been acknowledged and I have not previously submitted any part of the research towards a qualification.

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Signature Date

ABSTRACT

Inclusive education has been adopted worldwide in order to provide effective and inclusive teaching to all learners, including those who experience barriers to learning in mainstream schools. Teachers are central in this change in ensuring that all learners are accommodated in the inclusive classroom. However, little evidence is available in the South African context about effective teaching strategies and precisely how they are applied in the inclusive classroom, while still guaranteeing quality education.

The purpose of this study was to explore effective inclusive Foundation Phase teaching strategies in mainstream primary schools that could benefit every learner in an inclusive education setting. Teaching strategies in the context of this study were not limited to strategies for learning, teaching and assessing content but included classroom management, creating positive learning environments, ensuring participation, selecting resources, modifying the curriculum and creating opportunities for collaborating with colleagues and parents. In addition, enrichment exercises, group work, peer teaching and a degree of fun were also considered.

A qualitative research design including open questionnaires, individual semi-structured interviews, document analysis and classroom observations as data collection instruments were employed. Content and constant comparative data analysis was used to analyse data inductively as well as deductively. Twenty participants were drawn from five private and public mainstream primary schools in the East Sedibeng district through purposive sampling.

Findings indicated that a variety of intrinsic and extrinsic barriers exist in the classrooms resulting in diverse learning needs. Essentially it was found that the participants in this study used various teaching strategies, including different teaching methods, to address these diverse learning needs. These various teaching strategies mostly focused on a learner-centred approach, although direct teaching, and particularly repetition, was also believed by the participants to be important teaching methods. Critically, a positive and accommodating classroom atmosphere was found to be vital in ensuring the successful application of different teaching

strategies to address a diversity of learning needs in the classroom. Good classroom management and the creative use of resources were noticed as important to allow for the implementation of effective teaching strategies. In general learners who seemed to experience barriers to learning were accommodated through curriculum and assessment modifications as well as individual support.

OPSOMMING

Inkulsiewe onderwys word wêreldwyd geimplementeer om doeltreffende en inklusiewe onderring aan alle leerders te bied, insluitende diegene wie struikelblokke ervaar in hoofstroomskole. Onderwysers staan sentraal tot hierdie implementering om te verseker dat leerders wel geakkommodeer word binne die inklusiewe klaskamer. Daar is egter min bewyse beskikbaar in die Suid-Afrikaanse konteks oor doeltreffende onderrigstrategieë en presies hoe hierdie strategieë toegepas word in die inklusiewe klaskamer terwyl die kwaliteit van onderrig steeds gewaarborg word.

Die doel van hierdie studie was om doeltreffende inklusiewe grondslagfase onderrigstrategieë in hoofstroom laerskole te ondersoek waarby elke leerder binne ‘n inklusiewe onderrigomgewing baat kan vind. Onderrigstrategieë teen die agtergrond van dié studie is nie beperk aan leer strategieë, onderrig en assesering van inhoud maar sluit in klaskamerbestuur, die skepping van ‘n positiewe leeromgewing, deelneming van leerlinge, keuse van hulpbronne, kurrikulum modifikasies en geleenthede te skep om met kollegas en ouers saam te werk. Verder is verrykingsstudies, groepwerk, portuuronderwys en ‘n mate van pret ook oorweeg.

‘n Kwalitatiewe navorsingontwerp wat oopvraelyste, semi-gestruktreerde vraelyste, dokumentontleding asook klaskamer waarnemings insluit, was onderneem. Inhoud en konstante vergelykende dataontleding was toegepas om data induktief sowel as deduktief te ontleed. Twintig deelnemers vanuit vyf publieke en privaat hoofstroomskole in die Oos-Sedibeng distrik is geselekteer deur middel van doelgerigte steekproefneming.

Resultate dui die bestaan van verskeie intrinsieke sowel as ekstrinsieke struikelblokke binne die klaskamer aan wat lei tot uiteenlopende leerbehoeftes. Daar was in wese bevind dat die deelnemers aan die studie van verskeie tegnieke, insluitend verskillende onderrigmetodes, gebruik gemaak het om die uiteenlopende leerbehoeftes aan te spreek. Hierdie verskeie onderrigstrategieë was meesal gefokus op ‘n leerder-gesentreerde benadering alhoewel die deelnemers glo dat direkte onderrig, en spesifiek herhaling, ook belangrik is. Daar was bevind dat ‘n positiewe en akkommoderende klaskamer atmosfeer noodsaaklik en krities is om die

suksesvolle toepassing van verskillende onderrigstrategieë aan te spreek binne ‘n verskeidenheid van leerbehoeftes in die klaskamer. Goeie klaskamerbestuur en die kreatiewe gebruik van hulpbronne was uitgewys as belangrik vir die implementering van effektiewe onderrigstrategieë. In die algemeen blyk dit dat leerders wat struikelblokke ondervind met die leerproses geakkommodeer word deur middel van modifikasies aan die kurrikulum en assesering, asook deur individuele ondersteuning.

DEDICATION

I dedicate this research to those teachers in mainstream schools who through hard work and dedication consistently guide and encourage all learners to surmount any barriers to learning through persistence of their own.

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Rosemary Anne Wahl November 2016

'Informed teachers; informed learners'

TABLE OF CONTENTS

LIST OF TABLES

KEYWORDS

Inclusion	Inclusive education	Teaching strategies
Mainstream	Barriers to learning	Teaching methods

ABBREVIATIONS

Caps: Curriculum Assessment Policy

DBE: Department of Basic Education

DBST: District Based Support Team

DoE: Department of Education

EFA: Education for All

EWP6: Education White Paper 6

HOD: Head of Department

LSEN: Learners with Special Education Needs

HIV/Aids: Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome

ILST: Institution Level Support Team

ISP: Individual Support Programmes/Plans

LOLT: Language of Learning and Teaching

NCESS: National Committee on Education Support Services

NCS: National Curriculum Statements

NCSNET: National Commission on Special Needs in Education and Training

SIAS: Screening, Identification Assessment and Support policy

UDL: Universal Design for Learning

UNESCO: United Nations, Education, Scientific and Cultural Organisation

UNICEF: United Nations International Emergency Children's Fund (now United Nations Children's Fund

ZPD: Zone of Proximal Development

CHAPTER 1

INTRODUCTION, PROBLEM STATEMENT AND RATIONALE FOR THE STUDY

1.1 Introduction and rationale

The Salamanca World Conference on Special Needs Education of the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 1994) sanctioned the concept of inclusive education and drove the idea that inclusive schooling would effectively eliminate discrimination and achieve equity in education. The concept of inclusion was perceived to be a process to identify and remove barriers and ensure participation and achievement for all learners (UNESCO, 2005:15-16).

Equality and access to quality education is embedded in South Africa's Constitution (RSA, 1996) and based on these principles Education White Paper 6 (EWP6) on Special Needs Education: building an inclusive education and training education system, was released in 2001 and developed to create positive learning conditions for all learners in an inclusive education system (Department of Education [DoE], 2001; Hay & Beyers, 2011:235).

With the introduction of EWP6 there was a paradigm shift from the segregated approach of the medical model to embracing inclusion. However, the implementation of inclusive education continues to be hampered by a lack of funding, inefficient physical and human resources, as well as continual political changes impacting on education (Wildeman & Nomdo, 2007:1; Bines & Lei, 2011:420-423). Since teachers are seen to be central to the implementation of inclusive education they need to be developed to be able to deliver multi-level classroom teaching with variations applicable to individual needs of learners (Swanepoel, 2013a:189). This task is complicated by numerous challenges, such as, learners that come from adverse economic backgrounds with illiterate parents, health problems as a result of the Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome HIV/Aids pandemic and language barriers (Daniels, 2010:640). In a diverse classroom teachers also need to deal with differing learning styles and ability levels of learners.

Classes with a large number of learners often present disciplinary problems exacerbated by learners with disruptive behaviour disorders which frequently lead to educators lacking the motivation to implement adaptive strategies in considering each learner's individual learning needs (Engelbrecht, 2013b:35).

Many teachers are not adequately qualified to cope with the diversity of learning needs and the barriers to learning that occur as a result of these challenges. It is especially important that Foundation Phase teachers are adequately trained to deal with a variety of barriers to learning because of the impact of learners' developmental age in this phase (Engelbrecht 2013a:146, 223). This requires that teachers' are able to implement different and appropriate teaching strategies (Davis & Florian, 2004b:13).

Florian and Black-Hawkins (2011:813) assert that inclusive education requires dealing with diversity through the differentiation of the curriculum and of teaching methods, as well as of teaching and learning material and assessment tasks. Lesson plans and teaching strategies therefore need to be devised to incorporate multi-level learning, teaching and assessment (Nel, 2013:28). Many teachers develop a store of effective teaching strategies through years of practice. Yet, effective teaching methods are often contained within specific schools or environments and remains undocumented (McMenamin, 2011:99; Sapon-Shevin, 2007:180-216). The focus of this study was to explore some Foundation Phase teachers' teaching strategies and to record and report on them, in order to inform inclusive classroom training and practices for a broader audience.

Many studies (e.g. Daniels, 2010:640; Hodkinson, 2010:65) focused on the challenges involved to bring about an inclusive education system, such as, the belief by some teachers that special needs learners hold back the rest of the class and the notion that a lack of resources do not allow for differentiation. This indicates that there is a need for research to determine which teaching strategies do promote an effective inclusive education environment. The focus in research is often on learners experiencing learning barriers and why inclusive education is unsuccessful, resulting in a lack of research on teaching and learning methodologies that have shown to work for all learners in the classroom (Miles & Singal, 2010:1). Davis and Florian

(2004b:24), as well as Forlin and Chambers (2011:24), assert that knowledge is insufficient on specific practices used to enable inclusive teaching methods of the different curriculum subjects. Only a limited number of studies using small groups of participants have been conducted on assessing certain teaching approaches (Davis & Florian, 2004b:12; Forlin & Chambers, 2011:14). This results in an absence of a sound research network and data base that could provide feedback on the effects of various approaches to teaching, the value of learner participation in the classroom, as well as an indication of their learning and development (Davis & Florian, 2004b:30; Forlin & Chambers, 2011:14). Furthermore, a gap in research is also evident on the importance of early detection of learners with more complex learning needs and the effectiveness of timely applied intervention teaching strategies (Khan, 2011:87).

In my own experience as a Foundation Phase teacher in classrooms with a diversity of learning needs I identified that effective teaching strategies applied in an inclusive environment need to provide for all learners in the classroom while no learner experiences an interruption of progress. This research focused on exploring and identifying the most effective inclusive teaching approaches and strategies applied by Foundation Phase teachers at five mainstream schools in the Sedibeng East district. The findings of the study could assist in making recommendations for policy-makers and practitioners in developing more appropriate and sustainable practices and policies to steer towards an inclusive pedagogy in order to allow the participation, well-being and progress of all learners. The aim of the study was to initiate reflection and raise awareness regarding teaching strategies shown to be successful in an inclusive setting.

1.2 Problem statement

For inclusive education to be successfully implemented it has to benefit all learners at all times where participation moulds experiences and uniqueness of all learners (Kozleski *et al*., 2014:235). However, in practice inclusive education seems to seldom take into consideration the coping capability of the teacher; especially with regard to the application of various teaching strategies. Issues such as time constraints placed on the teacher by the education department to accomplish the

curriculum requirements place an additional workload on the teacher leaving little time to attend to individual learner needs. Large classroom numbers, lack of support from the Education Department, inadequately trained teachers and a shortage of resources do little to alleviate the situation (Wildeman & Nomdo, 2007:17). Yet, despite these challenges many teachers employ effective teaching strategies, which have not yet been fully been explored and recorded (Sapon-Shevin, 2007:180-216).

1.3 Purpose statement

The primary aim of the study was to explore effective inclusive Foundation Phase teaching strategies in mainstream primary schools that could benefit every learner in an inclusive education setting.

1.4 Research question

1.4.1 Primary question

Which effective teaching strategies are employed by Foundation Phase teachers in mainstream primary schools to effect inclusive education?

1.4.2 Secondary questions

- What is inclusive education?
- How does the literature describe effective teaching?
- What makes teaching strategies effective in an inclusive classroom?
- Which teaching strategies do Foundation Phase teachers believe are effective in an inclusive classroom?
- Which teaching strategies are employed by Foundation Phase teachers?
- How should Foundation Phase teachers choose and implement teaching strategies to effect inclusive education?

1.5 Concept clarification

Terminology used in inclusive education continually underwent changes in accordance with politically correct language as historic practices contributed to segregation and exclusion which impacted on shaping of education structures. Thus with the move towards inclusive education concepts were refined (Sheehy, 2003:124). Key concepts used in this study are clarified below.

1.5.1 Mainstream education

Mainstream education refers to ordinary schools where learners require minimal support (Landsberg, 2011a:69).

1.5.2 Mainstreaming

Mainstreaming, as defined in relevance to learners with disabilities, refers to inclusion of learners in the general education process. It involves selectively placing these learners in mainstream classes (Swart & Pettipher, 2011: 18).

1.5.3 Inclusive education

According to Sapon-Shevin (2007:6) inclusive education refers to the educational rights of all children to receive quality education in the mainstream of education as full members. Education White Paper 6 (EWP6) declares that inclusive education is about acknowledging that all learners can learn and need support (Department of Education, 2001:16-17).

1.5.4 Teaching strategies

Teaching strategies are plans or techniques that are used to ensure that a certain concept or lesson is passed from the teacher to the learner by several means. For the purpose of strategies used in inclusive education these strategies must be applicable to all levels of ability and should vary in accordance with learners' learning styles and needs (Engelbrecht, 2013b:35). Monyai (2006:104) asserted that for a teaching strategy to be effective appropriate teaching strategy choices must be

matched with the lesson plan and activities adapted to facilitate all learners. This requires that a teacher is versatile in choosing teaching strategies that will ultimately produce independent and self-motivated learners.

Within the context of inclusive education policy, teaching strategies do not only refer to strategies for teaching, learning and assessing content but encompass all the different methods teachers employ to address different barriers to learning. This includes strategies to manage the classroom, a variety of teaching styles, to create positive learning environments, to ensure participation, to select resources and create opportunities for collaborating with colleagues (Florian & Black-Hawkins, 2011:822) and parents. Furthermore, teaching strategies also comprise modifying the curriculum (Ainscow & Miles, 2008:16), enrichment exercises, group work, peer teaching (Landsberg, 2011a:82) and an element of fun.

1.5.5 Teaching methods

Teaching methods are principles and methodology applied by teachers to achieve learning outcomes and encompass a variety of methods for instruction, among others, various styles of tuition, collaborating, classroom discussion, teacher-centred and learner-centred teaching (Davis, 1999:389).

1.6 Methodology

1.6.1 Paradigm

The philosophy fundamental to this research is an interpretive worldview allowing the researcher to draw on the constructive philosophical assumptions of participants. Social constructivists believe this paradigm is often combined with interpretivism as individuals, based on their historical and social perspectives, seek to understand the world and develop subjective meanings towards their experiences and towards objects and things (Creswell, 2009:8). This social meaning is therefore constructed by participants' interpretation of a situation and through interaction with others. The interpretivistic view strives towards a holistic understanding of the relationship and

interaction among participants, as well as how meaning is derived from the phenomenon (Nieuwenhuis, 2010b:75; Creswell, 2009:176).

For the purpose of this study, as researcher I was the primary instrument in the social setting of the data-gathering process and through open questionnaires, interviews, document analysis and observations I pursued in-depth exploration of a situation and constructed interpretation in order to obtain a holistic view. Data was gathered by compiling questions and conducting face-to-face interviews with participants, as well as availing to participate as observer in the natural environment of the classroom.

1.6.2 Research design

The qualitative research method is meant to give meaning to a social interactive event or role from which interpretations are determined (Creswell, 2009:194). The researcher generates meaning from gathering data in the field (Creswell, 2009:9), while understanding a phenomenon by means of gaining different insights from participants to be described and analysed (Nieuwenhuis, 2010b:81).

The qualitative approach guided this research and multiple sources of data generation were used to obtain a holistic picture. (Nieuwenhuis, 2010b:85).

1.6.3 Strategy of inquiry

This study entailed an in-depth investigation into the process of inclusive teaching strategies utilising the qualitative strategy of a multiple case study. The nature of the research involved collecting comprehensive information over a certain period by means of numerous data collection procedures which is synonymous with the strategy (Creswell, 2009:13). Case study research investigates an event or related events that modify a specific phenomenon and is instrumental for acquiring greater insight and comprehending a certain situation (Nieuwenhuis, 2010a:76). Several sources and numerous techniques were used to gather data that included a literature review, open questionnaires, interviews, document analysis and observations. Cases

chosen enabled me to make comparisons between them through certain data collection methods so as to extend and validate concepts (Fouchè, 2007: 272).

1.6.4 Methods of data collection

1.6.4.1 Literature Review

Research encompassed both primary and secondary resources on the topic. The North-West University library with links to search engines NEXUS and EBSCO-host were employed throughout the study, as well as text books, journals and other documentation.

A complete theoretical and conceptual framework was provided in the literature review from which data was analysed and interpreted. The literature review afforded clarity on important concepts regarding teaching strategies in inclusive classrooms in mainstream education. Explicit literature enabled the research design and methodology to be structured within the interpretive paradigm. Conclusions were drawn from the literature in accordance with the data gathered from questionnaires, interviews and observations for analysis.

1.6.4.2 Qualitative questionnaires

The literature review informed the questions. A self-structured questionnaire that contained open-ended questions was compiled and administered to participating mainstream Foundation Phase educators within the Sedibeng East district. The questions were intended to establish the kind of teaching strategies Foundation Phase teachers employed when confronted with a diversity of learning needs in an inclusive classroom. As the questions were intended to find out factual details it was beneficial to have more open, unstructured and unobtrusive questions (Fink, 2003:32). Questionnaires were first pilot tested using a sample of the population that did not participate in the main study for a qualitative overview to guarantee well-structured questions that would elicit valid responses towards this research.

1.6.4.3 Individual semi-structured interviews

Interviews are viewed as a valid facet of research methodology as they can provide rich descriptions (Greeff, 2007:296). In keeping to this, semi-structured interviews, comprising pre-determined questions, as a guiding schedule were conducted face-to-face with some mainstream Foundation Phase educators. Individual semi-structured interviews of approximately 30 minutes were conducted with each participant and as researcher I directed the route of questioning by probing to explore relevant remarks made by the participants (Creswell, 2009:179). Interview data was later transcribed and documented and thereafter analysed to also identify possible new paths of inquiry to pursue during the observations (Greeff, 2007:296; Nieuwenhuis, 2010b:87). My intention was to explore teaching strategies used by participants, to address a diversity of needs in an inclusive setting.

1.6.4.4 Observations

Qualitative research involves purposely selecting sites or individuals for a proposed study (Nieuwenhuis, 2010b:85). Five local schools that would best help to clarify the problem and the research question had been identified for the purpose of this research and I was allowed to act as observer participant in the natural setting of the classroom situation, while remaining as unobtrusive as possible. Running records of observations focusing on the situation of inclusive practices were documented with descriptions of the consequential responses, as well as my reflection of events (Nieuwenhuis, 2010b:85). This form of direct observation suggested a detached perspective and tended to be more structured than participant observation (Trochim & Donnelly, 2008:147). However, it provided first-hand experience of the classroom situation and heightened understanding of activities under study through reflection (Nieuwenhuis, 2010b:84; Creswell, 2009:175). I was able to focus predominantly on observing inclusive teaching strategies.

The literature review, as well as data from the questionnaires and interviews, assisted in highlighting aspects to note during observations and new data was also recorded in the observational notes. There were twenty observations across the

chosen schools and rich data was gained. Observations took place during the normal course of lessons and averaged half an hour long at the given time.

1.6.4.5 Document analysis

Document analysis entails any written communication that described the phenomenon under investigation whether published or unpublished (Nieuwenhuis, 2010b:82). Documents, such as, curriculum documents, books of learners, individual assessment files, as well as Departmental circulars, were assessed to establish recurring ideas, patterns and categories. Evidence that certain teaching strategies were considered effective in inclusive education were determined by noting that they featured consistently across the study. Analyses of documents were undertaken with strict discretion and validity of the information assessed prior to including the data in this study.

1.6.5 Population sample

Non-probability sampling methods are mostly utilised in qualitative research, such as, the purposive sampling criterion used in this study. Participants in purposive sampling are the holders of the data needed for research and chosen according to preselected criteria befitting the research question as they are involved in the required settings and activities (Nieuwenhuis, 2010b:79). The criteria essential for participants involved in this research engaged Foundation Phase educators practicing inclusive education teaching strategies in the classroom. This method of sampling also allowed for convenience when considering travelling and time saving aspects for the research.

The population sample for the purpose of this research comprised twenty participants drawn from five mainstream primary schools in the Sedibeng East district in Gauteng who were Foundation Phase teachers. During formal and informal meetings the teachers from the selected schools indicated that they believed they were implementing successful inclusive teaching strategies in their classrooms to address their learners' diverse learning needs. This was part of the motivation to conduct this study. These teachers further indicated their readiness to complete

questionnaires, be interviewed and to be observed in their classrooms. Written consent was obtained from principals, heads of department and participants. The approval allowed the participants to be interviewed, have them complete the questionnaires, let their classroom practices be observed and documents to be analysed while confidentiality at all times was ensured.

More detail about the sample is provided in Chapters 4 and 5.

1.6.6 Data collection procedure

In order to gain insight and understanding from this case study research the following multiple data collection procedures were applied:

1) Data collection commenced with a literature review where academic works based on similar studies including journals, articles, dissertations and theses were studied. Documents, such as, curriculum documents and Department circulars, were also scrutinised.
2) The literature review and document analysis informed the questionnaire, interviews and observations.
3) Documentation, such as, teachers' notes of learners were also scrutinised to provide a shared, collective and comprehensive review.
4) Written consent was obtained from principals, Heads of Department at the schools and participants to conduct interviews and observations, to complete the questionnaires and analyse relevant documents (e.g. lesson plans and books of learners) by the researcher from the selected schools. Confidentiality was guaranteed.
5) A pilot study, using participants not involved in the research, took place to determine whether the contents of the questionnaire will be understandable and appropriate.
6) Findings from the pilot study identified unclear themes and language, but I only needed to make minor necessary language and editorial alterations.
7) Questionnaires were thereafter handed out to participants to complete with the open-ended questions designed to elicit information on various inclusive

teaching strategies that these participants' employed in the classroom, and the outcomes of their implementation.

8) The findings of these questionnaires informed the individual interview schedule.
9) Individual semi-structured interviews were conducted and the data transcribed.
10) Categories of behaviour that I wished to observe were extracted from the data analysis of the literature, questionnaires and interviews.
11) Observations in the natural location of the classroom took place and transcribed.
12) The observations included my reflections from a researcher's perspective which I documented.
13) An analysis of the data by utilising the constant comparative method with all four data sets, namely, questionnaires, interviews, document analysis and observations was undertaken and then interpreted.
14) My promoter, knowledgeable in the field of inclusive education and experienced in qualitative research methods confirmed the validity of coding used.

1.6.7 Data analysis

Data analysis is a process that determines logic from data collected by reducing, merging, interpreting information from observations, verbal accounts and documentation (Merriam, 2009:178). The interpretative philosophy (hermeneutics) of qualitative data analysis is the extraction of meaningful content from a comparative investigation under study, usually through an inductive analysis of data. Inductive analysis involves continual reflection, analysing questions and documenting information (Creswell, 2009:184; Nieuwenhuis, 2010b:84). However, in this study deductive analysis was also applied since the themes as abstracted from the literature review and applied in the open questionnaire were in many instances used as themes in the data analysis (Pope *et al*., 2000; Fereday & Muir-Cochrane, 2006; Bradley *et al.*, 2007). In qualitative deductive analysis preliminary codes can help researchers to integrate concepts already identified in the literature review (Bradley *et al*., 2007:1763).

For this study data gathered from questionnaires, comprehensive written transcripts of interviews and structured observations, together with other various sources was studied to identify key aspects. The data was then analysed by means of constant comparative analysis (Merriam, 2009:134). Data identified as significant to the study I coded and placed into themes, categories and subcategories as the study progressed (Lincoln & Guba, 1985:334-341; Struwig & Stead, 2004:170).

I was able to interpret the meaning of the data based on the participants' perspectives to compare findings of recurring themes, identify patterns and connections between statements and to explain the social process under study, namely, effective teaching strategies employed in inclusive classrooms in the Foundation Phase. The findings are comprehensively described with some information presented in tabular form in Chapter 5.

1.7 Trustworthiness

Validity refers to soundness or credibility of the understandings (Nieuwenhuis, 2010a:114). Descriptive validity refers to factual and comprehensive information and whether information has been omitted or distorted, while interpretive validity indicates that meanings and perspectives of participants' regarding what is being investigated are correctly reported (Struwig & Stead, 2004:144). To ensure validity for this study a variety of collection methods were used which included:

- Comparing findings with other written sources, such as data acquired from the literature review (Strydom & Delport, 2007:317)
- Submitting transcripts and interpretation of data to participants to examine the accuracy of the data, i.e. member checking (Nieuwenhuis, 2010b:80)
- Checking accuracy of findings across the different data collection methods of this research (interviews, observation, questionnaires and document analysis) as this is commonly regarded as leading to trustworthiness (Nieuwenhuis, 2010b:80)
- Rich, thick descriptions of the setting and certain classroom events, as advised by Creswell (2009:192), were applied in this research to convey a shared experience

- An audit trail to verify how codes, categories and themes were derived from the raw data (Addendum G)
- Observing and documenting any teaching strategies in the various classrooms that continually produced similar findings, as suggested by Struwig and Stead (2004:134) in all five schools under study
- Ensuring that the contents of the questionnaire were correctly worded and relevant to the topic with a pilot study allowing for criticism and comments by respondents not involved in the research
- Multiple data sources, such as document analysis, questionnaires, interviews and observations to increase reliability
- My promoter, is knowledgeable in the area of inclusive education substantiated the interpretation of data to provide an objective assessment and enhance reliability as a second opinion (Creswell, 2009:192)

Data collection and analysis was described in detail in Chapter 4 to clarify methods used in the research. All phases of the project were scrutinised by the study's supervisor. Data was also constantly compared with the codes to ensure no deviation from the definition of the codes occurred (Creswell, 2009:190).

I was aware throughout this study that though every effort was made to avoid bias, interpretation of the findings was shaped by my background. Samples in qualitative research tend to be small, as in this research, therefore external generalisability could not be considered. Internal generalisability was addressed as explained above, whereby participants were allowed to comment on accuracy of the findings and by employing crystallisation of data (Struwig & Stead, 2004:146; Maree & Van der Westhuizen, 2010:40). In this study crystallisation entailed comparing results of the multiple methods of data collection and analysis to determine similarities in the findings of the various approaches.

1.8 Role of researcher

In qualitative research the researcher is considered the 'instrument' for collecting and analysing data and generating meaningful information to the best of the researcher's ability (Creswell, 2009:175; Merriam, 2009:67) as credibility of qualitative research

unequivocally depends on the competence of the investigator (Patton, 2002:14). Personal contact of the researcher with participants in the qualitative approach gives rise to concern regarding the subjective nature involved. It was important that honest, credible and meaningful findings were produced in this evaluation so I viewed my involvement and immersion in the study as vital to record happenings in reality.

According to Creswell (2009:175) it is essential that honest and meaningful findings are produced by the researcher who endeavours to prevent biased distortion of data that could jeopardise the reliability of the study. Creswell (2009:175) expanded that total objectivity may not be attained due to the subjective nature of the approach; that includes the researcher's disposition, like opinions, expectations and values.

As evaluator I pursued the purpose of the investigation to determine effectiveness and provide information regarding the achievements of objectives of the study. Permission was obtained from the gatekeepers, such as, the principals of the five schools concerned and participants to access the settings to study the situation. A brief proposal was submitted for review by gatekeepers explaining:

- the reasons for choosing the research site;
- how the study was to be conducted with minimal disruption;
- the manner in which results would be reported;
- the benefits of the study to the gatekeeper; and
- confidentiality and consideration of participants (Creswell, 2009:178).

Participants were encouraged to cooperate with me by promoting commitment through advocating the worth of the research and addressing any associated barriers. As interviewer I understood and knew when to probe and when to alter direction of the discussion. Establishing rapport with respondents was necessary and communication channels were kept constantly clear (Merriam, 2009:23).

The possibility that my presence in the classroom as an observer could influence the normal daily classroom environment was taken into consideration and in order not to obscure the participants' interpretations I exercised independent thought by focusing

on the language of the participants rather than on my own interpretation of the terminology. The participants' opinions on the accuracy of the documented data from the information that they provided was also sought (Struwig & Stead, 2004:144).

The research sites were all considered of equal standing in my opinion as I had no previous connections with the various classroom settings that could stand in the way of data collection.

1.9 Ethical considerations

Ethical guidelines in research protect individuals against possible harmful effects related to research (Trochim & Donnelly, 2008:24). My standing as researcher was to undertake and ensure that ethical considerations were adhered to. Consent to pursue the research was sought from the Gauteng Department of Education, gatekeepers, participants and the ethics committee of NWU. Participants were informed in writing regarding all aspects of the research, such as, that data would remain anonymous and that they could withdraw at any time from the research. An informed consent form was developed for participants to sign which acknowledged protection of their rights and included aspects, such as, the purpose of the research, the benefits of participation, and guarantee of confidentiality (Creswell, 2009:89). Data stemming from this research will be stored for at least five years in a locked cupboard. More detail about ethical procedures will be discussed in Chapter 4.

1.10 Chapter division

Chapter 1: Introduction, statement of the problem and rationale for the study
Chapter 2: Teaching in an inclusive education environment
Chapter 3: Teaching strategies to effect inclusive education
Chapter 4: Research methodology
Chapter 5: Data analysis and interpretation
Chapter 6: Summary of the findings, recommendations and limitations of the study

CHAPTER 2

TEACHING IN AN INCLUSIVE EDUCATION ENVIRONMENT

2.1 Introduction

In line with the 1994 Salamanca Statement and Framework for Action (UNESCO, 1994:vii-x) the collective effort to provide equal opportunities for all learners and the pursuit of excellence in teaching are of the highest priority in education worldwide. As an increasing number of learners from different backgrounds with diverse abilities and education enter the mainstream, teaching methods and strategies need to be reconstructed to accommodate these diverse demands.

In this chapter inclusive education is defined and the reasons for its implementation are explained with an account of how several countries address the issue. Different approaches with regard to mainstream, integration and inclusion are also described together with policy development in South Africa, including the Curriculum Assessment Policy Statements (CAPS). Challenges in implementing inclusive education are highlighted and contrary arguments on inclusivity based on research are offered. Attention will also be drawn to the changing role of the mainstream teacher within an inclusive education system.

2.2 Theoretical background

2.2.1 Defining inclusive education

Defining inclusive education is a complex and intricate process, since it could be viewed from different perspectives. Florian and Black-Hawkins (2011:814) maintain that the term ‘inclusive’ is so broadly used in education that it lacks precise definition, but is more or less understood as a process of increasing participation, while Ainscow and Miles (2008:17) describe a typology of five ways of thinking about inclusion as follows:

a) *Inclusion concerned with disability and “special educational needs”*. This refers to the general assumption that inclusion is primarily about placing

learners with disabilities or special educational needs in the mainstream and could also be defined as mainstreaming. However, the appropriateness of such an approach can be questioned, since it focuses on a ‘‘disabled’’ or ‘‘special needs’’ part of the learners and disregards other ways in which participation may be impeded or enhanced. Still including learners with disabilities in the mainstream should remain a key objective.

b) *Inclusion as a response to disciplinary exclusions.* Learners who are identified as demonstrating bad or difficult behaviour can be excluded from education by being expelled from school.

c) *Groups vulnerable to exclusion*. This perspective concerns learners who could be vulnerable to social exclusion, such as disabled learners, including learners with learning disabilities; learners who are excluded from school for disciplinary reasons; and learners living in economically poor communities. According to Foreman (2008:31) inclusivity is therefore the “challenge to provide the best possible learning environment for all children, regardless of social, cultural, ethnic background, ability or disability”.

d) *Promoting a school for all*. Within a school for all, perspective segregated special education institutions are discontinued and all learners who are regarded as different are accommodated into a homogenous normality, instead of bringing about change through diversity. The Salamanca framework asserts that inclusive education is the learning together of all learners despite differences or difficulties learners may encounter (UNESCO, 1994:11).

e) *Education for all (EFA)*. This focus was initiated by the World Conference on Education for All in Jomtien Thailand in 1990. The emphasis of the movement is that large numbers of vulnerable and marginalised groups of learners who are excluded from education systems worldwide must be given access to education. A key goal was to ensure that all children must at least have a primary education by 2015. It also has a vision of acknowledging that education is a much broader concept than only schooling, beginning with early childhood, emphasising women’s literacy and recognising the importance of basic literacy skills as part of lifelong learning. This means that all learners are to receive basic education of good quality in schools that embrace inclusive, sincere learning environments (UNESCO, 2005:9). In

> UNESCO's Guidelines for Inclusion (UNESCO, 2005:13-15) inclusion is further described as a process of addressing and responding to the diversity of needs of all learners in all aspects of learning by changing and adapting strategies and approaches to include all learners equally in the education system.

Inclusive education is also defined by the United Nations Education, Scientific and Cultural Organisation (UNESCO, 1994:11) as a constant, supportive integration of learners with disabilities, including learning disabilities, in the mainstream. This implies that learners should not merely be physically present in a classroom, but actively participate in social and curricular activities. Inclusion is therefore about believing that the only way to learn about living in a diverse and democratic environment is by participation (Sapon-Shevin, 2007:217). UNESCO (1994:11-14, cited by Ainscow & Miles, 2008:20) states that increasing participation should occur through:

- Reducing exclusion from the curriculum, and as a consequence of culture and communities
- Restructuring cultures, policies and practices in the school to respond to diversity
- Focusing on presence, participation and achievement of all learners
- Inclusion being regarded as a continuous process

Florian and Black-Hawkins (2011:814, 826), however, are of the opinion that there is still little clarity on defining inclusion, contributing to the confusion that exists on how inclusive education is actually implemented in practice. In order to address this confusion they declare that inclusive education should be a procedure that encourages participation by discouraging exclusion from community, culture and from the curriculum in mainstream schools and focusing on overcoming barriers, valuing perspectives and creating a collective vision that respects diversity. They also assert that how teachers approach lessons and enhance available resources with the intention of accommodating all learners within mainstream education should be viewed as an essential aspect to ensure the successful implementation of inclusive education (Florian & Black-Hawkins, 2011:815).

Within a South African perspective, Education White Paper 6 (DoE, 2001:16) (*cf.* 2.4.1.2) asserts that inclusive education requires the restructuring of structures, methodologies and systems to meet the needs of all learners. A pivotal strategy to achieve this goal is to train support personnel, as well as teachers, with regard to appropriate teaching strategies to address all learners' support needs (DoE, 2001:9). However, it is acknowledged that teaching strategies can be impacted by the following factors and must be taken into consideration (DoE, 2001:7; Prinsloo, 2011:37, 40; Daniels, 2010:640):

- Stereotyping and negative attitudes to differences
- Inadequate or inappropriate support services
- Non-involvement of parents
- Insufficient implementation of legislation and policies
- Inadequate communication (e.g. labelling or stereotyping)
- Inflexible curriculum
- Inappropriate language of learning and teaching (LOLT)
- Unsafe environment
- Inadequately trained teachers and management personnel

Since it is obvious that there are different views and approaches to inclusion, three main approaches relevant to this research will be discussed next.

2.2.2 Approaches to inclusive education

Mainstreaming and integration are related concepts often used interchangeably with inclusion. EWP6 (DoE, 2001:17) describes mainstreaming as giving certain learners extra support to enable them to 'fit in' or be integrated into the 'normal' classroom activities. Mainstreaming is the term used for general education and suggests that all learners, including those experiencing difficulties, are entitled to similar life experiences. However, mainstream schools often exclude certain learners as teachers believe that they do not have the necessary skills and knowledge to teach learners who experience barriers to learning, and facilities in separate self-contained environments can provide better learning opportunities for these learners (Swart & Pettipher, 2011:7). This promotes segregation within the mainstream system. Yet, it

is still the intention of many countries who promote inclusion to successfully accommodate learners with disabilities into mainstream education and numerous strides are being taken in this direction (Armstrong *et al.,* 2011:30; Berlach & Chambers, 2011:537).

Integration refers to how specialist or additional support can be presented to learners within the mainstream environment without perpetuating segregation and the associated discrimination synonymous with traditional approaches (Swart & Pettipher, 2011:8), such as the medical deficit model (*cf.* 2.2.3). Rix (2011:276) defines integration as a tendency to move the focus away from individualised needs towards the collective. This entails removing all barriers, including social barriers, ensuring access and participation for all, but still providing the individual with choices and the means to make changes. A literature study by Bossaert *et al*. (2013:65) reveals that literature remains unclear regarding the definition of social integration concerning learners with more severe barriers to learning (previously termed as special needs). Though several researchers did propose some definitions, Bossaert *et al. (*2013:65) determined that the concept is best described in a summary of definitions because of different essential components. Social integration could therefore be viewed as incorporating relationships, peer acceptance, social interactions, social skills and self-perception of the learner who experiences barriers to learning.

Yet true inclusion is described by Ainscow *et al.* (2006:25) as based on the principle that mainstream schools should provide for all learners irrespective of perceived intellectual differences or disabilities, and is the process of actively engaging all learners in the inclusive classroom (Ainscow *et al*., 2006:25). There should consequently be no exclusion from the curricula, cultures and communities of local schools. This requires that cultures, policies and practices in schools need to restructure so that they respond to the diversity of learner needs (Ainscow & Miles, 2008:16).

Inclusion also incorporates values and beliefs that recognise and respond to diversity (Nel, 2013:5; Swart & Pettipher, 2011:8). Nel (2013:1) views these values and beliefs

as accepting everyone for what he or she is: despite differences in appearance, having different needs and different ways of living, believing, and thinking.

However, research by Thomas and Loxley (2007) as well as Hansen (2012:91) found that many teachers still believe that full inclusion can be limiting and does not benefit all learners. Many teachers feel that because learners who experience barriers demand much attention, other learners can be neglected as a result. This can be due to the teacher's own inability to succeed with integrating certain learners in the classroom or that they genuinely consider special schools to be better equipped to accommodate specific learners. At the same time, under the guise that teachers lack knowledge and skills to incorporate all learners in inclusive situations, schools often still refuse to enrol certain learners (Jordan *et al*., 2009:536). Consequently, special educational settings continue to play a dominant role and despite the drive to promote inclusive education, exclusivity is still evident because of a steady increase of learners referred to special education (Hansen, 2012:92; Schoeman, 2012:18).

As the concept of inclusive education is gradually becoming better understood, significant strides in inclusive development have been made locally and abroad (Berlach & Chambers, 2011:537).

2.2.3 The medical deficit model versus the socio-ecological model

2.2.3.1 Medical deficit model

Essentially the medical deficit model focuses on diagnosis and treatment, where a learner is placed in a specialised, segregated environment and labelled according to a category deemed to fit the learner (Swart & Pettipher, 2011:5; Ferguson, 2008:110). Consequently, exclusion is applied when diagnosing deficits or deviance within learners, followed by recommending remedial action that highlights individual difference and learning styles (Gudjonsdottir *et al*., 2007/8:177). This results in labelling and stereotyping of learners and is acknowledged today as discriminatory practice. 'Special educational needs' is rooted in this limiting medical deficit model which was exclusively employed in the previous South African education system.

Yet, despite worldwide criticism, and the move to inclusive education, it is still in use today (Swart & Pettipher, 2011:5).

McMenamin (2011:97) brings to light the continued existence of special schools. He argues that even with an inclusive-backed policy environment in place, it is likely that this situation will continue. The perseverance of these special schools is often seen to represent failure of the inclusive education system while others insist that special schools can be part of an inclusive system (Higgins *et al.,* 2009:471; DoE, 2001:47). A similar trend is noted in the UK where inclusive practices within the mainstream have been strengthened by special schools (Ainscow, 2007:135). While South Africa is facing the daunting task to provide quality education to all learners, with some controversy regarding provision and delivery of support services, special schools continue to function in the education system (Walton, 2011:241). This allows us to question to what extent the development of an inclusive school system addresses the needs of all learners.

Parsons *et al*. (2009:54) assert that a reason for the continuation of the medical model is that a disparity exists between policy legislation and daily experiences of families with children that have barriers to learning who are driven by their child's education needs and own concerns. Parents of children with 'special needs' often choose special schools because of the availability of special therapists (such as speech therapists, physiotherapists and occupational therapists) as permanent staff members. Specialised teachers are able to adapt teaching for learners who experience barriers to learning, often with the use of more appropriate education equipment, and provide high quality learning and teaching programmes. This, together with small class size and supportive teaching staff are often determining factors for parents to enrol their children in special education settings (McMenamin, 2011:97-100).

2.2.3.2 Socio-ecological model

The socio-ecological model shifts the focus away from the medical model where deficits are seen as 'within-the-child'. It asserts that there are also hindrances in the society and system that prevent learners from achieving their optimal learning

potential (Nel, 2013:5; Swart & Pettipher, 2011:6). This model acknowledges the critical role played by the environment and contextual factors in successful human functioning. This includes socio-economic circumstances, ideological and cultural contexts, as well as the types, intensity and duration of support that can reduce active participation (Nel, 2013:15; Soresi *et al.,* 2011:16). It is, therefore, essential that factors in learners' environment and community must be taken into consideration when teaching, assessing and supporting learners who experience barriers to learning (Nel, 2013:15). In the following table the medical and socio-ecological model is compared to enhance a better understanding of what both these models entail.

Table 2.1: Medical model vs. socio-ecological model (Nel *et al*., 2012:10; Swart & Pettipher, 2011:6)

Medical model	**Socio-ecological model**
• Identify difficulty • Assess child in isolation from daily life • Refer to specialists, special schools and special classes • The following was not considered: socioeconomic circumstances, diseases, home language and teaching methods • Curriculum inflexible	• Identify strengths • Consider environment and community of child • Assess learner within teaching and learning environment • Classroom offers support • Teacher reflects on teaching styles, methods and strategies to help • Systems are put in place to support teachers

2.3 Global development of inclusive education

Since the South African movement towards inclusive education originated within a global development it is important to provide some background on this.

The global movement towards inclusive education formally started during the 1990 World Conference on Education for All (EFA) held in Jomtien, Thailand. At this conference the focus on deficiency (i.e. medical model) was noted as upholding exclusionary practices and denying the rights of all learners to have access to learning (Nel, 2013:3). However, the EFA movement is not progressing as well as anticipated (Ainscow & Miles, 2008:30; Miles & Singal, 2010:1). The reason is that

within certain countries the rights of particular groups, previously discriminated against, were more emphasised in the movement towards inclusion instead of engaging in the necessity to improve the teaching and learning environment for all learners (Miles & Singal, 2010:2). Miles and Singal (2010:3) assert that the EFA movement could focus more on cultural and contextual appropriate educational programmes to address social and educational inequities. This would include enabling teachers to adapt teaching strategies to promote an environment of participation and acceptance.

After the Jomtien Conference, UNESCO, driven by a global movement on rights of children and the need for Education for All, adopted the belief that all children have an equal right to education. In 1994 the Salamanca Statement and Framework for Action on Special Needs Education came into being at the World Conference on Special Needs Education advocating that regular schools should provide effective education to all, where discrimination can be combated (UNESCO, 1994:6). The document adopted the principle that all learners should be incorporated into inclusive environments with support provided for those experiencing difficulties (UNESCO, 1994:12; Nel *et al*., 2012:6). Adaptive and accommodating teaching strategies to address a diversity of needs was realised globally as a key issue to making teaching more inclusive after the Jomtien and Salamanca conferences (Florian & Linklater, 2010:370).

Research in some countries has shown that with the adaptations of teaching strategies inclusive education can be successfully enacted. An example of a successful attempt to capacitate teachers with regard to an inclusive pedagogy approach (*cf.* 3.5.2) is a Scottish project that helped teachers to develop greater awareness and understanding of issues that affected learning by enabling them to develop inclusive teaching strategies to deal with different learning difficulties (Florian *et al*., 2010:719). Another Scottish example is where multi-sensory teaching approaches in Scottish mainstream schools encouraged learners with dyslexia to determine their own learning strategies through using auditory, visual, tactile and kinaesthetic approaches aimed at visual, phonetic and physical skills development (Davis & Deponio, 2015:523). In Canada the Universal Design for Learning (UDL) was implemented in inclusive schools. UDL refers to using a teaching strategy

designed for all learners. In this case UDL by means of technology was found to contribute towards self-efficacy of learners experiencing learning difficulties (Katz, 2015:1).

A more in-depth discussion with regard to teaching strategies will be provided in the next chapter.

2.4 Inclusive education in South Africa

In this section a brief overview of the development towards inclusive education in South Africa will be provided.

2.4.1 Policy development

2.4.1.1 NCSNET and NCESS

After the political transformation, in its commitment to provide quality education to a diverse learner population, the South African government appointed the National Commission on Special Needs in Education and Training (NCSNET) and the National Committee on Education Support Services (NCESS) in 1996 to investigate the transition to inclusive education. In their 1997 report the NCSNET/NCESS adopted an approach stating that the needs of all learners must be identified and addressed with the aim of removing all barriers to promote learning (DoE, 1997:55; Lomofsky & Lazarus, 2001: 304).

Among the key findings of this report it was evident that support services, policies and legislation were inadequate, and a lack of human resource development existed. The NCNET/ NCESS report asserted that in the previous education system:

- the curriculum did not respond to the diverse need of learners;
- specialised education and support served only a small percentage of learners within ‘special’ schools and classes; and
- specialised education and support were provided on a racial basis and catered mostly for the white population (Donohue & Bornman, 2014:2; Walton, 2011:240; Muthukrishna & Schoeman, 2000:320; DoE, 1997:57).

This report emphasised that there should be flexibility in the curriculum to accommodate a diversity of learning needs. A key strategy that was envisioned by this report and the subsequent EWP6 (DoE, 2001:49) (*cf.* 2.4.1.2) was to develop teachers' professional knowledge to enable them to implement a flexible curriculum and assessment practices that respond to differences and ensure participation of all. The vision of the report was that this would result in all teachers being flexible in the application of the curriculum and being able to critically reflect and evaluate their teaching practices in teaching learners with diverse needs (DoE, 1997:57).

The NCSNET/NCESS report also determined that terminology such as 'special needs' should not be used anymore, because of its labelling emphasis, but rather that the term learners who experience 'barriers to learning' be utilised. Education White Paper 6 was ultimately the result of NCSNET and NCESS recommendations (Nel *et al.,* 2012:7).

2.4.1.2 Education White Paper 6 (EWP6)

Influenced by the country's Constitution (Act 108 of 1996) founded on values of equality, human dignity and human rights, as well as the Schools Act (Act 84 of 1996), EWP6 on special needs education: building an inclusive education and training system was released in 2001. It was developed to create positive conditions for learners who did not attend school, as well as those experiencing barriers to learning, in a single and undivided education system (Hay & Beyers, 2011:235). EWP6 provides a framework and guidelines for the development and implementation of an inclusive education and training system. It acknowledged that the curriculum was a significant barrier to learning for certain learners regarding aspects such as content, language of instruction, teaching style and pace of teaching (DoE, 2001:19). Key foci of EWP6 were therefore redesigning the curriculum to be flexible in addressing all learners' learning needs and capacitating teachers to teach within an inclusive education environment. It was acknowledged by EWP6 that since teachers are seen as central role players in effecting inclusive education it is important to enable them with knowledge and skills to enact inclusion in every classroom (Florian *et al*., 2010:719; Forlin & Chambers, 2011:18).

The Department consequently prioritised orientation and training for teachers in assuming new roles with a learner-centred approach to learning and teaching that focuses on multi-level instruction where lessons can be planned with variations for individual learner needs, curriculum enrichment, co-operative learning and dealing with behavioural problematic learners (DoE, 2001:18-19). To achieve this, emphasis was placed on developing teaching strategies to accommodate all learners (DoE, 2001:9). This approach was consistent with international processes to understanding barriers to learning and planning teaching actions accordingly (UNESCO, 1994:27-28).

Other strategies of EWP6 were to restructure special schools as resource centres (SSRC), transforming some mainstream schools into full service schools, while still retaining mainstream schools as is (DoE, 2001:47). The SSRCs were also integrated into district based support teams (DBST) to use the resources (teachers and equipment) at these schools to support full service and mainstream schools regarding the adaptation of teaching, assessment and the curriculum for learners who experience barriers to learning. Learners attending the SSRCs are in need of high level support and full-service schools are to provide for learners with a medium level need of support. Both of these schools are also meant to assist neighbouring mainstream schools regarding teaching, assessment and curriculum adaptations. District based support teams, as well as institutional level support teams (ILST) at schools, were also established to provide assessment and instructional support programmes and materials, assessment instruments and professional support to educators at all schools (DoE, 2001:49).

The key duties of the DBST are to:

- Evaluate curriculum programmes and suggest modifications if necessary.
- Build the capacity of schools by supporting teachers to apply adaptive teaching, learning and classroom management to address learning difficulties.
- Provide professional development in adaptive curriculum and assessment strategies.

Key duties of the ILST are to:

- Provide support to learners by means of building teachers' capacity to address barriers to learning through teachers' interaction with learners and involvement in all aspects of learners' learning.
- Identify and address learner, teacher and institutional needs, specifically with regard to curriculum and assessment modification (DoE, 2001:29).

2.4.1.3 Ensuing key policies

To effect the implementation of EWP6 the following policies were drafted:

- Draft conceptual and operational guidelines for the implementation of inclusive education (DoE, 2002).
- Conceptual and operational guidelines for special schools as resource centres (DoE, 2005a).
- Conceptual and operational guidelines for full service schools (DoE, 2005b).
- Conceptual and operational guidelines for district based support teams (DoE, 2005c).
- National policy on assessment and qualifications for schools in the general education and training band (National Education Policy Act 27 of 1996).
- Guidelines for full service/inclusive schools (DBE, 2010a).
- Guidelines for inclusive teaching and learning programmes (DBE, 2010b).
- National strategy on screening, identification, assessment and support (DBE, 2014).

The last two policy documents are summarised briefly since aspects of them focus on employing effective inclusive teaching strategies. In order to accommodate all learners the following teaching strategies are proposed by the Department of Basic Education (DBE, 2010a; DBE, 2010b):

- Differentiation of learning programmes as well as work schedules and lesson plans. This can involve aspects such as breaking down assessment into more achievable components, reducing the number of learning programmes and allowing more time as well as designing individual support programmes (ISP).

- A flexible curriculum and assessments that can be adapted to a learner's needs.
- A multi-level teaching approach that includes lessons with various methods of learning, teaching and assessment.
- Cooperative learning whereby each group member in a heterogeneous group of different abilities is allocated a task that all members work towards solving a problem.
- Apply various teaching styles to accommodate different learning styles.
- Collaboration should take place among all stakeholders (*cf.* 2.5.1.5) and collaborative learning and peer support should be promoted instead of competition between learners.
- General strategies, such as minimising visual distractions, demonstrating activities and providing visual auditory reminders.

2.4.1.4 Curriculum developments

Since 1997 there have been a series of curriculum transformations to ensure that all learners receive quality education. This included Curriculum 2005 and thereafter the National Curriculum Statements (NCS) from 2002. In 2011 the NCS was revised and changed into the current Curriculum Assessment Policy Statements (CAPS). In all these curriculum policy documents inclusion and a consequent application of a flexible curriculum area are fundamental principles.

In November 2009 the Minister of Basic Education announced the new Curriculum Assessment Policy Statements (CAPS) (DBE, 2011a:13). The CAPS was to be a single policy document with a more simplified curriculum; redressing important subject knowledge; ensuring progress and continuity across grades; and assessments were to be more standardised (DBE, 2011:12-13).

The CAPS emphasised that lessons must include a variety of activity-based presentations. A key focus was to strengthen learners' content knowledge. It is stressed in the CAPS that content that is difficult for a learner to understand must be revisited until the learner can manage it. This requires that the content must be contextualised for better understanding (Landsberg, 2011a:84). Accommodating

diverse learning styles are regarded as integral to the inclusive principles of CAPS. This requires a variety of teaching styles and strategies as well as assessment practices to be able to address a diversity of needs (DBE, 2011:16).

Guidelines attached to the policy document intended to help teachers understand diversity and respond to it through the curriculum by means of differentiation (DBE, 2011:12-13). It is required by this policy document that teaching methods must be flexible with regard to:

- Learning materials – a wide range must be provided catering for various abilities, interests and learning styles, also taking into account learners with poor vision
- Methods of presentation – a range of teaching methods, styles and strategies for diverse needs including scaffolding (*cf.* 3.2.2; 3.3.3.2) must be applied
- Learning activities – differentiation of these provides access to learning for all and motivates learners to develop self-esteem
- Learning environment – a stimulating environment to promote well-being in a psychosocial sense and classroom space, size, displays and desk arrangements to develop physical satisfaction conducive to learning are regarded as essential
- Lesson organisation – differentiating and adapting activities to ensure maximum participation by all learners based on level of development, readiness, interests, learning profiles and backgrounds
- Assessment – the intended lesson outcome needs to reflect a learner's understanding of what has been learnt or what the learner is presently learning, inform instructional planning, evaluate success against pre-determined criteria, and identify learner needs and strengths
- A flexible curriculum allows for individual differences and meets diverse needs of learners without marginalising those who experience difficulties, and allowing adaptable assessments of learning outcomes (Wilde & Avramides, 2011:90-1)

As can be seen from the above discussions all the various South African policy documents as well as guideline documents emphasise an inclusive education

system where a flexibility of curriculum is required to address the diverse needs of all learners. This necessitates that inclusive teaching strategies must be applied. However, there is an array of challenges that complicate the implementation of inclusive education.

2.5 Challenges with regard to the implementation of inclusive education

In an inclusive classroom flexibility with regard to teaching strategies should be a focal objective in being able to address a diversity of needs. However, there are a range of factors that impact on the planning and application of a variety of teaching strategies, which can also be called extrinsic barriers to learning. Extrinsic barriers include conditions in the environment of the learner that have an impact on the learner (Nel *et al.*, 2012:15). These extrinsic barriers can include socio-economic problems, budget constraints, school policy issues and not being taught in a learner's home language.

2.5.1 Extrinsic barriers to learning

2.5.1.1 Socio-economic problems

There is a distinct association between socio-economic status and learning achievement (Bines & Lei, 2011:424). Numerous socio-economic issues affect learners' education and are more evident in a developing country like South Africa (Polat, 2011:55). This includes:

- Learners living with health issues and/or HIV/Aids, and those whose families are affected by health issues
- Orphaned learners
- Under-fed or poorly fed learners
- Schools located in rural areas where travelling to school is an issue
- Shortage of classrooms and other resources such as textbooks and teaching materials
- Gang warfare
- Lack of infrastructure such as water, sanitation, inappropriate playgrounds and inadequate buildings

- Overcrowded classes and not enough teachers
- Child-headed households
- Cultural barriers
- No pre-school exposure
- Lack of community awareness

In their research on teachers' perceptions regarding the effects of poverty in the implementation process of inclusive education Stofile *et al.* (2011:605) determined that poverty affects access and participation to education for learners. All the above factors also impact on how teachers plan for appropriate teaching strategies. Teaching through the curriculum should be meaningful, taking the environment in which the learner functions, learner needs and interests, and level of functioning into account when planning. Modifying content for learners to attain knowledge, skills and competencies also needs to be considered to provide an accessible learning experience that builds self-esteem (DBE, 2010b:5; *cf*. 2.4.1.4).

2.5.1.2 Budget constraints

A strategic reason why inclusive education was introduced was that it was believed that segregated special education involves prohibitive costs in developing countries, whereas integration of all learners into mainstream classes can be almost negligible in comparison (Armstrong *et al*., 2011:34). Nonetheless, Wildeman and Nomdo (2007:10) found that the implementation of inclusive education required more funding than was initially thought. Consequently, funding was not sufficient for the promotion of inclusive education because it entailed issues that require large funding resources, such as teacher education, adequate human resources, physical and learning infrastructure, transport and mobilising out-of-school youth to enter education in South Africa. As a result continuous professional development opportunities, support structures and availability of learning material as well as education equipment for learners with barriers such as visual, hearing and physical impairments are still inadequate (Engelbrecht *et al*., 2015:5-6; Geldenhuys & Weyers, 2013:15). In addition, lack of support, teacher knowhow and limited resources all correlating to budget constraints could complicate the adaptation of the curriculum as well as teaching and assessment strategies.

2.5.1.3 Inadequate implementation of policies

Although a range of policies (DoE, 2001) (*cf.* 2.4.1.3) with regard to the approach and implementation of inclusive education has been developed, the implementation thereof still seems to be problematic and not only due to funding constraints (Wildeman & Nomdo, 2007:10). According to Walton (2011:241) there has been slow progress towards inclusion with evidence of resistance to and non-implementation of policies.

Oswald and Swart (2011:390-3) assert that there remains a limited understanding of what inclusive education involves. This and a lack of training among teachers still present challenges toward implementing inclusion effectively. Yet teachers are expected to find ways in which to help learners who experience barriers to learning. Teachers' attitudes in the South African context were felt by Oswald and Swart (2011:309-3) to be more positive towards inclusive education if they were trained to deal with this aspect of as well as receive support. This often leads to teacher frustration and hence rejection of transformation policies. Further exacerbating the problem is that few schools have access to health professionals, therapists and social workers with whom teachers can collaborate to provide additional support to learners. There is often little collaboration between support services such as the DBST and even ILS teams, as well as a shortage of learning material resources that could aid learners with barriers to learning (Nel *et al.,* 2014:904). This results in teachers resisting the implementation of inclusive education policies because they believe that this will increase workload. Teachers also experience a low sense of self-efficacy and confidence in accepting responsibility to further inclusive education in their classes (Oswald & Swart, 2011:399, 401; Wildeman & Nomdo, 2007:6).

2.5.1.4 Language of learning and teaching (LOLT)

Many learners in SA are learning in their second language in which they are not proficient (Daniels, 2010:640). In many instances teachers are also teaching in their second language (Nel, 2011:169). This could mean that these learners experience barriers to learning as a result of their own or their teachers' limited proficiency. These barriers include: limited vocabulary of the language of learning and teaching

(LOLT); misunderstandings between the teacher and the learner; and struggling to carry out instructions and assessment tasks appropriately. It is affirmed by many researchers that mother tongue education is the better choice to enable learners to achieve their optimal academic potential. However, since parents believe that English will provide their children with more opportunities to achieve success in the world of academics and work, they will continue to choose English as LOLT. This means that teachers need to be prepared to adapt their teaching in such a way that learners become proficient in LOLT while learning subject content (Nel, 2011:174; Daniels, 2010:637).

2.5.1.5 Inadequate collaboration

Within an inclusive education system collaboration is essential to ensure the successful implementation thereof. Based on Bronfenbrenner's bio-ecological system numerous complex interactions, interrelationships and influences between a learner and other systems come to play (Swart & Pettipher, 2011:16). It is therefore essential that holistic support is rendered by all collaborative role-players in order to be able to plan and implement effective teaching strategies to assist the learner. Collaboration entails open communication, shared responsibility, collective decision-making and problem-solving, a supportive environment, shared resources, cooperation and accountability, and an environment fostering equality among all role players in education (Nel *et al.,* 2014:906; Sapon-Shevin, 2010; Scorgie, 2010:699). These role players can include the learner, teacher, parents, school management team, community members, health professionals and the district offices.

Having a range of learner support experts collaborating and supporting teachers to enable them to use a variety of effective teaching strategies in addressing a diversity of needs could have a positive impact on inclusive teaching. This however requires a commitment from all role players to understand that the participation and inclusion of all learners, including those experiencing barriers to learning, are key objectives of an inclusive classroom (Hay & Beyers, 2011:243; Soresi *et al*., 2011:16). However, inefficient collaboration among these role players, including official support structures such as the ILST and DBST, is a major challenge in enacting effective inclusive

practices and collaborative processes in the South African education system (Schoeman, 2012:18).

Research has found that DBSTs struggle to function efficiently and provide comprehensive support to schools (Daniels, 2010:641; Dreyer, 2008:88; Makhalemele & Nel, 2015:3). In addition, ILST's at many schools also appear not to function fully (Daniels, 2010:640). Besides limited human and physical resources to perform their duties, a reason for this seems to be that many of the members of these teams are not sufficiently skilled to provide assistance for adaptive learning programmes, resources, teaching strategies, assessment instruments and other professional support (Nel *et al*., 2014:904; Schoeman, 2012:18). Failure of these support services means that teachers are left unaided to identify barriers to learning and develop strategies to address these needs with whatever resources are available.

Since parents also have a critical role to play in supporting their children when experiencing barriers to learning, the non-involvement of most parents places a heavier load on teachers. When parents show indifference to scholastic activities such as homework tasks, teachers have to take this into account when planning lessons. However, teachers also have the responsibility to make an effort to continuously communicate with parents as they need to become aware of the part they need to play in the learning and support of their children (Okeke, 2014:7).

Collaboration between teachers within schools as well as among schools by sharing materials and knowledge can enhance knowledge and skills about a variety of effective teaching strategies (Swart & Pettipher, 2011:16).

2.5.1.6 Overcrowded classrooms

In developing countries, large classroom numbers are often the cause of negative attitudes towards inclusion. Teachers report that they have problems with classroom management which makes it difficult to pay extra attention to learners experiencing barriers to learning (Chhabra *et al*., 2010:222). This could impact on limited use of a variety of teaching strategies as teachers in overcrowded classrooms may be

stressed and overwhelmed by spending more time in managing classroom organisation and learner behaviour than teaching. Chhabra *et al.* (2010:220) found that high noise levels also impede teaching and could increase learners' inability to learning as noise acts as a distraction and makes it difficult for learners who experience barriers to learning to concentrate.

Lavian (2012:242), however, postulated in her study that it was not necessarily class size that affected teaching, but classroom dynamics; a complexity that could be altered through the school organisational climate and by supportive administrative procedures. Yet, teachers would have to practice effective classroom management strategies to promote academic engagement and minimise disruptions. Being able to manage the inclusive classroom is a crucial factor in helping all learners perform. It involves the ability to encourage a learning environment, the forming of relationships, mutual respect and a sense of belonging (Tomlinson, 2003:10; Landsberg, 2011a:76).

2.5.1.7 Disruptive behaviour

The most stressful issue in a teacher's professional life is challenging learner behaviour which is often also associated with learners that have additional disabilities or barriers to learning (He & Cooper, 2011:98). To be able to deal with disruptive behaviour teachers need to understand factors that contribute to such behaviour. They also need to be aware that many factors that lead to disruptive behaviour are linked to mismanagement in the classroom as well as the manner in which the curriculum is delivered (Chinn, 2010). This includes aspects such as:

- Teachers' inconsistent behaviour towards learners
- A rigid teaching style
- Inappropriately presented material that is either too simple or too difficult
- A disorganised and cluttered classroom with no setting of deadlines in which to complete tasks (Chinn, 2010)

Since behaviour problems are regarded as one of the most difficult challenges in managing an inclusive classroom, teachers need to educate learners that disruptive behaviour violates the rights of other learners and bring to all learners' attention that

responsible behaviour is expected of all in the classroom (Swanepoel, 2013b:113). It is important to deal professionally with behavioural issues by providing a positive climate of respect, trust and support, irrespective of behaviour, for a learner to respond positively (DBE, 2010:35). This strategy has been shown in a study by Wilde and Avramides (2011:97) to be effective in successfully incorporating such learners in inclusive education. According to Hamilton (2007:37) there are three components for a teacher to apply to change the undesirable behaviour of a learner:

- A clear articulate behaviour plan which includes a self-management strategy
- Teaching the learner to use the elected self-management strategy
- Creating ongoing situations to enable the learner to accomplish expected behaviour

Preventative strategies by the teacher in the planning stages such as seating arrangements, a variety of activities as well personal attention are also useful methods for restraining disruptive learners (Swanepoel, 2013b:117). Furthermore, teachers also need access to ongoing support from support structures (e.g. ILST and DBST) to deal with such learners and this is often not forthcoming. Many extrinsic barriers to learning, such as child abuse and family violence, can become interwoven with intrinsic barriers that can complicate matters further for learners (Nel *et al*., 2012:15).

2.5.1.8 Demands on the teacher

Inadequate training can result in inappropriate teaching methods being applied as many teachers lack knowledge, competencies and concepts to differentiate accordingly for diverse needs of learners. This can be aggravated by the lack of resources with which to differentiate. Teachers are expected to incorporate inclusive strategies with a limited knowledge base and little or no support from the DBSTs and ILSTs which can often lead to frustration (Dreyer, 2008:231).

Other demands made on teachers in an inclusive education system can include:

- A rigid curriculum and lack of flexibility thereof in schools. Florian and Black-Hawkins (2011:820) revealed that such constraints within the education system can restrain teachers' inclusive practices (*cf*. 2.4.1.1; 2.5.1.1)

- Learners with behaviour disorders and discipline problems disrupt classes and the teacher's input. This often affects the teacher emotionally and causes high levels of stress (*cf.* 2.5.1.8; 3.4.1.7)
- Teachers' initiatives to instil a sense of belonging and respect among learners are often countered by cultural barriers stemming from a divided community in the learners' home situation (Bines & Lei, 2011:424) (*cf.* 2.5.1.1)
- Some learners and parents take exception to extra attention given to learners with learning problems, exacerbating negative attitudes towards these peers and towards the teacher (Florian & Linklater, 2010:371) (*cf.* 2.5.2.1)

When adapting teaching strategies to be more inclusive and address diverse learning needs it is essential to know and understand intrinsic barriers as discussed below.

2.5.2 Intrinsic barriers to learning

Intrinsic barriers are conditions the learner experiences within himself or herself. This includes medical conditions, as well as learning, sensory and neurological impairments (DoE, 2004:39). Barriers for this study were considered according to statistical prevalence and excluded certain intellectual, genetic and physical impairments.

2.5.2.1 Learning impairments

A learning impairment is mainly due to a dysfunction of the central nervous system which can also occur simultaneously with an intellectual impairment, emotional disturbances and external risk factors, such as a disadvantaged environment (Dednam, 2011b:401). Learners with learning impairments can display the following intrinsic barriers to learning (Nel *et al*., 2012:16; Dednam, 2011b:400; Hallahan & Kaufman, 2006):

- 'Learned helplessness' – a tendency to believe that failure is imminent no matter how hard one tries
- Struggling to remain attentive
- Making careless mistakes

- Appearing not to listen when spoken to
- Hyperactive behaviour that causes interrelationship problems with teachers and peers
- Disinhibition and impulsivity where quick responses to questions are given that are often irrelevant; as a consequence, poor decisions are made resulting in the learner experiencing disparaging attitudes from teachers and peers
- Perseveration by repeating a continuous activity
- Learning in a second language makes it more challenging for a learner with a learning impairment (*cf.* 2.5.1.4)
- Difficulty in expressing feelings and needs leading to social incompetence and rejection by peers
- Sensory motor skills may not function fully, causing difficulty in balance and rhythm which affects language, mathematics and handwriting
- Textual-kinaesthetic perception can be affected, where problems are experienced in determining the forms of different letters and textures
- Poor tactile skills resulting in learners being unable to keep up with the rest of the class
- Reduced work speed
- Poor visual perception and as a result there is difficulty in discriminating between similar symbols, words, sequencing of similar letters and distinguishing different forms; this often affects visual memory and subsequently learners tend to lose their place in a book
- Spatial orientation problems that lead to difficulty discerning different directions with the inclination to reverse letters
- Auditory perception is also poor where, for example, discriminating between similar sounds can be difficult as well as analysing spoken words into sounds. Remembering the sounds of words in correct order can also be a problem as well as following a conversation among others
- Poor motivation causes limited active involvement in class and on the playground
- Poor language ability that affects the capability to communicate effectively and instructions can also be misinterpreted

- Poor gross motor coordination which is limiting when it comes to participating in sports and other activities
- Poor fine motor coordination; handwriting is often illegible as a result
- Emotional problems arising from the challenges to progress academically are experienced which can result in anxiety, depression and withdrawal
- Learning styles are not taken into consideration by teachers
- Poor memory often makes the learner forget previously learnt work, like mathematical combinations and solving problems
- Disorganised learning is experienced often, for example, place is lost when reading
- Poor sensory information causing the learner to experience difficulty with letter sound associations
- Struggling with spelling or reading

Most learners who have learning impairments also experience social barriers (Rix, 2011:270). Social barriers are often formed by the learners' inherent perspective of themselves and can include the following (Dednam, 2011b:416; Darlington Education Village, 2008):

- Problems with self-esteem and confidence
- Poor school attendance
- Unpunctuality
- Poor social skills
- Inappropriate behaviour and anger issues
- Low aspirations and resulting underachievement
- Poor attitude towards school

2.5.2.2 Hearing impairments

A hearing impairment is a broad term referring to varying degrees of the sensory disorder of hearing loss and could be a result of a sensorineural and/or conductive malfunction of the ear. Sensorineural hearing loss is caused by problems in the auditory nerve or inner ear; while conductive hearing loss refers to problems in the process of conducting sound waves in the middle or outer ear (Storbeck, 2011:385).

The development of communication and language skills are major challenges facing learners with this impairment.

Information is gathered from our senses and when a learner's auditory ability is impaired, hearing and understanding spoken instructions will weaken. This will require additional work from a teacher since it will be expected that more visual or tactile material is prepared and even a more intensive individualised education plan should be provided for such learners (Polat, 2011:52).

Learners with hearing impairments can experience the following barriers to learning (Nel *et al*., 2012:41):

- Learners do not respond to spoken instructions and fall behind the rest of the class
- the teacher's continual rephrasing for the hearing impaired could annoy the rest of the class and result in these learners becoming unpopular classmates
- Learners become restless or disruptive by distracting the class, often developing social problems as they realise that they differ from others
- The teacher or other learners are constantly interrupted while they are talking
- These learners find difficulty in constructional language related activities
- Learners tend to lose concentration making it difficult for them to work in group sessions and often choose to rather disrupt the class

2.5.2.3 Visual impairments

According to the Centres for Disease Control and Prevention (CDC) a visual impairment is one or more limitations in the function of a person's vision (CDC, 2010:1). Learners can be identified by the following characteristics (Nel *et al.*, 2012; Landsberg, 2011b:372):

- They struggle with reading or writing
- Hold their books either near or far, depending on what the visual impairment is
- Learners with visual impairments often do not wish to participate in certain physical activities, for example, catching a ball, because they can be signalled out as being incapable
- They also struggle to discern similar letter shapes

- Refuse to participate in ball games
- Frown or squint
- Rub eyes incessantly
- Find it difficult to write on lines
- Lose their place when reading

2.5.2.4 Autism

Autism is a neurodevelopmental disorder and another intrinsic barrier to learning found to be on the increase in our schools. Learners with Autistic Spectrum Disorder experience varying degrees of the disorder associated with repetitive activity and resistance to change. It manifests with impairment in social interaction, language and communication, and behaviour and imagination, impeding the learning ability of the learner and ability to communicate and interact with others (Nel *et al.*, 2012:20; Jordan, 2013:4).

2.5.2.5 Epilepsy

Epilepsy can be defined as a "sudden disturbance or change in brain function due to unusual electrical activity in brain cells" (Titus *et al*., 2008:893). Learners who experience convulsions during grand mal seizures are often left tired and disorientated. Academic difficulties are common among learners with epilepsy and those who experience the 'daydreaming' or 'cut off' spells of petit mal epilepsy often follow with a change in mood such as aggression (Nel *et al*., 2012:18; Klepping & Zaagman, 2009:30). In addition to the above, harmful side effects of medication for epilepsy can affect a learner's attention span and concentration.

2.5.2.6 Behavioural problems

Many of the above impairments, because of their nature, can give rise to what could be considered by teachers as behavioural problems. Attention Deficit Hyperactivity Disorder (ADHD) can be associated with extreme disruptive behaviour and these learners are reported to pose trying conditions for teachers. Learners who display such behaviour are often unpopular with peers and intensify their negative behaviour

in an attempt to draw much needed personal attention. Medication for Attention Deficit disorder (ADD) can result in further rebelliousness, aloofness or depression (Krüger & Kapp, 2011:15).

2.5.2.7 Mal- and undernourishment

In South Africa malnourishment as well as undernourishment is a major problem as a result of poverty. Consequently, many learners come to school hungry with little motivation to learn. Incorrect eating can also cause inattentiveness in class with some foods causing learners to be either passive or overactive (Luo *et al*., 2012:738; Nel *et al*., 2012:20).

Taking into account the diverse learning needs that arise as a result of extrinsic and extrinsic barriers to learning teachers need to have adequate knowledge and understanding about these barriers to be able to devise teaching strategies that can accommodate all learners in every classroom. In the next discussion the role of the teacher within an inclusive classroom will be addressed.

2.6 The role of the teacher in inclusive education

The role of teachers is seen as critical in the success of inclusive classroom practice through their attitudes and actions (Florian & Linklater, 2010:372; Forlin *et al.,* 2008:252).Teachers serve as role models with whom learners identify and this influence determines the degree of willingness to comply with what is expected of them in the classroom (Polat, 2011:52). According to the General Teaching Council for England (2008), teachers' ability to promote learners' learning is affected by their beliefs which can be enhanced positively through better understanding and more knowledge. The Council believes that teachers' disposition is important in order to promote positive beliefs in their learners as well as responding constructively to learners' mistakes. With appropriate training, teachers can be skilled with strategies in which to gain more positive dispositions. Teachers need to accept that all learners have the capacity to learn and it is their responsibility to enhance this learning by any means at their disposal (Florian & Linklater, 2010:378).

Acknowledging social justice should be a first priority for teachers to enact inclusivity in a classroom (Nel, 2013:2; Florian & Black-Hawkins, 2011:816; Ballard, 2003:59). Ballard (2003:66) asserts that teachers need to understand historical, cultural, socio-economic, gender issues, racism and ideological situations that create discriminatory practices in the classroom.

In addition to this, Barret and Green (2009:23) as well as Rodrigues (2009) feel that teachers need to develop a research attitude by continuously looking for more appropriate teaching strategies and experientially applying this in the classroom. Active participation by all learners should constantly be encouraged by teachers by exercising creativity and imagination. It is also important to have a resilient attitude by rather focusing on the learners achieving learning outcomes than emphasizing own teaching successes (Florian & Graham, 2014:467). Teachers who allow for reflection to integrate and modify their skills base to fit specific situations find it easier to develop new strategies (Barret & Green, 2009:17).

2.6.1 Attitudes and perceptions

In an inclusive classroom teachers need to demonstrate an approach towards learners that demonstrates understanding, empathy and nurturing of learners who experience barriers to learning by applying an appropriate assortment of teaching strategies that allow all learners to experience success (Florian & Graham, 2014:468).

A negative teacher mind-set and attitude can be a major barrier to the implementation of inclusive education when they believe that the presence of those requiring additional support (*cf.* 2.2.5) will hold back the progress of the rest of the class (Wilde & Avramides, 2011:88; Daniels, 2010 633; Hodkinson, 2010;65; Ainscow & Miles, 2008:21; Forlin & Lian, 2008:6). At the same time, a lack of adequate support (*cf.* 2.5.1.6-8) does not help to improve teachers' attitudes towards inclusive education (Hodkinson, 2010:62).

Wilde and Avramides (2011:88) assert that considerable influence on the attitude of teachers towards inclusive education is the divided loyalty they have for learners with

barriers to learning and the ‘rest of the class’. As a result, many teachers do not feel that all learners can be accommodated in the mainstream, with particular reference to learners with behavioural problems and others that are neuro-typical, such as autism. In research done by Ainscow and Miles (2008:23) teachers felt that an inclusive classroom would mean they could not treat everyone equally, as some learners would need considerably more attention than others.

In a study about attitudes of teachers in Finnish and South African schools by Savolainen *et al*. (2011:17) it was found that Finnish teachers’ sentiments towards interacting with persons with physical and learning disabilities were more positive than their South African counterparts and reflected the belief that they were more able to implement inclusive practices on both concrete and pragmatic levels. The reason for this could possibly be found in the obstacles already mentioned earlier (*cf*. 2.5.1.1-8; 2.5.2.1-7).

Naraian (2011:971) suggests that to promote positive attitudes in learners towards those with barriers to learning teachers would have to create a classroom culture where learners can take powerful stances against oppression and recognise their own ability to change others’ thinking.

Harnessing parents and the community as resources to change attitudes are also considered vital as often barriers to learning are rooted within the family and community environment (Nel *et al*., 2012:248). Often values taught at home may be in contrast to those taught at school, generating confusion or prompting learners to take sides.

According to Stronge *et al.* (2011:341-342) personal qualities that contribute to teacher efficiency within an inclusive education include: caring; social interaction with learners; positive attitude towards their profession; fairness and respect towards learners; and instilling enthusiasm and motivation in learners by utilising methods such as peer feedback and reflective practices. Teachers that uphold inclusive justice in the classroom view learners who experience barriers to learning as competent and ensure that they have opportunities to demonstrate their abilities (Higgins *et al*., 2009:474).

A teacher also plays a pivotal role in creating the social climate within the classroom as it is an important factor to learners' successful development and learning. Acting as a mediator of learning in a comfortable diplomatic environment will promote and encourage dialogue among all learners, despite their differences, as well as between learners and the teacher (Landsberg, 2011a:75). When learners are taught to be compassionate and to see things from another's perspective it will foster respect and result in learners who will function rationally in a democratic society (Sapon-Shevin 2003:27; Polat, 2011:52). In this manner the teacher serves as role model (Polat, 2011:52). Learners who identify with their teachers are more inclined to accept their teaching (*cf.* 2.6).

Garrett *et al*. (2009:520) declare that a caring classroom community and strong interpersonal relationships create a functional environment. An inclusive classroom with a positive social climate will therefore have teachers who exercise authority without too much rigidity, make learning fun, and are able to establish positive, caring interpersonal relationships (Sapon-Shevin, 2007:166; Woolfolk-Hoy & Weinstein, 2006:190).

Learner responses are often elicited according to how the teacher presents a lesson. Creating a relationship of trust during a lesson presentation helps both teacher and learner to develop a positive perspective towards one another and the learning process (Ragan, 2009:60). This requires expectations to be conveyed honestly to all learners in the inclusive class according to Naraian (2011:964, 969).

Learners experiencing barriers to learning need to trust in a system that will meet their individual needs and motivates striving to achieve to the best of their ability. Wide-ranging capabilities and impediments require individualising education for such learners (Polat, 2011:52). In order for teachers to meet the educational needs of these learners in an inclusive setting requires adaptation, such as a differentiated curriculum and also a variety of inclusive teaching strategies. In addition, Nel (2013:28) proposes that teachers should know individual learners' strengths and needs.

The role of teachers should always involve ongoing learning to enhance personal skills through further study, attending workshops, initiate scholastic and community projects and research methods and strategies that can be applied in their profession to advance inclusive education (Landsberg, 2011a:76). This also includes utilising the media such as the Internet and teacher education websites. As Bornman and Donohue (2013:102) assert it is ultimately up to the teacher to be willing to commit to making the inclusive environment a successful experience for all learners.

Forming collaborative partnerships with colleagues, parents and other professionals (such as health professionals) is an essential tool to effect inclusive education (Nel, 2013:28). Collaboration and interrelationships between role players in education fosters accountability through a collective, problem-solving and supportive environment. Professionals and parents can help identify barriers to learning and assist the teacher to develop strategies to address these needs. In addition, knowledge is honed and materials shared through collaboration among teachers (*cf*. 2.5.1.5).

2.7 Conclusion

This chapter has provided a theoretical background and approaches regarding inclusive education, as well as insight into both a global and South African perspective in educational transformation aimed at including all learners in mainstream schooling. Specific reference was made to barriers to learning and the role of the mainstream class teacher in establishing inclusive classrooms was also discussed.

A theoretical background and overview of teaching strategies for the inclusive classroom is provided in Chapter 3 and describes practices both locally and abroad.

CHAPTER 3

TEACHING STRATEGIES TO EFFECT INCLUSIVE EDUCATION

3.1 Introduction

In this chapter an exposition is given of theory that initiated alternative teaching strategies. Inclusive pedagogy is defined and research conducted locally and elsewhere is also referred to with regard to teaching strategies.

3.2 Theoretical framework

Theory is defined as ideas, assumptions and concepts that inform us about the world, people or aspects of reality and offers a framework to understand and interpret experiences with suggestions for courses of action (Swart & Pettipher, 2005:9). Theoretical background is important in understanding aspects of learning and contributes towards our understanding of the cognitive development of learners, the behavioural aspects regarding meanings, relationships and interactions among people, and the interdependence of individuals within the social context. Knowledge of these facets allows us to understand the needs of learners, to develop strategies to attend to these needs, and manage differences (Donald *et al*., 2010:33). The theories that will be addressed in this research include the behavioural learning theory, Vygotsky's Social Constructivist Theory and Bronfenbrenner's Ecological Systems Theory.

3.2.1 Behaviourism

Behavioural learning theorists propose that all behaviour is learned and that an individual's behaviour will be affected depending on whether the action of learning took place through punishment or reward (McLeod, 2015:3). Watson (2013, cited by Carter & Seifert, 2013:187) asserts that "we can't know what is inside the mind, but we can know what actions are observable in the world". Behaviourism is linked to a positivist philosophy postulating that relationships are discovered only by observation and experiment. This objectivist view discredits subjective ways of knowing and

understanding. Traditionally, behaviourists believed that learners need to be conditioned, where the final goal of conditioning is to produce a behavioural result. Learning is therefore based on a stimulus to which the learner responds. When behaviour is rewarded it reinforces the chance of similar behaviour in the future (Robinson & Lomofsky, 2010:140) (*cf.* 5.4.6); for example, a learner's correct answer to a question is an indicator of successful conditioning and then teachers continue to reinforce correct responses behaviourally by assigning good grades. The form of teaching used in conditioning to achieve the desirable behaviour is a direct teaching pedagogy, where the learner is considered as an unreflective responder, i.e. teacher-centred. The only involvement of the learner is when he or she displays the appropriate behaviour, for example, checking the correct box on a multiple choice test (Carter & Seifert, 2013:187; Boghossian, 2006:714-716). Thus, when learners respond positively to praise for good behaviour or good work it will result in inspiring the learner to learn and seek further success (McLeod, 2015:3) (*cf*. 5.4.5). Continual positive reinforcement of desired behaviour is believed to result in that behaviour becoming habitual (*cf*. 5.4.7). However, a critique towards behaviourism is that it does not take into account that negative behaviour can produce undesired consequences leading to resentment and associate learning at school with punishment (Donald *et al*., 2010:97-98).

The behaviourist approach also believes that skills are enhanced through revision and repetition, for example, mathematical processes that are continually repeated become embedded in a learner's memory (*cf.* 5.4.5). Modelling is another facet of reinforcement whereby learning takes place through imitation and observation used as prompts or stimuli (Brown & Green, 2006:35) (*cf.* 5.4.7).

Warin *et al*. (2011:1595) reduced the behaviourist approach to a few principles:

i) Knowledge is an objective reality and the teacher determines it completely.
ii) This knowledge is divided into elementary knowledge units, which are expressed in content to be known and ability to solve problems directly related to that content.
iii) Learning is done by learning the elementary knowledge, thus insuring the educational objectives are achieved.

iv) Assessment is done according to the teacher's model, and therefore is objective. It is quantifiable, individual and most often written.
v) Learning is conducted by the presentation of the teacher's knowledge.
vi) The learner learns by listening and reading, then trial and error, followed by reinforcement.

Although one must take care not to ignore the value of behaviourist principles in teaching (Abramson, 2013:55) in an inclusive education environment, different approaches to teaching need to be engaged (Nel *et al.,* 2012:27) (*cf*. 5.4.20). If appropriately applied the behaviourist approach provides learners with structure, organisation and learning activities from simple to complex (Brown & Green, 2006: 36).

3.2.2 Cognitive approach to learning

The cognitive approach focuses on learning as changes in knowledge in the mind (Carter & Seifert, 2013:187). This means that by sampling through watching others learning, knowledge and behaviour can change. It is also known as modelling, since we imitate the behaviour of others (Carter & Seifert, 2013:208). "Cognitivism is to be able to model and explain the mental activities that generate a behaviour" (Warin *et al*., 2011:1595). The human mind is consequently regarded as a machine for processing information, and the learner is therefore able to interpret the environment according to its mental schemes in order to internalise new knowledge (Warin *et al*., 2011:1596).

There are several cognitive theories that have influenced education but as this research concentrates on the constructivist perspective, the focus will remain in the constructivist theorist domain. Inclusive education is based on the principles of constructivism and constructivist theory mainly associated with works by Bruner, Piaget and Vygotsky (Donald *et al*., 2010:79) (*cf.* 3.2.3).

In the constructivist approach, knowledge is seen as the natural result of a constructive process with instruction supporting this process (Bichelmeyer & Hsu, 1999:4). It is therefore believed that learning results from the interaction between

learners and their environment and is not only a result of the influence of the environment. Learners are therefore actively involved in their learning, seeking meaning and significance and interpret information based on their personal representation. Kolb (1984) argues that active learning is acquired by individuals by doing more than thinking. Successful learning takes place when learners can contextualise what they learn for immediate application, allowing them to acquire personal meaning. A supportive teaching style rather than an interventionist teaching style is applicable in such a learning environment. This requires that the teacher must provide a rich and stimulating learning environment where he or she is more of a facilitator of learning and a mediator than merely a knowledge supplier (Warin *et al*., 2011:1597).

The social-cognitive theorist, Bruner, believed that a child's cognitive thinking is shaped by experiences within the child's social environment. He viewed the child as an active strategist as the mind searches for efficient ways to interpret information and develop strategies to deal with a situation (Bruner, 1964). Similarly, Jean Piaget's Theory of Cognitive Development postulates that children construct an understanding of the world based on what they know, their experiences, and what they discover in their environment. From this they are able to formulate ideas (Piaget & Inhelder, 1969). Vygotsky proposed that knowledge varies and is passed on by social interaction through a process of construction and reconstruction both socially and individually by individuals such as teachers and learners. A fundamental principle of his Social Constructivist Theory is the belief that individuals seek understanding of the world in which they function and knowledge is linked to what is relevant and previously known to them. From this basis, new understandings can be construed and added onto previous knowledge (Donald *et al.,* 2010:30, 80; Nel, 2013:23; Creswell, 2009:8) (*cf.* 3.2.3).

Taking Piaget, Bruner and Vygotsky's cognitive theories into consideration, addressing the diverse needs of their learners in the inclusive setting entails teachers to become familiar with the knowledge base of each individual in order to assist the individual to develop further understanding.

Gagné (cited by Warin *et al*., 2011:1596) has described nine events of instructions that can serve as a guideline to a constructivist pedagogy:

1) Gain the learner's attention
2) Inform learners of the objectives
3) Stimulate recall of previous learning
4) present the content
5) Provide for learning guidance
6) Elicit performance
7) Provide feedback
8) Assess performance
9) Enhance retention and transfer to the job

This means that a practical approach to a constructivist lesson is to begin the lesson with a stimulating question or an original fact, then present the lesson outcomes, followed by the lesson content. It is important to connect the new knowledge to previous knowledge and encourage learners to organise the knowledge. The content must be presented in different forms and different paths (adapted from Kruse, 2009:1).

3.2.3 Social constructivism

Vygotsky is regarded as the pioneer of social constructivism (Donald *et al*., 2014:79). In the social constructive theory, knowledge is considered to be actively and continuously constructed and reconstructed by individuals, groups and societies through reflection and experience (*cf*. 3.2.2; *cf*. 5.4.3). A learner-centred teaching approach that is activity based is important in constructivist theory as knowledge is not passively construed. Meaning is actively constructed in individuals' lives by social and cultural interactions. Learning can therefore not merely be passively passed on but always needs to be reconstructed anew (Donald *et al.*, 2010:79). Although sometimes learning can be passive as the teacher explains or demonstrates a concept, a connection with learners still needs to be made to ensure that the work is understood by ensuring that learners become actively involved (Nel *et al*., 2012:29).

Vygotsky promulgated that mediation is the process that assists a child to construct knowledge from cognitive tools such as planning, problem-solving and reasoning with guidance from another person, such as a teacher, to facilitate the process. In Vygotsky's zone of proximal development (ZPD) a process of cognitive mediation takes place and refers to the crucial moment where something may not be clearly understood by the child, but the potential of learning exists and is stimulated by means of proximal interaction with another person (Donald *et al*., 2010:55). Learning and the construction of knowledge are therefore facilitated through social experiences and collaboration between the teacher and learners on an interpersonal level (Nel *et al*., 2012:11). Collaborative learning skills are regarded as an integral part of social constructivism (Warin *et al*., 2011:1597). This suggests that the classroom environment needs to stimulate communication among learners as well as between educator and learners (*cf.* 5.4.5).

The facilitation of learning through social interaction espoused by constructivist principles of teaching practice (Vygotsky, 1978; Bruner, 1966) fosters critical thinking through co-operative activities (*cf*. 5.4.5). This encourages meaningful learning as mediation is incorporated at peer level and promotes active agency, thereby motivating learners to take responsibility for their own learning. This study takes into account that development of knowledge that takes place within a social context with language as a vital constituent in mental development and the ingredient to meaningful interactions (Donald *et al*., 2010:54). Constructivist principles central to teaching and learning include (Donald *et al*., 2010:84-91):

1) Process and content: What is taught as well as how it is taught is of equal significance. Helping a learner to grasp the basic composition of a topic will improve the learner's understanding of the content; therefore the process of learning is enhanced through effective learning strategies.
2) Active learning: Opportunities that keep learners actively engaged are created by teachers for active learning which turns the 'unfamiliar into the familiar' and ensures that all learners are occupied, and should often incorporate fun activities such as field work and experiments (Donald *et al*., 2010:85) (*cf.* 5.4.19).
3) Connecting familiar to unfamiliar: Donald *et al*. (2010:84) concede that in order to learn new information the learner's prior knowledge has to be taken

into account to enable an understanding from the 'familiar to the unfamiliar'. The teacher can do this through mediated learning and link concepts to aspects such as cultural customs and the learner's immediate environment (Nel *et al.,* 2012:30). Teachers can assist learners by being aware of the following associations as a means of connecting from what is familiar to that which is unfamiliar (Engelbrecht, 2013b:39-41):

- Connecting individually – learning takes place the moment a learner is challenged and guided to understand the more advanced level and integrate the unknown into that which is known
- Connecting form and content – both familiar and unfamiliar content can be used to connect and grasp, for example, a mathematical concept
- Connecting through cognitive conflict – applying Piaget's (1953) concept of cognitive conflict, which is information or experience that a learner might struggle to deal with but which challenges the learner
- Towards a more effective manner of organising and dealing with the situation (Donald *et al*., 2010:50)

4) Guided discovery: Promoted by Bruner, this principle refers to teachers guiding learners to discover aspects of understanding that are connected with learners' previous understandings (Bruner, 1966; Gagné, 1965). Guided discovery necessitates well planned lessons that incorporate strategic thinking in solving problems and allows for reflection and argument over solutions with peers (*cf*. 5.4.3).
5) Scaffolding: This technique requires mediating strategies and structures for certain areas of knowledge and then gradually these structures are removed as learners understand concepts (*cf*. 3.4.2.3; *cf*. 5.4.5).
6) Group work and co-operative learning: This method requires joint involvement in solving a reasonably challenging task and must involve all members to be effective (Ensor, 2009:58). It encompasses mediation among peers, and promotes stimulation of cognitive conflict and active engagement (*cf*. 3.4.21; *cf*. 5.4.5).

7) Language interaction: Language is espoused by Vygotsky and Bruner as an important principle in teaching and learning as it is the manner in which people communicate and transfer knowledge, whether in writing, speaking or reading. Language also promotes social development and develops confidence in learners, meaning that proficiency in the language of learning (LOL) and teaching is important (Donald *et al*., 2010:85, 89) (*cf*. 5.4.4).
8) Other modes of representation not to be neglected by teachers are in the form of dance, art and music. These representations can be applied in the diverse classroom to enhance appreciation of the rich diversity of cultures in the South African context to develop respect for one another. The constructivist principle of connecting familiar to unfamiliar can be applied through the arts by sharing one's own ways of enjoying the arts with others and then learning other individuals' ways of enjoying the arts. Co-operative learning from the constructivist perspective can also be enhanced through group work in the arts, such as by organising a school function.

3.2.4 Bio-ecological theory

Bronfenbrenner (1977:526) identified different levels of a social system and influenced our understanding by describing how these interact in the process of a child's development. He introduced a model with four interacting systems that generate a balance for a child to function effectively. These are ecological systems which describe the interdependence between organisms and their physical environment, and the balance they create through interrelated social interactions, relationships and influences among the systems (Donald *et al*., 2006:36-7; Nel *et al*., 2012:11-12; Swart & Pettipher, 2011:11).

Bronfenbrenner (1977:518) ceded that a child's development is the result of a network of interactions that can be cultural, political, social, economic and psychological. Changes within systems can be an advantage when viewing learning support in schools, provided that positive interactions occur on a regular basis to be effective. The bio-ecological framework offers an understanding of challenges within the interconnected systems in dealing with social issues and barriers to learning faced by the individual learner. These social issues and barriers need to be taken

into account when considering the design and application of teaching strategies in diverse settings.

Bronfenbrenner (1977:518) also identified four interacting facets affecting child development, which are important to take into consideration when teaching. These include:

- Person characteristics: disposition towards situations and ecological resources such as physical defects, mental impairment or hyperactivity that influence a person's capacity to function successfully
- Proximal process factor: interaction between a person and the person's environment with emphasis on relationships and interactions with others
- Context: person's development, for example, within the school or family situation
- Time: changes within the environment over a period of time

According to Bronfenbrenner the above interacting dimensions occur within four 'nested systems' in which child development takes place (Donald *et al*., 2006:40; Swart & Pettipher, 2011:11-13). I considered these systems important for my study as each system would inexorably have an effect to some degree on every individual learner and I wanted to know if teachers had taken this into account in their everyday teaching practice. The systems include:

- The macrosystem that consists of subsystems that can all influence one another. In South Africa this includes social values and political responsibility involving aspects such as policies
- The microsystem is seen as the interaction between the individual and his or her immediate environment, such as the school, peers, the teacher and family
- The mesosystem is a series of interacting microsystems that could have a positive or negative influence on a learner, such as a learner not supported by his parents may receive care and support from a neighbour or teacher which could change his initial sense of insecurity (*cf.* 5.4.1.4)
- The exosystem refers to environments that may affect the learner, such as poor health services, failing, an ill family member and influencing the learner's development

- The chronosystem is the effect of interactions between systems on the individual within specific time frames, such as the effect of the apartheid system in South Africa and its effect on the development of all children (Swart & Pettipher, 2011:15)

As the above systems, put forward by Bronfenbrenner (1977:518), are interdependent of each other, all of them need to be considered when implementing teaching strategies that advance inclusive education, due to the influence that every system has on each unique individual learner. The theories explained above allowed me to explore methods and strategies used by teachers to create a classroom environment that promotes inclusive education in the Foundation Phase mainstream class.

3.2.5 Bloom's Taxonomy of Learning

In 1956, Dr Benjamin Bloom provided an important framework for teachers by developing a hierarchy of six levels to assist teachers in utilising multiple instructional methods (*cf*. 3.3.4), such as designing tasks, crafting questions and providing feedback on their learners' work (Bloom *et al*., 1956). These levels are described below.

- Level 1: Knowledge – the ability to recall previously learned material, such as recognising facts, methods and concepts
- Level 2: Comprehension – be able to understand what is being learned, draw conclusions and make deductions, such as being able to describe, classify and summarise
- Level 3: Application – to know how to apply information that has been learned to situations that are new and unfamiliar
- Level 4: Analysis – the ability to break into parts information that has been learned to detect motives, to classify elements of a whole and identify relationships, and ultimately clarify and make conclusions
- Level 5: Synthesis – to be able to combine elements into patterns that were not evident before, and assemble or integrate parts to form a new whole, such as, creating a poem or an advertisement

- Level 6: Evaluation – the ability to assess information according to certain criteria logically and state reasons, such as a debate on the merits of wearing a school uniform

According to Bloom *et al.* (1956), learners can achieve all of these levels which can be reached by means of differentiated teaching. This is important to my study, particularly where it concerns learners experiencing barriers to learning, as it allows teachers to understand their learners better and consequently develop more appropriate teaching strategies that allow a learner to progress to the next cognitive level.

Though Bloom's Taxonomy was revised in 2001 by Anderson and Krathwohl (2001), the original concept remained the same with more pertinent additions to contemporary learning of how the taxonomy interacts on different types of knowledge, inclusive of factual, procedural, conceptual and metacognitive. Emphasis from the noun towards the verb is evident in the descriptions of the various levels in the new taxonomy and the various cognitive processes are designed to make learner assessment easier (Anderson & Krathwohl, 2001). These are described below.

- Level 1: Remembering – recalling or recognising knowledge from memory by retrieving previously learned information
- Level 2: Understanding – constructing meaning from various functions, comparing, explaining, written messages or activities
- Level 3: Applying – carrying out a procedure by implementing through the use of learned material, such as interviews, or presentations
- Level 4: Analysing – breaking concepts or material into parts and determining their relationships to one another or to a whole
- Level 6: Creating – bringing components together to form a logical whole, such as reorganising through planning or producing

Until now the theoretical framework underpinning this study has been discussed. In the next section a conceptual framework is presented in order to clarify all relevant concepts.

3.3 Conceptual framework

3.3.1 What is a teaching strategy?

Teaching strategies are a broad plan of action for teaching and learning activities to achieve aims in the desired course content that entail setting goals and developing plans to achieve these goals. These aims and plans also need to be evaluated to accommodate learners' learning styles (Landsberg, 2011a:84; Mahaye, 2003:210). Teaching strategies contain methods teachers use to help learners access information by determining achievable goals. This can be done by:

- visualising, such as, by displaying pictures (*cf.* 5.4.5);
- auditory methods, through listening to the teacher or a recording (*cf.* 5.4.5); and
- kinaesthetically by letting learners experience a situation and actually doing something, such as an experiment.

It is therefore important to use a variety of teaching strategies, methods and teaching styles within the education system to accommodate the diverse learning needs that can originate from the aforementioned. Appropriate planning for a teaching strategy can help identify the different teaching methods to enable teachers to develop or adapt activities in order to ensure all learners understand the content (Donald *et al*., 2010:81). Differentiation in all aspects of teaching should be considered to accommodate all learners. This should be incorporated when planning lessons, developing assessment and for designing a variety of classroom activities. Group work and peer teaching are also considered effective teaching strategies.

Besides taking into consideration different ways of learning, learners' developmental levels and types of intelligence, research has also shown that issues such as personality traits, socio-economic background, experience and the environment in which learners function impact on their learning (UNICEF, 2010:1). Taking this into account teachers need to choose topics that relate to the learners experiences and encourage participation and involvement. Collaborating with colleagues enhance learning environments through effective classroom management, tested teaching and curriculum adaptation strategies, and sharing of resources (Ainscow & Miles,

2008:16; Florian & Black-Hawkins, 2011:822). In addition, collaborating with parents is an effective teaching strategy that serves to motivate learners.

This research will explore the various teaching methods that could be effective in addressing diverse learning needs in the Foundation Phase classroom.

3.3.2 What is a teaching method?

Teaching methods comprise principles, practices, procedures and methods teachers use to convey knowledge to learners and reach an anticipated outcome (Mahaye, 2003:210). Effective teaching methods engage learners with subject matter through active learner participation, demonstration or memorisation, often determined by the ability of the learner and the subject matter to be taught (Donald *et al*., 2010:81).

A variety of teaching methods should be used to accommodate all learners in the inclusive Foundation Phase classroom and must be part of the lesson planning stages. It is suggested by Nel *et al*. (2012:124) that in order to address all learning styles (*cf.* 5.4.3) as well as implement differentiation (cf. 3.6.2; *cf*. 5.4.5)—a key strategy of instruction in an inclusive classroom—teachers need to know their learners by interacting with them and keeping learner profiles to follow their progress (Nel *et al.,* 2012:124). With an emphasis on participative methods between teacher and learner as well as between leaners and a focus on learner-centred learning teaching, methods in an inclusive classroom could include the following activities (Mahaye, 2003:212-216):

- A variety of teaching methods to address all learners' diverse learning needs and ensure all learners understand the content (*cf*. 3.6.2; *cf*. 3.6.2.1.2)
- Direct teaching by the teacher, whereby an initial explanation of a concept is discussed but also encourages learners to make their own independent decisions
- A differentiated approach, especially in applying the language of learning and teaching (LOLT) that incorporates differentiation of instruction methods as well as that of content to vary the complexity of an exercise or activity
- Peer teaching in pairing or groups

- Class or group discussions whereby the teacher ensures full participation, respect of opinions and understanding of work, which includes explaining, problem-solving, predicting and debriefing of work to follow
- Interesting and creative presentation that is captivating
- Open-ended questioning by the teacher that requires learners to expand on their answering
- Demonstrations by teacher and learners
- Fun activities of varied intricacy to facilitate all learners, such as games, simulation, word games and crossword puzzles that enhance sequencing
- Contextualising and explaining new vocabulary by using activities such as stories, poems and excursions
- Linking learning to real life scenarios, especially in mathematics (Nel *et al.,* 2012:233)
- Use of resources, such as flow charts, flash cards, flannel boards, globes, maps, transparencies, models, slides, exhibits, posters, murals and montages
- Cooperative learning to enhance group dynamics (*cf*. 3.4.2.1)
- Experimentation, dramatisation, role play and field trips
- Recordings and audio tutorials
- Learners' reading aloud or independently, shared reading in groups, or small group reading instruction (Lapp *et al*., 2007:40-51)
- Use of technology and instructional resources
- Developing individual education plans (IEP) for learners who experience barriers to learning (Nel *et al*., 2012:68)
- Brainstorming within groups or as class exercise with all ideas accepted and all participating in choosing the best ones (Mahaye, 2003:221)

3.4 Teaching approaches

A teaching approach to learning is a technique that a teacher employs to teach in the classroom. The two distinct approaches to teaching and presenting material to learners are through deductive teaching and inductive teaching. Both are regarded as useful in their application and are described as follows (Blumberg, 2008; Mahaye, 2003:210):

- Deductive teaching is a teacher-centred approach whereby the teacher explains a new concept and then learners put it into practice (*cf.* 3.4.1). This practice is mechanical in its presentation and can pay little attention to meaning and could be effective with highly motivated learners or when recapping for exams. It is often preferred by teachers and is seen as a quicker method of teaching in overcrowded classrooms.
- The inductive approach to instruction, in contrast, is from a learner-centred perspective (*cf*. 3.4.2) whereby the teacher presents learners with demonstrations or examples and allows learners to take note of how the work is done and then apply it to their own work. In this approach, learners are more actively involved in their learning experience.

There are positive and negative aspects for both these approaches and though the move is towards learner-centred teaching, it is believed that learners can benefit from the balance of a combination of the two approaches to ensure that all learner needs are met (Blumberg, 2008).

3.4.1 Teacher-centred approaches

The teacher is the focus of the teacher-centred approach where learners listen as the lesson is delivered and collaboration is not emphasised during activities (*cf.* 3.2.1; *cf.* 5.4.5). The classroom remains orderly and the teacher intervenes and controls tasks. This approach also encourages learners to be independent and to make their own decisions. Another favourable aspect of this approach is that in overcrowded classrooms where English as LOL is not the home language, learners are committed to making an effort to understand the teacher, whereas the learner-centred approach incorporates considerable peer interaction with the result that learners often revert to verbalising in the home language. The negative side of the approach is that communication skills are not enhanced as learners have little opportunity to express themselves and ask questions. In this respect learners do not direct their own learning (Blumberg, 2008; Schweisfurth, 2011:430; Vavrus *et al*., 2012:1).

3.4.2 Learner-centred approaches

This approach to teaching allows teachers to employ a variety of teaching methods that shift the role of teacher from the giver of information to facilitate learners' learning. Teachers who adhere to learner-centred classrooms are strongly influenced by principles of constructivism and social constructivism (*cf*. 3.2.3). Learner-centred approaches, such as an inclusive pedagogy (*cf.* 3.6.1), are more favoured and encouraged in inclusive education. In this approach, learner participation in the decision-making process of what is to be learnt, how to learn, and the type and amount of help required is emphasised (Monyai, 2006: 104; Sharma *et al.,* 1999:839).

The teacher as a mediator of knowledge first ensures that learners have prior knowledge to be able to connect with new knowledge. Experiences need to be provided by the teacher that allows the learners to identify with their own knowledge and incorporate this with their learning in the classroom. Teachers provide scope for learners to explore and test their learning in a variety of ways, including multi-sensory experiences. Learning is facilitated through experimentation and by posing open-ended questions to further learners' thought processes. The teacher also serves as temporary support or to bridge the learning process and guide learners onto the next step (Warin *et al*., 2011:1597) (*cf.* 3.2.2). In addition, learners are offered the freedom to apply their own ideas and discuss concepts freely with others (Monyai, 2006:126).

Learner-centred teaching focuses on the active process of learning, thus encouraging learners to take responsibility for their own learning, leading to increased motivation and confidence (Blumberg, 2008) (*cf.* 5.4.5). The direction and purpose of the lesson is also determined in the process with strategies such as active presentations, investigation, projects, brainstorming and field excursions (Nieman, 2006:34). Since communication and collaborative skills are encouraged in this approach, learners become more interested in learning because they participate actively. In the South African context, a learner-centred approach can be used more appropriately to encourage communication about cultural differences, while active engagement in the LOLT enhances language skills Monyai, 2006:126).

Negative aspects to this approach are that it can lead to noisy and chaotic classrooms. In addition, teachers can struggle to manage all learner activities at once as learners could be working on different stages of a task (Blumberg, 2008; Schweisfurth, 2011:430; Vavrus *et al.,* 2012:1).

3.4.2.1 Cooperative learning and teaching

Cooperative learning entails a team effort where individuals work in cooperative learning groups to reach a common goal (Henson *et al*., 2004:208). This requires positive interdependence within the group to achieve a mutual outcome, where tasks are divided among group members and roles are specifically assigned (Landsberg, 2011a:79). According to Karpov (2003), cooperation involves social skills that include trust, communication, support and conflict resolution as education advancement takes place through group members' encouragement and acceptance of each other's efforts. In a cooperative learning activity the task of the teacher is to explain the group assignment so that it is fully understood by all members of the group. This also serves to foster mutual respect at all times among learners as well as between teachers and learners (Grosser, 2014:6; Landsberg, 2011a:79; Henson *et al*., 2004:280). According to Grosser (2014:6), cognitive conflict occurs in group discussions which enhances intellectual development, while emotional development is also nurtured through group support in the process of learning to work with and respect diversity. Since the group is accountable for achieving tasks each learner is to be held responsible, necessitating active involvement of all members (Karpov, 2003:382) (*cf*. 5.4.13). Reflection on the success of individual members as well as the group's contributions is also regarded as a vital constituent of cooperative learning (Grosser, 2014:7). Cooperative learning can be a key element in multi-level teaching (*cf.* 3.6.3) where lessons should be planned to accommodate all levels of learning in the inclusive classroom situation.

In an inclusive classroom where diversity is accommodated the value of trust and a disposition to communicate within a cooperative group should be taught and encouraged by the teacher. In a group where there is trust, despite differences, conflict is easier to control. This necessitates that the teacher is aware of the various

potential skills of the learners and the contributions they can make, and discretely encourages this in the group setting (Donald *et al.,* 2010:90). Further to this, reflection is essential at the end of a group task as learners should evaluate their contribution towards the outcome of the activity. This can be done by asking open-ended questions with less emphasis on correct answers but rather ensuring participation by all learners. It is suggested by Donald *et al.* (2011:90) that groups could be varied with long-term tasks that can take weeks to complete or activities that last the duration of a class lesson. It is also important that groups are heterogeneous and often rotated to stimulate cognitive conflict and active engagement, promote social development, encourage respect for gender and diversity and refine proficiency in the LOLT (Donald *et al*., 2010:85; 89) (*cf*. 3.4.21; *cf*.5.4.4; *cf*. 5.4.5). The teacher should at all times promote constructive social interaction through support and praise for the individual as well as the efforts of the group as a whole. This helps to highlight the importance of each member's contributions while removing any feelings of inadequacy by certain learners (Donald *et al.,* 2011:90).

The advantages of co-operative learning apart from involvement include increasing self-esteem and self-worth, cooperative problem-solving, a more positive attitude to learning, social interaction and peer acceptance. A disadvantage of this form of learning is that more confident learners can dominate the group, resulting in a learner who experiences barriers to learning opting for a submissive role. Another disadvantage is that gifted learners could be inhibited by being subjected to the work pace of the group (Grosser, 2014:25). In South Africa class size could further hamper the successful application of this strategy (*cf*. 2.5.1.6; *cf.* 5.4.8) and result in roused noise levels and behaviour problems (Engelbrecht *et al*., 2015:6). It is therefore essential that proper planning is done to gain the most learning from cooperative learning. By knowing their learners, teachers can place a learner with behaviour issues in a group setting where certain behaviours might be frowned upon by group members, thus spurring a positive response in the learner's behaviour to conform to the rest of the group. Tactics such as using clear instructions and keeping desks clear of distractions also foster attention skills and alleviate many behaviour problems (Gregory, 2008:36). It has also been found in South Africa, however, that some teachers in the inclusive classroom place learners in homogenous ability

groups and provide them with different educational material than the rest of the class. These teachers feel that leaners with barriers to learning would feel more comfortable with material that they can cope with. This prevents learners from moving forward as full participants with the opportunity for more challenging tasks denied them, and even less motivated as they also become aware of being treated differently from the rest of the class (Engelbrecht *et al*., 2015:6).

3.4.2.2 Cubing

This instructional strategy is associated with a cube which consists of six sides and asks learners to consider a concept from six different perspectives that incorporate describing, comparing, associating, analysing, applying and arguing. According to research, the strategy is tied to stages of Bloom's Taxonomy of Learning (*cf*. 3.2.5) and encourages problem-solving and thinking skills (Bornman & Rose, 2010:78-80). These skills include:

- Describing through recognition and memory
- Comparing to indicate understanding of the matter at hand
- Associating by applying facts to the given situation
- Analysing information by breaking it into smaller parts
- Arguing for and against and applying facts to new situations (Landsberg *et al*., 2011a:82; Gregory & Chapman, 2002:4)

Both cubing and Bloom's Taxonomy of Learning prioritise the modification of content and different instruction methods (*cf*. 3.6.2; *cf*. 5.4.5) to address different levels of learning needs encouraged in inclusive education. Bearing the multidimensional sides of a cube in mind in a classroom with diverse needs, teachers should present lessons in a variety of ways so that all learners can be given the opportunity to understand, while at the same time learners can be taught to consider various ways of looking at an idea (Gregory, 2008:36). In a cubing approach, reflection at the end of a lesson takes into account all considerations as discussions are held, and it is consequently important that all learners are encouraged to participate (*cf*. 5.4.2).

3.4.2.3 Scaffolding

Bruner's (1966) scaffolding idea, based on constructivist practice (*cf*. 3.2.3), is a learning process that is tailored to the needs of the learner and can be an effective teaching approach to accommodate diverse learning needs. Likened to a scaffold in the building process, it offers support to help a learner along during the learning process and is therefore also a multi-level teaching method (*cf*. 3.6.3). The teacher models the expected problem-solving technique, presents new approaches to solve the problem and encourages the learner to use personal skills. As the learner assumes more responsibility to solve the task independently, the teacher presents progressively more challenging tasks (Vygotsky, 1978:79; Petersen *et al*., 2002:13-19). Explaining concepts continuously, demonstrating through modelling, and questioning learners to determine their understanding of a topic or concept are essential teaching activities during scaffolding (*cf.* 5.4.5). Scaffolding can also be part of tasks, such as steps in a mathematics problem or visual clues to comprehension questions.

Peer support can also be employed during scaffolding. As better understanding is gained, peer support is gradually withdrawn until the learner is able to assume responsibility for his or her own learning (Landsberg, 2011a:82). A positive feature of peer assistance in the practice of scaffolding is that while the teacher focuses on certain learners experiencing problems, the other learners are also busy learning with the help of their peers. Learners could also feel more comfortable interacting with a peer. A disadvantage of peer support in scaffolding could be that learners experiencing barriers to learning may feel inferior to their peer tutors. Feedback on the progress of the scaffolding process, especially in large classes, could also be difficult to achieve with peer support.

Educators who make an effort to familiarise themselves with the potential of their learners are better prepared to scaffold an individual learner to the next potential level of development and consequently more able to steer a learner towards a higher level of cognitive thinking (Walton, 2012:131) (*cf.* 5.4.3).

3.4.2.4 Repetition

With regard to repetition, it is important to first ensure that learners have understood the content for them to benefit from memorising through repetition. Content should therefore not merely be imparted. According to Richards (2003:34), learners should be taught new knowledge or skills a step at a time to provide learners time to process and associate the information with prior knowledge and skills. Some learners may find multiple repetitions boring and then not pay attention. To enhance repetition, 'association' strategies are recommended. These strategies should form a memorable pattern, such as movement, humour and songs, icons, keywords and mind maps (Richards, 2003:34).

3.5 Teaching to a flexible curriculum

Donald *et al.* (2010:14) describe a curriculum as a syllabus (that what is prescribed to be taught, i.e. the current CAPS), but also as processes that involve methods of teaching, assessment and decision-making. These authors believe that a flexible curriculum involves adapting what is to be taught in the curriculum in such a way that it accommodates the diversity of needs of learners. Diverse needs can be a result of aspects, such as learners' level of ability, home circumstances and life experiences (Donald *et al*., 2010:21) (*cf.* 5.4.3). Teachers therefore need to be aware of any intrinsic and extrinsic barriers to learning learners may experience in order to adapt the curriculum, by addressing the needs of all learners while still achieving the outcomes (*cf.* 5.4.16). According to Engelbrecht, Nel *et al.* (2013:217) a flexible curriculum means that classroom organisation and management revolves around the type of activity using different tools, methods and techniques to ensure successful learning takes place. At the same time a variety of material and equipment should be available during activities to address all learning styles and needs (Engelbrecht, Nel *et al.,* 2013:217) (*cf.* 5.4.3). According to Roy *et al.* (2013:1200), any changes to learning activities in a flexible curriculum should be accommodated in the assessment adaptations as well (*cf*. 3.6.2*; cf.* 5.4.10). The Department of Basic Education advocates that the curriculum is the best means for teachers to respond to the diverse needs of learners and support those with barriers to learning by treating each learner with respect, ensuring that opportunities are created and devising

different approaches, methodologies, strategies and differentiation to teach the content (DBE, 2014:3,4). EWP6 (DoE, 2001:19) emphasises that the following aspects need to be taken into consideration when adapting the curriculum to address different learning needs:

- The content
- The language of teaching and learning
- The methods and processes utilised in teaching
- The pace and time available to complete the curriculum
- Various teaching strategies
- Active learner participation despite learner diversity
- Equal opportunities for all learners to learn despite different abilities or disabilities

A major barrier to learning in South Africa that requires flexibility when teaching the curriculum is the use of English as medium of instruction which is a second language to most learners, often creating serious communication issues (Nel & Theron, 2008:204; Nel, 2011:167-168; Donald *et al.,* 2010:21; Jordaan, 2015:3) (*cf.* 5.4.4). In order for learners to complete the curriculum successfully they need to be able to communicate and understand. It is therefore important to ensure that vocabulary and concepts are understood during teaching and learning activities (*cf*. 5.4.15), which could necessitate a slower pace.

For learners who experience more serious intrinsic barriers to learning the Department of Basic Education has developed the Screening, Identification Assessment and Support policy (SIAS) (DoE, 2014) where guidelines and procedures are outlined when adaptations need to be made. The process consists of three stages (DoE, 2014:24-27), namely:

- Stage 1: The teacher compiles a learner profile in order to determine the learner's strengths, weaknesses, home background and specific needs
- Stage 2: The learner's barriers to learning and development are identified at school level by the teacher through means such as teacher reflection on strengths and needs, consulting with parents and curriculum assessment. An

Individual Support Plan (ISP) is then drawn up to be monitored by teachers, parents and the ILST and to be reviewed at least once per term

- Stage 3: Barriers to learning and development are identified and addressed at district level where the action plan of the teacher and SBST is reviewed according to an intervention guideline strategy monitored by the DBST

Although policies provide guidelines with regard to a flexible curriculum, teachers need to be innovative and find ways to work together in order to make the appropriate adaptations (Naraian, 2011:971). In their two-year study of learners residing in a lower income region in Adelaide, Australia, Wrench *et al*. (2013:933) found that learner engagement and achievement is influenced by pedagogy and curriculum. The researchers asserted that the curriculum content should be taught in a manner that integrates learning and knowledge (Garret & Wrench, 2011:239). The researchers established that pedagogical practices are effective when teachers manipulate the curriculum to accommodate all learner abilities, thereby discouraging learners from experiencing feelings of inferiority. They determined that this fosters well-being and motivates learners, even though socio-economic challenges prevail, as learners are able to explore and imagine bright futures beyond their financial circumstances. It was also affirmed in this study that this view should be introduced from early schooling which would then become an entrenched way of thinking (Wrench *et al*. 2013:935; Wilde & Avramides, 2011:90-1).

3.6 Teaching within an inclusive classroom

Education seldom takes into consideration the coping capability of the teacher who needs to accommodate learners with a variety of learning problems where class numbers can be up to or exceed 60 learners per classroom, as in South Africa (Wildeman & Nomdo, 2007:17). However, an inclusive pedagogy approach has shown to be successful in addressing a diversity of learning needs (Wildeman & Nomdo, 2007:19).

3.6.1 Inclusive pedagogy

Pedagogy refers to knowledge and skills needed by teachers to enable decisions about their teaching practice (Alexander, 2004). Florian and Black-Hawkins (2011:815) (*cf*. 2.2.1; *cf*. 3.3.2) view inclusive pedagogy to be an understanding of how teachers approach lessons and improve existing resources, with the intention of accommodating all learners within mainstream education. Accepting that there are differences among learners allows educators to reinforce inclusion within the mainstream classroom (Florian & Black-Hawkins, 2011:823). This includes the extension of available ordinary classroom routines to respond to differences. It integrates different or additional approaches to teaching to provide learning opportunities for all learners to participate in classroom activities. Contrariwise, an additional needs approach to inclusion concentrates on a learner in need of additional support, while the inclusive pedagogical approach emphasises participation of the entire classroom community. It involves adapting teaching and learning methods from a system that works for most learners to subsist together with 'additional' or 'different' teaching and learning methods for those who experience difficulties. The result is ultimately to develop a healthy learning community that leads to learning opportunities for everyone, allowing all learners to participate in the classroom (Florian & Black-Hawkins, 2011:818; Florian & Linklater, 2010:369).

According to Ainscow and Miles (2008:26), teachers who feel that their own methods need to be challenged rather than focusing on dealing with learners who experience barriers to learning are more proficient in re-designing their teaching to effectively accommodate these learners. Florian and Linklater (2010) also determined that educators with a greater awareness and understanding of educational and social issues that could affect learners' learning seem to be able to develop strategies to support and deal with these difficulties more effectively (Florian & Linklater, 2010:370).

Within an inclusive pedagogy approach teaching can, for example, be adapted to the needs of the slower child by merely extending work that is normally given to the class rather than making work different, or making separate provision for the learner. Collaboration with learners on how to approach this allows the learners to be

participants and engage in dialogue to determine their own programme. In this way activities and outcomes are determined by the learners themselves (Florian & Black-Hawkins, 2011:820; Allan *et al.,* 2009:116).

Funded by the Scottish government, the Inclusive Practice Project intended to enhance teachers' awareness and understanding of issues that influenced learning and to develop strategies to deal with problems within the inclusive pedagogical framework (Florian & Linklater, 2010:369).

In this study by Florian and Linklater (2010) it was found that applying inclusive pedagogy forced teachers to become aware of the unfair practice of labelling learners according to ability when providing additional support. It was asserted by this study that teachers preferably needed to find new ways of teaching by creating a variety of strategies that included all learners. The results of this study indicated that when teachers apply an inclusive pedagogy approach, they also developed new means of working with others by circumventing other teachers' ideas on how to teach (Florian & Linklater, 2010:383). They also responded to learners by not identifying them as individuals that had to conform to a certain standard. The participants in this study began increasingly to take risks; including adapting the curriculum and offering the learners choices without the restrictions of the curriculum (*cf.* 3.5). Florian and Black-Hawkins (2011:822) also investigated two primary schools in Scotland that promoted inclusive education. They found that when teachers chose tasks with varied activities, individual differences between learners were accommodated. This lead to an increase in participation and achievement of all learners – including those requiring additional support or having special education needs. The researchers identified strategies whereby teachers attended to individual differences without branding any learners as being different. Yet, the findings also revealed that although teachers' practice was varied it did not extend to all learners at times due to constraints in the education system that countered teachers' efforts to practice inclusion, such as not being permitted to adapt the curriculum in a manner that they saw best. Adding to the problem, school inspectors determined the extent of teaching differentiation by ability level (Florian & Black-Hawkins, 2011:820). This was in contrast to efforts by the South African Education Department through EWP6 and ensuing key policies (*cf*. 2.4.1.3) that encourage teaching in a

differentiation manner and not determined by ability level. However, research by Basson (2011:195) noted that many teachers trained in inclusive education practices in South Africa tend to sustain these inclusive practices for a while only but then revert to entrenched personal practices that do not promote inclusive education.

Research by Wilde and Avramides (2011:83), exploring the implementation of inclusive pedagogy, found that teachers in certain schools in Northern England felt that this was not an applicable approach since it was difficult to accommodate all learners in the mainstream; particularly those with behavioural difficulties or complex learning needs, such as Asperger's syndrome an Autism Spectrum Disorder. The teachers also requested more resources and training regarding learners who experience barriers to learning. A South African study by Nel *et al.* (2014:903-917) also confirmed that teachers felt they were not adequately trained in developing collaborative support strategies to establish networks to be able to help learners with complex learning needs. Insufficiently skilled personnel affiliated to DBSTs and ILSTs also fell short of providing adequate instructional support with regard to learning programmes, learner support materials, assessment instruments and professional support (Schoeman, 2012:18).

In maintaining the principles of inclusive pedagogy, it is the nature of autonomy and resourcefulness demonstrated by teachers such as those participating in the Scottish Inclusive Practice Project and the successful application of their various strategies that influenced me to initiate this study. Naraian (2011:971) maintains that being able to adapt teaching and assessment methods are important for an inclusive educator to effectively convey learning.

3.6.2 Differentiation

Differentiated instruction is defined by Tomlinson *et al.* (2003:123) as a strategy whereby teachers offer new avenues of learning to learners in response to differences in readiness, interests and learning profiles (*cf.* 5.4.9). Ferguson (2008:114) describes differentiated instruction as being fundamentally more inclusive of diverse needs as individual needs are met through adaptations in content, processes and products. The learner's learning style is regarded as central to the

learning process and teaching styles therefore need to acclimatise to this and be varied and combined to accommodate all learners. Using visual, auditory and kinaesthetic applications allows for flexible and creative instruction and activities to encourage learning.

Teachers provide learners with a purpose when learning is connected to genuine life experiences beyond the school setting; for example, allowing learners to count real money brings this reality to the school situation (Petersen *et al*., 2002:1). In addition, topics should be chosen that learners are familiar with in their environment to be able to add more knowledge onto this foundation, as suggested in the social constructive perspective (*cf*. 3.2.3; *cf.* 5.4.16).

Differentiated instruction may include offering alternative tasks and additional supervision with additional time allocated to both teaching and learning (Nel *et al.,* 2012:40) (*cf*. 5.4.5). Differentiation within tasks that incorporates increasing levels of complexity enhances higher-order thinking skills and meets individual levels and interests (*cf.* 3.6.2.2); for example, a mathematical concept can be introduced with three increasingly difficult tasks. The first task uses smaller numbers to explain the concept; the second activity is with larger numbers, while the third requires a fair amount of thinking to solve problems (Nel *et al*., 2012:135) (*cf.* 3.6.3).

An alternative method of differentiation is to vary the intricacy of an activity (*cf*. 5.4.15). To do this the teacher can divide an activity into various tasks that are on different levels of difficulty to accomplish. This can be done for a comprehension test, for example, where learners may be reading at different levels of competency and understanding. The teacher may set some fairly difficult questions and also include an easier word puzzle based on the story. Providing additional enrichment activities, especially to challenge learners who finish their work before others, also sustains learner interest (Walton, 2012:133).

In any learning activity it is important for the teacher to develop a teaching strategy that utilises a learner's strengths to encourage the learner to overcome weaknesses. Learning activities can also be individualised by the teacher who can adapt the way in which a task is expected to be performed or presented by the learner, for example,

introducing new words prior to a task with repeated explanation during the task for a learner whose home language is not the LOLT (Rothenberg & Fischer, 2007:245).

In their research regarding the extent that teachers applied differentiation in classroom learning in Australia, Mills *et al*. (2014:343) found that teachers were many times uncertain of what was expected of them regarding differentiation. One teacher explained that she tried mixed ability groupings hoping for peer tuition to take place, only to find that there was a lack of motivation by all the learners, and the lower achieving learners experienced difficulty accepting the higher achievers. The teacher eventually found that friendship groups worked best as close relationships produced strong commitment. The researchers concluded that it seems that school policies restrict the freedom of teachers to experiment with various pedagogical strategies to better assist their learners and this could have contributed to the uncertainty.

Researchers Roy *et al*. (2013:1187) proposed a method to develop and validate a Differentiated Instruction Scale (DIS) in Quebec, Canada. The DIS was to provide information and guide teachers regarding specific and adaptable approaches for particular learners. The researchers found that with a differentiated approach where there are different outcomes for different learners, some learners with learning difficulties experienced social comparison and as a result low self-concept. This implied that learners compared their coping abilities with that of their peers and developed a low self-esteem when unable to keep up with the others. They proposed therefore that differentiated instruction should be according to learners' abilities, interests and style of learning without different outcomes. In support of this the researchers cited Tomlinson *et al*. (2003:140) who emphasise that differentiation should apply to the following aspects in an integrated manner (*cf.* 3.6.4):

- Content – focusing on learners' competencies, goals and expectations
- Process – adapting instruction through activities that create understanding
- Product – learner's ability to demonstrate knowledge

This study explores differentiated teaching methods applied, since it seems from the above discussion that this is appropriate in responding to the needs of all learners and contributes towards accommodating the various learning abilities and differing

pace of the diverse classroom. It is also necessary to take into account that differentiating learning activities to accommodate all learners is inexorably linked to differentiation in assessment tasks and the manner in which the learner is assessed by the teacher (*cf*. 5.4.10).

3.6.2.1 Differentiated assessment strategies

Assessment is an integral part of education and a variety of strategies should be utilised and modified accordingly to assess learner knowledge, attitudes and skills. These could include oral tests, projects, examinations and presentations. At the same time both manageable and challenging assessment tasks should be made available to all learners (Walton, 2012:131).

According to Walton (2012:132), two important categories of differentiation in learning and assessment tasks include:

- Differentiation where the difficulty of a task's concept remains unchanged
- Differentiation that permits a learner to work at different levels of conceptual difficulty

These categories are described below.

3.6.2.1.1 Differentiation with no change to conceptual difficulty

Assessment strategies where there is no change to conceptual difficulty are for example when learners are equipped with strategies to assess their own progress (Landsberg *et al*., 2011a:76). For instance, learners can choose between presenting a topic through writing an essay, a demonstration, or a speech. In this manner questioning and learning can be encouraged in a setting that a learner finds more comfortable.

Another example in this category is to alter the manner in which a task is to be completed prior to assessment. For instance, reading a task beforehand or introducing certain words relevant to the task. Marking concessions through modified assessment rubrics with altered criteria for individual learners so that they are not

penalised for aspects like untidy handwriting, can also be taken into account (Walton, 2012:132).

3.6.2.1.2 Differentiation by varying difficulty of assessment task

Varying the difficulty of an assessment task can consist of a number of sections, each with increasing levels of difficulty (Walton, 2012:132) (*cf*. 3.6.2). Learners who complete work accurately before the rest of the class can be provided with more challenging tasks on a higher level (*cf.* 3.6.3). Enrichment of the curriculum, however, should extend to accommodate all learners of differing abilities to prevent frustration and to add an element of fun by making work more challenging yet attainable (Engelbrecht, 2013c:166-167).

When setting tasks with differentiated levels a teacher needs to guard against setting tasks that limit learning opportunities for learners by giving tasks that are not challenging enough to allow the learner to progress, even if the learner experiences barriers to learning (Walton, 2012:131). Collaboration between teachers with the parents and support teams is important here to ensure that tasks are appropriately set (Nel, 2013:28).

3.6.3 Multi-level teaching

Multi-level teaching and differentiated teaching are very closely linked. According to Walton (2012:126) “multi-level teaching is a strategy that can be used for differentiation”. Multi-level teaching revolves around the teacher designing a lesson on a topic that provides multiple opportunities, at varying levels, in which all learners in the class can participate and demonstrate their skills through assigned differentiated learning tasks. This means that teachers can plan a single lesson on a particular topic allowing access to the curriculum for every learner. In addition, the teacher’s workload is reduced as one lesson plan can accommodate all learners allowing each the opportunity to be challenged at a level of intellectual and academic ability that he or she feels motivated to continue (Engelbrecht, 2013b:38). Designing a differentiated lesson plan also requires flexibility in the teacher’s presentation style in order to reach all learners (Betts & Letkemann, 2003:15-16). Through this mode of

teaching teachers are able to get to know their learners' academic abilities, become adept at identifying learner support needs and cultivate new ways of organising lessons. A good classroom relationship develops when learners are challenged at a level where they feel motivated to continue and the teacher shares in each learner's success (Betts & Letkemann, 2003:15-16).

The benefits of multi-level teaching include (Engelbrecht, 2013b:46; Swanepoel, 2013a:197):

- Allowing learners to work at their own pace makes them feel more confident to tackle a task (*cf*. 5.4.21). Alternatively, the teacher can increase the pace of a learning activity and allow the learner to compete against himself or decrease the pace by giving the learner a starting point ahead of others.
- Encouraging learners to work independently by 'simplifying' the work through dividing into manageable chunks. In order for a learner who experiences barriers to learning to feel comfortable in a group setting, the teacher should modify the nature of the task and, if need be, the extent of the learner's active involvement (*cf.* 5.4.5).
- Developing organisational skills and responsibility for own learning. Allow alternative ways in which the learner can demonstrate competence, such as relating a story verbally instead of written work.
- Limiting derogatory competition (*cf.* 5.4.5; *cf.* 5.4.13). The teacher needs to continually emphasise the need for accuracy and not speed. Focus on calling for aspects such as neatness to prevent learners from speeding through their work.

There are various ways in which to present teaching a topic at different levels of difficulty (Walton*,* 2012:129):

- To introduce a new concept, cooperative teaching (*cf*. 3.4.2.1) can be utilised whereby learners are placed in mixed ability groups. The teacher can design work stations over a period of five days for each group with a specific task for each day. Groups are rotated the following day. In this way learners are taught within small groups to master the concept (Nel *et al*., 2012:127-8).

- Whole class teaching followed by group activities entails teaching a concept to the whole class and thereafter setting differentiated activities within groups, while the teacher walks among groups to assist individuals.
- Peer tutoring can be very effective as learners could feel more comfortable being tutored by their peers (*cf*. 3.4.2.3).
- Providing more challenging material in a step-by step approach such as the principle of scaffolding (*cf*. 3.4.2.3).

Differentiating tasks for individual learners can be done in several ways, for instance (Nel *et al*., 2012:132):

- Altering the conditions in which a task is performed, such as allowing for extra time (*cf*. 5.4.21).
- By changing the manner in which a task is presented, such as going through difficult words first before the learner is expected to summarise a story.
- Marking leniency allowed for instances such as incorrect spelling granted to learners experiencing barriers to learning, as it is considered a motivating factor in reducing feelings of inferiority when compared with marked work returned to the learner covered in red corrective ink (*cf.* 5.4.4).
- Individualising tasks so that they can be presented in several ways, for example, learners are given a choice whether to write about a rocket, talk about it, or construct one (*cf*. 5.4.4).
- Providing enrichment activities such as challenging word puzzles to learners who complete their work before the others to keep them challenged and active throughout the lesson.
- Differentiating a task with different degrees of difficulty (*cf*. 3.6.2; *cf*. 5.4.10). This can be done, for instance, by introducing a poem with three progressively difficult tasks. The first task asks straight-forward questions on the poem. The second task requires learners to offer a substantiated opinion on aspects of the poem. The third task expects learners to compose their own relevant poem.

3.6.4 Universal design of learning (UDL)

Universal design refers to designing products and environments from the onset to provide access to everyone and preferably, without the need for much redesigning and adaptation (Burgstahler, 2007:2). Creating a harmonious classroom atmosphere and encouraging effective interactions among learners as well as ensuring the safety and accessibility of facilities, activities and materials are key features of UDL. UDL also emphasises making curriculum content and teaching strategies accessible to all learners and planning lessons with differentiated teaching and learning activities in which all learners can participate from the beginning. This is in contrast to planning teaching and learning activities and then trying to modify them to accommodate learners. It means that differentiation is planned from inception to fit learners' diverse learning needs and not added on afterwards.

Three aspects that take learners' abilities and strengths into account are considered in the planning stages. These include content, which starts with the topic; process, how it is to be presented; and product, which is the intended outcome. The topic remains the same but the content is modified. The intention is not to make tasks easier, but to make them possible for all learners (Byrnes, 2000:24-25) (*cf.* 3.6.2). Learners are still expected to demonstrate their knowledge and skills and achieve the outcomes.

3.6.5 Individual support plans (ISP)

Research by Roy *et al*. (2013:1189) suggests that when appropriate strategies for individual learners are chosen, achievement and progress can be better monitored. This can be done by compiling an individual support plan. They assert that this is especially applicable for learners who experience barriers to learning and need more individual attention.

The SIAS document describes an individual support plan (ISP) as a support plan developed by teachers in collaboration with parents, the school support team and district support staff (*cf*. 3.5). Such plans are intended for learners in need of additional support (DBE, 2014:ix) and should be reviewed every term. Based on the

learner's needs, support should cover curriculum intervention that includes differentiation of content, modified assessment and varied teaching methods (DBE, 2014:39). To enable the teacher to apply appropriate strategies a learner's previous achievements should be used to plot further progress while also taking into account the grade in which the learner functions at the time (Engelbrecht, 2013b:46; Roy *et al.* 2013:1189; Landsberg, 2011a:84) (*cf*. 5.4.3). This means that learning programmes can then be specifically designed to further expand on existing knowledge and meet the needs of the learner experiencing learning difficulties. With an ISP the danger could be that negative stereotypes can result and therefore participatory tasks must be carefully planned to prevent this (Nel *et al*., 2012:135-6). Consequently, one needs to take care of comparing the learner to what is considered the norm of the group, because this devalues all principles of inclusive pedagogy contributing further towards barriers to learning.

3.6.6 Collaboration among teachers

Collaborative partnerships comprise all role players, including the Institution-Level Support Team (ILST), parents, and the District-Based Support teams (DBSTs) with support personnel and health professionals. In order to enable Foundation Phase teachers in mainstream schools to explore effective teaching strategies, collaboration among all these role players is necessary as all impact on a learner's learning process (Nel, 2013:28). Further to this, collaboration among teachers is the most important facet in an inclusive environment as it allows for advancement in an individual's learning and an all-round positive school environment (Florian & Black-Hawkins, 2011:822). This is because constructive involvement by teachers through sharing knowhow on effective teaching strategies to further the inclusive process draws on the interests and concerns of their learners (Ainscow & Miles, 2008:24). Effective collaboration requires support structures and good leadership provided by principals and Heads of Department (HODs) because through collaborating with each other they promote inclusive practice and provide quality education to all learners.

Collaboration among teachers takes place by listening to each other, sharing materials, exchanging knowledge, and learning from each other's skills and

experience. In addition, teachers can share resources and encourage one another (Donald *et al*., 2010:131). Knowledge and experiences about learners shared among teachers can often play an important role in solving problems or serve to encourage a learner. For example, a hockey teacher can inform a class teacher of certain learner strengths on the hockey field which can be utilised to great effect by the class teacher in the learner's academic work.

Collaboration among colleagues in the practice of inclusive pedagogy occurs in a supportive manner resulting in confidence to experiment with new ideas and share resources. Meetings can be held on a regular basis to discuss methodology developed by teachers and how to modify the curriculum (Florian & Black-Hawkins, 2011:822). A British study by Ainscow and Miles (2008:24) revealed that effective inclusive teaching practices took place when teachers shared experiences with colleagues as a means of helping one another.

Teachers can also encourage one another to become actively involved and participate in many activities revolving around their learners' academic and extra-curricular interests, such as sport and fund raising activities (Sapon-Shevin, 2010). In addition, effective classroom management techniques are often shared among teachers, particularly when dealing with learners exhibiting behavioural problems.

3.7 Classroom organisation, management and environment

UNESCO (2005:17) argues that classrooms with a diversity of learners can benefit all learners since they bring with them uniqueness in their experiences, skills, knowledge, and attitudes. Teachers need, therefore, to integrate diversity in the curriculum as an important contribution to the teaching of respect and tolerance. An inclusive environment, according to Donald *et al*. (2010:131), goes a long way to promote a learning and teaching relationship where all learners' needs and values in the classroom environment are accommodated, promoting social interaction. Such a diverse classroom needs to be well organised and managed and the role of the teacher remains central (Engelbrecht, 2013a:133).

With regard to accommodating learners who experience barriers to learning there are some practical measures that need to be taken into consideration. This includes,

for example, appropriate seating arrangements for visual and hearing impaired learners (*cf*. 5.4.6). These learners should be in proximity to the teacher where they can clearly see the teacher's facial expressions and their work can be visually monitored by the teacher. Learners with challenging behaviours should also be seated near the teacher and far from similar others whose inappropriate behaviours can be modelled (Gregory & Chapman, 2002:14). In multi-level learning environments, classroom management effectiveness calls for all general classroom management that should require as little effort as possible but include individual support needs (Morgado, 2005). Multi-level teaching that easily accommodates all learners' needs results in effective classroom management that requires little effort by the teacher to maintain, while also incorporating individual support needs (Morgado, 2005).

Conflict management in a diverse classroom should demonstrate consistent behaviour by the teacher as values of respect for each other's needs are repeatedly upheld. This promotes a secure learning environment where fairness is experienced, resulting in well-adjusted learner behaviour (Grosser, 2014:6; Landsberg, 2011a:79; Henson *et al*., 2004:280) (*cf.* 3.4.2.1).

3.8 Conclusion

In this chapter the theoretical perspective as a basis for different teaching strategies was explained and a discussion followed on their application to bring about Inclusive Education. Various teaching approaches were described, with emphasis on the value of differentiated teaching in the inclusive Foundation Phase classroom. The significance of a flexible curriculum, collaboration among teachers for quality education, and the classroom environment were also discussed.

The next chapter describes the methodology of this research.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

In this chapter the research design and methodology applied in this study is described. The paradigm is also explained as well as how participants were selected for the study. The criteria and ethical guidelines followed are also discussed.

4.1.1 Background of the study

As discussed in Chapter 1, this study was initiated to make a positive contribution to determining inclusive teaching strategies that are found to be effective in the Foundation Phase that will benefit all learners.

4.1.2 Purpose of the study

The purpose of the study was to explore inclusive Foundation Phase (FP) teaching strategies in mainstream primary schools that may benefit every learner in an inclusive education setting. The following primary research question guided the study:
Which effective teaching strategies are employed by Foundation Phase teachers in mainstream primary schools to effect inclusive education?

This primary research question was operationalised by the following secondary questions:

- What is inclusive education?
- How does the literature describe effective teaching?
- What makes teaching strategies effective in an inclusive classroom?
- Which teaching strategies do Foundation Phase teachers believe are effective in an inclusive classroom?
- Which teaching strategies are employed by Foundation Phase teachers?

- How should Foundation Phase teachers choose and implement teaching strategies to effect inclusive education?

4.2 Research paradigm

A paradigm is defined by Mertens (2005:7) as the way one sees the world through certain philosophical assumptions that direct thinking and actions. As described in Chapter 1 (*cf*. 1.6.1) this research is located in the interpretivist constructivist paradigm which presents the ontology that reality is socially constructed and interpreted. According to Charmaz (2006:187), social reality is determined by the epistemological assumption that only through meaning and interpretation do facts become relevant. Empirical research based on constructivist epistemology assumes that knowledge is constructed and that only when facts are interpreted within the context that they occur do they become relevant. Accordingly, while taking historical and cultural norms into account in individuals' lives, meaning and knowledge are socially constructed by interaction with others. The interpretive constructivist paradigm thus encourages the researcher to consider the settings in which teachers work and live, and interpret meaning from a situation. This means that knowledge is produced through social interaction. Meaning is constructed and constantly interpreted by persons in situations and while engaging with others, to gain insight and form clear understanding. The interpretation of their findings is shaped by their own background and experience (Creswell, 2009:8). This interpretive worldview of the constructivist paradigm is often utilised in the humanities and calls attention to in-depth examination to discover meaning of text through means such as interviews and open questionnaires (Creswell, 2009:176). This research seeks to find answers by utilising such means to find answers through interpretation and determine solutions to effective teaching strategies in the inclusive Foundation Phase classroom.

4.3 Research method

The qualitative approach was the research method chosen for this study as it could deepen understanding and gain insight into effective teaching strategies to effect

inclusive education in the Foundation Phase. Tracey (2013:2) proposed that self-reflexivity, context and thick description are three core qualitative concepts that provide such understanding. Self-reflexivity is the manner in which the researcher's past experiences and opinions influence interactions (*cf.* 4.5.3) and interpretations of the research, while context refers to the researcher immersing herself in a scene such as an interview or as an observer in the classroom, to make sense of the situations with participants. Through such immersion in a situation, exploration of the circumstances can take place and only then can interpretation of events generate meaning for conclusions to be drawn in the form of thick descriptions. The research methodology is summarised in Figure 4.1.

Table 4.1: Research design

Research paradigm	This study is located in the interpretive constructivist paradigm
Research method	A qualitative research approach will be followed
Research questions	What is inclusive education? How does literature describe effective teaching strategies? What makes teaching strategies effective in an inclusive classroom? Which teaching strategies are employed by Foundation Phase teachers? Which teaching strategies do Foundation Phase teachers believe are effective in an inclusive classroom? How should Foundation Phase teachers choose and implement strategies to effect inclusive education?
Strategy of inquiry	Multiple case study
Data collection methods	Researcher's role: Complete observer Questionnaires Individual semi-structured interviews Document analysis

4.3.1 Strategy of enquiry

A multiple case study was chosen for this research utilising the qualitative strategy and entailing an in-depth exploration of inclusive teaching strategies in the Foundation Phase classroom. A researcher uses multiple case studies as a strategy of enquiry to explore an activity, process or event in-depth through several individual cases. Data collection procedures in case study research take place within a certain time-frame (Stake, 1995). The multiple case study approach was appropriate for this research because:

- A phenomenon was examined in a real-life context (Lauckner *et al*., 2012:1). In this research it applies to exploring teachers' application of teaching strategies as a phenomenon in Foundation Phase, in the real-life context of their inclusive teaching environment;
- Multiple perspectives are gathered from numerous sources. Data for this study was gathered from multiple teachers working at schools publically advocating inclusive education.
- Comparisons could be made between the cases to extend and validate concepts (Fouché 2007:272).

4.4 Participant selection

As the participants were the suitable holders of the data needed by the researcher, they were purposively selected (Nieuwenhuis, 2010b:79; Creswell, 2009:178). In considering the requirements for the research involving the multiple case study design, while considering time constraints and travel costs, I chose five schools in fairly close proximity to one another. For discussion purposes the schools are referred to as School A through to School E.

A teacher from School B and one from School C, each with 10 years teaching experience, agreed to pilot-test the questionnaires (*cf.* 4.5.1.1). These teachers did not form part of the main research and were chosen because of their considerable teaching experience and the diversity of learners in the two respective schools they represented; School B being an ordinary public, multi-cultural setting and School C a private school upholding strong religious ethics. I obtained consent from the

principals of these schools as well as from the teachers concerned to pursue with the pilot testing.

All principals and Heads of Department were contacted and meetings arranged to obtain consent for me to conduct research at the selected schools. I explained the purpose of the research, the procedure for collecting data, and probable contributions of the research. This was also explained to the participants with emphasis on the methods and activities for data collection which would involve them personally, together with the time they would have to allocate. Informed consent forms, comprising a detailed description of the research and the participants' part in the procedure, were handed to the participants and subsequently signed by them (Addendum A).

Twenty participants; four from every school that included each Foundation Phase grade (i.e. grade 1 – grade 3), agreed to take part in this research. Participants were Foundation Phase teachers who volunteered to participate and complied with the following criteria:

- Qualified Foundation Phase teachers practising within an inclusive education setting. The school culture of the chosen schools overtly upheld inclusive education and participants assured me of their part in pursuing this in their classrooms. The participants in this study averaged eight years Foundation Phase teaching experience and the five schools all supported an inclusive environment.
- Teachers, including those in private schools, to follow the principles of the CAPS system of education as set by the Department (DBE, 2011:13).

I explained to the participants that although there were no apparent immediate personal benefits for them from the research, it could well contribute to promoting teaching strategies applicable to inclusive settings. While at all times making it clear that participation was voluntary, the teachers were informed of the data collecting methods and all agreed to participate in all four methods which included open questionnaires, classroom observations, perusing of relevant documentation, and interviews (*cf*. 4.5.1.2). This showed that the teachers were keen to share their

knowledge and experience. I also endeavoured to foster a positive, caring climate between myself and the participants throughout the study.

4.4.1 Description of the school contexts

The five schools in this research are all located within an approximate 30-kilometre radius incorporating industrial towns in the Vaal Triangle area which includes part of the provinces of the Free State and Gauteng. The socio-economic status of learners attending these schools is generally low but there is a considerable middle-income group. Three of the schools fall under the Gauteng Department of Education, one is semi-private and the fifth is a private school and a member of the Independent School Authority of South Africa (ISASA). All the schools in this study follow the CAPS system of teaching, have no separate special or aid classes for learners who experience barriers to learning, and the language of learning and teaching (LOLT) is English. A brief outline of each school follows.

4.4.1.1 School A

This is an ordinary mainstream public primary school situated in a middle class suburb catering for all learners, though most are from a middle income group. The school has a diversity of learners from different cultures with classes averaging 30 learners which are slightly lower numbers than that of average public schools. Only a few learners are first language English speakers whereas others speak Hindi, but the home language of the majority of the children is Sesotho. Parent involvement is poor to average, though teachers make an effort to involve parents, such as homework signing and contact through written correspondence should the need arise. Parental involvement is also sought through school sport and social events. Foundation Phase classes appear to have adequate resources.

4.4.1.2 School B

This is an ordinary public school and a former C-model school which has a diverse learner community mainly from a low socio-income group. Classes' number from 30 to 40 learners and the predominant home language spoken by learners is Sesotho

though the LOLT is English. Resources are minimal but use of recycled material is encouraged and appears to be sufficient as learning material. There is insufficient parental involvement which tends to taper off even further towards the end of each year, though homework books are generally signed by parents.

4.4.1.3 School C

This institution is a community-based initiative that was established by parents to provide high quality education and is based on strong religious ethics. This private school has an active parents' forum with considerable parental involvement in their children's education as well as in extra-curricular activities. The socio-economic context of the school tends towards middle to higher income groups. Learners are well disciplined and the school is well managed with adequate resources. Class numbers average from 22 to 27 learners and though the LOLT is English, the home language of most of the learners is Hindi.

4.4.1.4 School D

This school is an ordinary public school with large classes typical of public schools. Learners and staff are multi-cultural, multi-lingual and from different religious backgrounds that include Islam, Hindu and Christian. The LOLT is English; however, the home language of the majority of learners is Sesotho. Most learners are from the lower income bracket. The school is dedicated to bringing technology into the education process and learners have access to a computer laboratory. Parental involvement is considered 'average' by Foundation Phase teachers.

4.4.1.5 School E

This is a semi-private institution situated in a middle class suburb and the religious character of the school is appraised. Resources for school management include religious resources, GDE documentation on Curriculum News and other Department of Education strategy documents, and an adequate computer centre is utilised. Classes are large, consisting of an average of 34 learners and inclusive education practice is embraced. The LOLT is English and though some learners are from other

African countries, the predominant home language of the children is Sesotho. Besides signing of homework books there is not much parental involvement in their child's education at the school.

4.5 Data collection

4.5.1 Data collection methods

Methods used to collect data in this qualitative study included the following: open-ended questionnaires, semi-structured individual interviews, document analysis and field notes in the form of documented observations. The data generated from these methods were compared and the findings analysed and interpreted by me (*cf.* 4.6).

After analysing the open-ended questions from the completed questionnaires, individual interviews with some participants were conducted in order to clarify certain aspects of the questionnaires and gain further information. I then proceeded to explore the real-life classroom situation through observation. The research methods employed are discussed in the consecutive order in which they took place.

4.5.1.1 Questionnaires

Taking into account that the interpretive constructivist paradigm in this study allows for multiple interpretations and perceptions (Creswell, 2009:176), an open questionnaire was designed to address teaching strategies used by the 20 Foundation Phase teachers in their respective inclusive classroom settings (Addendum F; *cf*. 1.6.4.3). An open questionnaire consists of open questions that introduced the topic under investigation to generate reactions. This type of questioning did not influence the respondents as multiple-choice type of questioning could have done (Struwig & Steed, 2004:92). The semi-structured questionnaire allowed the participants to provide their own answers and express any ideas they felt applied to open-ended questions. The literature and a pilot study served to steer the design of the questionnaires in order to collect rich data regarding teaching strategies applied in the classroom. From two of the schools used in this research I obtained consent from participants not included in the consequent main study, to

pilot-test the questionnaires that I had compiled. Both these participants concluded that the questions were satisfactory with minor changes, which merely entailed rewording one or two questions for clarity.

Under the guidance of my supervisor I developed the questionnaires which comprised of three sections. Section A requested personal information related to background issues such as qualifications and teaching experience of the participants. The reason for this was for me to ascertain the role teacher qualifications and experience can play in the application of certain teaching strategies. Section B sought information regarding intrinsic and extrinsic barriers to learning the teachers were faced with in their everyday teaching and how they managed the situation as this was vital to understanding which teaching strategies were found to be effective in certain situations. Section C focused on specific teaching strategies employed by the teachers. Both Section B and Section C comprised open-ended questions that explored opinions of what they experienced and how they implemented teaching strategies in their classrooms as well as issues that they felt related to the effective functioning of the inclusive classroom. Open-ended questions allowed participants the freedom to incorporate beliefs and opinions revealing honest and interesting information (Maree & Pietersen, 2010:161) relevant to their choice of teaching strategies in the inclusive situation.

The questionnaires were self-administered and on collection I found that some had insufficient or indistinct data. It was therefore necessary to interview the relevant participants in order to gain clarification regarding their responses. I analysed the responses through content and constant comparative methods (*cf.* 4.6; Table 4.4) by applying open coding to break down data and compare for similarities and differences.

4.5.1.2 Semi-structured individual interviews

Semi-structured individual interviews revealed the participant's personal experience of the phenomenon under study (Leedy & Ormrod, 2010:153; Nieuwenhuis, 2010b:87). Semi-structured interviews contained some key pre-compiled questions to be explored but also permitted the researcher to pursue further responses from the participants and identify new emerging lines of enquiry. After the analysis of the

questionnaires I concluded that the comprehensive nature of the responses was adequate for the purpose of the research and therefore interviews only served to elaborate on the questionnaires where written answers were insufficient or unclear. Interviews were held with three teachers from School A (grade 1, grade 2 and grade 3) and one each from School B (grade 1), School C (grade 1), School D (grade 2) and School E (grade R). By means of face-to-face semi-structured interviews based on the questionnaire, I encouraged the participants to elaborate on information not thought of at the time of completing the questionnaires and endeavoured to understand the participants' points of view as they unveiled their experiences of teaching in the inclusive classroom. Keeping to the interview schedule, the interviews (Addendum B) took place at each of the selected schools with each interview lasting approximately 30 to 40 minutes and conducted in an amicable manner. Three interviews were audio recorded as four participants preferred not to be recorded, confessing that they felt uncomfortable with the arrangement (*cf.* 4.4). I assured them that recording was unnecessary and they were happy to do the interviews and allow me to document pertinent data for this research. Relevant data recorded during interviews were transcribed verbatim.

4.5.1.3 Observations

A detailed plan (Addendum C) of what I intended to observe in each participant's classroom was compiled relating to aspects such as classroom lighting and seating arrangements, but the main focus was to observe specific strategies of teaching employed in the inclusive classroom.

Observations were conducted in all 20 classroom settings over a three-month period and I participated as an unobtrusive, direct observer in the natural environment of the classroom, taking notes of events (Nieuwenhuis: 2010b:85) (*cf*. 1.6.2) in each of the participants' classrooms. Approximately two to four hours per observation, not necessarily consecutively, with each participant in the classroom setting were used for the observations in search of behaviour patterns relevant to the study. Descriptive field notes were made during the course of the observations that, at times, included how learners responded to the teaching strategies. I was able to document specific situations and relevant interactions that took place between teachers and learners.

My own reflection (observational notes) on various class activities was also noted. I analysed and interpreted the data and then compared it with data gathered from the questionnaires, interviews and documents.

4.5.1.4 Document analysis

The documents I analysed generally took place immediately before, after and during observations. The participants would occasionally draw my attention to aspects of their teaching and allowed me to peruse through relevant material. This included mainly learner's books, learner assessment files, lesson plans and other relevant material. The data collected from these was also interpreted and incorporated into the coding.

4.5.2 The data collection procedure

The data collection procedure summarised in Table 4.3 applies to all five schools in this study.

Table 4.2: Data collection process

Data collection procedure	
Step 1	Literature review of the topic.
Step 2	Development of an open questionnaire.
Step 3	Appointments were made with principals and HODs to explain the study and obtain consent to pursue with the various methods of data collection.
Step 4	Two schools were chosen; each with one participant not involved in the research to pilot test the questionnaire. The comments of the participants were noted and small changes made to the questionnaire.
Step 5	I then met individually with each participant, explained the purpose of the research, the research methods and their respective role and rights as participants. Informed consent was obtained from the participants and the questionnaires were handed out with a specified date for their return. I personally collected the questionnaires from the participants with a 100% return rate.
Step 6	Data from the questionnaires in Step 3 were analysed and interpreted. Information that lacked clarity or found to be insufficient was noted and interviews were arranged with

Data collection procedure	
	these participants.
Step 7	Face-to-face semi-structured interviews were conducted with the relevant participants. Some interviews were audio-recorded while other participants preferred not to be recorded. All interview data relevant to the study were verbatim transcribed and analysed.
Step 8	To observe teaching strategies employed in the inclusive classroom, scheduled dates were set aside for the researcher to act in the capacity of observer in the classroom over the period of a term, covering four Foundation Phase classrooms from each school. All relevant observable procedures were noted.
Step 9	Documents analysed included learners' books, learner assessment files, and lesson plans.
Step 10	Data gathered from preceding steps were analysed.
Step 11	Coding of data.
Step 12	Based on the findings, conclusions were drawn.

4.5.3 Role of researcher

As the 'research instrument' the researcher is a fundamental part of this study in the data collection procedure, analysis of the information and drawing up of conclusions (*cf*. 1.8). In the role of observer, I obtained a visual perspective of the phenomenon and from semi-structured interviews an understanding of how teachers modified, developed and applied methods of teaching to accommodate all learners. According to Fouché and Delport (2007:74), in-depth knowledge and understanding is acquired from face-to-face interviews of how persons construct their social world. A flexible strategy of formulating the problem and data collection ensures that the researcher gains first-hand holistic understanding from a qualitative study (Fouché & Delport, 2007:74).

The intrusive nature by the presence of the researcher in the classroom could to some extent have influenced the normal classroom atmosphere (*cf*. 1.8), but I considered the disruption minimal as initial curiosity soon abated and learners seemed to hardly notice my existence. Participants too appeared to forget my presence as lessons got underway. Credibility of qualitative research, according to

Patton (2002:14), hinges to a degree on the skill and competence of the investigator and because of personal contact with persons in the situation under study, the subjective nature of the approach is questioned by critics of qualitative inquiry. Although I have endeavoured to be as objective as possible and function in an unbiased manner in the data gathering process, subjectivity is unavoidable and is accepted for qualitative studies (Nieuwenhuis, 2010b:79). In an attempt to remain as objective as possible all data, including the field notes, were reflected with the participants as well as my study supervisor in order to obtain honest, credible and meaningful findings.

4.6 Data analysis and interpretation

According to Creswell (2009:198), analysis of qualitative data involves making sense of textual data and entails “continual reflection about the data, asking analytical questions and writing memos during the research”. De Vos (2007:335) further elaborates that collection and preliminary analysis of data is considered a concurrent relationship in qualitative research as revisions constantly yield new data and become subjected to renewed analysis in order for the researcher to build coherence in the interpretation (De Vos, 2007:335). I followed this process and took care not to be limited by initial interpretations while continually looking for alternative explanations that either confirmed or even discarded initial insights. I utilised a system to enable simple retrieval for analysis as suggested by De Vos (2007:335). Consequently, all data was properly labelled with a retrievable notation system.

Content analyses as well as the constant comparative method were used. Content analysis is an inductive and iterative approach where qualitative data analysis links people and settings, and interpretation means making sense of the data (Nieuwenhuis, 2010a:99). The constant comparative method of analysis entails comparing specific data in the text to determine similarities and differences which are then categorised and named. Deductive analysis was also utilised from themes generated from the literature review which were transferred to the open questionnaire and served as themes in the data analysis (Pope, Ziebland & Mays, 2000; Fereday, & Muir-Cochrane, 2006; Bradley *et al*., 2007) (*cf*. 1.6.7).

In this study, data I collected was read several times and reflected on; relationships and connections were sought that enabled me to generate patterns, themes and categories. These smaller, more meaningful components were then coded by means of content and comparative coding (*cf*. 4.5.1.1; Addendum G). This allowed all data associated with an idea be examined together and instances compared. As tabulated in Table 4.4, I followed the stages described by Creswell (2009:186).

Table 4.3: Data analysis process (Creswell, 2009:185)

	Data analysis process
Stage 1	**Organise and prepare data for analysis** Data from Section B and Section C of the questionnaires involving all 22 open-ended questions were transcribed in table format, whereby each question was accompanied by all 20 participant responses to enable effortless visual access for interpretation and coding. Responses from individual interviews were transcribed verbatim onto the same table system above. This was done as the interviews were used to explore questions that were initially not satisfactorily completed in the questionnaires. Field notes and reflections of the observations were analysed and words or phrases that best described specific data sought and chosen for coding.
Stage 2	**Coding of data** Transcripts were scrutinised and all data labelled by choosing a word or phrase that best suited a section of data that I focused on. According to Creswell, codes should be reduced to a manageable number (Creswell, 2009:245), therefore, codes were revised and those that did not fit with themes or did not answer the research questions were discarded. By comparing codes, themes for each research question emerged and similar codes were then grouped under these themes (Creswell, 2009:186). All the above was data gathered from the 20 participants, then compared and incorporated into one main list containing all the themes and codes. Duplicated themes were refined. The field notes of the observations were categorised separately because of the volume of the field research but with the intention that all associated ideas be consolidated in the themes of the questionnaires and interviews when documenting the findings.

	Data analysis process
Stage 3	**Description of data** Themes generated by the data were used to describe strategies of teaching within an inclusive Foundation Phase classroom setting which enabled me to present findings that answered the research questions.
Stage 4	**Interpretation of Data** Data derived and analysed from all the collection methods were compared and interpreted.

4.7 Trustworthiness

Trustworthiness refers to the reliability of the methods used in the study and the validity of the conclusions drawn. According to Hammersley (1992, cited by Silverman, 2005:209), validity refers to the extent to which a research situation is accurately presented and reliability refers to the consistency aspect with which a phenomenon occurs. Although qualitative research depends considerably on the skill, integrity and personal circumstances of the researcher, it also includes several means to substantiate the gathering of evidence (Patton, 2002:14).

I ensured credibility of the research through various methods (*cf.*1.7) which included:

- A detailed and accurate description of the data-collection procedure
- multiple methods of data collection, such as questionnaires, observations and interviews
- A pilot study conducted to determine responses to the open questionnaires and small suggested changes made to wording
- Individual interviews, some audio recorded, and then verbatim transcribed
- Prolonged engagement in the field entailed three months of onsite data collection from multiple sources which included five primary schools with four Foundation Phase participants from each
- Continuous analysis of the transcribed documentation by me (Merriam, 2009:215)
- Correlation of findings with the literature (*cf.* 1.7)

- Crystallisation which involves the use of different methods to study the same phenomenon to establish themes and is usually applied to ensure validity and reliability (Creswell, 2009:191; Merriam, 2009:216)
- Conformability to the findings of the study as being the focus of the investigation in that data interpretation was not influenced by my personal judgement (Denzin & Lincoln, 2005:10)
- An audit trail presented to verify how codes and themes were derived from raw data (*cf.* 1.7; Addendum G)
- Member checking, whereby interpretations and conclusions from data were confirmed with participants

As several methods of data collection were used to determine which teaching strategies are effective in Foundation Phase classrooms, the bias of a single method was reduced in the analysis and interpretation.

4.8 Ethical aspects

In order to protect both participants and researcher, ethical considerations were important (Trochim & Donnelly, 2008:24). I obtained permission for this research to be conducted from the North-West University Ethical Committee (Addendum A) and the Department of Higher Education and Training (Addendum D and Addendum E), while I took ethics issues into account throughout the investigation.

Informed consent is adequate information that is presented to participants in order for them to decide whether they wish to participate in a study (Leedy & Ormrod, 2010:101; Creswell, 2009:819). This applied to the informed consent drawn up for this study and included the following information:

- A description of the research activities
- The participants' rights to voluntary participation and withdrawal
- Discussion regarding risks and confidentiality
- Time frame of the study explained

In the analysis procedure the participants were allotted numbers to protect their identities and transcriptions kept confidential by the researcher. All material relevant to the research must be kept for five years locked in a cabinet at North-West University.

4.9 Conclusion

This chapter gives an account of the research design and methodology used to carry out the study. Data collection methods and analysis are described, and explanation proffered on trustworthiness of the study together with ethical guidelines upheld in the research process. Findings of the collected data are discussed in Chapter 5.

CHAPTER 5

DATA ANALYSIS AND INTERPRETATION

5.1 Introduction

In Chapter 4 the research process was discussed by describing the research design and data collection methods used in this study. My position and ethical considerations as researcher were also explained *(cf.* 4.5.3).

This chapter presents and interprets the themes that resulted from the content and constant comparative data analysis of the empirical study. Data collection methods included interviews, questionnaires, observations and document analysis (*cf.* 4.5.1.1; *cf.* 4.5.1.2; *cf.* 4.5.1.3; *cf.* 4.5.1.4). The information has been integrated in the findings under the relevant themes in both Section B and Section C. The discussion of the findings is grounded on the associated literature.

Direct quotes used to support themes, categories and subcategories are labelled as follows: P15DGr3. 'P' refers to participant no. 15 with 'D' indicative of a particular school followed by the grade that the teacher was teaching at the time of the study. I felt that the grade taught was relevant as comments made by participants were often better understood in the context of the specific grade in which the teacher conducted lessons.

5.2 Findings of the study

In explaining themes the collective numerical values denoting the 20 participants in my study are referred to as follows:

- 'Few' indicates 1 to 5 participants
- 'Some' refers from 6 to 10 participants
- 'Many' is from 11 to 15 participants
- 'Most' is from 16 to 20 participants

During the process of data analysis, themes and categories were deductively identified; determined by the literature and from questions asked in the open questionnaire. However, inductive analysis was also applied as identified from answers supplied by participants through the questionnaires and interviews. My observations served to both extend and endorse the deductive and inductive data that emerged from the themes. In most of the instances I was allowed to peruse worksheets and other relevant documents beforehand that were to be used for the particular lessons in which I was to act as observer. Within some categories, sub-categories also emerged during the analysis, providing additional relevant information to clarify categories in more detail.

Teaching and learning is an integrated mix and aspects were incorporated in various categories of the findings. It will therefore not be uncommon to have similar aspects incorporated in findings under differing categories.

Section A provides information about the participants' biographical data and Section B and Section C deal with the findings as presented by themes, categories and subcategories.

5.3 SECTION A

5.3.1 Participant biographical information

Section A comprises basic biographical facets of the participants and aspects of their present school situation. I realised that knowledge on certain facets of biographical information of the participants was relevant to the research as teaching strategies could be affected by:

- qualifications and the number in years of a teacher's experience in the Foundation Phase setting;
- the present grade taught by the teacher; and
- the number of learners in the classroom.

Table 5.1 below outlines these basic biographical features.

Table 5.1: Biographical and research information table

School	Sex	Partici-pant (P)	Qualifications	In-service training	Years of FP experience	Present grade	No. learners in present classroom
A	F	P1	Bachelor of Arts (BA) Higher Diploma in Education (HDE)		3	R	25
A	F	P2	Teacher's Training Diploma (TTD) HDE	Facilitator for CAPS training (1st lang.) Developed common task assessment papers for underperforming school (Home Lang. & Life Skills)	30	1	30
A	F	P3	Bachelor in Education (BEd)		3	2	30
A	F	P4	BEd		5	3	31
B	F	P5		Gauteng Department of Education District Courses	20	R	26
B	F	P6	National Professional Diploma in Education (NPDE); Advanced Certificate in Education (ACE)		5	1	26
B	F	P7	BEd		2	2	40
B	F	P8	HDE; Further Diploma in Education (FDE – Remedial ed.)		33	3	26
C	F	P9	NPDE – Foundation phase (FP)		22	R	22
C	F	P10	4-year teaching Diploma		11	1	22

School	Sex	Partici-pant (P)	Qualifications	In-service training	Years of FP experience	Present grade	No. learners in present classroom
C	F	P11	HDE	Training received in Natural Sciences (NS), Revised National Curriculum Statement (RNCS), and CAPS	16	2	27
C	F	P12	NPDE, ACE		8	3	26
D	F	P13	BEd (FP)		1	R	
D	F	P14	4-year Teaching Diploma	Practical strategies for teaching 2nd language District workshop – overcome barriers to learning	21	1	42
D	F	P15	BEd Hons in Education, Law & Policy	Destinata – workshop	16	2	43
D	F	P16	BEd Hons in Education, Law & Policy	Destinata – workshop	23	2	42
E	F	P17	N6 Diploma in Educare		12	R	26
E	F	P18	HDE	Caps workshop	10	1	36
E	F	P19	BEd, PGCA, BA Hons, MBA Business Degree	CAPS workshop	10	2	36
E	F	P20	Ed Dip – Methodology of teaching theology Bachelor of Science Honours (BSc Hons) – Consumer Science & Conflict Crisis Control Management	Destinata – Certificate in Remedial Education	8	3	36

From the above it is evident that all the participants are well trained on a pre-service level though only some have attended a number of in-service workshops to improve

their knowledge and skills. The years of teaching experience range from only one year to 33 years. The number of learners in the classroom spans from 22 to 43.

5.4 SECTION B and SECTION C findings

Themes in Section B and Section C were amalgamated in the analysis to avoid repetition and to deliver an uncomplicated account of the answers provided by participants. The findings are presented in the following themes, categories and subcategories.

Table 5.2: Framework outline of themes and categories

Themes	Categories	Subcategories
5.4.1 Barriers to learning	5.4.1.1 Intrinsic	5.4.1.1.1 Perceptual problems 5.4.1.1.2 ADHD 5.4.1.1.3 Limited language proficiency in LOLT 5.4.1.1.4 Poor concentration
	5.4.1.2 Extrinsic	5.4.1.2.1 LOLT 5.4.1.2.2 Social issues 5.4.1.2.3 Emotional issues 5.4.1.2.4 Late arrival 5.4.1.2.5 Little parental support 5.4.1.2.6 Shortage of resources 5.4.1.2.7 Overcrowded classrooms
5.4.2 Factors affecting learning needs	5.4.2.1 Language	5.4.2.1.1 Oral communication 5.4.2.1.2 Reading and comprehension 5.4.2.1.3 Auditory discrimination
	5.4.2.2 Mathematics	5.4.2.2.1 Concrete learning material 5.4.2.2.2 Individual assistance for Mathematics
	5.4.2.3 Fine motor problems	
	5.4.2.4 Parental support	
	5.4.2.5 Social problems	
	5.4.2.6 Teacher's approach	
5.4.3 Teaching methods	5.4.3.1 Using different methods	
	5.4.3.2 Whole class teaching	

Themes	Categories	Subcategories
	5.4.3.3 Cooperative learning and teaching	
	5.4.3.4 Peer teaching	5.4.3.4.1 Peers as interpreters 5.4.3.4.2 Peers as assistants
	5.4.3.5 Group work	5.4.3.5.1 Effective group work 5.4.3.5.2 Ineffective group work
	5.4.3.6 Individual instruction	
	5.4.3.7 Demonstration	
	5.4.3.8 Straddling	
	5.4.3.9 Scaffolding	
	5.4.3.10 Cubing	
	5.4.3.11 Repetition	
5.4.4 Classroom management	5.4.4.1 Discipline	5.4.4.1.1 Setting classroom rules 5.4.4.1.2 Merit/demerit system 5.4.4.1.3 Addressing behaviour issues
	5.4.4.2 Organisation	5.4.4.2.1 Delegating tasks 5.4.4.2.2 Seating arrangements 5.4.4.2.3 Keeping occupied 5.4.4.2.4 Well-prepared lessons
	5.4.4.3 Routine	
5.4.5 Promoting a positive social environment	5.4.5.1 Inclusion	
	5.4.5.2 Recognition	
	5.4.5.3 Values	5.4.5.3.1 Awareness of cultures 5.4.5.3.2 Treatment of others
5.4.6 Collaboration with colleagues		
5.4.7 Teaching strategies	5.4.7.1 Teacher-learner Interaction	
	5.4.7.2 Learner participation	
	5.4.7.3 Teaching and learning Material	5.4.7.3.1 Language 5.4.7.3.2 Mathematics 5.4.7.3.3 Life skills
	5.4.7.4 Modification of CAPS	5.4.7.4.1 Language 5.4.7.4.2 Mathematics
	5.4.7.5 Lesson planning	
	5.4.7.6 Assessment modifications	5.4.7.6.1 Language 5.4.7.6.2 Mathematics
	5.4.7.7 Parent involvement	5.4.7.7.1 General methods to include parents

Themes	Categories	Subcategories
		5.4.7.7.2 Response from parents/ Caregivers

5.4.1 Theme 1: Barriers to learning

Theme 1 reports on information provided by the participants on the barriers to learning they believed their learners' experienced. It also focuses on how the participants dealt with these barriers in their daily teaching. This helped to better understand which teaching strategies were used by the participants and perceived to be effective in an inclusive classroom. Open-ended questions explored the participants' opinions and experiences from which the information was encoded by extracting categories and sub-categories to enable me to interpret the data as depicted in Table 5.2.

Table 5.3: Barriers to learning described by participants

Theme	Category	Subcategory
Barriers to learning	Intrinsic	• Perceptual problems • ADHD • Limited language proficiency in the LOLT • Poor concentration
	Extrinsic	• LOLT • Social issues • Late arrival • Emotional issues • Lack of parental support • Lack of resources • Overcrowded classroom

5.4.1.1 Category 1: Intrinsic barriers to learning

Intrinsic barriers to learning were reported by most participants' as impeding learner progress with the following sub-categories: perceptual problems; Attention Deficit Hyperactivity Disorder (ADHD); limited vocabulary/spelling and grammar; and poor concentration.

5.4.1.1.1 Subcategory 1: Perceptual problems

Some participants felt that intrinsic barriers to learning experienced in their classrooms were mainly due to auditory, fine motor or gross motor perception problems (P2AGr1; P7BGr2; P4AGr3; P5BGrR; P9CGrR; P11CGr2; P12CGr3; P18EGr1; P19EGr2; P20E Gr3). A few reported that this resulted in *"some learners being slow".* They believed it was because these learners had none or little formal pre-school exposure and consequently experienced developmental backlogs. Two participants indicated that *"skills needed to be enhanced with particular emphasis on listening and concentration skills"* (P18EGr1; P20EGr3).

5.4.1.1.2 Subcategory 2: Attention Deficit Hyperactivity Disorder (ADHD)

ADHD was recognised to be problematic in only a few of the classes (P1AGrR; P9CGrR; P12CGr3). However, the participants voiced concerns regarding certain learners displaying what they felt were characteristics of ADHD, but which remained undiagnosed. One participant voiced her concern: *"I'm certain that two of my learners are ADHD but though I have consulted with parents and the DBST in this regard, nothing seems to have been done"* (P12CGr3). Participants reported the following behaviours which they perceived as indicators of ADHD: "*hyperactive behaviour, short attention span and incomplete work*". These learners were also reported as tending to be "*bossy, manipulative and aggressive*" towards peers and even towards their teachers, as one participant noted, *"One child in my class who struggled to lift his body to perform frog hops seemed to have no trouble venting his frustration on a peer standing close by and punching him in the stomach!"* (P9CGrR).

5.4.1.1.3 Subcategory 3: Limited language proficiency in the LOLT

Although this theme is usually regarded as an extrinsic barrier it results in teachers not being able to determine if learners are experiencing barriers to learning as a result of limited language proficiency or a possible 'low intelligence*'* (*cf*. 3.6.2). Limited vocabulary leading to poor comprehension skills as well as problems with spelling and grammar was noted by a few participants who indicated that the possibility of a low level of intelligence could be the cause of this, but were not

confident about this presumption (P4AGr3; P11CGr2; P12CGr3; P16DGr3). *"This makes keeping up the work on grade level very hard,"* one participant complained (P12CGR3). *"Language of learning is completely non-existent when learners begin school for the first time,"* said another grade R participant (P5BGrR). One grade 3 participant (P16DGr3) explained, *"I have learners that came only in the beginning of this year from schools in settlement areas and can hardly understand English".*

5.4.1.1.4 Subcategory 4: Poor concentration

A few participants reported that some learners struggled to concentrate (not linked to ADHD) and seemed unable to react to instructions immediately (P7BGr2; P9CGrR; P1AGrR). *"I need to repeat instructions several times and can see from the expression on their faces that what I say is just not registering",* said one participant (P1AGrR).

5.4.1.2 Category 2: Extrinsic barriers to learning

Seven sub-categories were identified from the analysis regarding extrinsic barriers to learning which include: language of learning and teaching (LOLT); social issues; late arrival for class; emotional issues; lack of parental support; and lack of resources and overcrowded classrooms.

5.4.1.2.1 Subcategory 1: Language of learning and teaching (LOLT)

Many participants expressed the LOLT to be the predominant barrier to learning in their classrooms as they believed it lead to all aspects of language being affected, such as reading, writing, tenses and pronunciation. One participant stated that this barrier resulted in *"phonic recognition and spelling remaining a problem even beyond the final Foundation Phase grade"* (P12CGr3). Where English was perhaps a second or third language in some of the learners' lives, the additional language of Afrikaans was often a third or fourth language which the participants indicated exacerbated learning problems. None or little formal pre-school exposure was again proffered as a possible reason for this. A participant also mentioned that, *"the level of English knowledge was according to the economic status of the learner"* (P15DGr3). Another

asserted that *"this [LOLT and economic status] was often the deciding factor regarding whether a learner attended a pre-school or not"* (P2AGr1).

It was also stated that sentence structure in English differed from that of the home language, resulting in incorrectly worded English sentences. *"English that is learned is often applied in similar context to the home language where word sequence is inapplicable to the language of learning",* a participant explained. She added, *"It is a difficult habit to discard and often continues through to grades beyond Foundation Phase"* (P14DGr1).

5.4.1.2.2 Subcategory 2: Social issues

A few participants felt that social issues were also responsible for causing barriers to learning (P6BGr1; P11CGr2; P16DGr3). The factors that were identified included: *familial factors, such as divorce, ill health and financial issues*. The participants seemed to believe that *poverty* has a profound effect on the ability of a learner to function scholastically. *Malnourishment* was specifically identified as causing concentration problems. "*Social issues are evident when financial barriers become a problem and one can see that pupils are unfamiliar with certain issues as they are not exposed to them",* one participant remarked (P16DGr3). However, social skills did not seem to be affected by social background, as one participant stated, *"Social skills seem fine but the discipline of sitting down quietly to listen and follow instructions takes some effort on their part"* (P18EGr1).

5.4.1.2.3 Subcategory 3: Emotional issues

Only two participants commented on emotional aspects that possibly affected their learners' learning. *"Neglect at home is the most noticeable emotional issue*", a participant mentioned (P1AGrR), while another asserted that *"learning difficulties also appear to cause emotional distress in some learners with evidence of frustration, often leading to lack of confidence and motivation"* (P11CGr2).

5.4.1.2.4 Subcategory 4: Late arrival

Persistent late arrival for school was an issue with a few participants. *"Learners miss up to 15% of work",* insisted one participant (P6BGr1). Another stated that *"some don't have school uniform[s] and stationary so the class resumes late"* (P6BGr1). Transport was also regarded as a key problem as one participant stated, *"Transport issues are a big problem"* (P3AGr2).

5.4.1.2.5 Subcategory 5: Little parental support

A few participants felt that lack of parental support was because parents were either unwilling or unable due to their own lack of education. *"Parents think if their child can greet in English, they can speak English",* remarked one frustrated participant (P17EGrR). "*Some parents",* another maintained, *"feel that it is the teacher's job, not theirs, to teach their child and ensure he or she succeeds"* (P20EGr3).

5.4.1.2.6 Subcategory 6: Shortage of resources

Two participants indicated that a variety of resources were urgently needed, some with technological improvements as they often had to make do with inappropriate recyclable items, especially in the larger classes, leading to teacher frustration (P10CGr1; P15DGr3). *"Teachers have to constantly seek recycled material to use in the classroom",* reported one of the participants (P10CGr1). Availability of resources for small motor exercises was reported to be particularly in short supply (P10CGr1; P11CGr1).

5.4.1.2.7 Subcategory 7: Overcrowded classrooms

Some participants complained that class numbers were unacceptable since this added to the workload and increased discipline issues which also led to teachers feeling frustrated (P5BGrR; P20EGr3; P20EGr3; P8BGr3). One participant reported that *"managing a large classroom required certain discipline measures"* (P20EGr3). Another stated that *"noise levels hamper the learner with concentration problems"* (P5BGrR).

It appeared that large class numbers clearly lead to teacher frustration, with participants voicing their disappointment for being unable to assist learners who experienced barriers to learning in such a classroom. A participant explained that *"it is difficult to have very strong learners in a large class with children that struggle as carrying on with new concepts entails going back to recap so that all learners can understand. It feels like the weaker learners are keeping everyone behind"* (P18BGr3).

In my observations I noted that discipline in large classes with more than 30 learners became an issue towards the end of the day when learners were becoming tired. Learners would begin to become restless and annoy one another by punching each other or by taking stationery that belonged to others seemingly deliberately to begin an argument. Attention levels decreased as classes also progressively became noisier with lots of chatter. *"Responding to the needs of learners by being sensitive towards them and always helping those that struggle with learning can become difficult in a class with large numbers",* one participant reported (P3AGr2). *"Learners that need extra help or time will not easily be accommodated in a class of 30 or 40 plus",* announced another (P5BGrR); while yet another stated, *"It is very challenging for a teacher with 40 or more learners to apply inclusive teaching in the classroom"* (P7BGr2). One participant complained that although this contributed to the workload and led to discipline problems, teachers appeared to be *"fearful to voice this to authorities"* (P9CGrR).

According to some participants there is a dire need for schools to be supplied with additional professional assistance as *"outcomes would be far more successful if there were teaching assistants to help; or smaller classes",* a grade 2 participant declared (P7BGr2). Another participant summed it up by proposing, *"Schools need to be equipped with teacher assistants, educational psychologists, occupational therapists and other relevant professionals to assist in the guiding of specific needs"* (P9CGrR). A few participants felt this to be essential with large class numbers expressing that teachers were in *"dire need of teaching assistants to assist with learners who experience barriers to learning"* (P4AGr3, P8BGr3; P15DGr3). All the participants affirmed that they designed strategies to deal with the challenges in their classrooms but had to change these strategies every year. One participant

explained: *"No two classes are the same and class assistants would be a great help"* (P16DGr2).

One participant (P9CGrR) responded by expressing strong sentiment about what she regarded as the unreasonable expectations imposed on teachers by the District Based Support Team (DBST) and School Based Support Team (SBST) despite large classroom numbers. She added: *"Changing teaching strategies or adding new smart ones are not enough. The teacher needs to be empowered to be able to manage an all-inclusive classroom. The teacher has a teaching qualification – but is expected to know more, for example, if the learner has certain specific special needs – then the teacher needs to go and learn what is required and apply it. Teacher needs to become an all-encompassing figure and still deal with a class of 30 to 40 learners"* (P9CGrR).

5.4.2 Theme 2: Factors affecting learning needs

Leaning needs, which imply areas of learning in which some learners need attention, were reported by most participants in this study to be categorised into six themes with sub-categories as depicted in table 5.4 and integrated into the discussion below.

Table 5.4: Areas indicating learning needs

Theme	Category	Subcategory
Factors affecting learning needs	Language	• Oral communication • Reading and comprehension • Auditory discrimination
	Mathematics	• Concrete learning material • Individual assistance for mathematics
	Fine motor problems	
	Parental support	
	Social problems	
	Teacher's approach	

5.4.2.1 Category 1: Language

Sub-categories that were reported by most participants in this category included oral communication, reading and comprehension, and auditory discrimination.

5.4.2.1.1 Subcategory 1: Oral communication

Many participants were of the opinion that attention needs to be paid to *"speech and language enrichment and development"* of the LOLT, namely English. It was felt that especially oral communication is a problematic area that needs to be improved. *"Oral communication should be increased as it goes hand in hand with vocabulary extension",* noted one participant (P7BGr2). Another expressed similar sentiment with: "*There is a need to speak more English"* (P18EGr1). Participants reported that in large classes there was a tendency for learners to refuse speaking English at times, *"especially when I turn my back and during break",* a participant contended (P15DGr3). This was also endorsed by another participant who added that it *"[issues with the language of learning] exacerbates the lack of progress"* (P6BGr1).

"More time was [is] needed for responses", according to a participant (P15DGr3), while a few participants thought it necessary for instructions to be translated into the home language (P14DGr1; P13DGrR; P6BGr1). *"I often ask the brighter learners in my class to translate instructions for me. I then explain this in English to the children concerned*", a participant stated (P14DGr1). This participant also added: *"Some learners are more visual [visually orientated] so pictures are needed to explain work. Others are more comfortable to express themselves orally. This means that I need to accommodate assessment for them too".*

During observations I noted that several participants made use of peers to assist with translating instructions.

5.4.2.1.2 Subcategory 2: Reading and comprehension

Some participants reported that *"reading and comprehension content needed modification".* One participant felt that "*memory training and phonic awareness reinforces reading skills"* (P20EGr3). Participants asserted that reading was constantly encouraged through paired reading and picture reading for clarification in the early classes. One participant commented, *"Reading skills are reinforced through memory training and phonic awareness"* (P20EGr3).

5.4.2.1.3 Subcategory 3: Auditory discrimination

Auditory discrimination was reported by three participants who expressed that this area needed to be addressed with *"more intensive phonics awareness programmes"* (P2AGr1; P7BGr2; P20EGr3). They felt that this was important since the LOLT is *"often well below the level required in all the Foundation Phase grades*".

5.4.2.2 Category 2: Mathematics

The following were identified as sub-categories within Mathematics as areas of need: concrete learning material and individual assistance.

5.4.2.2.1 Subcategory 1: Concrete learning material

A few participants viewed learning material resources to be very important and noted that more time should be spent with concrete maths manipulations while content also needed to be modified (P7BGr2; P13GrR; P16DGr3). *"Some learners have to actually experience a mathematical concept in order to understand",* a participant stated, *"and this can only be physically demonstrated using concrete material"* (P16DGr3). Another felt that *"material is needed to prepare grade R learners to some degree for grade I maths"* (P13GrR).

5.4.2.2.2 Subcategory 2: Individual assistance for mathematics

Some participants asserted that "*individual attention"* was important and one grade R participant declared, *"Poor concentration needs to be attended to individually but one-on-one assistance calls for constant attention and supervision with extra learning and teaching activities"* (P1AGrR). Another participant stated, however that *"time is restricted due to the volume of work"* (P3AGr2). Most of these participants stated that individual attention is necessary because learners *"find certain concepts particularly difficult".* With regard to individual assistance one teacher added: *"Aspects such as tables and bonds needed to be addressed before teaching a learner new concepts"* (P20EGr3).

5.4.2.3 Category 3: Fine motor problems

Fine motor problems were asserted to be obstacles by two participants and need to be addressed (P2AGr1; P10DGr1*). "I find that by helping the learner through different forms of stimulation and exercise their writing does improve",* reported a participant who also added that *"fine motor refinement tools and resources, such as pencil grips, should be readily available in the classroom"* (P10DGr1). A grade 1 participant felt that the use of concrete materials for small motor exercise is of particular importance and stated, *"I set aside considerably more time for practical activities, such as screwing bolts and nuts and tracing as this results in improved writing skills which ultimately lessens my workload* (P2AGr1).

5.4.2.4 Category 4: Parental support

"Lack of parental support" was reported to add to both learner and teacher frustrations (P15DGr3). One participant felt strongly about this aspect and stated, *"One wishes to tell parents that each child has only one childhood, and that parents and teachers have a great role to play"* (P2EGr3). Parental support was reported by a few participants as important to support learning needs and one proffered*: "Parental support often falls short in some learners' lives"* (P6BGr1).

5.4.2.5 Category 5: Social problems

In instances where social problems were mentioned as causing barriers to learning, a few participants agreed with one who mentioned that *"counselling is imperative and that a supportive teacher with a caring attitude was a prerequisite"* (P11CGr2).

5.4.2.6 Category 6: Teacher's approach

A teacher's approach in the classroom was felt by a few participants to be of significant importance where a caring environment should be reflected in the treatment of learners and the support given by the teacher. One participant stated, *"I make a point not to generalise but to rather treat learners as individuals"* (P12CGr3). Participants asserted that teachers need to *"know their learners as individuals as*

well as their strengths, weaknesses and needs" (P5BGrR; P12CGr3). In addition, one participant felt it was important that *"classroom routines be maintained for safety and continuity"* (P13DGr3).

5.4.3 Theme 3: Teaching methods

During my observations I noticed that although a variety of teaching methods were employed, formal class teaching was incorporated many times by participants. In the questionnaire and interviews the participants mentioned that they employed different teaching styles to accommodate all learners.

Eleven categories and some subcategories under the peer teaching and group work categories emerged from the data. See table 5.5 for a summary of the categories and subcategories.

Table 5.5: Framework depicting teaching methods applied by participants

Theme	Category	Subcategory
Teaching methods	Using different methods	
	Whole class teaching	
	Cooperative learning and teaching	
	Peer teaching	• Peers as interpreter • Peers as assistants
	Group work	• Effective group work • Ineffective group work
	Individual instruction	
	Demonstration	
	Straddling	
	Scaffolding	
	Cubing	
	Repetition	

5.4.3.1 Category 1: Using different teaching methods

A few participants indicated that teaching methods should be differentiated to address diverse learning needs (P13GrR; P9CGrR; P3AGr2). One participant asserted that *"differentiation is not only considered for content but differing teaching*

styles are used according to the needs of learners and to coincide with their learning styles" (P3AGr2). This was also summed up by another participant, *"That way everyone is included. Some children will understand when it is presented differently so I feel strongly about applying a variety of teaching styles"* (P1AGrR). In the opinion of two participants, methods need to differ according to the topic presented and in order to develop learner performance (P9CGrR; P10CGr1). One participant proposed that teaching style *"needs to be varied daily or pupils will get bored"* (P8BGr3). Examples of differentiated teaching activities that were observed and reported by participants included showing, explaining, using concrete material, oral discussions, pictures stories, books, using the internet and teaching phonics by means of recording stories and replaying them.

Deductive teaching or didactic/direct teaching is a teacher-centred approach which can incorporate demonstration and practice (*cf.* 3.3.2; *cf.* 3.4.1). I observed this method to be preferred by a few participants in some of the overcrowded classes resulting in limited time for learner-centred activities. Inductive teaching, on the other hand, is an indirect, interactive teaching approach and includes facilitation, individualisation and group management. This learner-centred approach permits learners to be actively involved in their learning (*cf.* 3.4.2) and was observed as well as reported to be favoured by many participants.

Formal and informal approaches were reported to be consistently applied by the participants, as one participant notated, *"Certain areas require a more formal approach, for example, doing of worksheets, then playing freely with dough"* (P5BGrR).

I also noticed that in one talkative class the teacher would work hard to vary her teaching methods and capture her learners' attention (P16DGr3). In this class an interesting presentation on friendships included pets, so the participant had an adult, bring a kitten, hamster and dog to class for a few minutes allowing learners to touch the pets and ask the owner relevant questions. Learners were then asked to write five sentences on how they felt about friendship. Physical contact with the animals seemed to make for a quietened, reflective atmosphere resulting in some very creative writing.

In some classes I observed it was noted that teaching methods were differentiated during a single lesson. For example, one participant began by presenting a grade 3 lesson on ‘our planet’ from a practical perspective (P4AGr3). The class was taken out onto the playground as space was needed for the demonstration. She used learning material such as a yellow beach ball for the sun; some small ones for Mars, Mercury and Venus; a smaller one for the moon and a globe of the earth. Learners were selected to hold up the props and on her instructions enact the movement of the celestial bodies. On returning to the classroom the participant focused on memory, by asking questions about the outside activity and allowing time for responses. Worksheets were then handed out to be completed for homework. I was informed afterwards of the results. Most learners had recalled the order and size of the planets and the position of the moon and how it influences the Earth.

5.4.3.2 Category 2: Whole class teaching

I observed that whole class teaching was favoured by some participants whereby a topic or concept was introduced and followed by a discussion with questions and answers (*cf.* 3.4.1). During these observations all contributions by learners were acknowledged during this approach with participants ensuring that weaker learners participated and that questions were understood by all after direct teaching*. “I prefer this method,”* one participant proffered, *“due to large learner numbers in the class”* (P14DGr1). Another confirmed, *“I favour the didactic approach but make sure that weaker learners participate”* (P19EGr2). A few participants allowed time to re-teach specific topics or mathematics concepts to the whole class, including revision of assessment tasks (P3AGr2; P8BGr; P18EGr1; P20EGr3). One participant stated, *“I provide remedial worksheets and present a lesson that is [based on] revision work”* (P19EGr2). *“Extra time is made to re-teach,”* explained another participant (P18EGr1).

Often additional worksheets were handed out to help learners grasp the content. One participant stated, *“Remedial and revision of work and assessment tasks is done under close supervision to ensure that learners become familiar with the work. When explaining work or reading, I point out questions and requirements to problematic learners”* (P19EGr2). “*I make a note regarding difficulties with regards*

spelling and maths concepts", commented another, *"with the intention of repeating at end of the term once the syllabus was completed"* (P15DGr3). This was not so in some instances as little extra time was available at the end of the term after completing the curriculum.

Whole class teaching extended to where direct teaching was employed by incorporating the senses. This was described by a few participants to be particularly effective. Examples of this also entailed imagery, such as *"showing objects and pictures on a screen or a laptop"* were felt to be important by a few participants. *"When possible learners are given the opportunity to feel textures of objects; taste different flavours and to hear how sounds are produced*", reported a participant (P15DGr3). When teaching phonics, certain activities were emphasised as learners needed to *"hear how sounds are produced, listen to a CD then retell and even make up own stories"* (P15DGr3).

5.4.3.3 Category 3: Cooperative learning and teaching

Many participants felt that cooperative methods of learning were effective though it was not observed being implemented as often. Cooperative learning was especially reported to be used in Life skills lessons in all the Foundation Phase grades, as in the words of one participant, "*This helps to enforce discussion and feedback"* (P13DGrR). During one observation, cooperative learning was incorporated in a fieldwork activity. I watched learners being organised by a participant to go onto the school grounds in heterogeneous (mixed cultures and abilities) groups of five to search for creatures' 'homes'. The learners were tasked to make notes about the material with which each home was built, but with strict instructions not to disturb the occupants (P9CGrR). Learners then listed their group's findings while the participant facilitated discussions within the groups. The results from their research included: paper wasp, webs, weaver nests, swallow nests, dove nests, fish pond (frogs and fish), leaves (pupae), ant heaps and snail shells. Each group wrote five sentences about their findings and thereafter an open class discussion was held on the different group findings. The learners seemed keen to talk about how 'their' group had found some of the homes. In addition, the participant brought up questions that required reflection, such as, *"What do you think are the reasons for the specific homes?"* All

learners had relied on and successfully contributed towards the mutual outcome of the group through each member's individual contributions.

Observations often revealed that verbal interaction between learners encouraged each other's contribution to the success of a task. For example, a brief class discussion on aspects of interviewing celebrities was held in one grade 3 class. The participant (P12CGr3) demonstrated on the blackboard the written format of interview questions and answers, and then placed learners in pairs in an interviewer/interviewee situation. One learner was to represent a sport hero and answer relevant questions posed by the other learner. The learners were then instructed to write down eight interview questions and answers that they had thought of in their pairs. This was followed by a lively classroom discussion with emphasis on pertinent interview questions. The commitment of the pairs to work together through direct verbal interaction was evident as it appeared that they had thought hard about asking appropriate questions.

5.4.3.4 Category 4: Peer teaching

Peer teaching was utilised by many of the participants with peers helping others in the capacity of either translators or assistants.

5.4.3.4.1 Subcategory 1: Peers as interpreters

A few participants asked learners who were familiar with the home language of a learner struggling with English to act as translators. One participant stated, "*I ask peers to translate content now and again"* (P14DGr1). Another added, *"Especially when it comes to language as those that are more familiar with English are encouraged by me to translate but then to continue in English"* (P1AGrR).

5.4.3.4.2 Subcategory 2: Peers as assistants

Some participants reported that peer teaching was an effective teaching strategy. One admitted that *"peer teaching or peer support is often considered to help re-teach*

a struggler" (P3AGr2). At times, in classes with smaller numbers, participants would even ask the peer to teach the whole class; for example, one learner was an avid snake collector and willingly brought some specimens from his collection for a Life Skills lesson. The learner 'taught' the class about the various snakes that he knew, their eating habits, their usefulness and how to take care of them (P20EGr3). On another occasion a participant asked one learner to explain to his group how he worked out division problems. *"Learners sometimes learn and understand easier through a friend",* the participant proclaimed (P13DGrR). One participant reported that *"top learners assist the medium group while I work with weak learners"* (P8BGr3). Another participant stated, *"I always pair a strong and a weak learner. The learners are to work together with their partner, then a very short test follows and answers are handed to the partner to mark and assess. This is followed by a discussion of the work between the partners"* (P4AGr3).

A participant reported, "*One-on-one often includes peer teaching in small groups"* (P15DGr3). A grade 3 participant also mentioned, *"I adopt one-on-one in the form of peer teaching sometimes if a pupil feels threatened by more methods"* (P16DGr3). One participant described her experience with pairing. "*A caring aspect sometimes is evident with a general learner [one who does not have a barrier to learning] making a special effort to help"* (P18EGr1). Another endorsed this with "*some captains' stay after school to assist poor learners"* (P15DGr3).

In my capacity as observer I noticed that the practice of peer teaching was embraced in many of the classes and appeared to work quite well. I saw that it was enjoyed by the learners, with the weaker learner usually happy to learn from a peer. Similarly, I noted that the stronger learner seems to demonstrate a sense of importance since he/she feels accountable for assisting a peer. This was evident in statements made by these learners regularly: "*I can make you do this easily; watch*". It was apparent that learners were more comfortable with one of their peers than with the teacher as inhibitions seemed to fall away.

Two participants had a pairing policy whereby the teacher would ask certain learners to choose a learner from a specific row in the class to participate with them in a particular task. In this way learners could not always pick close friends (P11CGr2;

P14DGr1). At the same time I noticed peer teaching allowed the teacher some time to assist specific learners on a one-on-one basis. Learners were not allowed to copy from their 'pairing' peer who offered them individual support. To prevent this and teach responsibility I watched the participants in two classes allocate small workable tasks that kept learners occupied at all times during the pairing session (P2AGr1; P6BGr1). During a spelling lesson in another class I observed a learner would look at a word, say it, then cover the word and try to spell it to a peer (P15DGr2). I also witnessed that in many of the classes learners were often paired during reading sessions and took turns to read to one another. These exercises tended to become noisy and participants had to continuously remind learners to "*turn it down".*

I also sat in on a dialogue lesson that took place between learners in pairs with one strong and a weaker learner. The written format had first been demonstrated on the blackboard by the participant. Learners were then asked to pretend that one learner had accidentally broken a neighbour's window with a ball. The other learner was to be the neighbour who expected an apology. The cooperative venture turned out to be effective as learners later completed a written exercise obtaining reasonable results (P16DGr2).

However, facilitating peers to serve as assistants did not always yield the required results and a few participants did not view peer teaching as an effective teaching strategy. According to one participant *"stronger learners take over and forget that they are supposed to help the weaker ones"* (P3AGr2). Another discontinued the exercise as she "*found that learners tend to rely on their friends' answers"* (P7BGr2). Though copying was forbidden I noticed that it took place often in one class (5BGrR).

5.4.3.5 Category 5: Group work

Group work was considered by some participants as an effective method of teaching where cooperation rather than competition was encouraged. With the exception of two participants (P2AGr1; P11CGr2) who grouped learners according to ability, the others placed learners in mixed ability groups.

The participants reported that group work:

- *"Provided individual and group accountability"* (P4AGr3)
- *"Improved social skills and self-esteem fostering a sense of belonging"* (P4AGr3)
- *"Helped with the teaching of maths concepts and their understanding"* (P9CGrR)
- "*Allowed for open group discussions*" (P8BGr3)
- *"Gave an opportunity for collaborative rather than competitive problem-solving"* (P10CGr1)
- *"Permitted the teacher to incorporate on a rotation basis a combination of listening, writing and physical activities"* (P11CGr2)
- *"Allowed the teacher the opportunity to give individual attention to specific learners"* (P11CGr2)

The participants that grouped learners according to abilities affirmed that they moved learners on to the next academically stronger group as their work improved. I noticed that the classroom atmosphere was more sedate and learners appeared less enthusiastic than in the classrooms where mixed ability grouping took place (P2AGr1; P11CGr2). These participants, however, argued that this accommodated the weak, strong and average learner and did not make weaker learners feel "*out of their depth". "Groups are not fixed",* one participant explained, "*for as learners improved they are moved to a stronger academic group"* (P2AGr1).

Role play activities in groups were asserted by many participants as a recommended strategy to sustain interest in topics, especially during Life Skills classes. The success of this was observed in one class, for example, where some learners portrayed farm workers and others pretended to be specific farm animals in their groups. The purpose was to demonstrate the purpose behind the farming of certain animals (P5BGrR). Participants generally felt that the purpose of group work was to initiate peer assistance and participation of learners in the class. My analysis based on observations and participant opinions lead me to subdivide into effective group work and ineffective group work.

5.4.3.5.1 Effective group work

Many participants agreed that the stronger learners seemed to naturally take the lead in group work. *"Stronger learners enjoy teaching peers as a means of showing off their knowledge. It works!"* declared one participant (P20EGr3).

Another participant reported, *"I find group work effective as the weaker learners are eager to please the stronger ones and often ask questions that they might not have asked the teacher"* (P1AGr3).

Tasks and roles were rotated within groups, and some participants contended that taking turns was an important aspect of inclusion which one participant felt was to be taught from 'day one' (P5BGrR). *"Group members are constantly changed"* another participant stated (P5BGrR) and *"different tasks rotated within the group tasks so that each learner has a chance to learn and experience something new",* another added (P7EGrR). Classroom duties were fairly delegated and rotated to accommodate all learners, even those that preferred to 'hide away' as described by a participant (P9CGrR). One participant explained, *"All take turns to be group leaders and each gets a turn to do a specific task, next time round"* (P10CGr1). Another ensured that each learner had a turn to participate in role-play to *"give each learner an opportunity to speak"* (P10CGr1). One participant offered incentives, such as liquorice sticks, to groups who ensured that all members understood concepts at the end of the week to promote group responsibility (P7BGr2).

A participant was of the opinion that *"group work improved social skills, enhanced self-esteem, developed team and sense of belonging"* (P20EGr3). I, too, observed a sense of achievement and improved self-esteem among learners in many instances and detected a sense of belonging among them during group work. This appeared evident in the happy faces of the learners who managed to show their peers that they had successfully completed their contribution for the group.

A few participants encouraged learners to work together rather than compete with each other and one supported this concept by arguing that *"I feel this teaches them patience, tolerance and caring"* (P15DGr3). A participant stated that *"explaining time*

was shortened because brighter children would explain to the rest of the group and in the process lessen teacher workload" (P18EGr1). Another participant agreed that it made it possible for her to effectively *"observe the learners progress and set up assessment strategies"* (P15DGr3).

During my observation at the various schools I noticed that discussions in many of the classes were often held in groups and some participants seemed to encourage a collective mind-set with questions like *"How will your team work its way through the maze?"* The 'maze' was an exercise that entailed working out sums on a mathematical 'road map' to arrive at a destination (P15DGr3). I also noted that participants would focus on correct answers in favour of speed. "*If your group finishes earlier than the rest of the class you must check your work from the beginning*", a participant asserted (P16DGr3).

It was observed that most participants attempted to make sure that learners understood the instructions for group work exercises by continually asking, *"Have you all understood? I don't mind explaining again. I really want you all to know what you have to do".* I noted that in almost all of these classes, group tasks were completed satisfactorily.

I observed learners in their groups working on a particularly difficult mathematics problem which seemed to prompt a sense of achievement amongst stronger learners who were obviously enjoying showing off their own knowledge in the process of assisting other group members. This 'achievement', in turn, seemed to help encourage peers and motivate them to assist others who struggled (P15DGr3).

In some classes I noted group work entailed lengthy discussions on a topic while working on specific topic-related tasks. After group work a class discussion would follow where group results were compared (P9CGrR; P15DGr3; P10CGr1). It was also noted that participants took care to praise each contribution equally.

Participants in a few Life Skills classes made considerable use of group work in their activities. In one class each individual group member was to choose a numbered piece of folded paper from a container, the contents of which would only be known to

that learner. In consecutive order learners followed the written instructions along a particular route on a map. The plotting activity inspired an enthusiastic response in order to reveal the clue to where Batman was going for lunch (P12CGr3).

I observed a few sessions where five-member teams of grade 3s worked on numeracy or literacy projects for a few days with leaders chosen by group members (P20EGr3). New groups with new leaders were formed each Monday and leaders were expected to designate tasks fairly. Leaders were also responsible for group discipline and this appeared to promote leader accountability. On Fridays discussions were opened to the class and all learners participated. The discussion focused on what learners had learned or gained during the group activity. The participant continuously assessed learners while working in their groups during the entire project as well as during the final discussion (P20EGr3).

Group work was presented by many participants by dividing classes into four or five groups with each group allotted a different task but relevant to the topic. After fifteen minutes group tasks were rotated to maintain interest. I noted in my observations that group work in one grade 2 lesson entailed different activities for each group member within a group (P15DGr3). The topic was on transport and activities within a group ranged from one learner cutting out pictures on modes of transport; one writing five sentences on the topic; a learner drawing a favourite mode of transport; and one making a speech before the group on the topic. Tasks were then rotated within each group.

During one observation I witnessed a heated argument ensue in one group over delegated tasks set by the group leader. The participant intervened and subtly helped members share tasks to accommodate all learners (P4AGr3). Observing another class, I saw that group members were first encouraged to ask each other for ideas regarding the topic and the specific task they would like to be delegated before going ahead. One participant (P8BGr3) incorporated a fair amount of singing during group activities to relieve tensions and effect participation by all members (P6BGr1).
In some of the larger classes only pairing was practiced and participants reported that they always paired weaker learners with stronger ones; especially when individual or corrective attention was needed.

5.4.3.5.2 Ineffective group work

Some participants felt that learners did not benefit from group work and therefore it was seldom practiced in their classrooms. These participants felt that discipline levels fell during such sessions due to large classroom numbers and they preferred to teach the class as a whole.

"I have found that the stronger learner takes over. Slower learners don't get a chance or sit back and just get input from the stronger learners", a participant stated (P2AGr1). One participant (P3AGr2) stated that stronger learners seemed to enjoy showing weaker ones that they, as stronger learners, were capable of doing the work. *"Time is wasted on boasting and they don't seem to understand that they should help the weaker ones".* One participant (P4AGr3) maintained that she would sometimes pair learners *"as learners tended to get out of hand in bigger group numbers".*

In my observation of one class I noticed that strong learners indeed dominated the group and the weaker ones seemed to be overwhelmed by these learners and tended to withdraw within themselves (P2AGr1). At the same time, I felt that discipline was somehow lacking with this group. Similarly, I noticed that some groups in another class were very boisterous and the quieter learners also tended to withdraw (P4AGr3).

5.4.3.6 Category 6: Individual instruction

One- on-one instruction was reported to be supported by some participants and seen as an *"important teaching method usually coupled with continuous practice on a problematic area"* (P16DGr2). Another participant explained, "*I tend to plan lessons that allow for time with specific learners"* (P15DGr2). During observations it appeared that difficult activities were simplified and sometimes a participant would assist a learner to a certain extent. *"I will cut an object out for them, so that they only need to glue",* a grade R participant explained (P5BGrR).

Some participants maintained that whole class teaching was often followed by individual teaching. During my observation at one school I witnessed a learner having difficulty remembering the spelling of new words related to a topic on plants (P15DGr3). The participant provided individual instruction and through drill and practice she let the learner hear the difference in sound at the beginning, middle and end of the words. This continuous practice had the desired effect as the learner managed seven of the ten words when learners wrote a spelling test at the end of the lesson.

I often noticed participants sitting with individual learners and demonstrating or re-teaching concepts. After explaining work to a learner, one participant informed the learner that the teacher-learner role was to be reversed (P5BGrR). *"Now you are going to 'teach' me what I have just taught you".* She was quick to establish whether the learner had understood her explanation. In one class I saw that while learners were busy in their groups, the learner struggling to understand was on the carpet with the teacher who was explaining division to him using counters (P8BGr3). A few also recorded the length of time a learner took to complete a task for reference. *"The length of time a learner has taken to complete tasks is recorded for perspective",* a grade 3 participant maintained, meaning that it was documented to refer to the learner's progress (P20EGr3). Two participants allowed learners to set their own pace and goal and compete against their own time (P12CGr3; P7BGr2), while another participant sent incomplete work home to be completed (P19EGr2).

Individual support plans were shown to me by a few teachers who explained that these were usually in the form of additional remedial work with which learners had been struggling with and accompanied by a learners' progress report. I noticed how difficult it was to provide individual attention to learners who experience barriers to learning in a large class, though two participants continuously tried their best to provide individual support to these learners (P18EGr1; P20EGr3). One participant had the occasional services of an assistant to offer support with learners who struggled (P17GrR).

5.4.3.7 Category 7: Demonstration

A few participants explained that learning was made fun through demonstrations, such as role-play and experimentation using mainly topics taught during Life Skills lessons. *"Children love experiments and I try now and again to include in lessons e.g. with plants, seeds. I use 4 pots to see what will happen – 1. No sun, 2. No water, 3. No soil…",* a participant explained (P2AGr1). This participant also had learners in her grade 2 class tend to a small garden that they had underway. Some participants, however, felt that there was often little time to conduct experiments.

Demonstrations based on modelling knowledge and skills were also reported to be applied often by the participants. One participant had learners demonstrate the 'doing words' (verbs) by doing the actions (P3AGr2). *"Thabo, come to the front and show the class what you would do if you were hungry?"* The visual aspect of these exercises seemed to have the desired effect as the learners were able to 'see (understand)' the figure of speech.

Another also felt that "*problem-solving should be demonstrated by packing out objects if necessary and drawing or explaining solutions"* (P2AGr1). In other instances I saw participants first model a lesson on letter-writing on the blackboard before asking learners to write in their workbooks (P3AGr2; P7Gr2). I noticed that topics that were difficult to understand were often presented by means of demonstration to ensure that learners understood, for example, a mathematics lesson on 'capacity' was demonstrated physically where the teacher filled a container with water to demonstrate measurement and then the learners were requested to do the same (P12CGr3). In another class (P11CGr2) I observed how learners enjoyed watching the different reactions of chemicals when they came into contact with one another.

In the opinion of one participant: *"Tasks should first be demonstrated before learners commence with their work, preferably using learners in the example demonstration"* (P3AGr2). In one lesson I observed the teacher used a tape measure where she asked five learners to have their heights measured against the markings on a wall. A discussion was then held as to who was tallest, shortest, as well as the difference in

height between certain learners. This was followed by an exercise on measurement to be completed individually, consisting of three exercises catering for all abilities on which the teacher assessed the learners. The exercises consisted of 1) lines of various lengths that the learners were to measure using rulers; 2) an exercise whereby they were to estimate lengths of items in the classroom; and 3) addition combinations of metres and centimetres.

5.4.3.8 Category 8: Straddling

I noticed that most participants employ this teaching method. For example, for slower learners the participants used sums with smaller numbers during mathematics lessons and increased the level as they began to understand. I observed one participant breaking up the content into smaller chunks during a lesson on division (P20EGr3). Learners began division using single numbers and gradually she introduced larger numbers that included remainders in the answers.

5.4.3.9 Category 9: Scaffolding

Scaffolding was reported to be utilised by a few participants who applied this in numerous ways (P13DGr3; P2AGr1; P5BGrR). One participant explained, *"It is important to establish prior knowledge as basis for improvement and follow this by teaching in small bites, with much practice and repetition"* (P13DGr3). Another purported, *"The use of cards to show letter formation is first applied then learners are asked to build words with the cards or using a smartboard. Using words in the context is essential"* (P2AGr1). The participant would then ask learners to find similar sounds, or similar sounding prefixes or suffixes on their own.

All participants in the classrooms I observed seemed to employ this method as easier questions were posed first and gradually more difficult ones were asked. I noted in one class (P6BGr1) that reading cards were displayed and each word sounded out. The teacher then asked learners to write out sentences using the words on the cards. The following day learners were expected to write down those same words from memory. In many of the classes support and assistance were provided by the teacher during a lesson and as the learner began to understand and

cope, support was gradually withdrawn. For example, I witnessed a participant helping learners with a multiplication method and as they began to understand the method she would withdraw her assistance and move on to the next learner (P12CGr3).

5.4.3.10 Category 10: Cubing

While observing I noted that participants in many of the classes started their lessons based on the existing knowledge of their learners. Many participants, as one participant put it *"go back to where the child did understand the instruction and take it from there"* (P1AGrR). *"Tasks are then often divided into small steps",* proffered another (P16DGr2). *"It's no use confronting learners with something they know little about without beginning from their own knowledge base",* one participant explained (P8BGr3). *"Learners expand on their own knowledge and practice what they have learnt",* another affirmed (11CGr2*). "I like to use discrete task analysis to break up learning content into parts and make it easier for learners to understand to begin with*," a grade 3 participant reported (P13DGr3).

I observed learners in one grade 3 class (P8BGr3) being given the opportunity to demonstrate their understanding of the work by means of describing, comparing, and analysing. The topic was on interpreting a road map. The learners were asked by the participant to describe features and places that they could discern on a map. They were then told to observe landmarks and note various different routes to specific places depicted. Aspects of the different routes were thereafter analysed by the learners, such as distance, road conditions, features and landmarks. In one participant's class a maths lesson was presented which involved questions that needed to be solved by means of addition, subtraction, division or multiplication. The teacher began by associating terminology such as *reduce, sell, share and increase* to the mathematics concepts by comparing the meaning of the terminology with the functions of addition, subtraction multiplication or division. She then went through each problem step by step, breaking them into smaller sections to allow learners to understand each component of the sums and to determine which function was applicable to work out the solution. This was followed by an exercise that included ten sums with varying degrees of difficulty. She later explained to me that this was to

allow for ability assessment as from this she would be able to ascertain where any difficulty lay with a specific learner (P12GrCGr3).

One participant presented a somewhat challenging comprehension lesson to the class on how Bushmen lived in the past, focusing on a particular experience of a character called Xaxa (P3AGr2). The comprehension text was first read to the class and the Bushmen's way of life compared to the learners own ways of living. Each paragraph was broken into sentences that were discussed and questions that required critical thinking were asked by the teacher, for example, *"How would you have dealt with the dilemma Xaxa found himself in? Would you have ventured so far into the Kalahari Desert on your own?"* Incomplete sentences on the events in the story were subsequently given to learners to complete for homework.

5.4.3.11 Category 11: Repetition

Most participants agreed that revising concepts continuously was probably the most common teaching strategy and often in the form of recitation. Revision of assessment tasks was also regarded as a form of repetition*. "We sing educational songs together on the work we have done repetitively",* a participant stated (P13DGr). In some grade 1 classes the learners counted in unison their time tables every morning in 2s, 3s, 5s and 10s. In the words of one participant*, "Repetition makes recall easier and quicker"* (P2AGr1). *"The children love it anyway",* another contributed (P5BGrR). The participants affirmed that drill work, remediation and corrections form part of repetition which was practised by all and reported to be significantly effective. *"We apply repetition to the point where we even sing about an idea",* a participant mentioned (P1AGrR). *"We practise repetition daily as a form of reading and through weekly repetitive phonics and bond tests*", another added (P19EGr2). A participant also mentioned that *"repetition extends to mental maths and spelling games"* (P20EGr3).

Repetition was certainly the most common practice that I observed during my research, especially in the grade R classes and particularly involving learners with concentration problems and other barriers to learning. *"Repetition is the normal modus operandi",* one participant conceded (P14DGr1). I noticed that aspects

involved with most repetition in mathematics included counting, concepts, days and months. In the areas of language, repetition accounted mostly for reading words, figures of speech and spelling and in most grade 1 classes the alphabet was recited daily, concentrating on sound and pronunciation.

The general occurrence during my observations was that the participants gave an instruction that was repeated several times, and once the learners understood, they continued with the next instruction. They would often revisit and repeat earlier instructions.

5.4.4 Theme 4: Classroom management

All of the participants felt that managing the inclusive classroom effectively provided a safe and friendly environment for learning. Categories and subcategories surfacing from the data analysis are tabulated below in Table 5.6.

Table 5.6: Framework outline determining management strategies in the inclusive classroom

Theme	Category	Subcategory
Classroom management strategies	Discipline	• Setting classroom rules • Merit/demerit system • Addressing behaviour issues
	Organisation	• Delegating tasks • Seating • Arrangements • Keeping learners occupied • Well-prepared lessons
	Routine	

5.4.4.1 Category 1: Discipline

During the observations it seemed as if poor discipline was handled well by most participants. The three sub-categories that emerged and are described below were the setting of rules, a merit/demerit system, and dealing with behaviour issues from the onset.

5.4.4.1.1 Subcategory 1: Setting classroom rules

Many of the participants had set classroom rules as part of a Code of Conduct which was regularly revised to remind learners of the rules. The participants indicated that they would explain to learners why there were rules and repercussions for disobeying. One participant stated, *"Parents and learners sign this Code of Conduct at the beginning of the year"* (P11CGr2). Another related: "*I revise the rules regularly in order to remind learners now and again"* (P2AGr1). A grade 3 participant explained, *"I maintain eye contact at all times and explain why there are rules and repercussions for disobeying"* (P16DGr3).

Strategies such as *"counting to five and learners need to be seated"* while maintaining eye contact at all times were practiced in one difficult class which I observed (P1AGrR). In one classroom, rules were strictly applied regarding completion of tasks and class captains were tasked to report disruptive behaviour to the teacher (P1DGr3). One participant's personality showed firmness, but an underlying compassion was obvious since learners showed respect towards the participant (P20EGr3). This participant would hand out additional time tables to be written out by misbehaving learners, but at the same time would constantly encourage any learner who was struggling, and often with a pat on the shoulder that seemed to motivate the learner to try harder.

5.4.4.1.2 Subcategory 2: Merit/demerit system

A merit/demerit system was in place in some of the participants' classrooms and described as an effective measure that entailed a behaviour chart displaying learners' names alongside where stickers and stars were awarded for good behaviour. Bad behaviour resulted in the removal of a sticker. Praise and reward items were extracted from a 'magic box' at the end of the week by one participant (P2AGr1*). "We have a 5-card system and each time the card changes colour according to behaviour the learner receives a warning. Once it reaches the red card the learner is punished",* a participant explained, *"and after reaching a certain amount of merits for good conduct a learner can wear civvies"* (P10DGr1). One

participant maintained, *"Consistency and fairness is practiced at all times with no special treatment to avoid favouritism"* (P6BGr1).

5.4.4.1.3 Subcategory 3: Addressing behaviour issues

All participants incorporated methods to deal with inappropriate behaviour issues which some addressed swiftly. Strategies, as reported by participants, to maintain order included:

- "*A naughty corner"* (P4AGr3)
- *"keeping 'naughty' or hyper learner in charge, in this way the child tries to be good"* (P13DGrR)
- *"Address behaviour issues quickly"* (P12CGr3; P17EGrR)
- *"immediate response to prejudice to promote acceptance"* (P19EGr2)
- *"Light calming music played in the class"* (P17EGrR)

I noted, during my observations that participants mostly ignored poor behaviour and remained calm. I witnessed an instant whereby a learner directed a derogatory remark towards a struggling learner and the teacher immediately admonished the learner with the following remark*: "Such behaviour is not tolerated in my class"* (P1AGrR). The culprit was visibly embarrassed. In another classroom I observed a learner who was seated alone near the front of the class and trying to disrupt the class. The teacher ignored his antics and in following her conduct the rest of the class did the same. He soon gave up his attention-seeking behaviour (P4AGr3).

I observed how learners were watched over in a strict manner by a participant known to be 'a very serious teacher' by her colleagues. This strategy definitely seemed to work. On reflection, I got the impression that this teacher was a good role model as to how learners ought to behave (P15DGr3). I heard a few participants constantly remind learners of rules which they were expected to obey while the participants remaining consistent with appropriate punishment (P3AGr2; P7BGr2; P13DGr3). One participant meted out detention during break after unheeded repeated warnings. The participant used this time to give learners enrichment exercises and praised them for their efforts. This seemed to have a positive effect as the two learners

involved were somewhat more subdued after break and for the rest of the day (P20EGr3).

No special treatment of specific learners by any of the participants was noted during my entire observation period.

5.4.4.2 Category 2: Organisation

Organisation was reported by many to be of relevance in maintaining classroom order. Subcategories that were extracted from the data included delegating tasks, seating arrangements, maintaining learner interest, lesson preparation and time management.

5.4.4.2.1 Subcategory 1: Delegating tasks

A few participants reported that *"delegating tasks was common practice and should be rotated to give all a chance to participate"* (P17EGrR; P18EGr1; P1AGrR; P2AGr1; P7BGr2; P20EGr3). One participant explained, *"Leaders are chosen every Monday and are responsible for all tasks and errands"* (P18EGr1). Another insisted, *"Tidy up time at the end of the day is a compulsory delegated task"* (P17EGrR).

All the participants gave each learner a chance to be monitor or captain and classroom duties were rotated. One participant emphasised that *"tasks were delegated within a learner's capabilities to enhance responsibility and feelings of importance"* (P18EGr1). I observed this aspect to be common in many of the classes as participants delegated specific tasks within learner's capacity. Some were menial tasks to assist the teacher, like taking forms to the office. Monitors were delegated tasks like handing out library books or marked books and one participant expressed: *"Delegating tasks gives learners a sense of responsibility and increased confidence"* (P18EGr1). It was indeed evident from the expressions of the learners that delegating enhanced responsibility and feelings of importance. In one Grade 2 class a learner tasked with delivering a file to another teacher and returning with a specific book had a huge satisfied smile that reflected a sense of accountability when she returned (P7BGr2).

5.4.4.2.2 Subcategory 2: Seating arrangements

Participants reported that strategic seating arrangements were another aspect that allowed for the smooth running of the class (P3AGr2; P8BGr3; 7P6BGr1). Selective seating positions for specific learners in many of the participants' classes meant that normally academically weak learners sat in pairs near the front, close to the teacher, while disruptive ones sat alone. *"The front two rows are reserved for weak learners",* a grade 2 participant stated (P3AGr2), while another concluded, *"Disruptive learners are also seated in front"* (P8BGr3).

Another aspect practiced by some participants that encouraged mixing and participation was by alternating seating arrangements. *"Rotation and rearranging seating arrangements encourages mixing",* according to a Grade 3 teacher (P15DGr3). Another participant added, *"Learners often make new friends in this way"* (P1AGrR). Yet another participant maintained*, "Stronger learners help out weaker ones because we all belong to one class"* (P11CGr2). *"I mix children. Strong and weak sit at same table. In that way all are included all the time. Sometimes I organise different seating arrangements like in a circle and all learners are encouraged to participate in a specific task",* explained a participant (P1AGrR).

In my observations of the various schools I noted that many participants allowed seating arrangements in groups of four to eight learners, depending on specific tasks. I also noted one participant kept ADHD learners in the middle rows of the classroom to keep them away from being distracted by windows and the learners were also instructed to keep their desks clear of distracting materials (P14DGr1).

5.4.4.2.3 Subcategory 3: Keeping learners occupied

During my observations I noted that all participants kept learners occupied at all times. A few participants mentioned that learners *"needed to be kept occupied or motivated with new and exciting lessons such as experimentation, baking, role play and show, and tell activities"* (P5BGrR; P9CGrR; P13DGrR; P19EGr2). A certain pace needed to be maintained to *"avoid learners becoming bored"* according to a participant, including giving time frames within which tasks had to be completed

(P5BGrR). One grade 2 participant wrote, *"There are specific time frames in which work needs to be done so there is no time when learners are idle"* (P19EGr2). *"Tasks need to be fast-pace otherwise the learners become bored",* another added (P5BGrR). I noted that activities appeared to be varied from art through to challenging questions to keep learners' interest renewed.

5.4.4.2.4 Subcategory 4: Well-prepared lessons

A few participants proposed that good class management meant that lessons are to be well-prepared in advance (P9CGrR; P12CGr3; P14DGr1; P15DGr3). *"Planning in advance is the key to management success",* insisted one participant (P14DGr1*). "The idea is to keep them busy so they have little time to 'wander off track'",* another participant added (P17EGrR).

During my observations it seemed that all participants' lessons were well-prepared.

5.4.4.3 Category 3: Routine

A few participants contended that routine needed to be learned and adhered to (P1AGrR; P2AGr1; P3AGr2; P17EGrR). *"It ensures a comforting and safe environment",* was cited by a participant (P3AGr2), while another maintained*, "Routine ensures a clean and welcoming setting so a 'tidy up time' is set aside each day"* (P17EGrR). One participant reported that *"learners need structure in their lives and like to know what was happening as they do not like uncertainty"* (P1AGrR). Another quoted, *"Children have to get to know routine, such as greet in the morning, put out readers to exchange, collect monies/tuck orders, etc."* (P2AGr1).

5.4.5 Theme 5: Promoting a positive social environment

Categories emerging from the data analysis for this theme indicated that participants were unanimous in agreeing that a positive classroom environment was conducive to learning and should be maintained at all times. I observed a positive social classroom environment in all but one classroom where not much socialising was allowed to take place (P6BGr1). Two classrooms were particularly noisy (P13DGrR;

P1AGrR). In all other classes a happy, friendly, warm and sharing atmosphere prevailed with strong class harmony particularly evident in one participant's classroom (P20EGr3).

Categories extrapolated from the data under this theme were inclusion, recognition and values. These were further sub-categorised as presented in Table 5.7.

Table 5.7: Framework outline of promoting a positive social environment

Theme	Category	Subcategory
Promoting positive social environment	Inclusion	
	Recognition	
	Values	• Awareness of cultures • Treatment of others
	The use of resources	

5.4.5.1 Category 1: Inclusion

It was evident that all participants made an effort to uphold a positive social environment through inclusive practices in their classrooms. Many participants indicated that they included insecure learners in all activities. *"I ensure that insecure learners are included in activities that ask for a certain amount of decision-making as it makes them feel important, and boosts their confidence"* maintained one participant (P4AGr3). Another participant asserted, *"I will encourage others to play with a learner sitting on his or her own"* (P5BGrR).

Fairness also extended to other aspects of consideration. A participant stated that *"learners are often called at random though easier questions are posed to strugglers so that they were more comfortable answering"* (P7BGr2). *"We base our reading and themes, where possible, on experiences our learners should be familiar with",* according to another participant (P8BGR3). *"I try to use examples that all learners can relate to",* was the opinion of another (P10CGr1). I also observed that participants mostly encouraged accuracy by instructing learners not to speed through their work and granted extra time to those who struggled. *"Please take your*

time, I'd rather have neat work and fewer mistakes", was echoed by most participants.

5.4.5.2 Category 2: Recognition

Motivation by the teacher through "*acknowledgement, praise and encouragement*" was reported by a few participants (P18EGr1; P19EGr2; P1AGrR; P15DGr3). According to one participant, *"acknowledging all contributions has positive consequences and also instils confidence through achievement"* (P15DGr3).

Activities that ask for a certain amount of decision-making promote "*recognition; for example, allowing the learner to choose any three out of six tasks to perform". "It makes learners feel important",* one participant stated, *"and you can see this in their expressions"* (P4AGr3).

During my observations I noticed that all participants celebrated successes, especially some participants who constantly praised and encouraged learners to work well. Some participants reported that all efforts were acknowledged and valued. *"I ensure that each child expresses his or her feelings in a class discussion*", reported a participant (P17EGrR). *"If a learner provides a wrong answer I still thank the learner for trying. I also make sure they all feel good about themselves",* a participant contributed (P18EGr1).

I noticed in my observations that a learner's effort was valued by participants with remarks, such as, *"That's a good answer".* Participants would sometimes choose a random learner to explain to the class how the learner would approach a topic. An open class discussion would then follow which appeared to boost the learner's self-confidence as well as enhance the social climate considerably (P16DGr3; P19EGr3).

5.4.5.3 Category 3: Values

Values and beliefs seemed to be entrenched in the daily school activities of the schools and were often mentioned by participants. In promoting a positive social

environment, values in this study were found to culminate in two subcategories; awareness of cultures and how to treat others.

5.4.5.3.1 Subcategory 1: Awareness of cultures

Acceptable behaviour towards different cultures was explained to learners by a few participants and this was made clear in the Code of Conduct in the beginning of a year which was often revisited *"in order to serve as a reminder",* according to one participant (P14DGr1).

Awareness of different cultures and the need for respect of various cultural beliefs and ways of doing things was reported to be promoted by a few participants. *"A spirit of friendship is encouraged among learners of different diversities",* reported one participant (P6DGr3). Multicultural seating arrangements also helped to bring about an awareness of differences and learners *were "taught to value this diversity among all cultures",* as stated by a participant (P15BGr3). Learners at this age were keenly aware of discrimination and *"needed to feel fairly treated",* a Grade 3 participant also stated (P8BGr3). Many of the participants' schools encouraged involvement in special cultural celebrations where learners were allowed to dress up for the occasion.

"Social interactivity is important so groups are multicultural", a participant conceded (P14DGr1). This was also believed to be important in boosting self-esteem by two participants (P13DGrR; P4AGr3). *"Learners need to feel they 'belong'"*, was noted by one participant (P11CGr2) and another reported, *"We do everything in a group so nobody feels excluded"* (P5BGrR).

I observed how the participant in one class adapted the curriculum to incorporate aspects of different cultures in topics. Learners were also asked to bring items that were important in their respective cultures, with their parents' signed consent. I noted a keen interest in this practice as lessons would end in a lively discussion with the curiosity of learners aroused. I also felt that it was a means of developing respect for the different cultures (P7BGr2).

My observations revealed that with the exception of School C, attended by learners from a single cultural group, mixed cultures seemed well adapted and comfortable with each other.

5.4.5.3.2 Subcategory 2: Treatment of others

The teacher was seen as instrumental in guiding learners towards acceptance and respectful treatment of others. This was asserted by some participants to include both teacher-learner relationship as well as learner-to-learner rapport. *"The teacher as a role model must treat learners with love and respect",* a participant proposed (P4AGr3). Another purported, *"A teacher should teach compassion and helpfulness that learners follow example"* (P19EGr2). A few of the participants were of the opinion that a teacher's attitude motivated a learner (P17EGrR; P18EGr1; P19EGr2). *"I believe in showing love and smiling",* one participant stated (P10DGr1). Another participant noted, *"I allow children to respond spontaneously to situations and they feel comfortable to do so"* (P17EGrR).

A participant claimed that she *"does not allow anyone to harm the dignity of another pupil"* (P16DGr3), while as a show of respect another insisted that *"all must be quiet, listen to who speaks and put up a hand when they wish to speak"* (P19EGr2). This was also confirmed by another participant who ceded*, "We make learners aware of others' feelings. We don't laugh at others or brag about our achievements"* (P2AGr1). This was evident in my observations throughout the study.

In respect of learners' feelings towards peers with behavioural challenges, I observed a positive and accepting attitude in all classrooms that reflected qualities, such as tolerance, friendliness and equal treatment. Though no untoward attitudes were noted, at times peers reprimanded learners who disrupted the class. One problematic learner, who was often admonished by peers, forgot his sandwiches at home one Friday and when the teacher asked the class if anyone could spare him one of their own, *"I do!"* was echoed by 15 learners who were unhesitant to put up their hands (P20EGr3).

5.4.5.4 Category 4: The use of resources

Display charts and resources made from recycled material seemed to add in creating a conducive learning classroom environment. A few participants used comprehensive charts displayed on the wall on mathematics and language by referring to them often (P15DGr3; P17EGrR; P18EGr1). For example, learners' attention would often be diverted to a wall chart on nouns and adjectives in a grade 3 grammar lesson (P4AGr3). In addition, most of these participants had set aside a display area for learners' work. One participant included a section with learners' names and photos (P1AGrR). Most participants had also reserved 'educational areas' that included teaching aids such as reference books, iPads and CD players; whilst a few classes boasted a nature table and a reading corner. Many participants utilised a working weather chart (P7BGr2).

5.4.6 Theme 6: Collaboration with colleagues

Colleagues appeared to be regarded as an important resource and I witnessed most participants collaborate with other teachers over many aspects of their teaching. *"Consulting with colleagues is absolutely vital",* proffered one participant (P13DGrR), *"as one of them is bound to have a solution to something I can't work out".* The principal was occasionally consulted but Foundation Phase Heads of Department were favoured for advice. This was particularly evident during break in the staff room over 'shop talk'.

I watched as materials were often exchanged between participants and other teachers with suggestions as to how they had presented a lesson and which methods were found to work best. Advice regarding individual support plans was also sought. In addition, strengths and weaknesses of certain learners were also discussed and more was learnt about these learners' backgrounds and behaviours. One teacher described her frustration over the bad behaviour of a learner and was given much support by her colleagues who offered valuable suggestions on how to deal with the culprit and, more so, how the teacher should not become overly distressed by the situation.

5.4.7 Theme 7: Teaching strategies

The categories and subcategories extrapolated from this theme are summarised in Table 5.8 and further integrated into the discussion below.

Table 5.8: Teaching strategies utilised by participants

Theme	Category	Subcategory
Teaching strategies	Teacher-learner interaction	
	Learner participation	• Topics relate to learner environment
	Teaching and learning Material	• Language • Maths • Life skills
	Modification of curriculum	• Language • Mathematics
	Lesson planning	
	Assessment modifications	• Language • Mathematics
	Parent involvement	• General method to include parents • Response from parents/ caregivers

5.4.7.1 Category 1: Teacher-learner interaction

Interacting with learners in the process of teaching was asserted by a few participants to be an effective style of teaching as they believed that discussions help learners to better understand content. Interaction with learners was seen by a few as a way to know one's learners better (P5BGrR; P17EGrR; P18EGr1). *"In this way",* a participant conceded*, "I can determine their needs and their abilities"* (P5BGrR). Another maintained, *"We practice continuous communication"* (P17EGrR). Teachers used certain exercises to get to know their learners; for example, in most of the grade R classes I observed language lessons on a Monday morning would begin with 'news time' where learners related what they had done over the weekend.

Learners were instructed to first listen to the news and then a discussion was held. On other mornings the day would begin with a story that the teacher would read and thereafter followed with learners expected to retell the story (P1AGrR; P13DGrR). It was evident from this which learners needed further assistance as some would quote the story with incorrect sequence events or even leave out parts altogether.

I observed that participants made an effort to teach from the knowledge base of their learners and would begin with easier tasks or questions like, *"What do you know about bees?"* (P5BGrR) or *"Tell the class what you think we use trees for"* (P18EGr1). In my observations regarding teachers' knowledge of individual needs it was obvious that all the participants in my study knew their learners well. An example was in the manner participants would often signal out specific learners to inquire if they *"understand this step before we go on to the next"*. In several maths and language classes participants would repeatedly ask learners who seemed unsure whether they were 'okay' with the lesson or activity at a specific point during the lesson. If it was apparent that work had not been understood, participants would often revisit the work by referring back to where the learner had understood and then proceed again to teach from there, applying a learner-centred approach. Reflection also included rereading and revisiting a difficult topic in one or two of the classes. I heard participants during Life Skills lessons ask learners to think over the topics they had discussed that day and to consider how to put this into practice. The respective topics were on 'friendship' and 'littering' (P11CGr2, P20EGr3).

As part of learner-centred teaching observed in some classes the participants offered learners choices on which methods they would prefer using to solve problems and one participant allowed *"learners to create their own exercises"* (P20EGr3). This aspect of teaching seemed to promote self-efficacy as learners applied methods with which they were comfortable and often using concrete material. Promoting self-efficiency was seen by some participants as the main goal of their teaching and they felt that this could be achieved by encouraging learners to solve problems on their own. These participants tended to teach learners to 'look, listen and do self'. One participant stated, *"I believe in instilling confidence through achievement"* (P15DGr3).

Participants also felt it was important to practise continuous communication through listening and speaking activities and for learners to feel free to ask questions. I did, however, observe a considerable amount of learners copying from one another in one class while the teacher was occupied answering other learners' questions (P1AGrR). I also noted that one participant insisted that learners were to ask *"only relevant questions"* (P15DGr3).

I observed that in all the classes the teacher moved around the classroom attending to learners for most part of a lesson. Most participants interacted freely with their learners but managed to control the class when it got out of hand. Humour was also brought in by a participant now and again that was enjoyed by her learners (P19EGr2).

5.4.7.2 Category 2: Learner participation

Many participants emphasised that participation was of paramount importance and attempted to include all learners at all times through designing activities whereby all were actively involved.

Purposeful, planned activities that included involvement of learners were obvious in several of the classes I observed. Active participation was regarded by some as important to draw the learner into activities One participant showed her pleasure in a learner understanding a mathematics problem he had struggled with for some time and promptly involved him by instructing the learner to show a peer who had also been struggling. *"Now, I want you to show Rethabile how you worked this out"*. The learner visibly glowed with renewed confidence (P4AGr3).

I also encountered a particularly enthusiastic and active group of learners in my fieldwork in two classes where both participants in their course of instruction regularly emphasised 'we' instead of 'I' (P11CGr2; P20EGr3). Participation of learners was further reported to be encouraged by all participants by calling on learners at random to answer, or even pose, questions. *"All learners must be given an opportunity to give answers. Also allow others to offer their perceptions to peers*

answers", a participant (P3AGr2) stated. Another added, *"Pencils are put down when others are talking as a show of respect"* (P2AGr1).

I also witnessed most participants encourage learner participation in making decisions and would even ask learners how they would prefer a lesson to be presented. A participant felt that a combination method of listening, writing and some physical activities allowed learners to 'choose' which participatory activity they would feel comfortable with (P16DGr3). In another participant's (P7BGr2) class, on a learner's suggestion a lesson on transport included dramatisation rather than merely discussion. Each learner in the class was encouraged to pretend he or she was a mode of transport, such as a horse or train. The learners had to enact and discuss how they delivered goods or people, and the lesson was enjoyed by all. One participant instructed her class to imagine hard they were doing things in the 'real world' as she believed that *"role-play, performing as well as dancing by learners during Life Skills gives them the chance to feel the part they are enacting"* (P20EGr3).

I noticed that most participants would prepare a variety of classroom activities to incorporate active participation of learners and accommodate all abilities. For instance, during a language lesson I witnessed the participant utilising group work to clarify key concepts by applying different team activities (P7BGr2). In one team a learner was appointed to model certain actions while the rest of the team verbally described these actions. In another team learners took turns to read from text and discussion was held within the team on how they understood what they had read. A third team had a learner call out a word in the learners' home language and the other team members would translate it into English. These words were then used to compile short English sentences. Teams were rotated allowing every learner in the class to participate in all the activities.

One participant would sometimes change the learning location to facilitate participation of all learners. During one observation I joined learners taken to the playground for group reading under the trees (P20EGr3). In a grade 2 classroom during a reading lesson a passage was reread by the teacher; then learners were grouped to share experiences on the text. This allowed all learners to participate

(P19EGr2). I also noted in some classes that participants accommodated learners' struggling. For example, in one class a learner who struggled to find places on a map was asked by the participant to hold up the map while others pointed out routes (P8BGr3).

I was interested to witness that the arts were used effectively in several Life Skills classes to differentiate lessons and in so doing, convey real-life situations. I noted that this encompassed plays, dancing, and in preparing for a concert by one participant (P5BGrR). Emotions regarding an element of fun with general teaching were favourable with many participants. Some participants felt that learning through fun, such as play, art classes and games were important aspects of learning. A Grade R participant conceded, *"Children work faster if they don't 'work' at it - but play. These are still young children and I feel that they need to learn through play and this is done continuously"* (P1AGrR). *"We apply fun methods like recording and playing back and hold a class discussion afterwards",* asserted one participant (P8BGr3). A few participants mentioned that they *"play games and do small fun activities inside and outdoors* (P10CGr1; P17EGrR; P10DGr1). *"When introducing phonics, we use games and fun activities as learners tend to retain through play,"* according to another participant (P10CGr1). The fun activities that I observed included games, drama, movement, singing, rhymes, stories, role playing and music. In some of the classes I noted the participant involving slower learners by giving one learner a task to perform like a few dance steps that the participant knew the learner was able to carry out.

Another allowed water game challenges (P20EGr3). *"Teaching pre-schoolers without fun is impossible",* purported another participant, *"as they learn best this way, like adding glitter to water during water play"* (P5BGrR). One grade R class produced a stage play involving all learners and it was felt by the participant that *"presenting to parents reflected a sense of achievement by the learners"* (P9CGrR). I observed a grade R (P17EGrR) art class where the teacher incorporated language in a 'game' that entailed learners having to name items they touched to create their posters. To keep the noise level low they were asked to mumble the words.

A few reported that classroom activities were often augmented by experiments and experiences that required field work as these experiences were drawn into classroom work, such as discussions and written work. Such outings for learners were also considered fun activities. *"Yes, with every theme we try and incorporate fun in our experiments and field work"*, a participant maintained (P13DGrR). Two participants reserved *"Fridays for field study day"* and learners looked forward to this as an *"art, gardening and field study day"* (P16DGr2; P11CGr2). A participant quoted, *"We go on outings, like visit the zoo when we do animal themes"* (P19EGr2) and another mentioned, *"A visit to the circus is planned for September"* (P16DGr2). *"A change of venue is important to maintain interest so different strategies are applied in most learning areas, for example, even during news time all learners head outside, or for the carpet if it's raining, for discussion",* a participant explained (P9CGrR).

I sat in on a lesson the day before learners from School C were to go on an organised outing to the Choice Biscuit Bakery. A discussion was held to clarify aspects, like conduct and what to look for, as learners would have to report in writing on their observations the day after. I was present again on the following day when a discussion was held in the classroom about the excursion with all learners participating enthusiastically. Considerable interest was shown in which biscuits tasted best as each had received free samples. Written work followed which was divided into three sections of different complexity and learners could choose which section they wished to complete. One exercise entailed a word puzzle but they were encouraged to attempt all three just 'for fun' (P12CGr3).

While participants tried to do field trips with their learners when possible, a few (P3AGr2; P4AGr3) insisted that *"discipline problems with large classes during field work made teaching a strenuous task",* and one (P4AGr3) reiterated that *"there was little time for such activities".*

I was also present in one Grade 1 class when a teacher brought in some grandparents to act as teaching assistants and inform learners of the old days. They would choose random learners and ask them to repeat what they had said about certain aspects. This class usually required some effort by the participant to

discipline but the lesson ensured learner interest and everyone enjoyed the experience (P6BGr1).

Enrichment exercises filled time when learners were finished with set work. Many participants provided materials such as work cards and smart boards and allowed enrichment activities that were fun, such as drawing and building puzzles. Others merely meted out extra work, based on class work at the time, whilst some preferred more challenging work that was adapted to accommodate learners on different levels. This included either individual tasks or group work. Enrichment activities were available to keep learners busy at all times, as one participant explained, *"Extra activities are given to learners when one-on-one teaching takes place"* (P10CGr1). A few other participants preferred to extend learning with more challenging worksheets for enrichment. I observed that in most classrooms enrichment exercises remained relevant to the theme but with fun individual activities like drawing or building puzzles (P14DGr1; P12CGr3; P15DGr3). A few participants also provided incentives by way of challenging enrichment exercises to accommodate all levels of ability which also often incorporated a fun element (P20EGr3; P11CGr2).

Enrichment exercises for the class was the time that most participants used to focus on problematic learners. I also noticed that although many learners were occupied with enrichment tasks, larger classes tended to become noisy when the teacher was engaged with helping individuals.

5.4.7.2.1 Subcategory 1: Topics related to learner environment

Participants were unanimous in reporting that CAPS' topics all relate to the South African environment. A participant was adamant in her report *that "as much as possible we draw on learners' experience and take their environment into consideration"* (P8BGr3). The most common approach was to always *"begin with knowledge that learners were familiar with and lead to unfamiliar information",* as emphasised by one participant (P5BGrR). Another reported, *"Aids are often used to help with understanding and examples taken from different cultures and religions"* (P16DGr2). This was affirmed by a participant who stated, *"As a multi-cultural school we use everyday examples out of all different cultures and religions"* (P4AGr3).

In my observations I was made aware by the participants that any additional material introduced to lessons still related to the learners' environment. In one lesson the participant highlighted the importance of insects. Learners were taught the importance of protecting insects and the respect that one should have towards them (P18EGr1). In another class I witnessed how the participant used the topic of pollution to include aspects that involved the learners' environment and how they could improve their environment with questions like, *"How would you prevent the rivers in our area from becoming polluted?"* (P19EGr2).

I watched a participant give her class a task that entailed listing all the 'Xmas in July' specials that learners spotted in their shopping trips with family and friends over a weekend (P20EGr3). It brought a fair amount of humour to the class during the Monday discussion as items included chocolate Christmas eggs and decorations. It was interesting to witness that some learners had overheard parents and understood the concept that it was all a marketing strategy. They did agree, however, that some bargains were scored.

5.4.7.3 Category 3: Teaching and learning material used

Many participants expressed their opinion on the importance of teaching and learning material. One participant emphasised that *"in order to ensure learners experienced success on some level, it's imperative to modify learning and teaching material (P20EGr3)",* while some participants felt that modifying learning and teaching materials needed to be according to a learner's own level of confidence or understanding. From the data provided I was able to categorise the relevance of teaching and learning material into the main learning areas as depicted in Table 5.8.

5.4.7.3.1 Subcategory 1: Language

Due to financial constraints, technology in the form of tablets was not readily available at the schools of this study, although computers were utilised and a variety of teaching resources were reported by most participants to assist with language. *"Without teaching aids in the form of concrete and tangible resources we would struggle to impart knowledge to our learners",* one grade 2 participant asserted

(P11CGr2). *"The pupils often write words on their slates first as a practice session before doing so in their books",* another participant added (P2AGr1).

Although little was reported on the manner in which materials were applied, it was apparent that they were indispensable to the participants. Two participants felt strongly that 'Big Books' contributed towards discussions, leading to language development (P2AGr1; P11CGr2). Big Books are large books compiled by the learners themselves and consist of a collection of pictures and simple word formations according to a theme. Furthermore, class readers and library books that participants issued to learners were carefully chosen to suit each learner's literacy ability (P17EGrR; P7BGr2; P11CGr2; P18EGr1). A participant conceded, *"A variety of books according to individual learners' different levels of language development are issued"* (P18EGr1).

CAPS documents and recommended books by the Department, such as Blue Books and All-in-One Work Books with their associated Teacher's Guides for Foundation Phase, were considered adequate by some of the participants (P1AGrR; P4AGr3; P17EGrR; P20EGr3). A few participants also referred to the Blue Books while the All-in-One work book and Teacher's Guide, a combination series endorsed by the Department for use in South African schools, were also mentioned as useful material (P1AGrR; P2AGr1; P17EGrR; P20EGr3). Phonic cards were used for word building according to two participants (P2AGr1; P11CGr2) whilst the smartboard was described by a few to aid learners by helping them to visually discern images (P16DGr3; P2AGr1; P1AGrR). Internet and e-learning was also utilised by learners in the schools as reported by a few participants (P17EGrR; P8BGr3; P20EGr3; 12CGr3). *"The Internet is great for illustrations and research",* one participant stated (P1AGrR).

Practical objects were favoured by some participants as learners enjoyed these the most and included pictures, blackboard, slates, writing boards, flash cards, games, puppets, charts, transparencies, block paint, CD players and musical instruments. *"Learners all need phonic cards – one set per learner",* a participant reported (P2AGr1). One participant however, reported that *"apart from white board and markers, other resources are in short supply"* (P19EGr3). In my observation I noted

that counters, charts and other practical objects were available in her classroom but, indeed, in limited amounts.

Visual, auditory and kinaesthetic learning aids offering cognitive support were seen to be used in many classes. One participant stated, *"I always take a learner's learning style into consideration. Some learners are more visually orientated and get bored when the lesson is all about talking. I make sure to include lots of pictures in my lessons"* (P3Agr2). These learning aids were predominantly in the form of pictures, cards and models on various topics, for example, a volcano and windmill. Tape recorders, CD players and computers featured in some classrooms and use of the library as a resource was encouraged. *"Listening to a CD and allowing learners to retell a story is an effective way to learn the language",* a participant claimed (P7BGr2). I also observed that most classes were stocked with pin boards, puzzles, fancy clothing and art material. To aid learners with visual discrimination the participant would make an effort to write in larger letters (P2AGr1).

One participant had a learner with hearing problems sit near the front of the class and the learner was often reminded to focus on the teacher's face when she was explaining. This learner was having difficulty with auditory discrimination in using vowels and consonants and the teacher used synthesis by allowing her to blend sounds and form words using flash cards to show word order (P7BGr2). Another participant had learners design their own mind map on a chart that they could refer to as a resource in order to describe the many uses of trees. Learners used leaves, pieces of bark, fruit peel and paper (P4AGr3). Recycled material such as tins used as musical instruments and egg and cereal containers, featured as a resource in many classrooms.

Participants reported 'out of the norm' resources to maintain interest and motivate learners, such as peg boards, play dough, paint and 'Bright Child' pre-school resources for the early Foundation Phase group, namely, grade R and Grade 1. *"They love simple things, like water and sand play",* a Grade R participant asserted (P5BGrR).

5.4.7.3.2 Subcategory 2: Mathematics

As in language, CAPS documents, Blue Books and All-in-One Work Books and Teacher's Guide for mathematics in Foundation Phase were considered sufficient by some participants. One participant expressed that *"past prep and resource books serve as useful guides"* (P20EGr3). Using concrete or tangible apparatus were emphasised to be imperative in the learning process by a few participants. These included Unifix, abacus, number charts, wall charts, flash cards slate boards, play money, capacity jugs, meter sticks, chalk board, Hoppie pencils, counters and bottle tops. A few schools allow learners to access certain mathematics programmes so participants reported that *"learners have the use of computers"* (P14DGr1; P16DGr3, P12CGr3).

A few participants maintained that *"mathematics was best taught by practical example and concrete apparatus"* (P13DGrR; P18EGr1; P19EGr2). This, I noticed was predominantly practiced in all grade 1 and grade 2 classes. When a concept was first introduced concrete objects such as counters (Unifix), flashcards and abacus were commonly used for learners to visually work out the answers. One participant reported that *"concrete objects explained reasoning"* (P9CGrR). *"Use of technology by means of a tablet also assists",* a grade 2 participant added (P11CGr2).

Concrete methods were also occasionally utilised in grade 3 classes, especially with regard to fractions and when explaining the use of money. One participant mentioned that, *"I think all teachers will agree that real-life examples, like using paper money, are favoured"* (P13GrR).

I watched many participants demonstrate concepts using real objects with card number identification, particularly in the grade 1 classes. This usually followed a session of counting together. One participant used learners as 'objects' to explain the minus concept by demonstrating the action. For example, she would have six learners stand before the class and explain with, *"James, Lebo and Isaac, the three of you are called away to lunch; how many are left behind?"* (P2AGr1).

Another needed to explain tens and units by means of ‘block sums’ whereby each block represented an amount of ten units. To demonstrate the block sum equivalent of 23 she called up 23 learners to the front of the class. She then tied rope around two separate groups of ten learners and allowed the remaining three learners to stand some distance away from the bound groups and from each other to signify the ‘unit’ concept. Learners appeared to enjoy the lesson and seemed to understand the concept easier with this kind of activity (P8BGr3).

In one class I noted that tasks at times included the usage of the white board for mathematics instead of workbooks, as well as demonstrations with counters by peers who understood the work (P4AGr3; P12CGr3; P14DGr1). Dominoes arranged in patterns for grade1s were also utilised (P1AGrR). Group leaders were occasionally requested to assist with learners who struggled in one mathematics class (P20EGr3).

I noticed that modifying teaching material extended to concrete material and some participants were considerably resourceful when resources were lacking. For example, a few participants encouraged learners to always think of recyclable items that could be used. *“This makes them aware of the environment in the process as well as enhancing their creativity”,* one participant had reported (P1AGr1). One participant had plenty of plastic milk bottle tops she had collected herself to serve as counters for her 36 learners (P19EGr2). *“Not enough resources to go around”* reported a participant*, “with pencil grips and even counters sometimes in short supply but we compromise”* (P8BGr3). Another had a few learners using pencil grips in her classroom and where this resource was limited, clothes pegs seemed to solve the problem (P5BGrR).

5.4.7.3.3 Subcategory 3: Life skills

One participant conceded that the CAPS documents are an adequate resource for this area (P17EGrR). The internet was occasionally consulted by one participant to obtain information for lesson planning. This same participant reported that she *“sometimes encourages learners to bring along genuine items relevant to the topic for that week”* (P11CGr2).

5.4.7.4 Category 4: Modification of curriculum

A few participants did not modify the curriculum and a participant explained stating that *"the CAPS documents cover all levels of understanding"* (P3AGr2). Another participant reported that *"the curriculum is only slightly modified as I feel it accommodates all learners"* (P1AGrR), and a grade 3 participant added, *"I only make allowance for extra time and some leniency"* (P4AGr3). I also became aware that due to the time factor in a few classes, some sections of a topic were shortened to accommodate all learners (P19EGr2; P2AGr1). One participant revealed that *"it takes a lot of effort from the teacher [to modify] and there is simply no time for this due to large classes"* (P14DGr1). Others who made slight changes, however, admitted that there is a need for further modifications. *"One should adjust to some degree to suit all levels of abilities a participant affirmed"* (P10CGr1).

A participant expressed that *"the CAPS document should have been refined in the Foundation Phase to include more time for basics such as reading, phonics and basic mathematical manipulation"* (P7BGr2). According to one participant this was because learners who experience barriers to learning generally demonstrate a slow work pace and yet the teacher was expected to maintain the CAPS syllabus for the whole class as new concepts were taught daily (P19EGr2). Another participant reasoned that *"learners with barriers to learning required constant assistance which took time to teach when compared to the rest of the class and also needed time to understand and apply their knowledge"* (P9CGrR).

Most participants, however, adapted the curriculum to a certain extent and did not involve the SBST or parents as they maintained that they received little help from either. One participant reported that she *"always made an effort to adjust the curriculum to suit the levels of all learners in her class" (P10CGr1).* An aspect of adaptation reported to be practiced by a few participants was to allow for wait-time responses, giving the learner a chance to think out an appropriate answer or solution (P2AGr1; P16DGr3; P19EGr2).

Categories from the questionnaires and observations fell generally into modifications that took place in the LOLT and mathematics with emphasis in both these areas on

additional time for activities, concrete manipulation, use of pictures, posters, blocks, number charts, daily reading of interesting material and other forms of differentiation. Variation of practical activities and resources were also favoured by a few participants who agreed on teaching tasks from simple to more difficult (P6BGr1; P18EGr1; P8BGr3 & P12CGr3).

5.4.7.4.1 Subcategory 1: Language

Since many learners are not learning in their mother tongue this was an area that was given more attention to by most participants. A few participants reported to spend more time focusing on improving listening and speaking before attempting written work, as described by one participant*, "I make an effort to spend more time with these learners by talking and listening in my class"* (P11CGr2). Another participant (P2AGr1) explained, *"More time for discussion and language development is allowed as well as extra time for learners to complete their work".* Yet another insisted, *"Time is spent on phonics and reading for about 20 minutes per day to reinforce language skills. Auditory presentations are also presented visually" (*P9CGrR). One participant felt that the workload should be shortened for learners who experience barriers to learning as a result of not learning in their mother tongue*. "I reduce the number of items that a learner is expected to learn according to the learner's capacity and sometimes different spelling words are chosen for learners to learn"* (P11CGr2). Another participant explained*, "I may reduce the work slightly and focus more on what [the] learner understands and take it one step further from there"* (P1AGrR).

A Grade 2 participant proclaimed, *"I set projects that involve pictures and concrete objects instead of written work"* (P15DGr2), while another stated, *"I prefer to begin with hands-on activity first like painting and tracing before introducing words"* (P13DGr). One mentioned that she *"makes allowance for length and quality of written stories depending on learner ability"* (P19EGr2). A few participants asserted that when taking struggling learners into account, *"questions in comprehension are reworded in simpler language".*

Many participants modified lessons including a variety of activities from which learners could choose, catering for all language ability levels to ensure active participation by all learners. All participants that I observed kept to the topic of the lesson, but the level of difficulty was modified to accommodate learners. This was also confirmed by a few participants who reported that they customised lessons. *"I simplify to a lower level"* when a learner is struggling, a participant reported (P3AGr2). *"To suit individual needs, lessons are often adapted in favour of oral, practical and even role play instead of written work,"* another participant affirmed (P14DGr1).

Differentiating and modifying curriculum content to accommodate language barriers was reported by a few participants who felt that differentiation should be from the knowledge base of the learner and agreed that *"teaching should be suitable on a level for all learners".* Further modification of the curriculum was noted in a grade 1 class I observed where differentiation was included on one worksheet (P2AGr1). Worksheets were handed out and learners were expected to choose sections they could complete, provided a certain amount of sections were chosen. This was pre-designed to ensure that each learner would have to complete a 'difficult' section allowing the teacher to mark according to her knowledge of each learner's capability.

In one class, I watched the participant present her lesson in two different ways. She first read a story to the class and then asked some learners to enact the story before the class. The learners had a choice to write a summary of the entire story in five sentences, write any three sentences on the story, or merely write the beginning of the story in two sentences (P11CGr2).

In one grade 3 class I observed the participant being creative in helping learners understand a grammar lesson on proper nouns. She used three individual charts mounted on banners that she had made for learners to hold up in the class, portraying people in national dress for nationalities, mountains and rivers, and a map of the Earth depicting places. She encouraged learners to "*call out all the proper nouns and shout out names such as Vaal River, Mary, Table Mountain, Spanish, Greek, America and Africa*". "*Children, I also want you to focus on spelling*", she told

them. Most obtained full marks for the written grammar exercise afterwards, which I was allowed to examine (P4AGr3).

Some participants felt that reading, as described by one participant, was of *"paramount importance"* to develop language skills of learners not learning in their mother tongue (P14DGr1). The development of reading skills was taught through the use of different strategies. One-on-one support and differentiating group reading were identified by many participants as strategies to teach reading to learners experiencing barriers in this regard. I observed that a few participants read aloud to learners; repeated what they had read and then allowed the learner to read the piece at the learner's own pace. A few other participants read the learning material through with the learner. After this activity a participant added, *"I then ask the learner to find sounds in the text"* (P2AGr1). Two participants mentioned that they differentiated group reading sessions by rotating tasks (P7BGr2; P19EGr2). *"While I ask a group of children on the same level to read to me, another group is busy completing a reading or phonics worksheet",* one of the participants added. *"The groups would then be rotated"* (P7BGr2).

In an endeavour to improve reading I noted that 'sound games' were employed by one participant (P2AGr1). *"Which sound do you hear most?"* she would ask the class and then read a sentence such as 'Mary made many more mud mice than Martin'. The participant then encouraged learners to try making up their own short sentences emphasising a particular sound. A few participants expected home readers or library books to be read during class when other work was completed. These were readers issued to learners who were expected to read a certain section daily. A participant explained, *"Learners have been instructed to take out their home reading books and read when their work is done"* (P1AGrR). *"Learners are allowed to read to each another in their pairs",* added another (P15DGr3).

In two classes during a session of group reading, I noticed that after reading had taken place reading books were closed and sentences on the text were asked which were to be written out in the learners' workbooks (P6Gr1; P8Gr3). In another participant's class, spelling activities were done by using words from the text just

read (P14Gr1). It was interesting to note that some participants had learners design their own book markers which they were allowed to use to keep place when reading.

5.4.7.4.2 Subcategory 2: Mathematics

I noted during observations that many participants would modify the curriculum in some way to assist learners, for example, the teaching of 'measurement' was extended past the curriculum allocated period by a few participants as learners struggled with the concept (P8BGr3; 16DGr3). Periods for practical activity were also extended by participants. All twenty participants teaching Foundation Phase classes in this study conceded that *"maths was best taught using concrete examples with more time spent on mathematical manipulation".*

In a lesson I observed a participant use a worksheet on problem sums consisting of three exercises whereby the content remained the same but the numbers involved were smaller. The purpose of this activity was to accommodate all ability groups in a mathematics lesson. Learners could choose which exercise they wanted to complete. More capable learners did not appear to need encouragement to try a more difficult exercise and many of them completed all three exercises (P15DGr3). Single worksheets for maths were also reported to be differentiated by another participant (P16DGr2). *"I hand out worksheets adapted to all learner capabilities and ask some to focus on specific questions, for example, one learner focuses on matching and recognising numbers while another writes number sentences for symbols",* a participant stated (P16DGr2).

During another mathematics lesson observation, some learners were allowed to work out fractions by moving into place sizeable, coloured polystyrene props designed by the teacher to demonstrate parts of a whole. This seemed to be considerably effective in working out answers to fairly difficult sums. The sums were varied in complexity to accommodate all learners. A more challenging exercise was set for brighter learners to create their own fractions without the use of props (P12CGr3). I also noted in one class that desk arrangements were altered to form heterogeneous five-member groups of mixed abilities and gender to work out specific mathematics problems with concrete materials available. Worksheets

comprised of five sections of varying degrees of difficulty and each member had to work on one section (P20EGr3).

I noticed on several occasions that participants focused on strengths of learners which they were obviously aware of and let learners decide for themselves how to go about a task offering encouragement in the process. One participant told some learners, *"I know you have a good way of your own for doing the bonding. Now let's see how you are going to do this by bringing in the hundreds"* (P4AGr3).

5.4.7.5 Category 5: Lesson planning

It was noted that not all participants adapted lesson plans asserting that the CAPS material was adequate and most participants seemed to stick rigidly to the prescribed curriculum (P4AGR3; P7BGr2). They also indicated that due to large class numbers and insufficient time it was difficult to adapt lesson plans. *"Having an inclusive classroom and overcoming the barriers to learning takes a lot of serious planning on my side",* a participant reported. *"I spend every weekend planning for the next week. I know of many teachers who find inclusive education too taxing, and just don't bother to plan well and these learners are the ones that have greater challenges later in education"* (P14DGr1).

Planning was seen as important by a few participants who felt that all prescribed work needed to be covered effectively during the planning stages, as one explained, *"Learners are just passed into the next grade and teachers wonder how the next teacher will cope with work that should have been dealt with the year before"* (P20EGr3). Categories extracted from the data indicated that most participants applied diverse methods and activities in planning their lessons to accommodate all learning abilities and strategies to promote learning. Differentiating lessons was favourably viewed by a few participants and one explained that she *"diversifies lessons to allow for diverse methods to solve problems"* (P20EGr3). Two participants added that they *"always included extension work in prep work",* meaning that additional challenging work on all ability levels was incorporated when planning lessons (P8BGr3; P9CGrR). *"This accommodates bright learners and allows the teacher time to assist others",* the one participant cited (P8BGr3).

I noticed that lesson plans often included several ways of 'getting to the answer'. For example, one grade 3 participant wrote out a multiplication sum on the board referred to as a 'sentence problem' and proceeded to show learners three methods of obtaining the answer. They were allowed to choose whichever one they were comfortable with. I noted that one method was not included in the CAPS curriculum (P12CGr3).

5.4.7.6 Category 6: Assessment modifications

All the participants, even those who seemed to conform more rigidly to the CAPS' prescribed assessments, reported to make adaptations to some degree for learners experiencing barriers to learning. One participant maintained, *"We are all created differently and we all learn differently but our national assessment doesn't accommodate for this which is not fair on learners who learn differently"* (P11CGr2). Another participant argued that *"assessment activities are written in such a way that all learners are able to complete 40%"* (P11CGr2), and another ensured that *"a few challenging questions are always included"* (P7BGr2).

Assessment modifications by participants were mainly in the learning areas of language and mathematics as subcategorised for this research.

5.4.7.6.1 Subcategory 1: Language

A few participants mentioned that they took into account the learner's level of understanding when modifying assessment by simplifying or adapting methodology. One participant reported, *"This allows me to identify a learner's skill base so that I can work on the problem"* (P11CGr2). A few also felt that one-on-one observation of a learner allowed for continuous assessment to identify interests, needs and ability of the learner. Participants argued that this allowed the teacher to adapt assessment accordingly. *"I assess a problematical learner individually rather than in a group context",* reported a participant, *"to identify areas of weakness"* (P2AGr1).

A few participants felt that knowing their learners allowed them to assess learners differently (P3AGr2, P8BGr3; P10CGr1; 20EGr3). For example, I observed an English comprehension test consisting of three exercises in order of difficulty which all learners had to complete (P20EGr3). The teacher who knew her learners later showed me how she had evaluated according to individual capabilities.

Assessment was adapted by a few participants through diversifying work into written, practical and oral activities in all areas of language to accommodate all learners, which I observed in several of the classrooms (P16DGr2; P2AGr1). According to a grade 3 teacher, *"Assessments are drawn up with tasks that learners can do with challenging questions for those who excel"* (P20EGr3).

A few also acknowledged that they customise assessments. *"I simplify to a lower level"* when a learner is struggling, a participant reported (P3AGr2). Test questions were simplified or rephrased verbally and short answers were accepted. One participant mentioned, *"I adapt to a lower level especially with the phonic or spelling assessment of writing"* (P2AGr1). Another added, *"I merely adapt to a simpler assessment method"* (P11CGr2). A degree of leniency was permitted by some participants, especially with spelling and grammar for learners who experience barriers to learning. *"Assessment for learners who struggle is reduced",* a participant quoted (P15DGr3) and a second chance is sometimes considered. One participant stated, *"Same assessment is used as the rest of the class; just more lenient"* (P18EGr1).

Assessment was also adapted for specific learners through the use of concrete material. *"While general learners cut and paste pictures in order, learners with barriers use sequencing puzzles",* one participant stated (P13DGrR). Similarly, in assessing writing skills where learners displayed under-developed motor skills, a few participants reported that they allowed learners to *"build words with cards instead of written work"* (P12CGr3; P11CGr2). Referring to learners who struggled with writing, one asserted, *"I allow learners to describe verbally instead of writing"* (P3AGr2).

Adaptations to reading assessment, reported by two participants, included allowing the learner to re-read the text by regarding the first attempt as a practice run

(P7BGr2; P8BGr3). Moreover, when participants questioned learners who experience barriers to learning on the content of the text, they would rephrase the questions for learners to understand better. Extra time to ensure that learners completed a fair amount of reading for assessment was permitted. *"A learner is made to feel comfortable before reading for assessment takes place and told to take time to read so that no intimidation is felt",* a participant conceded (P7BGr2). *"Content remains same but I allow for extra time to ensure tasks are completed*", asserted a Grade 1 participant (P6BGr1).

I observed how one participant placed learners in groups of four and gave each group a text to read. All took turns to read the story 'How Themba conquered his fear of the deep water'. Discussions took place within the groups. The teacher walked from group to group and assessed the learners in their groups. It was later explained to me that group assessment through Bloom's Taxonomy was applied and leniency exercised when assessing problematic learners. The learners then took turns in their groups to summarise the story and relate it to the other members. A class discussion was subsequently held and the teacher asked random learners what they thought of the story and how they would have dealt with the situation while continually assessing the learners (P8BGr3).

One grade 1 participant announced that she *"modifies activities through a system of group work and applies this for assessment; for example, when teaching spelling, learners in group 1 fill in a missing sound for a picture. Group 2 write a word for the picture, while learners in group 3 are expected to write a short sentence about the picture. The learners are then rotated and assessed accordingly"* (P14DGr1).

I observed in several of the classes when reading assessment took place that extra time and a certain amount of leniency was permitted with learners who battled to read, and in one class learners were allowed to read less complicated material for assessment (P8BGR3).

5.4.7.6.2 Subcategory 2: Mathematics

Many participants adapted mathematical assessments and a few mentioned that they presented assessment activities on different levels to accommodate all abilities which according to one participant, *"makes it difficult to give a class average"* (P9CGrR). To provide for all learners, similar assessment methods as those for language emerged from the analysis of the questionnaires which included diversification, modification, one-on-one assistance, use of concrete objects and leniency. A few participants also reported that they diversify mathematical assessment by dividing the work into written and practical exercises adapted to include concrete material on various levels of difficulty (P11CGr2; P19EGr2). A participant explained, *"If assessments cannot be written I do them practically, depending on learner's circumstances"* (P11CGr2). "*Practical apparatus for those wanting it is allowed, especially during maths lessons, a participant conceded"* (P2AGr1). A grade R participant explained, *"I assess learners through play so as not to attract attention"* (17EGrR). These participants felt that modification of the process of assessment *"identified the learner's skills base, allowing the teacher to address problems*". Another participant maintained, *"This (diversification) enables me to determine a learner's potential"* (P20EGr3).

One-on-one assessment, according to a participant, permitted the teacher and learner to compare progress to previous activities (P1AGrR), and another participant explained, *"This enables a teacher to modify further assessment adaptations accordingly"* (P19EGr2). Another participant reaffirmed that *"comparison to previous activities rather than general learner assessment is done"* (P10CGr1). Some participants also mentioned that they practiced leniency by adapting to a less complicated assessment method or giving learners a second chance*. "I don't adapt assessment except for allowing leniency",* a participant proffered (P3AGr2).

During the observations I noted that some participants entered information in assessment portfolios which contain a historic account of each learner's academic achievement (P3AGr2; P8BGr3; P10CGr1; 20EGr3). Teacher's often referred to these portfolios and I was later informed that this was in order to ascertain the previous level of understanding of a specific problem and should the problem persist

the participant would be able to know how to address the situation. Progress seemed to be based on previous assessments and this was evident from remarks made by the teacher to the learner, such as, *"Do you remember how you managed to work that sum out? Now let's add another number to the calculation and see how you manage with that"* (P20EGr3).

Furthermore, additional time in which to complete assessment tasks was reported to be granted by most participants.

5.4.7.7 Category 7: Parent involvement

I extracted two categories from the theme that involved general methods to include parents and how parents respond to these methods. All the participants made various attempts to encourage parents to show interest and assist in their children's learning.

5.4.7.7.1 Subcategory 1: General methods to include parents

"Parent evenings and summoning parents" were described as the general methods of approaching parents by all participants, but methods such as using WhatsApp, SMS and phone calls were also common. An information evening is held at the beginning of each year at all the schools where teacher-parent contact is explained to parents and care givers. Other methods of contact include written circulars, parent-teacher meetings and newsletters. In all five schools parents were expected to sign their child's homework books on a daily basis, but participants felt that this was not always an 'effective measure' as books were not always signed. *"A signature does not always signify that homework has indeed been done,"* a grade R participant contended, "*and the teacher is often caught up having to educate the parents as well" (P9CGrR). "Parents need to be encouraged to reinforce previous homework",* added another (P15DGr3).

Communication books for learner's progress and other information were kept by school A and school D, and described as a "*reasonably effective two-way system"* between teacher and parents. The parent group in School C with its online forum

was reported by participants to be a method that allows parents to be effectively involved in the learners' learning and as one participant put it, *"where parents know exactly what is happening at school and how to reinforce it at home"* (P14DGr1).

Additional homework often included revision of assessment tasks and would involve parents overseeing the material. *"Revision of assessment tasks are given to learners for homework,"* was expressed by one of the participants (P19EGr2). *"It's a great help when parents can be involved to supervise extra homework,"* another participant added (P1AGr3).

5.4.7.7.2 Subcategory 2: Responses from parents or caregivers

Not all parents or caregivers were reported by the participants as enthusiastic regarding communication with teachers as they felt that it was *"the teacher's job to teach the learner and this had nothing to do with parents (P16DGr2)*".

A few participants reported that they compile extra homework and modify this for each learner yet receive little assistance from some parents; however, they continued to consult with parents (P6BGr1; P12CGr3; P18EGr1*). "Extra homework which is to be overseen by parents as part of Individual Support Plans does not always come back to the teacher",* reported one participant (P18EGr1). Another added*, "It's as if parents feel that extra homework as part of a Support Plan is not important"* (P16DGr3).

A few participants reported positive feedback when involving parents in programmes to assist their struggling children. Extra homework was overseen by these parents, signed by them and returned to the teacher. One participant stated, *"I always inform parents and ask for their help when possible"* (P18EGr1). Ongoing instructional decisions were reported to be included in support plans to School Based Support teams. This is affirmed by some participants (P20EGr3, P6BGr1; P8BGr3). Some participants were disappointed, however, by parental response. One participant related the following experience: *"Communication channels are open to misuse by parents and caregivers with little consideration to the teachers' time on a 24-hour basis by communicating irrelevant information"* (P11CGr2). A few participants

confirmed that the teacher's workload was increased by having to spend time to educate parents as well.

5.5 Interpretation and discussion of integrated findings

The findings for Section A, Section B and Section C, divisions of the questionnaire that include interview answers, were analysed. Information obtained through document analysis and additional observations are integrated in the discussion that follows.

5.5.1 Biographical background

It seems that the pre-service qualifications of the participants were sufficient with regard to teaching in the Foundation Phase. However, only a few mentioned that they had the opportunity to attend in-service workshops on how to support learners who experience barriers to learning and accommodate them in an inclusive environment. Participants averaged 13 years of teaching experience which seemed to be the main contributing factor to their developing own strategies for teaching in the inclusive classroom. Class numbers ranged from above 20 to more than 40 learners. In the findings it was clear that this is a major challenge for many of the participants.

5.5.2 Barriers to learning

The intrinsic barriers to learning identified by participants were perceptual problems, such as auditory, fine and gross motor perceptual skills, concentration problems, and a limited English vocabulary (*cf.* 5.4.1.1.1). According to Hugo *et al.* (2012:145, 151), poor auditory perception makes it difficult for a learner to discern between sounds, and they also struggle with auditory memory. This impedes on the learning of language since auditory stimuli are not recognised appropriately in order to interpret language correctly. Poor gross motor coordination appears also to be common with learners who have learning impairments. They struggle, for example, to sit upright at a desk for long periods of time, as well as when participating in physical activities. Poor fine motor coordination affects smaller muscles, such as pencil grip, which is

reflected in aspects such as poor handwriting (*Hugo et al*., 2012:159). As these barriers can result in learners experiencing learning disabilities, they could also create emotional problems as learners struggle to succeed academically (Philpott & McLaren, 2011:32). In addition, according to the participants, a few learners showed typical ADHD behaviour such as considerable inability to concentrate and expressed concerns that in some cases these learners were probably undiagnosed (*cf.* 2.5.2.6; *cf*. 5.4.1.1.2). These kinds of behaviours can have a significant impact on classroom discipline when a teacher is not trained in dealing with this, especially in a classroom with large numbers (Krüger & Kapp, 2011:15) (*cf*. 2.5.2.6).

Extrinsic barriers to learning were also described by participants in this study to impede learner progress in their classrooms. A key factor that they felt causing barriers to learning was learners learning in a LOLT (i.e. English) which was not their mother tongue. In several other studies (e.g. Nel *et al.*, 2012:15; Daniels, 2010:640) (*cf.* 2.5.1; *cf.* 2.5.1.4; *cf.* 2.5.2.1) this has been found to be a critical influence in learners not progressing academically as they should. According to Vygotsky (1978) and Bruner (1966) the language of learning plays a major role in the learning process as it forms the basis of communication and transfer of knowledge (*cf.* 3.2.3). This is also in accordance with Erikson and Erikson (2013:1) who stressed that psychosocial development occurs through the ability to express oneself in the language of learning and teaching to encourage academic success. The implication of this in an inclusive classroom could entail decelerating the curriculum for all learners in order to make time to teach the language of learning for some.

Participants also believed that for many English Second Language (ESL) learners' English knowledge levels appeared to be in accordance with poorer economic status and whether the learner had received any pre-school tuition. This confirms findings of Bines and Lei (2011:424) as well as Polat (2011:55) who affirm a distinct association between socio-economic status and learning achievement (*cf.* 2.5.1.1). According to Chetty (2012:1) it is reasonable to assume that learners need to be introduced to the LOLT as early as possible to become more formally stimulated, particularly as many parents place their children in English medium schools from Grade 1. Poor language ability as a result of learning in a second language was also judged as leading to limited comprehension skills and learners struggling with

spelling and grammar. The participants believed that the reason for this was because there is a difference between English and the mother tongue's word sequencing (*cf*. 5.4.1.2.1; *cf.* 5.4.2.1.1), which in this study is mainly Sesotho. According to the South African multi-language dictionary and phrase book (1994:7) verbs are used in Sesotho without specifying the subject with nouns or pronouns. Some learners are therefore prone to apply similar sentence structure to communicate in the English medium and then struggle to understand why it is not acceptable.

Other extrinsic barriers that were identified by the participants included various emotional and social issues, such as ill health, divorce, financial issues, parental neglect and emotional effects of experiencing barriers to learning. This has a negative influence on a learner's academic self-confidence (*cf.* 2.5.1.1; *cf.* 3.2.4; *cf.* 5.4.1.2.2). Late arrival for school as well as little parental support, due to certain parental attitudes or lack of education (*cf.* 3.2.4; *cf.* 5.4.1.2.5), were also cited as causing barriers to learning. A study by Okeke (2014:7) reported that parents who are aware of the importance of them being involved in their child's academic progress are more likely to become engaged. The literature states that in order to address learners' needs, teachers need to be aware of barriers to learning their learners could experience so that they will act accordingly by adapting learning situations and the curriculum (*cf*. 3.5).

A shortage of resources (*cf.* 2.5.1.3; *cf*. 5.4.1.2.6) was also reported and overcrowded classrooms (*cf.* 5.4.1.2.7) were a critical concern for a few participants throughout the study, since they felt that weaker learners could not get the support they needed and that these learners also kept others behind. Discipline also seemed to become a problem in large classes since participants had to spend time managing learner behaviour while also trying to help learners who experienced barriers to learning (*cf.* 2.5.1.6). In addition, noise levels were a distraction to learners with concentration difficulties (*cf*. 5.4.1.2.7). A study by Sheehy and Budiyanto (2015:480) found that in an inclusive education setting, learners who experience barriers to learning learn more effectively when the teacher-to-learner ratio is smaller (*cf.* 3.6).

Taking into account the diverse learning needs that arise as a result of intrinsic and extrinsic barriers to learning, an important aspect of the findings is that teachers need to have adequate knowledge and understanding about these barriers to be able to devise teaching strategies to accommodate all learners in every classroom (*cf.* 2.2.2).

5.5.3 Factors affecting learning needs

As mentioned above the medium of tuition in this study is English which was the second language of most learners'; consequently language was identified as an important learning need that needed attention, specifically with regard to oral communication and reading comprehension (*cf*. 2.4.1.2; *cf*. 2.5.1.4; *cf*. 5.4.2). Learning in a second language means that teaching needs to be adapted so that learners who experience barriers to learning can become more proficient in the LOLT (Daniels, 2010:637; Nel, 2011:174) (*cf*. 2.5.1.4). Since auditory discrimination was regarded by the participants as a key learning need (Hugo *et al.*, 2012:145, 151; Canadian Ministry of Education, 2003:23) (*cf*. 5.5.2), it was mentioned that good phonological awareness programmes were essential. In a study by Schaffler (2015) it was found that phonological awareness is not given adequate attention by Foundation Phase teachers. The primary reason for this is that teachers are not sufficiently trained in this regard and CAPS also addresses this factor ineffectively.

With regard to mathematics the participants asserted that concrete material in order for learners to experience mathematical concepts more visually, as well as more individual attention, were needed. (*cf*. 3.6.1; *cf*. 3.6.5; *cf*. 5.4.2.2). Roy *et al.* (2013:1189) assert that one-on-one attention enables teachers to better apply appropriate remedial strategies focusing on a learner's problematic areas of learning and learning programmes should be designed to assist the individual learner.

Parental support was highlighted as a critical factor in addressing learning needs by participants, and is affirmed by several studies (Swart & Phasha, 2011:237; Okeke, 2014:7). It is therefore obvious that learners' progress can be impeded if parents are not involved in a supportive manner. Social problems were also identified as a learning need to be addressed and as suggested by Bronfenbrenner (1977) (*cf*.

3.2.4), is an important facet in a child's development that can impact on academic progress (*cf.* 5.4.2.5). A teacher's approach in creating a caring environment where learners' strengths and weaknesses are known and accepted was accentuated in the literature (c*f*. 2.5.1.3; *cf.* 2.6) as well as by the participants in this study (*cf.* 5.4.2.6). It was observed that the participants acknowledged this and seemed to put special effort in caring for all their learners.

5.5.4 Teaching methods

Different approaches to teaching should be employed in an inclusive environment in order to address a diversity of learning needs (Nel *et al*., 2012:27; Petrina, in press: 127) (*cf.* 3.2.1). A variety of teaching methods and styles are needed to accommodate learners in the inclusive classroom with methods that can challenge all learners (*cf*. 2.4.1.4; *cf*. 3.2.2). Although formal approaches were used many times by participants, it was evident that they made an effort to apply a diversity of teaching methods (*cf*. 5.4.3.1) to include all their learners, emphasising learner participation as underlined by the social constructivist approach (Donald *et al*., 2010:81) (*cf*. 3.3.1).

While asserting a learner-centred perspective, the participants in many instances followed a whole class teaching approach by introducing a topic first using direct teaching and then following it up with questions and answers, especially when large class numbers were involved. According to Mahaye (2003:212-216), using a question and answer method encourages learners to make their own decisions independently (*cf.* 3.3.2; *cf*. 3.4.1). The inductive approach was, however, the preferred method of teaching as this learner-centred aspect involves active participation where learners were many times allowed to choose strategies and activities with which they were comfortable. Lessons were also mainly prepared with this in mind (*cf.* 3.4.2.1; *cf.* 5.4.5.4; *cf.* 5.5.5). According to Blumberg (2008) (*cf.* 3.4.2) and Jonassen (2000:92), in this way communication and collaborative skills are enhanced and learners are more motivated to learn when they are included in setting their own goals for learning (*cf.* 3.4.2).

Classroom support appeared to focus mainly on concentration strategies to help improve memory (*cf.* 5.4.5.1) by active learner participation while incorporating the senses through using imagery, phonics exercises and tactile opportunities such as slides, CD player and tangible material that could be physically handled (*cf.* 5.4.3.2). This is encouraged by Sandberg *et al*. (2015:512) who affirm the importance of incorporating different senses to address a variety of learning styles.

Visual and auditory queues were often applied, such as imagery in the form of charts and pictures, acting out situations and phonics through sounding or CDs (*cf.* 3.3.1; *cf.* 5.4.7.1). Visual and auditory methods of teaching were shown to be effective in a Scottish study by Davis and Deponio (2015:523) (*cf*. 2.3) as the stimulation of the senses helped learners retain memory. Demonstrations and experiments as well as field work and occasional organised outings were all seen to be fun activities in the process of learning (*cf.* 3.2.3; *cf*. 5.4.3.7), and utilised many times by the participants. However, participants admitted time was often an inhibiting factor in employing these kinds of activities.

Cooperative learning was usually used where group interactions were dependent on individual contributions but included discussion and feedback (*cf.* 3.4.2.2). Group discussion, as asserted by Braundy (1997:45-50), is considered a democratic method of teaching that involves clarification of a topic through a wide spectrum of points of view. It was also found in studies that successful cooperative learning follows positive interdependence among group members (Grosser, 2014:58-59) (*cf.* 3.4.2.1). Cooperative learning allows for learner participation and can also include a role play situation where learners are perhaps not assertive enough to take part in discussions (Petrina, in press:128). This was utilised by participants in many instances. Verbal interaction between the participants and the learners was observed to serve as encouragement to those learners who appeared to display less self-confidence in taking part in cooperative group activities. This usually seemed to have an effective outcome where learners then became involved and also achieved success.

Group work was encouraged by participants mainly to initiate peer assistance and learner participation. Nevertheless, they were divided in their opinions over the

effectiveness of group work. Proponents of group work believe it to be an effective collaborative, problem-solving teaching technique (Donald *et al.,* 2011:236) (*cf.* 3.23) and found that stronger learners took the lead in successful groups and enjoyed teaching and assisting peers who struggle. In this study, groups were mostly of mixed ability where cooperation rather than competition was encouraged. This is affirmed by several studies to be conducive in an inclusive classroom (Donald *et al*., 2011:236) (*cf.* 3.6.3; *cf.* 5.4.3.5). Weaker learners appeared comfortable in the group setting and also eager to please other members. Group membership was constantly changed and tasks rotated (*cf.* 3.6.3; *cf.* 5.4.3.5). Participants also asserted that they felt that self-esteem and social skills were enhanced, together with team spirit and a sense of belonging during group work (*cf.* 5.4.3.5; *cf.* 2.6.1). This is in compliance with the opinion of Sapon-Shevin (2007:219) who states that inclusion should promote a positive climate with feelings of acceptance and belonging where all learners are valued. This will result in all learners becoming better able to interact with others. Active involvement of all members was also encouraged by the participants by ensuring that the group was accountable for achieving tasks through each learner's contribution (Karpov, 2003:378) (*cf.* 3.4.2.1).

Some participants paired weaker learners with stronger learners where the stronger learner acted as teaching assistant and sometimes as translator. Positive aspects of this practice were reported by participants in that both learners seemed to enjoy the practice. Weaker learners appeared to feel more comfortable to be helped by a peer when struggling. Peer teaching and peer assessment also gave the impression that it lessened the teacher's workload, and consequently the teacher had more time to assist other weak learners and confirmed by Goto and Schneider (2010:33) (*cf.* 5.4.3.5; *cf.* 5.4.3).

Participants who did not find group work an effective practice, however, noted that stronger learners many times took over during discussions or the activity, forgetting their specific assigned duty. Weaker learners looked as if they relied more on and also copied answers given by the stronger learner (*cf.* 5.4.3.5). This led to some participants seldom utilising the practice. In some instances it was observed that stronger learners dominated groups, resulting in slower learners feeling overwhelmed. This was in contrast to other observations where leaders

demonstrated a genuine inclination to assist peers in more effective groups. Problematic disciplinary issues were also evident with group work in large classes (Donald *et al.,* 2010:90; Engelbrecht *et al*., 2015:6) (*cf.* 3.4.2.1; *cf*. 5.4.3.5). This is in accordance with Dednam (2011b:401), who proposed that learners did not all benefit from similar methods of support.

Individual or corrective teaching by the participants, in many instances, was done throughout their teaching. Lessons were also planned to allow for time in which to provide individual assistance (*cf.* 5.4.3.6). In the case of learners who experienced more severe learning difficulties, individual support plans (*cf.* 3.6.5; *cf*. 5.4.3.9) were compiled based on a learner's needs and strengths. Additional support was then provided to these learners by most of the participants. Engelbrecht (2013b:46) and Roy *et al.* (2013:1189) (*cf.* 3.6.5) assert that additional support should be designed according to the needs of the learner and progress must be monitored when appropriate strategies have been chosen.

Bruner's (1966) constructive scaffolding concept was often applied through facilitating techniques such as using explaining, questioning and demonstrating but gradually withdrawing as learners understood concepts (*cf.* 3.2.3; *cf.* 3.4.2.3; *cf*. 5.4.3.9). Straddling (*cf*. 3.2.5) was another much used method where the level of complexity was gradually raised, especially with tables and bonds in mathematics. Bloom's Taxonomy to design tasks on each level (*cf.* 3.2.5; *cf.* 5.4.3.8) was mostly employed during straddling. Bloom's taxonomy was also incorporated in applying the cubing method (*cf*. 3.4.2.2). Expanding on learners existing knowledge, comparing sections of work and then breaking it down as well as analysing it, were done consistently (*cf*. 5.4.3.10). This was afterwards followed by questioning learners on the work completed (*cf.* 3.4.2.2). Learners were also given the opportunity to describe, compare and analyse aspects of work when the cubing method was utilised. In addition, wait-time for responses from slower learners, rather than giving hasty incorrect replies, seemed to be encouraged by participants (*cf.* 3.4.2.1; *cf.* 3.6.3).

Nevertheless, repetition was the most used teaching method to help learners recall learning matter even though it did result in some learners becoming bored and not

paying attention. Behaviourists are of the opinion that skills are enhanced through revision and repetition because retention of material to memory is then made easier (Brown & Green, 2006:35) (*cf.* 3.2.1). Repetition extended to include aspects such as repeating lessons, maths processes, recitation and revision of work as well as assessment instructions and tasks (*cf.* 3.2.1; *cf.* 5.4.3.11). Participants were of the opinion, however, that learners needed to understand the learning material and therefore included repetition in remediation and corrections as well (*cf.* 3.6.2).

5.5.5 Classroom management

Classroom management strategies entailed maintaining discipline through setting classroom rules, often using a Code of Conduct that was regularly revised (*cf.* 3.7; *cf.* 5.4.4.1.1). Class monitors (learners) were also employed by participants to assist in maintaining order. Challenging learner behaviour was often associated with learners experiencing barriers to learning which, according to He and Cooper (2011:98) (*cf.* 2.5.1.7) is considered the most stressful aspect of teaching. Behaviour issues were immediately addressed by the participants, which seemed to be the appropriate reaction. A merit/demerit system with a weekly reward was effective for some participants, but crucially the participants applied fair treatment at all times (*cf.* 5.4.4.1.3). This is in agreement with research findings by Robinson and Lomofsky (2010:140) (*cf.* 3.2.1) who confirmed that rewarding good behaviour reinforces the chance of similar behaviour in the future.

An organised classroom was considered a good management strategy by participants (*cf.* 5.4.4.2) who appointed monitors, delegated tasks and in the process instilled responsibility. This is advocated by Donald *et al.* (2010:131) who state that an organised classroom promotes an inclusive environment (*cf.* 5.4.4.2.1). Strategic seating arrangements also ensured a smooth-running classroom with weak learners as well as disruptive ones seated near the front of the class. This seemed to keep learners with challenging behaviours from modelling each other (Gregory & Chapman, 2002:14) (*cf*. 5.4.4.2.2) although the possibility exists that this practice could lead to labelling. Therefore the teacher needs to be aware of this and respond accordingly by creating an atmosphere of acceptance. Rearranging seating was also considered to encourage mixing of cultures and abilities.

Learner interest was maintained by keeping them occupied through a learner-centred approach (*cf.* 2.5.1.7; *cf.* 3.7; *cf*. 5.4.4.2.3). This approach focuses on the learner who should be doing the learning, resulting in motivation to learn which consequently empowers the learner to take responsibility for his/her own learning (Blumberg, 2008). A learner-centred approach could be successfully applied by the participants because they prepared their lessons in advance and as a result effective time management in the classroom was observed (*cf.* 5.4.4.2.3; *cf.* 5.4.4.2.4). As Çubukçu (2015:53) explained, a time plan benefits learner and teacher and gives teachers time to focus on problematic learners. Additionally, routine was also seen as an important management strategy in upholding a sense of safety and continuity (*cf.* 5.4.4.3). As a result learners seemed to feel contented in their learning environments.

5.5.6 Promoting a positive social environment

Participants viewed a positive classroom environment as essential for conducive learning, leading to a constructive social environment that seemed to prevail in all classes. Inclusive practices were promoted throughout with fairness and equality prevalent to ensure a positive social environment (*cf.* 3.7). Praise and encouragement were evident in all classes and activities and encouraged learners to make their own decisions. In addition, recognition was applied by acknowledging all learner contributions (Hayes *et al*., 2007:171). Values, for example respecting different cultures, appeared to be entrenched throughout daily activities (*cf.* 5.4.5.3). Awareness of acceptable behaviour supported by good discipline practices prompted favourable responses in learner behaviour (*cf.* 5.4.5.3.1). This is in accordance with research by McLeod (2015:1) who advocated that continual positive reinforcement of desired behaviour is believed to result in that behaviour becoming habitual (*cf.* 3.2.1). In order to teach learners to show respect towards one another, particularly in the awareness of different cultures, participants endeavoured to remain role models in the treatment of their learners (*cf*. 3.2.3; *cf.* 5.5.1.3.2). This is in compliance with research by Brown and Green (2006:35) (*cf.* 3.2.1) who asserted that behaviourism incorporates modelling whereby learning is reinforced through imitation and observation.

In summary, a favourable social and inclusive learning environment was observed in the manner in which values were embedded in school activities, where all learners were included.

5.5.7 Collaboration with colleagues

Colleagues were constantly consulted and regarded as an important resource for professional support through exchange of material and information. According to Florian and Black-Hawkins (2011:822), collaboration with colleagues in an inclusive environment is essential since it advances learning and a positive school environment. In addition, colleagues seemed to offer moral and emotional support through shared experiences which are affirmed by Ainscow and Miles (2008:24), as well as Nel (2013:28), as vital to ensure that teachers do not become overwhelmed by the challenges of a diverse classroom (*cf.* 2.6.1; *cf*. 3.6.6).

In addition, discussing certain learners who experience barriers to learning with colleagues appeared to give participants a different perspective on these learners that could be utilised in a positive way.

5.5.8 Teaching strategies

Participants viewed continuous teacher-learner interaction as a means in which to get to know their learners. This involved listening and speaking activities and allowing learners freedom to ask questions as well as to make their own decisions (*cf.* 3.4.2.1; *cf.* 5.4.7.1). Collaborative learning skills are seen as a key component of social constructivism (Warin *et al.,* 2011:1957) (*cf.* 3.2.3), where learning mainly takes place through social interaction between teachers and learners (Nel *et al*., 2012:11). However, care needs to be taken that learners signalled out constantly by the teacher to enquire whether work has been understood does not result in these learners being labelled as slow learners by their peers.

Participants constantly linked new learning to learners' prior knowledge (Petrina, in press:150) (*cf.* 5.4.7.1) and this encouraged a feeling of self-efficacy within learners

which participants felt was their main goal in teaching. According to Piaget's (1969) cognitive development theory (Piaget & Inhelder, 1969) (*cf.* 3.2.2), children construct knowledge and new understanding based on what they know. Concrete materials also formed an imperative part of the learning process and resourcefulness in participants developing their own material was evident where it was unavailable. Incorporating an element of fun was also generally regarded as important to assist the learning process. This was encouraged through play, art and games which were important elements of active learning and participation in the classrooms of this study (*cf.* 3.3.2; *cf*. 5.5.13).

Participants were diligent in ensuring all learners actively participated in activities and consequently designed activities from a learner-centred perspective by using activities such as dramatisation and group work. They also ensured that all learners took turns by rotating different tasks (*cf.* 5.4.7.2.2) which is in accord with findings by Hay and Beyers (2011:243) (*cf*. 2.5.1.5) who state that participation of all learners is the main goal of inclusion. In addition, teacher instruction often emphasised 'we' rather than 'I' or 'you', favouring a shared experience for both teacher and learner. As previously mentioned, learners were often allowed to make their own decisions on how lessons were to be presented and to choose tasks or methods that they preferred to solve problems.

Teaching methods were differentiated in all subject areas and in some instances methods varied in a single lesson. Lesson presentation was modified to include a variety of activities from which learners could choose that catered for all ability levels; however, participants confirmed that incorporating differentiated levels was often a time-consuming exercise (*cf.* 5.5.5). Differentiation according Ferguson (2008:114) (*cf*. 3.6.2) meets diverse needs of learners through adaptation of content, while Florian and Black-Hawkins (2011:815) (*cf*. 2.2.1) emphasise that the way in which teachers approach lessons to accommodate all learners would ensure effective inclusive practices.

Differentiating classroom activities was noted as the foremost practice in ensuring participation. This was often done by utilising fun activities such as the arts, outside excursions, role play, celebrating special cultural occasions or by rotating seating

arrangements which apart from encouraging participation also contributed towards advancing the language of learning and teaching (*cf*. 5.4.7.2.1). Enrichment exercises such as crossword puzzles, challenging but fun worksheets and reading of library books, for the rest of the class filled time when the teacher was occupied with assisting problematic learners. Enrichment exercises are important to help maintain learner interest (Walton, 2012:133) (*cf.* 3.6.2).

Participants adhered to the CAPS topics which were all relevant to the South African environment and ensured therefore that lessons were taught by presenting relevant knowledge to learners (cf. 5.4.7.2.2.1). Additional learning material used by participants also related to the learners' environment and examples were often extracted from different cultures and religions (*cf.* 3.6.2). Participants felt that in South Africa, with its multi-cultural communities, teachers need to pay attention to specific backgrounds and life experiences of their learners and adjust the curriculum accordingly to ensure learners acquire meaning and respect for diversity as part of the learning experience for all learners (*cf.* 3.5). This is in accordance with the constructivist approach that affirms that learning is a consequence of the interaction between learners and their environment and not merely environmental influence (Bichelmeyer & Hsu, 1999:4). Learners were therefore actively involved in their learning, seeking meaning and significance (*cf.* 3.2.2). In addition, reflection extended to presenting lessons on topics that allowed learners to make decisions and offer their own perspective on what they had learnt (*cf.* 3.2.3). It also included rereading or revisiting a topic that required reflection. Knowledge, according to Vygotsky (1978) is constructed through reflection and experience (Donald *et al*., 2014:79; Grosser, 2014:7) (*cf*. 3.2.3) and it is therefore important to evaluate all considerations towards the outcome of individual or group activities (Donald *et al.,* 2010:90) (*cf*. 3.4.2.1).

Teaching and learning material was regarded as vital to aid teaching in the inclusive classroom and included 'Big Books', DBE recommended books and Teacher Guides, as well as concrete material. Mathematics was best understood by many learners through the use of practical and concrete material (*cf*. 5.4.7.3.2). Visual, auditory and kinaesthetic learning aids were utilised, as well as e-learning via the Internet by some schools (*cf*. 5.4.7.3.1). Learners were taught the value of using recycled

material, particularly where resources were lacking, and these featured in many classroom activities. Shortage of appropriate resources posed complications as a variety of material and equipment are required for differentiated activities in order to address diverse needs (Engelbrecht, Nel, *et al.,* 2013:217). Mahaye (2003:212-216) declares that appropriate instructional resources and in particular transparencies, maps and charts, audio tutorials and use of technology can augment teaching methods.

Flexibility in implementing curriculum requirements was also evident in that periods for practical activities that included small motor exercises and concrete manipulation in maths was extended as it was believed important for improving writing and mathematical skills (*cf.* 5.4.7.4; *cf.* 3.5). In addition, visual discrimination and auditory activities were also lengthened in most language lessons (*cf.* 5.4.3.1).

Participants developed and incorporated curriculum and assessment adaptations themselves as support from the SBST or parents' regarding this was not readily available. Adaptations included leniency in allowing learners more time to complete tasks as well as modifications of lessons and assessments, such as using oral or practical aspects in favour of written work (*cf.* 3.6.2.1; *cf.* 5.4.7.4). In addition, more time was used for visual and auditory perceptual activities, especially in most language lessons, while work volume for those experiencing barriers to learning was also reduced in all subjects (*cf*. 5.4.7.4.1). Adapting the curriculum is important as it accommodates the diversity of needs of learners and outcomes are still achieved while developing confident well-adjusted learners (Donald *et al.,* 2010:14; Engelbrecht, Nel *et al.,* 2013:217) (*cf*. 3.5).

Although lesson plans were also adapted to accommodate all abilities, some participants felt that the CAPS actually accommodated this adequately; however, others felt that the CAPS did not cater entirely for the inclusive classroom as teachers often struggled to complete the curriculum requirements for the whole class while also accommodating the slower work rate of learners who experienced barriers to learning (*cf.* 5.4.7.4). Therefore, taking the diverse needs of learners into account, curriculum modifications included adapting content by differentiating and modifying the curriculum on a level suitable for all learners (*cf.* 3.5) as well as extending the

curriculum past the Department's prescribed period in order to ensure learners understood concepts and developed basic skills. This was especially evident in the mathematics and language classes. In some classes, this practice, however, resulted in participants having to hasten other lessons towards the end of the term to complete the curriculum in time. Tomlinson *et al.* (2003:123) affirmed differentiated teaching as a tool of instruction whereby teachers offered alternative ways of learning in response to differences in learner readiness, interests and learning ability (*cf.* 3.6.2).

The participants saw the differentiation of learner tasks as either a slight variation from the original task, to completely diversifying tasks on a similar topic (*cf.* 3.6.2; *cf.* 5.5.3.1.1; *cf.* 5.5.9.1). Modifying an activity often led to the adaptation of learning and teaching materials according to a learner's level of ability (*cf.* 3.5). According to Betts and Letkemann (2003:15), learners are motivated when challenged on a level they can manage and consequently a positive teacher-learner relationship develops.

Re-teaching or revision of topics or concepts that learners found to be difficult was considered an effective curriculum intervention and is supported by the behaviourist approach (*cf*. 3.2.1). This usually took place towards the end of a term when the required curriculum had been covered; however, it was often not possible since little extra time was available. Re-teaching also included the revision of assessment tasks as well as second opportunity assessments (*cf.* 5.4.7.6). Often previously completed assessment tasks were given afresh to learners for additional homework as a form of revision (*cf.* 5.4.7.6).

Strategies to improve reading for learners who experienced difficulties were either provided on a one-on-one basis with the teacher or in groups where reading tasks were differentiated and rotated (*cf.* 5.4.7.5.2). Most reading strategies used seemed to develop reading abilities adequately in order to prepare learners to apply text to writing (Walker, 2000:100) (*cf.* 3.6.2.1.1). In order to develop and enrich learners' proficiency in the LOLT, they were encouraged to read their library books either alone or to each other when they completed their work. A principle of the behaviourist approach prescribes that a learner learns primarily by listening and

reading which is followed by trial and error and finally by reinforcement (Warin *et al*., 2011:1595) (*cf*. 3.2.1).

Participants were of the opinion that differentiation of lesson presentation and materials invariably resulted in differentiating assessment activities (*cf.* 3.6.2; *cf.* 3.6.3). Roy *et al.* (2013:1200) proposed that any changes to learning activities in a flexible curriculum should also be accommodated in the adaptation of assessment (*cf.* 3.5; *cf.* 3.6.2). Participants were also of the view that one-on-one diagnostic observation of a learner identifies learner needs and ability so assessment can be adapted accordingly (*cf.* 5.4.7.6; *cf.* 3.6.5).

Extra time, rereading and rephrasing of questions are determined as effective adaptive assessment measures (Dednam, 2011b:412; Canadian Ministry of Education, 2003:14-26) and were also applied by the participants. To allow for differentiation in assessment Bloom's Taxonomy was incorporated (*cf.* 3.2.3; *cf.* 3.2.5; *cf.* 5.4.7.6). Leniency was granted for spelling and grammar mistakes, and second chances were also granted in many instances (*cf.* 5.6.4; *cf.* 3.6.3). When building words, word cards were preferred above written work when assessing writing skills (*cf.* 3.6.3; *cf.* 5.4.7.6).

Participants indicated that mathematical assessment was diversified into various levels of complexity through written and practical work (*cf.* 3.6.2). Baseline assessment identified learners' knowledge and skills base and assessment could then be accordingly modified to address problems. One-on-one assessment was also utilised to help identify leaner progress and then adapt assessment tasks correspondingly (*cf.* 5.4.7.6). Additionally, learners were permitted to use a variety of concrete materials (*cf.* 5.4.7.6.3) during mathematical assessment. Roy *et al.* (2013:1200) and Naraian (2011:971) maintain that changes to the curriculum must be adapted in the assessment (*cf*. 3.6.2*; cf.* 5.4.10) to allow for enhanced learning (*cf*. 3.6.1).

Encouraged by their respective schools, participants attempted various methods to include parents in their children's education (*cf.* 3.6.5; *cf.* 5.4.7.7.1). These included WhatsApp, SMS, phone calls, information and parent evenings. Other means were

the use of communication books, letters, circulars and parent-teacher meetings. The signing of homework books was a prerequisite with all participants. Support often encompassed extra homework but these were found only to be effective when overseen by cooperative parents (*cf*. 5.4.7.7). Responses from parents or caregivers were not always enthusiastic with some feeling it was the teacher's job to educate their child. Research affirms positive results when parents are actively involved in their child's education (Davis & Florian, 2004a:143).

5.6 Conclusion

The findings of the research as well as the discussion thereof were presented in this chapter. The implications of these findings and how they answered the research questions are discussed in the next chapter.

CHAPTER 6

SUMMARY OF THE FINDINGS, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

6.1 Introduction

In Chapter 2 and Chapter 3 the literature review revealed that inclusive education was adopted globally in order to accommodate all learners who experience barriers to learning. Influenced by a human rights philosophy and well-established theory, as well as policies, the implementation of inclusive education is slowly progressing in South Africa. However, there seems to be a gap in reporting effective teaching strategies that could improve the application of inclusive education, particularly in the important early childhood years as taught in the Foundation Phase.

In this chapter the research questions of the study are revisited to determine whether the literature review and the findings addressed the problem statement adequately. The chapter is outlined as follows:

- Overview of the study
- Findings from the literature review
- Findings from the empirical research
- Recommendations
- Limitations of the study
- Conclusion

6.2 Overview of the study

In Chapter 1 the study was introduced firstly by providing a rationale and stating the problem and purpose of the study. A primary question was identified, namely: which teaching strategies are employed by Foundation Phase teachers in mainstream primary schools to effect inclusive education?

A concept clarification of key terminology was given with an overview of the research methodology, and the ethical aspects were also briefly presented.

Chapter 2 explored the theoretical background, policy development and conceptualisation of inclusive education. Challenges and extrinsic and intrinsic barriers to learning, complicating the successful implementation of inclusive education, were discussed. The role of the teacher within an inclusive education system was also addressed. These were regarded important aspects in the successful teaching of the inclusive Foundation Phase classroom.

Chapter 3 was dedicated to exploring the different theoretical perspectives underlying teaching strategies and methods in an inclusive education environment. Behaviourism, a cognitive approach and social constructivism, as well as the bio-ecological theory and Blooms' Taxonomy, were included in these discussions. A conceptual explanation was given with regard to teaching strategies and teaching methods and thereafter a variety of teaching approaches were presented. Teaching to a flexible curriculum, inclusive pedagogy, differentiation, multi-level teaching as well as a universal design of learning were deliberated on. Issues with regard to individual support plans, collaboration between teachers, classroom organisation, management and environment were also dealt with.

The research methodology followed was explained in Chapter 4 with reference to the qualitative method, the interpretivistic paradigm, the sample selection, data collection methods and procedures, data analysis as well as ethical procedures.

In Chapter 5 the data of the four methods of collection were integrated, analysed and interpreted. These findings were then summatively discussed.

6.3 Findings from the literature review

Key findings of the literature review, as relevant to this research, are presented below in accordance with the secondary questions posed in Chapter 1 to ultimately answer the primary question.

6.3.1 What is inclusive education?

The principled definition of inclusive education is in response to social exclusion worldwide of learners who have special educational needs, as a result of intrinsic as well as extrinsic barriers to learning. It is therefore a process of participation and inclusion, whereby all learners, regardless of physical or learning disabilities should be provided access to and accommodated in mainstream education (Ainscow *et al.*, 2006:25; Swart & Pettipher, 2011:11) (*cf.* 1.1; *cf*. 3.2.4). It promotes an *education for all* approach, particularly for those from vulnerable groups that have been and are treated unjustly by society. This includes learners from minority ethnic and cultural backgrounds, poor socio-economic circumstances, as well as children with disabilities (DoE, 2001:16) (*cf*. 2.2.1; *cf.* 3.2.3). Inclusive education is best described as bringing about change through diversity and characterised by the discouragement of all forms of exclusion (Florian & Black-Hawkins, 2011:816) (*cf*. 2.6; *cf.* 3.6.2.1.2)

6.3.2 How does the literature describe effective teaching?

Effective teaching in the literature is described as engaging learners in a subject on their level of ability through active participation, demonstration or memorisation (*cf*. 3.3.2). Both teacher-centred and learner-centred teaching is considered important, but the latter is preferred in an inclusive education environment as it allows learners to be active participants in their learning (Mahaye, 2003:212-216). A learner-centred approach must include differentiated teaching methods and varied content of diverse intricacy to promote inclusive education in the Foundation Phase, as various teaching methods and strategies are essential to accommodate diverse abilities (Walton, 2012:124) (*cf*. 2.4.1.4; *cf.* 3.3.2). This approach offers the learner choices that motivate learning through participation in the process of decision-making (Mahaye, 2003:221) (*cf*. 3.3.2; *cf*. 3.4.2). The DBE stated that adequate learning materials, a range of teaching methods, various styles and strategies, different methods of presentation, differentiating learning activities and a flexible curriculum were needed to allow for different learning needs (Wilde & Avramides, 2011:90-1). In addition, presenting a variety of classroom activities require that assessments should also be differentiated. In order to implement appropriate differentiated tasks and

address diverse learning needs, teachers should know their individual learners' needs and follow their progress (*cf*. 3.6.2.1).

The literature review took the behaviourist perspective into account which postulates that learning is associated with conditions that take place under either positive or negative influences (McLeod, 2015:1) (*cf*. 3.2.1) and that rewards reinforce positive behaviour (Robinson & Lomofsky, 2010). The role of the teacher is seen as crucial and it is emphasised that teaching is effective when the teacher's disposition and actions are conveyed to learners in a positive light. This, in turn, influences the degree of willingness of learners to comply (Polat, 2011:52).

In a constructivist approach, classroom organisation and management requires promoting a teaching and learning relationship where the focus is centred on the learner as an active participant. Such a constructivist environment fosters respect in a fair and secure learning environment. This approach also upholds that new knowledge must be linked to previous knowledge and learning should be made relevant to the learner to ensure effective learning. In addition, it asserts that the focus of learning should be on interaction between learners and their environment and not merely on the influence of that environment (Bichelmeyer & Hsu, 1999:4) (*cf*. 3.2.2). This requires that teaching and learning must be presented in different forms and also include multi-level teaching methods to promote inclusive practice (Kruse, 2009) (*cf.* 3.2.2).

Collaborative skills are important aspects of social constructivism, meaning that social interaction through communication between learners, between teachers, as well as between the teacher and learners are important (Warin *et al*., 2011:1597) (*cf*. 3.2.3; *cf*. 5.4.7.1). Furthermore, collaboration between all stakeholders, including the SBST, the DBST and parents is considered imperative to the successful teaching process, ensuring that diverse needs are met and appropriate activities are designed for learners (Nel, 2013:28; Schoeman, 2012:18) (*cf*. 2.5.1.5; *cf.* 3.6.2.1.2).

6.3.3 What makes teaching strategies effective in an inclusive classroom?

Teaching strategies can only be made effective by the teacher who is the primary mode through which learners learn. Knowledge and understanding of barriers to learning and of a range of possible ways to respond to these barriers, together with knowing one's learners and their individual needs is vital to successful inclusive practice (Donald *et al.,* 2010:90) (*cf*. 3.4.2.1). A positive attitude towards all learners, including those who struggle, is therefore also important to create a stimulating and caring learning climate in the classroom (Florian & Linklater, 2010:372; Forlin *et al*., 2008:252) (*cf.* 2.6). Essentially teacher-learner interaction needs to reflect interactive communication, preferably from a learner-centred perspective (Mahaye, 2003:212-216) (*cf.* 3.3.2).

Effective classroom management paves the way for effective teaching strategies. The teacher as a positive role model who also applies firm and fair discipline further reinforces positive behaviour that is conducive to learning (Brown & Green, 2006:35) (*cf*. 3.2.1; *cf.* 3.6.1; *cf*. 5.4.4). In addition, constant praise as well as rewarding good work or behaviour encourages the learner to strive and replicate the behaviour and try harder (Robinson & Lomofsky, 2010:141) (*cf.* 3.2.1).

Teachers need to guide learners towards taking responsibility for their learning, for example, by allowing learners to choose how they wish to approach a topic or problem as motivation and confidence are increased in this way (Blumberg, 2008; Vygotsky (1978); Bruner, 1966) (*cf.* 3.2.3; *cf.* 3.4.2; *cf*. 5.4.5). Furthermore, it is essential that topics and activities relate to the learner's environment. Learning should also take place from the learners' existing knowledge. This enables learners to better understand new learning (Brown & Green, 2006:36) (*cf.* 3.2.1).

When difference is accommodated through a variety of teaching strategies, classroom activities as well as a flexible curriculum and active participation of all learners in all activities, learners will be able to achieve academically (Dednam, 2013a:217) (*cf*. 2.6; *cf*. 3.5). This will continuously motivate them to apply themselves to their learning (*cf*. 2.4). It is asserted (*cf.* 3.6.2) that an effective strategy includes teachers adapting the curriculum to the learners' pace, while taking

existing knowledge into account and allowing for time to reflect as well as revisit work.

Having discussions with learners where the teacher does not dominate the conversation, but rather guides the discussion, ensures full learner participation and expression of views (Mahaye, 2003:214). This implies that supportive teaching can be more effective than an intervention later to remediate learning difficulties (Warin *et al.,* 2011:1597) (*cf*. 3.2.2). Knowing their learners and planning lessons well in advance to cater for various abilities is an effective inclusive strategy. Differentiation of lesson presentation and learning activities is important to cater for all abilities, and consequently assessment activities also need to be varied accordingly (Roy *et al.,* 2013:1200) (*cf.* 3.6.2; *cf.* 3.6.3). A variety of classroom activities that include cooperative learning through group work or peer teaching is also an effective inclusive strategy. This encourages communication skills, develops confidence and leadership qualities as well as provides the teacher with time to assist other learners who struggle (*cf*. 3.4.2.1).

In classes where the learner-teacher ratio is smaller the teacher can more effectively manage the class and attend to individual learners (Sheehy & Budiyanto, 2015:475) (*cf*. 3.6; *cf*. 5.5.2). At the same time cooperation and involvement of all stakeholders, including SBSTs, DBSTs and especially parents in the teaching process, promotes inclusion as they can positively influence a learner's learning process (Nel, 2013:28) (*cf*. 3.6.5). Collaboration amongst teachers who are willing to assist one another and share knowledge, resources and provide emotional support is also conducive to effective teaching (*cf.* 3.2.3).

Adequate learning material and concrete resources for learners who experience barriers to learning are also important in promoting a positive learning environment (Florian & Black-Hawkins, 2011:815) (*cf.* 2.2.1). Teaching and learning materials are vital in the Foundation Phase, especially to clarify various linguistic concepts and demonstrate mathematical manipulations. However, when this is in short supply teachers need to exercise innovative prowess and compromise (Florian & Black-Hawkins (2011:815) (*cf.* 2.2.1).

In order to fulfil the curriculum requirements within any time frame and sustain successful inclusive instruction, teaching assistants in every Foundation Phase classroom should be considered (*cf*. 2.5.1.5; *cf*. 5.4.1.2.7). In addition, ongoing comprehensive training and support for teachers that offers knowledge and skills on how to adapt the curriculum and assessment procedures for all learners is important to ensure the successful implementation of inclusive education (DoE, 2001:18-19) (*cf*. 2.4.1.2).

In order to enhance their knowledge on barriers to learning and develop effective teaching strategies, teachers should become lifelong learners by attending workshops, conducting their own research and by enrolling in online courses (Bornman & Donohue, 2013:102; Landsberg, 2011a:76) (*cf*. 2.6.1).

6.4 Empirical findings of this study

The main findings mentioned in the discussion below were determined from the empirical research and presented within the secondary research questions. In answering these questions the primary question has been addressed.

6.4.1 What is inclusive education?

The findings revealed that the participants understood the concept of inclusive education as the inclusion of all learners from various cultures, religions as well as those experiencing intrinsic and experiencing barriers to learning in one classroom. Teachers further demonstrated their understanding by asserting that a variety of teaching strategies are needed in order to accommodate these diverse learning needs (*cf*. 5.5.2).

6.4.2 Which teaching strategies did Foundation Phase teachers believe were effective in an inclusive classroom?

Differentiating teaching strategies, including the use of a variety of teaching methods, were asserted by the participants as important to address diverse needs in their classrooms (*cf*. 5.5.3). Proper lesson planning was viewed as essential in

ensuring that successful teaching and learning take place (*cf*. 5.5.7). Creating and promoting a positive learning environment and social climate for all learners where they endeavour to serve as role models, with a caring attitude that encouraged learners were regarded as integral to an inclusive Foundation Phase classroom (*cf*. 5.4.4.1.3). While acknowledgement and praise, as motivators, were seen by the participants as essential strategies, some also agreed that a progress chart was an effective measure as learners vied for points (*cf*. 5.4.4.1.2; *cf*. 5.5.4).

The participants indicated that teaching can only be effective when learners' prior knowledge is taken into account as well as when topics are made relevant to their environment (*cf.* 5.5.7). Teacher-learner interaction was considered as important since this allows the teacher to become familiar with the learning needs of learners. (*cf*. 5.5.7). A learner-centred approach and learners' involvement in their own learning was also regarded as vital (*cf*. 5.5.7). The participants further believed that participation by all learners in all activities is important to build learners' self-confidence, and activities consequently need to be purposefully planned to accommodate this (*cf*. 5.5.7). Good classroom management strategies were viewed as imperative in the effective running of an inclusive and often overcrowded classroom (*cf*. 5.5.4). They also agreed that additional homework was only effective if parents supported their children. It was usually required that parents sign homework books (*cf*. 5.4.7.7). Collaboration with colleagues in all aspects of teaching and as support structure was considered to be of significant importance (*cf*. 5.5.6).

Repetition was regarded as a very effective strategy which included revisiting material and permitting learners' time to reflect on what they had learnt (*cf*. 5.5.3). Planning lessons that included a variety of activities, with enrichment exercises that were both challenging and fun, were also believed to be effective strategies for teaching learners of all abilities (*cf*. 5.5.7).

In modifying the curriculum, activities that seemed to be favoured for language involved oral exercises, dramatisation and story-telling instead of written work, as teachers believed these together with leniency in marking encouraged slower learners (*cf*. 5.5.2; *cf.* 5.5.7). Although individual reading support with the teacher

was seen as effective, teachers felt that learners were more comfortable in peer groups with a variety of reading tasks (*cf*. 5.5.7). Mathematics was differentiated into various tasks of different levels of intricacy including written and practical work (*cf.* 5.4.7.6.3). In addition, concrete manipulation in mathematics was protracted as teachers believed it improved mathematical skills (*cf.* 5.4.7.4). In both the areas of language and mathematics, allowing for extra time to completing tasks and lessening the workload was also deemed to be effective with emphasis on accuracy rather than speed (*cf*. 5.5.7).

Many participants believed that they needed to enhance their knowledge and understanding of barriers to learning to enable them to develop appropriate strategies to assist individual learners (*cf*. 5.5.2).

6.4.3 Which teaching strategies were employed by Foundation Phase teachers?

Teaching strategies were varied by the participants in an attempt to accommodate all learner ability levels (*cf*. 5.4.7), but a learner-centred teaching approach was mainly used with a strong emphasis on learner participation (*cf*. 5.5.3). Although direct or didactic teaching was used, it was mostly used in whole class teaching (*cf*. 5.5.3). However, during all the data collection methods it was continuously noted that an array of teaching methods were employed, including strategies that incorporated the senses, demonstrations, experiments, cooperative learning strategies, group work, peer teaching, individual attention, scaffolding, straddling, cubing and allowing time for responses and repetition (*cf*. 5.5.3). A range of different classroom activities were utilised and this included fun activities in the form of art, role play, demonstrations, experiments, as well as outside excursions (*cf*. 3.2.3; *cf*. 3.3.2). Repetition was regarded as indispensable by the participants and also incorporated during remediation and corrections (*cf*. 5.5.3).

Many participants adhered to the CAPS requirements as they considered this to be adequate. However, others adapted and modified plans while additional work was included to challenge all levels of ability (*cf.* 5.4.7.5; *cf*. 5.5.7). In creating an inclusive classroom atmosphere the participants presented lessons in a firm but

amicable and caring manner, and praised all learners for good behaviour or work. It appeared that in general no learner was excluded from teaching, class activities or support (*cf.* 5.4.2; *cf*. 5.4.3; *cf.* 5.4.7; *cf.* 5.4.2.6). Since classes had learners from different cultures, values such as respecting cultural diversity were integrated in different activities (*cf.* 5.4.5.3.1; *cf.* 5.4.7.2.2.1). The CAPS topics were made relevant to their learners' environment and participants expanded on their learners' prior knowledge base (*cf*. 5.4.7.1; *cf.* 5.4.7.4.1; *cf*. 5.4.7.2.2.1).

Curriculum modifications included using more visual and concrete learning material in mathematics and oral or practical components in language classes (*cf*. 5.4.7.6.2; *cf.* 5.5.7). Leniency was also granted with regard to spelling and grammar, especially for ESL learners (*cf*. 5.4.7.6.2; *cf.* 5.5.7). Reading support was generally on a one-on-one basis with the teacher or in groups where reading tasks were differentiated and rotated (*cf.* 5.5.7). In addition, assessment modifications were applied by most participants. However, some participants felt that the CAPS prescribed assessment activities were sufficient and consequently adapted to a much lesser degree than others. Adaptation chiefly entailed oral or practical aspects in favour of written work (*cf*. 5.4.7.6; *cf.* 5.5.7). Extra time to complete tasks as well as wait-time for responses was constantly applied with extensive use of repetition in all areas (*cf*. 5.2.5.6; *cf*. 5.5.7).

Individual support was provided to learners who struggled with mathematics and language in the classroom, which also entailed additional homework (*cf*. 5.5.4; *cf*. 5.5.7). Participants reached out to parents to encourage involvement in their child's education (*cf.* 5.5.7).

6.4.4 How should Foundation Phase teachers choose and implement teaching strategies to effect inclusive education? (This research question is answered from the literature review as well as the empirical research.)

It is evident from the findings that South African classrooms have learners with a diversity of learning needs. These learning needs differ as a result of diverse cultures, religions, socio-economic status, as well as intrinsic and extrinsic barriers to learning (Wrench *et al*., 2013:935; Wilde & Avramides, 2011:90-1) (*cf*. 3.2.4; *cf*.

3.3.1; *cf*. 3.5; *cf*. 5.5.2). Consequently, when choosing teaching strategies, these learning needs must be taken into account by planning appropriately and by using a variety of teaching methods as well as classroom and assessment activities (Florian & Black-Hawkins, 2011:815; Mills *et al*., 2014:343) (*cf*. 3.6.1; *cf*. 3.6.2; *cf*. 5.5.3; *cf.* 5.5.7). From the findings it is obvious that teachers need to take care not to assume that certain teaching methods work better than others. The different methods, integrating behaviourist, cognitive and social constructivist approaches (*cf*. 3.2.1; *cf*. 3.2.2; *cf*. 3.2.6; *cf*. 5.5.5; *cf*. 5.5.7) used in this study's classrooms were generally applied successfully because the participants planned well, knew their learners and understood the curriculum requirements (*cf.* 3.3.2; *cf*. 5.5.7).

The findings also confirmed that in an inclusive classroom, a learner-centred approach is crucial to ensure that all learners' learning needs are addressed, and particularly one that is based on activity and participation (Donald *et al*., 2010:79) (*cf*. 3.2.3) (Mahaye, 2003:212-216) (*cf.* 3.3.2; *cf*. 5.5.6). Central to this approach is continuous interaction between the teacher and the learners since this will enable the teacher to establish each learner's strengths and weaknesses (*cf*. 3.4.2.1; *cf.* 5.4.5.3.2; *cf*. 5.5.2; *cf*. 5.5.7). Learner participation in teaching and learning activities in order for learners to develop, understand and achieve successful learning is a quintessential feature of an inclusive classroom (Donald *et al*., 2010:81) (*cf*. 3.3.1; Nieman:, 2006:34) (*cf.* 3.3.1; *cf*. 3.5; *cf*. 5.4.7.2). Knowing and understanding learners' abilities and environments allow teachers to acknowledge prior learning as well as making learning relevant for the learners (*cf*. 3.4.2.1; *cf*. 5.4.7.6.1; *cf*. 5.5.7). Applicable topics and learning material can consequently be chosen and created to enhance learning for all learners (Dednam*,* 2011a:217) (*cf.* 5.4.3).

In the Foundation Phase tapping into the senses, particularly the auditory and visual intuits by providing concrete learning material such as slides, charts, counters and CD players, seems to be essential (Mahaye, 2003:212-216) (*cf*. 3.3.1; *cf*. 3.3.2; *cf*. 3.6.2; *cf*. 5.5.3). Although learning material resources are limited, the participants were creative in designing and making their own resources. Therefore, blame cannot rest squarely on the unavailability of resources as a reason to not teach inclusively (Florian & Black-Hawkins, 2011:815) (*cf*. 2.2.1; *cf*. 2.5.1; *cf*. 3.3.2; *cf*. 3.6.1; *cf.* 5.5.5, *cf*. 5.5.7). A noticeable component of the classroom (and outside classroom)

activities was the element of fun that was incorporated by the participants. This was evident in, for example, the role play, dramatisation and arts activities that learners enjoyed, but also learned from.

A key finding of this study is that the participants all believed in creating a social climate of acceptance and respect. Valuing difference appeared to be emphasised where all learners are accommodated in teaching and learning activities (Donald *et al*., 2010:131) (*cf*. 3.2.3, *cf*. 5.5.5; *cf*. 5.5.7). When a teacher creates a positive social climate through encouragement and praise (*cf.* 3.4.2.1; *cf*. 5.4.3.5.1; *cf*. 5.4.4.1; *cf*. 5.5.5), while serving as a role model and displaying fairness and a caring attitude, learners are more willing to apply themselves to learning and demonstrate positive behaviour. (Florian & Linklater, 2010:372) (*cf*. 2.6). Allowing learners to speak honestly and openly about challenges, enables a more accepting and receptive attitude towards inclusive education (Daniels, 2010:631). The large classroom numbers in some of these classes were emphasised as causing difficulties to address all learners' needs, especially 'slower' learners (Chhabra *et al.,* 2010:222) (*cf*. 2.5.1.6; *cf.* 5.4.1.2.6; *cf*. 5.4.1.2.7; *cf*. 5.5.2; *cf*. 5.5.3; *cf*. 5.5.7). However, effective classroom management by the participants through, for example, appropriate seating arrangements, rewarding good behaviour, disciplinary measures and keeping learners occupied seemed to mostly address these difficulties (Donald *et al.,* 2010:131; Robinson & Lomofsky, 2010:141) (*cf.* 3.2.1; *cf*. 5.4.4; *cf*. 5.5.4).

A range of barriers to learning were identified by the participants, such as perceptual and motoric difficulties, concentration problems, ADHD, as well as social and emotional challenges (Krüger & Kapp, 2011:15) (*cf*. 2.5.2.6; *cf*. 5.4.1.1.2). However, it appears from this study that ESL learners were the greatest concern for the participants (Nel, 2011:174; Daniels, 2010:637) (*cf.* 3.4.2.1; *cf.* 5.4.1.1.3; *cf.* 5.5.2). Learning in one's second (or even third or fourth) language results in teachers not always knowing if the learner is experiencing an intrinsic barrier to learning or if learning is slower because of a limited language proficiency in the LOLT (Bruner, 1966) (*cf*. 2.5.1.4; *cf*. 5.5.2). Consequently, in a South African classroom where this is a common occurrence, accommodating language difficulties needs to take priority (*cf.* 2.5.1.4; *cf*. 5.4.1.2.1) This is especially critical in the Foundation Phase classroom where foundations of learning are established (Daniels, 2010:637) (*cf*.

2.2.1; *cf.* 2.5.1.4; *cf.* 5.4.1.2.1). Kioko (2015:1) asserts that when learners enter school for the first time and need to learn new content in a new language, it unavoidably leads to a teacher-centred approach. Although the participants in this study believed that direct teaching and repetition (*cf*. 3.4.2.3) have clear benefits to ensure successful learning, they still employed a variety of learner-centred teaching methods (Blumberg, 2008) (*cf*. 3.2.3; *cf*. 3.4; *cf*. 3.4.2; *cf*. 5.4.3.1; *cf*. 5.4.7.1; *cf.* 5.5.7). Further to this, modification of the curriculum by applying leniency where spelling and grammar (*cf*. 5.4.4) were concerned, as well as giving extra time to complete tasks, appear to be workable solutions for learners experiencing difficulties (Byrnes, 2000:24-25) (cf. 2.4.1.2; *cf*. 2.4.1.3; *cf*. 3.4.2.2; *cf.* 3.6.2; *cf*. 3.6.5; *cf.* 5.4.7.4; *cf*. 5.4.7..4.1; *cf*. 5.5.7).

Incorporating peers in pair or group activities to assist the teacher with learners who experience barriers to learning was effectively used by the participants (*cf*. 3.2; *cf*. 5.4.3.4; *cf*. 5.5.7). Stronger learners as described in research by Jordan and Stanovich (2003), generally appeared to embrace the responsibility of supporting slower learners and slower learners also seemed more comfortable to learn from their peers (Mahaye, 2003:212-216) (*cf*. 3.3.2; *cf.* 5.4.3.5; *cf.* 5.4.3; *cf*. 5.5.7). Heterogeneous group work with mixed abilities was also efficiently employed by most participants in their inclusive classrooms (Ensor*,* 2009:58) (*cf*. 3.2.3; *cf*. 5.5.7). Collaboration with colleagues to assist each other with regard to teaching methods and learners who experience barriers to learning was an indispensable element to participants to ensure the successful implementation of inclusive education (Nel, 2013:28) (*cf*. 2.5.1.5; *cf*. 2.6.1; *cf.* 5.4.6). This allows for sharing resources and establishing a support structure when formal support structures at schools and the department of education are not functioning fully (Nel, 2013:28) (*cf*. 2.5.1.5; *cf*. 5.4.6).

Participants felt that parents were integral in ensuring that teaching strategies are generalised beyond the classroom. Involving parents by informing them what is happening in the classroom and how learners can continue learning at home is a strategic and basic aspect of inclusive teaching strategies (Nel, 2013:28) (*cf.* 3.6.2.1.2; *cf.* 5.4.7.7; *cf.* 5.5.7).

6.5 Recommendations

The following recommendations are based on the findings of my study:

- Given the time constraints required by the Department of Education to complete the curriculum in often overcrowded classrooms, specialised teacher assistants should be appointed in Foundation Phase classrooms to assist with learners who experience barriers to learning. A more flexible curriculum should also be allowed where teaching can be at a pace which the learner can follow. This will also grant teachers sufficient opportunities to provide tasks more suitable to the diverse needs of learners.
- Phonics awareness programmes to help ESL learners gain more proficiency in the LOLT should be implemented.
- Support programmes for parents to improve their proficiency in the LOLT in order for them to better support their children with their learning.
- Pre-service teachers complete their training with limited interaction with learners experiencing barriers to learning. (Engelbrecht & Van Deventer, 2013: 13; Nel *et al*., 2014:15). Teacher Education institutions should therefore integrate inclusive pedagogical methods in their training, but also expose pre-service teachers to an extensive practical component in order for them to develop adequate skills to teach inclusively.
- Continuous in-service teacher training should be provided by the department of education and Higher Education Institutions with regard to inclusive teaching strategies, as well as identifying, supporting and including learners who experience barriers to learning.
- Early childhood programmes should be made available and accessible to all learners in order for them to develop adequate perceptual, motoric and language competences before entering grade 1. These programmes can also assist in identifying and supporting learners who experience barriers to learning early which could prevent them from struggling to cope in the mainstream school.
- Teachers, in their capacity of a professional, should be allowed the freedom to innovate and experiment with new learning approaches rather than only

adhere to prescribed policy requirements and time frames to complete the curriculum (Doyle, 2015:1; Çubukçu, 2012:50).

- Effective support systems should be put in place by the Department of Education to ensure that all learners can learn and get support in an inclusive mainstream classroom.
- Teacher-learner ratios should be lowered.
- The DBE should provide incentives to teachers to obtain more formal qualifications with regard to inclusive teaching strategies. This can for example include study leave and bursaries.

6.6 Possible contributions

This research could contribute towards the following:

- Evidence that Foundation Phase teachers are successfully employing a variety of teaching strategies and teaching methods to ensure the effective implementation of inclusive education, even when they experience many challenges.
- The confirmation that a variety of teaching strategies, including the employment of different teaching methods, are crucial to accommodate diverse learning needs in an inclusive classroom.
- To influence departmental policies and procedures in encouraging more diversity and flexibility with regard to teaching strategies in the Foundation Phase.

6.7 Limitations

Challenges accompany all research and the following limitations of this research were identified:

- According to Struwig and Stead (2004:146), generalising in case study methodology usually depends on only one or two cases, which is the case in this research where only five schools were utilised. Furthermore, the schools were within a radius of about 30 kilometres, so findings cannot be generalised.

- The study only focused on Foundation Phase and the schools of this study were limited to urban areas and therefore contextual issues that could impact on schools in rural or township areas were not fully identified in this research.
- The interpretive stance of the research incorporated a more subjective, participating role while concerned with each unique situation. This could have influenced the researcher by allowing feelings to interfere and proffering an own point of view.
- Research on findings was found to be limiting as a relatively new field worldwide followed a lack of comprehensive study regarding effective strategies in inclusive situations.

6.8 Recommendations for further research

Themes that justify further research include:

- The role of support services (e.g. school psychologists, therapists, social workers) in supporting teachers to implement more inclusive and supportive teaching strategies
- The sense of self-efficacy of the teacher in the inclusive classroom
- The gifted learner in the inclusive classroom
- The discrepancy between policy and practice
- How a flexible curriculum should be applied
- The value of early childhood programmes to prepare learners adequately for the mainstream primary school

6.9 Conclusion

The purpose of the study was to explore effective teaching strategies employed by Foundation Phase teachers in mainstream primary schools to effect inclusive education. The research questions set in Chapter 1 have been explored through multiple methods of qualitative research from which a plethora of inclusive teaching strategies were identified as being applied successfully by the participants of this study. However, although the findings revealed that inclusive teaching was practised effectively, important contextual challenges still need to be addressed in order for Foundation classroom to be taught more inclusively.

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ADDENDUM A: INFORMED CONSENT FORM

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
VAAL TRIANGLE CAMPUS

PO Box 1174, Vanderbijlpark
South Africa, 1900

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

DATE 4 July 2015

Informed Consent

TITLE OF THE RESEARCH PROJECT: Exploring effective teaching strategies for Foundation Phase teachers in mainstream primary schools to effect inclusive education

REFERENCE NUMBERS: **NWU-00033-10-A2**

PRINCIPAL INVESTIGATOR: Rosemary A. Wahl

ADDRESS: **5 Summer's Rest, Sibelius Street, Vanderbijlpark, SW5**

CONTACT NUMBER: **082** 349 8620

You are being invited to take part in a research project that forms part of my Masters dissertation. Please take some time to read the information presented here, which will explain the details of this project. Please ask the researcher any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research is about and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the Faculty of Humanities of the North-West University ethics committee and will be conducted according to the ethical guidelines and principles of the International Declaration of Helsinki and the ethical guidelines of the National Health Research Ethics Council. It might be necessary for the research ethics committee members or relevant authorities to inspect the research records to make sure that the researcher is conducting research in an ethical manner.

What is this research study all about?

- *Participants in this study will be requested to complete a questionnaire comprising 24 questions. In addition, the study will incorporate the natural setting of the classroom whereby the researcher will act as observer for the duration of one or more lessons with each*

participant, and subsequently individual semi-structured interviews will be conducted with participants. The researcher has been trained to use the methods mentioned in the previous sentence as part of a mini-dissertation for her Honours degree under the supervision of a qualified supervisor of NWU, and will at all times be under such supervision for the duration of this research.

- *Approximately 16 participants will be included in this study.*
- *The objectives of this research are: exploring teaching strategies that teachers apply in Foundation Phase that effectively promote inclusive education.*

Why have you been invited to participate?

- *You have been invited to participate because you are in a position as a Foundation Phase teacher practicing inclusive education to assist with this research.*
- *You have also complied with the inclusion criteria that require your school to follow the CAPS system of education.*

.

What will your responsibilities be?

- *You will be expected to: 1). Complete a questionnaire as honestly as possible. 2). Participate in a 30-minute face-to-face individual interview with the researcher and answer questions as truthfully as possible. 3) Produce evidence of documentation if this is relevant to the research by way of reports etc. 4). Conduct no more than three lessons in the presence of the researcher who will act as an 'invisible' observer.*

Will you benefit from taking part in this research?

- *Your participation will hold no direct benefits for you.*
- *The indirect benefit will probably be your contribution towards research assisting all educators regarding the application of specific teaching strategies.*

Are there risks involved in your taking part in this research and how will these be managed?

- *The risks in this study, and how these will be managed, are summarised in the table below:*

Probable/possible risks/discomforts	***Strategies to minimize risk/discomfort***
Time to completing questionnaire	Can do so in own time over the course of the day. Researcher will collect at end of school day.
Time taken for interview	The researcher conducting the interview will provide some refreshment about halfway through]
Might feel uncomfortable to conduct a lesson in the presence of the researcher	Researcher will make every attempt to make participant feel comfortable and also explain that she too is an educator and trying to learn from other educators. She will also share her own experiences.
Imparting confidential information	Confidentiality assured at all times

- *However, the benefits (as noted above) outweigh the risk.*

Who will have access to the data?

- *Anonymity (that is, in no way will your results be linked to your identity) assurance as the researcher will not use any names of participants in the study.*

- *Confidentiality (that is, assurance that we will protect the information we have about you) will be ensured by keeping all research documentation safe in a locked cupboard in researcher's office. Reporting of findings will be anonymous by stating results without disclosing identity.*
- *Only the researcher and her supervisor will have access to the data. Data will be kept safe and secure by locking hard copies in locked cupboards in the researcher's office and electronic data will be password protected.*
- *Audio-recorded data will be sent to a transcriber who will sign a confidentiality clause (i.e., she will not be allowed to talk to anyone about any aspect of the data). As soon as data has been transcribed it will be deleted from recorders. The transcripts will be stored on a password-protected computer. All co-coders will sign confidentiality clauses.*
- *Data will be stored for 5 years in locked cupboards in the researcher's office and electronic data will be password protected. All data will subsequently be destroyed.*

What will happen to the data?

The data from this study will be reported in the dissertation but you will not be personally identified. This means that the reporting will not include your name or details that will help others to know that you participated (e.g., your address or the name of your school).

This is a once-off study, so the data will not be re-used.

Will you be paid/compensated to take part in this study and are there any costs involved?

No, you will not be paid/compensated to take part in the study, but refreshments during interviews will be provided. There will thus be no costs involved.

How will you know about the findings?

- The general findings of the research will be shared with you, if you so wish, by the researcher on completion of the study. The findings will be sent to your email address.
- If you would like feedback on your personal results, then contact the researcher personally.

Is there anything else that you should know or do?

- You can contact me, Rosemary at rosemarywahl82@gmail.com or 082 349 8620 if you have any further queries or encounter any problems.
- You can also contact my supervisor, Prof. Mirna Nel, at 0169103095 for any further queries
- You will receive a copy of this information and consent form for your own records.

Declaration by participant

By signing below, I ……..……. agree to take part in a research study entitled: Exploring effective teaching strategies for Foundation Phase teachers in mainstream primary schools to effect inclusive education

I declare that:

- I have read and understood this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions to both the person obtaining consent, as well as the researcher (if this is a different person), and all my questions have been adequately answered.

- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I understand that what I contribute (what I report/say/write) could be reproduced publically and/or quoted, but without reference to my personal identity.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (*place*) .....…..…….. on (*date*) ……...…….. 20....

....
Signature of participant **Signature of witness**

- You may contact me again ☐ **Yes** ☐ **No**
- I would like a summary of the findings of this research ☐ **Yes** ☐ **No**

The best way to reach me is:

Name & Surname: _____
Postal Address: _____
Email: _____
Phone Number: _____
Cell Phone Number: _____

In case the above details change, please contact the following person who knows me well and who does not live with me and who will help you to contact me:
Name & Surname:
_____
Phone/ Cell Phone Number /Email:
_____

Declaration by researcher and person obtaining consent

I *(name)* ……..…… declare that:

- I explained the information in this document to ……..
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter.

Signed at (*place*) .....…..…….. on (*date*) ……...…….. 20....

....
Signature of researcher **Signature of witness**

This document is an adapted version of the one used by HREC, Potchefstroom Campus (HREC General WICF Version 2, August 2014).

ADDENDUM B: INTERVIEW SCHEDULE

Dates were arranged as approximate times and were conducted after school hours.

SCHOOL A: 1 – 12 September

SCHOOL B: 25 -29 August 2015

SCHOOL D: 19 – 22 August

SCHOOL C: 16 – 20 September

SCHOOL E: 19 – 20 September

ADDENDUM C: OBSERVATION PLAN

DATA COLLECTION FIELD NOTES

School…… Teacher…… Gr….. Dates……

These headings apply for each classroom under study and subheadings that follow are checklists for observation relevant to this research.

1. Classroom environment

Lighting	Nature table	'Working' weather chart
Seating arrangements	Reading corner	Resources
Learning areas - teaching aids	Other educational corners Language, patriotic,	Discipline
Display charts -	Display area for learners' work	

2. Classroom organisation and management

Seating allows for group and paired activity	Selective seating positions for specific learners – visual or auditory, problems, behavioural
Learner centred teaching	Teacher moves around classroom
Activity based teaching	Time management – learners occupied at all times

3. Teacher-learner interaction

Positive atmosphere	Learners feel free to ask questions	Teacher involves learners in decision-making
Successes are celebrated	Teacher's knowledge of individual learner's needs	Dealing with learners with behavioural challenges (consistency?)

4. Learner-learner interaction

Social climate	Evidence of understanding re difference & responsibility towards one another
Attitude towards learners with behavioural challenges	Cooperative learning – peer teaching, solidarity

5. Teaching strategies

Multi-level teaching – different ways of presenting/teaching topic for all abilities	Differentiated lesson planning	Activities/tasks on levels of ability(e.g. clustering)
Repetition	Visual, auditory & kinaesthetic learning aids – cognitive support	Involvement / participation of all learners

Cooperative learning (**group** work)	Teacher explains & learners in **groups** understand fully what is expected	Social interaction encouraged in **groups** (how? e.g. delegating)
Variety of teaching styles	Modifications of curriculum	Other resources – computer, recording...
Individual support	Numeracy strategies – concepts, problem-solving	Language strategies - sounds, phonics, reading, grammar
Life skills strategies – creativity	Substitution – different learning, teaching & assessment resources	Modifications to assessment process
Reflection	Collaboration with - Parents - other teachers - others	Topics related to learners environment

Alteration – modify knowledge concepts and skills	Straddling (raise level gradually)	Diversification of tasks
Reduce/extend no of activities	Extra time/decrease time	Scaffolding (challenging steps)
Individual classroom support from teacher/peers	Individual support plans	Role-playing
Cubing - *Describing through recognition and memory* - comparing to indicate understanding of the matter at hand - associating by applying facts to the given situation - analysing information by breaking it into smaller parts - arguing and applying facts to new situations		
Bloom's taxonomy 1. Knowledge/remember – tell the story 2. Understand – explain what happened 3. Apply knowledge – draw the event 4. Analyse – why do you think? 5. Create – how would you deal with the situation 6. Evaluate – is there a better solution?		Enrichment (extend curriculum/learning to be more challenging)

ADDITIONAL OBSERVATIONS NOTED:

ADDENDUM D: GAUTENG DEPARTMENT OF EDUCATION CONSENT

GAUTENG PROVINCE
Department: Education
REPUBLIC OF SOUTH AFRICA

For administrative use:
Reference no: D2016 / 219
enquiries: Diane Buntting 011 843 6503

GDE RESEARCH APPROVAL LETTER

Date:	**18 August 2015**
Validity of Research Approval:	**18 August 2015 to 2 October 2015**
Name of Researcher:	**Wahl R.A.**
Address of Researcher:	**P.O. Box 179; Deneysville; 1932**
Telephone / Fax Number/s:	**082 349 8620**
Email address:	**rosemarywahl82@gmail.com**
Research Topic:	**Exploring effective teaching strategies for Foundation Phase teachers in mainstream primary schools to effect inclusive education.**
Number and type of schools:	**FOUR Primary Schools**
District/s/HO	**Ekurhuleni 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);

Makhado
2015/08/19

Office of the Director: Knowledge Management and Research
9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7710, Johannesburg, 2000 Tel: (011) 355 0506
Email: David.Makhado@gauteng.gov.za
Website: www.education.gpg.gov.za

3. A letter / document that outlines the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned;
4. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, SGBs, teachers and learners involved. Participation is voluntary and additional remuneration will not be paid;
5. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal and/or Director must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage;
6. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year;
7. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
8. It is the researcher's responsibility to obtain written parental and learner consent;
9. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources;
10. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations;
11. On successful completion of the study the researcher must supply the Director: Education Research and Knowledge Management with an electronic copy (and a Hard copy if possible) as well as a Research Summary of the completed Research Report;
12. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned; and
13. Should the researcher have been involved with research at a school and/or a district office level, the Director and school concerned must also be supplied with the Research Summary of the study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards

.....

Dr David Makhado

Director: Education Research and Knowledge Management

DATE: 2015/02/19

Office of the Director: Knowledge Management and Research
9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7710, Johannesburg, 2000 Tel: (011) 355 0506
Email: David.Makhado@gauteng.gov.za
Website: www.education.gpg.gov.za

ADDENDUM E: GAUTENG DEPARTMENT OF EUCATION AMENDED CONSENT

For administrative use:
Reference no. D2017 / 062 A
Enquiries: Diane Buntting 011 843 6503

GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

GDE AMENDED RESEARCH APPROVAL LETTER

Date:	**10 May 2016**
Validity of Research Approval:	**10 May 2016 to 30 September 2016**
Previous GDE Research Approval letter reference number	**D2016 / 219 dated 18 August 2015**
Name of Researcher:	**Wahl R.A.**
Address of Researcher:	**P.O. Box 179; Deneysville; 1932**
Telephone / Fax Number/s:	**082 349 8620**
Email address:	**rosemarywahl82@gmail.com**
Research Topic:	**Exploring effective teaching strategies for Foundation Phase teachers in mainstream primary schools to effect inclusive education.**
Number and type of schools:	**FIVE Primary Schools**
District/s/HO	**Ekurhuleni 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, the Principal/s and the chairperson/s of the School Governing Body (SGB.) must be presented with a copy of this letter.*

2016/05/11

Office of the Director: Education Research and Knowledge Management ER&KM)
9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7710, Johannesburg, 2000 Tel: (011) 355 0506
Email: David.Makhado@gauteng.gov.za
Website: www.education.gpg.gov.za

2. *The Researcher will make every effort to obtain the goodwill and co-operation of the GDE District officials, principals, SGBs, teachers, parents and learners involved. Participation is voluntary and additional remuneration will not be paid;*
3. *Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal and/or Director must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.*
4. *Research may only commence from the second week of February and must be concluded by the end of the THIRD quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.*
5. *Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.*
6. *It is the researcher's responsibility to obtain written consent from the SGB/s; principal/s, educator/s, parents and learners, as applicable, before commencing with research.*
7. *The researcher is responsible for supplying and utilizing his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institution/s, staff and/or the office/s visited for supplying such resources.*
8. *The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research title, report or summary.*
9. *On completion of the study the researcher must supply the Director: Education Research and Knowledge Management, with electronic copies of the Research Report, Thesis, Dissertation as well as a Research Summary (on the GDE Summary template). Failure to submit your Research Report, Thesis, Dissertation and Research Summary on completion of your studies / project – a month after graduation or project completion - may result in permission being withheld from you and your Supervisor in future.*
10. *The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned;*
11. *Should the researcher have been involved with research at a school and/or a district/head office level, the Director/s and school/s concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.*

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards

.....

Dr David Makhado

Director: Education Research and Knowledge Management

DATE: 2016/05/11

Office of the Director: Education Research and Knowledge Management ER&KM)
9th Floor, 111 Commissioner Street, Johannesburg, 2001
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Email: David.Makhado@gauteng.gov.za
Website: www.education.gpg.gov.za

ADDENDUM F: PARTICIPANT LETTER OF CONSENT AND QUESTIONNAIRE

PARTICIPANT LETTER OF CONSENT

Dear participant

This questionnaire will help me determine which teaching strategies can be applied effectively to all learners in an inclusive Foundation Phase classroom. Your input will be considered invaluable.

Your identification as participant in this research will remain anonymous and you may withdraw from the study at any time as participation is voluntary. The questionnaire and any other shared information are only for the purpose of this research and will remain confidential.

For further information do not hesitate to contact me (or my supervisor) on the following contact details.

……..

Rosemary Wahl
rosemarywahl82@gmail.com
082 3498620

I, _____, am familiar with the purpose and procedures of this research and hereby consent to participate. I understand that the outcome will be used for study purposes only and that I can withdraw at any time and my identity remains anonymous.

_____ _____

Signature Date

Please answer all questions in ink and as honestly as possible.

A. Biographical questions

1. Please indicate the years of teaching experience you have in the following grades (Mark one or more)

	Years' experience
Grade R	
Grade 1	
Grade 2	
Grade 3	
Special class	

2. Please provide details with regard to your qualifications

Professional qualifications	Post Graduate qualifications	Any other formal qualifications	Any training relevant to learning support, barriers to learning, curriculum development, etc.

Section B

1. Describe barriers to learning that the learners in your classroom experience.

_____
_____
_____
_____
_____
_____
_____

2. What do you deem are the different learning needs of learners in your classroom?

_____
_____
_____
_____
_____
_____
_____

3. Please describe the kinds of curriculum modifications you employ for the learners who experience barriers to learning and have a diversity of needs.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

4. Please describe the kinds of assessment adaptations you employ for the learners who experience barriers to learning and have a diversity of needs.

_____
_____
_____
_____
_____
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_____
_____
_____
_____
_____

5. Which teaching methods do you employ to attempt to include all learners in your classroom?

_____
_____
_____
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_____

6. Please describe the strategies you employ to manage the classroom.

_____
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_____
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_____

7. Please explain which kinds of teaching resources you generally find most useful.

_____
_____
_____
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_____
_____

Section C

Please describe, if you use the following teaching strategies, how do apply them in your classroom. (If you do not use the strategy you can indicate *Not Applicable*). Any opinions on the appropriateness of these strategies for an inclusive classroom will be appreciated.

	Your comment
1. A positive social learning environment is promoted for all learners to avoid feelings of exclusion	

2. Participation and involvement of all learners are prioritised in the classroom	
3. Adapting lesson plans to plan for differentiation to accommodate learners experiencing barriers to learning	
4. Assessment activities are differentiated to accommodate learners experiencing barriers to learning	

5. The curriculum (CAPS) is modified to allow access for all learners	
6. Enrichment exercises are employed for the rest of the class when teacher's attention is focused on an individual learner	
7. Group work is done in heterogeneous groups (different abilities in one group)	

8. Parental involvement is encouraged	
9. Classroom activities are modified to address a diversity of learning needs	
10. Topics relate to learners environment	

11. Repetition practiced as a teaching strategy	
12. Peer teaching forms a part of class activities	
13. An element of fun is incorporated into teaching e.g. field study	

14. Different teaching styles are applied to various situations	

15. Is there anything that you would like to add regarding teaching strategies and barriers to learning that are applicable for the inclusive classroom?

_____
_____
_____
_____
_____
_____
_____
_____
_____

Thank you for your time and effort in completing this questionnaire.

ADDENDUM G: 1. EXAMPLE OF ANALYSED QUESTIONNAIRE DATA

SECTION C – THEMES & CATEGORIES

Theme	Categories	Sub categories	Partici-pant	Explanation
1.Promoting positive social environment	Inclusion	Fairness/ equality	P1AGrR P4AGr3 P5BGrR P6BGr1 P7BGr2 P8BGr3 P9CGrR P10CGr1 P11CGr2 P13DGrR P14DGr1 P15DGr2	▫Ensure that insecure learners are included in activities that ask for a certain amount of decision-making as it makes them feel important, and you can see this in their expressions.P4 ▫Learners are keenly aware of discrimination at this age and need to feel fairly treated p8 ▫We do everything in a group so nobody feels excluded.P5 ▫Encourage participation If a learner is sitting on his/her own – I will encourage others to play with them P5 or call at random P13 ▫Pose easier questions to strugglers so that they are more comfortable answeringP7. ▫We base our reading and themes (where possible) on experiences learners should be familiar withP8 ▫Try to use examples that all learners can relate toP10 ▫Social interactivity is important and it boosts self-esteem P13 ▫Learners need to feel they belong P11 ▫Ensure social interactivity b.m.o. multicultural seating arrangements P14

				▫Groups not according to abilityP15
	Recognition	Acknow-ledging all contribu-tions	P4AGr3 P17EGrR P18EGr1 P20EGr3 P7BGr2 P15DGr3	▫Ask for decision-making. Makes learners feel important – noted in their expressions.P4 ▫Ensure each child expresses their feelings in a class discussion.P17 ▫If learner gives a wrong answer I still thank them for trying. I make sure they all feel good about themselves.P18 ▫Teacher poses easier questions to struggling learners so that they can feel more comfortable answering P7 ▫Ensure all learners' efforts are acknowledged and valued.P20
	Values	Awareness	P2AGr1 P3AGr2 P14DGr1 P15DGr3	▫We don't laugh at others, brag about our achievements.P2 ▫Acceptable behaviour explainedP3 ▫Yes, a spirit of friendship should be encouraged among learners of different diversities.P6 ▫Seating arrangements of multicultural learners allows for a positive social learning environment.P14 ▫Teach learners to value diversity among all cultures P15

		Treatment of others	P4AGr3 P11CGr2 P16DGr3 P19E Gr2	▫Also teacher treat learners with love and respect P4 (role model) ▫Stronger learners help out weaker ones.P11 ▫Don't allow anyone to harm dignity of another pupil P16. ▫Teach compassion and helpfulness that learners follow example ▫All must be quiet and listen to who speaks and put up hand when they wish to speak P19

2. EXAMPLE OF ANALYSED OBSERVATION DATA

2. Classroom organisation and management	
Seating allows for group and paired activity	Pairing only – 11 participants Allows for grouping - 9 participants (from 4 to 8 learners per group)
Selective seating positions for specific learners – visual or auditory, problems, behavioural	No allowance – 2 participants (P8 & P9) ADD learners placed in middle of class – 1 participant (P14). Generally keep them away from windows and keep desks clear. In pairs and in front close to teacher – 13 participants. Alone and in front – 1 participant (P1). This learner would try to disrupt the class – teacher tended to ignore his antics and was trying to teach the rest of the class to do the same.
Learner centred teaching	All participants. A variety of teaching methods were applied that definitely focused on what the learner was actually learning. The teachers took aspects into consideration: a. Taught from the knowledge base of the learner (teachers in many of the classes would repeatedly ask learners that seemed unsure whether they were 'okay' with the lesson/activity at a specific point during the lesson. b. Motivated learners through - involvement (active learning) - confidence to succeed by applying several strategies mentioned in this observation to accommodate the slower learner. P4 happy a learner eventually understood maths problem and had his explain to another peer. Learner delighted. Control over learners' own learning was observed in some classes as teacher offered learners choices on which methods they would prefer to solve problems. c. Language – P7key concepts were clarified and active language interaction was encouraged in 'teams'. Tasks were chosen by learners. One learner modelled actions while others verbally described the actions. Another team held a four-way conversation from text involving four characters. They then held a discussion on how they understood what they had read. A third team could call out a word in the learners' home language and the other learners were to translate into English. Those words were then used to compile short English sentences.
Teacher moves around classroom	All . Teacher brings in humour now and again which learners enjoy P5
Activity based teaching	All
Time management –	All.

learners occupied at all times	Activities are varied to keep interest renewed. Enrichment exercises fill time when learners are finished with set work and teacher focuses on problematic learner. Exercises vary from art through to challenging questions. In some of the classes learners filled in this time by reading their library books.

3. Teacher-learner interaction	
Positive atmosphere	All - class cohesion and harmony noted (P12 exceptionally positive teacher) Values and beliefs seem to be entrenched in the daily school activities and often mentioned in passing when the occasion arises P8, P7, P13, P16, P15.
Learners feel free to ask questions	All (P1 - Lots of copying in this class when teacher occupied with answering questions) Only relevant questions are to be asked P15 Most teachers interacted freely with their learners but managed to control the class when it would get out of hand. Teacher's personality shows firmness but with underlying compassion and learners respect is evident P20.
Teacher involves learners in decision-making	Yes – all, but P7 struggles a bit with her large class According to ANA (P14 &P15) Most teachers encourage participation in making decisions and ensure each learner's effort is valued by commenting s.a. "That's a good answer." Some teachers took time to include their learners in planning strategies and setting goals to solve problems showing that learners' opinions do matter P12, P7, P4, P6. Questions began with "How do you think we should go about...?
Successes are celebrated	All. Especially P1, P4, P9, P12, P11 & P20 who constantly praise and encourage learners to work well.
Teacher's knowledge of individual learner's needs	All. This was evident as teachers would often signal out learners to inquire if they understood 'this step before we go on to the next'. An English comprehension P20 consisted of three exercises in order of difficulty which all learners were to complete. The teacher who knew her learners evaluated according to individual capabilities. Teachers P3, P8 P10 were observed entering learner information in portfolios that created a profile to determine interests and needs. It is understood that all teachers are required to do this however. Noticed on several occasions that teachers focused on strengths of learners which they were obviously aware of and let learners decide for themselves how to go about a task offering encouragement in the process. P4 "I know you have a good way of your own for doing the bonding. Now let's see how you are going to do this by bringing in the hundreds."

Dealing with learners with behavioural challenges	All have methods to deal with such learners P8 & P9 have no learners with behavioural challenges in their class. Watching over learners' in strict manner P18, P15. P15 is a v serious teacher) while a good role model as to how learners ought to behave. Praising, warnings sometimes accompanied by detention P20 during break. No special treatment of specific learners by any of the teachers was noted which could harbour resentment by other learners. Teachers mostly ignore poor behaviour and remain calm. Teachers constantly reminded learners of rules and apply them remaining consistent with appropriate punishment P3, P7, P13.

ADDENDUM H: LETTER FROM LANGUAGE EDITOR

South African Translators' Institute (SATI)

31 October 2016

Ms Rosemary Wahl
North-West University

RE: CERTIFICATE – TECHNICAL EDITING AND PROOFREADING OF DISSERTATION

I, the undersigned, herewith certify that the technical editing and proofreading of the Masters' dissertation of Rosemary Wahl, entitled "*Exploring effective teaching strategies for Foundation Phase teachers in mainstream primary schools to effect inclusive education*", has been conducted and conclued.

The finalised document was submitted to Ms Wahl on 31 October 2016.

Sincerely

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