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# Teachers' teaching strategies in a sample of South African inclusive classrooms

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# Teachers' Teaching Strategies in a Sample of South African Inclusive Classrooms

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A research report submitted in partial fulfillment of the requirements for the degree of Master of Arts in Psychology by coursework and research report in the faculty of Humanities, University of the Witwatersrand, Johannesburg, 2010

## Declaration

I, Nicola Lake, hereby declare that this research report is my own work. It is being submitted for the Degree of Master of Arts in Psychology by coursework and research report at the University of Witwatersrand. It has not been submitted for any other degree or examination at any other university.

_____

Nicola Lake

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Date

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# Chapter 1: Introduction to the Study:

## 1.1) Introduction

South Africa's history of apartheid has created vast inequalities within its society (Engelbrecht, 2006). The system of apartheid saw the development of separate and unequal educational departments for each of the racial groups (Engelbrecht, 2006; Lomofsky & Lazarus, 2001). For the majority of South African children this resulted in education that was characterised by neglect and lack of provision (Engelbrecht, 2006; Lomofsky & Lazarus, 2001). Within post-apartheid South Africa there has been a demand for equality within society including the educational sphere (Engelbrecht, 2006). This push towards equality is emphasised in the Constitution of South Africa as it outlines the commitment by the new democratic government to restore the basic human rights of all groups (Engelbrecht, 2006). In terms of education the Bill of Rights states that "all learners have a right to basic education," (Republic of South Africa, 1996, p. 29). Inclusive education has therefore been introduced in South Africa within the context of ensuring that the basic human rights of all of its citizens are adequately met (Engelbrecht, 2006). Additionally, there has been the move away from a medical model of special needs education, where the problem was located within the individual as a biological deficit and as something to be treated outside of the normal school, towards a model that focuses on understanding the deficiencies and barriers within the system that makes it difficult for learners to critically engage with the curriculum (Department of Education, 2005; Engelbrecht, 2006; Naiker, 2006).

Therefore, given South Africa's history, inclusive education developed not simply as a means of including learners with disabilities into mainstream schools, but rather as a way of identifying and addressing barriers to learning, including language and socio-economic barriers, negative attitudes towards diversity, problems with educational provision and

organisation and high levels of violence and HIV/Aids (Engelbrecht, 2006; Pather, 2011). It has been developed with the aim of enabling access to quality education for all despite these barriers to learning (Pather, 2011). Furthermore, inclusive education has come to be seen as a way of addressing the diverse needs of all learners in order to increase learners' participation in schools and the learning process thereby reducing their exclusion (Engelbrecht, 2006; Pather, 2011).

Because teachers are the ones faced with the diverse learning needs of learners, it becomes important to consider them and more specifically the methods they use to accommodate this diversity (Lomofsky & Lazarus, 2001). According to King (2003) diversity in the classroom can be accommodated through differentiation of the curriculum, methods of instruction as well as the means of assessment. Teachers can be grouped into two teaching styles based on their methods of instruction, namely teacher-centred, where the focus is on transmitting knowledge, and learner-centred, where learners are seen as active participants in the development of their knowledge (Kemp, 2013). Furthermore, in learner-centred teaching there is the use of variety in methods of instruction and assessment (Brown, 2003). This use of variety is in accordance with Tomlinson's (2000) concept of differentiated instruction, where instruction is adapted to meet individual learners' diverse needs and differences. This is in-line with the idea of inclusive education in South Africa which calls for education to meet the needs of diverse learners through the use of variety and differentiation in teaching, in order to allow all learners to have equal access to the curriculum (Department of Basic Education, 2010; Engelbrecht, 2006).

1.2) Research rationale:

There are many articles that discuss and define what is meant by inclusive education (Ainscow & Sandill, 2010; Engelbrecht, 2006; Hay & Beyers, 2011; UNESCO, 2001). On the one end of the spectrum it is argued that inclusion should be full inclusion where there are no special or separate schools and all learners are taught together in the general classroom, whereas at the other end it is argued that there should be inclusive schools as well as special schools in order to support the needs of the learner and parents' choice (Walton & Nel, 2012). In South Africa inclusive education is an educational policy which argues for the inclusion of all learners into the education system regardless of their diversity, including learner differences in ability levels, gender, socio-economic status, race, language and culture (Department of Education, 2001). However, inclusive education within South Africa does not argue for the inclusion of all learners, regardless of ability level or barriers to learning, into mainstream schools; rather provision is made for the development and availability of full-service and special schools (Department of Education, 2001). Full-service and special schools are schools with resources and support that allow them to accommodate for a diversity of learning needs among learners who would not benefit from being placed in mainstream schools (Department of Education, 2001; Hay & Beyers, 2011).

Despite the right of children with disabilities or barriers to learning to be educated in ordinary mainstream schools and classrooms as long as this is in their best interests, it has been found that mainstream South African schools do still discriminate against such children (Human Rights Watch, 2015). Mainstream schools within South Africa decide whether or not they can and will accommodate learners with certain needs and disabilities with many refusing to admit those who they are unable and unwilling to accommodate (Human Rights Watch, 2015). Parents within South Africa are also often unaware of their rights and are not provided with adequate information or access to support services that can assess their children and help

them make a decision that is in the best interests of the children (Human Rights Watch, 2015).

Inclusion is also about more than just placing or fitting learners with different abilities and needs into the same mainstream classroom (Department of Education, 2001). Rather there is a focus on identifying and respecting learners' differences, placing equal value on learners' different needs and providing support to all parties within the education system (Department of Education, 2001). Emphasis is placed on overcoming barriers within the education system that prevent the needs of learners being met (Department of Education, 2001). The aim of inclusive education in South Africa is to help develop learners who are included in the learning process, curriculum and classroom as active participants (Department of Education, 2001). The White Paper 6 (2001), which is the policy document guiding inclusive education in South Africa, also highlights that learning takes place not just in but beyond the classroom as well, and this needs to be considered in creating an inclusive school environment. Moreover, it is argued within the White Paper 6 (2001) that inclusive education must meet the needs of all learners through changes in curricula, attitudes, behaviours and environments as well as maximise learner participation in the curriculum and school, and identify and minimise barriers to learning in order to facilitate learners' critical participation in the learning process. Of particular relevance to this study, the White Paper 6 (2001) also stipulates that there needs to be changes with regards to teaching methods in order to meet the aims of inclusive education.

Therefore, within an inclusive education system, classrooms are filled with learners who vary widely with regards to their needs and abilities (Stanovich & Jordan, 2002). Given that teachers directly interact with learners in the classroom and directly encounter learners' diverse needs it is argued that teachers are the most important resource in and central to achieving the goals of inclusive education (De Jager, 2013; Department of Education, 2001;

Donald, Lazarus, & Lolwana, 2006; Forlin & Chambers, 2011). Additionally, when the White Paper 6 (2001) was written up it stipulated the need for the development and improvement of teachers' skills and knowledge for dealing with diversity in the inclusive classroom. Within mainstream schools this includes developing skills for ''multi-level classroom instruction so that educators can prepare main lessons with variations that are responsive to individual learner needs; co-operative learning; curriculum enrichment; and dealing with learners with behavioural problems'' (Department of Education, 2001, p. 18). Although, it can be seen that teachers are argued to be important resources in inclusive education few studies in South Africa have explored what teachers actually do in the classroom when attempting to include diverse learners (De Jager, 2013; Donohue & Bornman, 2014).

Furthermore, since teachers are essential to achieving the goals of inclusive education, teacher training and development of appropriate knowledge, skills and attitudes needed for inclusive education is said to be essential to the success of inclusion (Department of Education, 2001; Walton & Nel, 2012), and should be a priority (Engelbrecht, 2006). However, Naiker (2006) argues that teachers in South Africa are not adequately trained for inclusive education. Additionally, despite the importance assigned to the development of teachers skills it has been found in one study by Engelbrecht, Oswald, and Forlin (2006), where they used the British Index for Inclusion in three Western Cape primary schools, that teachers indicated that there was insufficient development and training opportunities and that they lacked knowledge about dealing with diverse learners' needs and behaviours. De Jager (2013) also found in her study, regarding South African teachers' use of differentiated instruction in the inclusive classroom, that teachers highlighted that they lacked training in dealing with learners' diverse barriers to learning. Furthermore, Donohue and Bornman (2014) argue that South African teachers lack the skills and knowledge for teaching diverse

learners in one classroom without substantially increasing their workload. They further argue that training programmes provided by the Department of Education for accommodating diverse ability level learners are insufficient (Donohue & Bornman, 2014). If the aim is to have inclusive classrooms then it is imperative to evaluate what teachers are doing in the classroom to achieve inclusiveness of learners into the classroom and the accessibility of the curriculum given that teachers are an important resource in achieving inclusion of learners in the classroom and curriculum (Department of Education, 2001; Donohue & Bornman, 2014). This is especially important in light of the fact that many teachers contend that they lack the training, development opportunities and skills regarding strategies that are argued to be beneficial for inclusive education and for dealing with learners' diverse needs (De Jager, 2013; Donohue & Bornman, 2014; Engelbrecht et al., 2006).

Despite a lack of skills for implementing inclusive education teachers need to plan their lessons to accommodate for the diverse needs of all learners in order to ensure quality and meaningful education for all (Donald et al., 2006; Donohue & Bornman, 2014; Hay & Beyers, 2011). Furthermore, teachers are responsible for mediating learning that is most effective for all learners given their diverse learning needs and need to choose appropriate means to assess the learning (Donald et al., 2006). Teachers are argued to achieve this by interpreting and adapting the information in the curriculum to create learning programmes that are appropriate given their specific learners' needs and barriers to learning (Donald et al., 2006).

However, in Engelbrecht et al's (2006) study South African teachers indicated that they found the new inclusive teaching methodologies and curriculum that focuses on constructivism, group work and cooperative learning challenging to implement. Within inclusive education it is argued that there is also a need to move away from a reliance of teacher–centred methods of teaching where teachers lecture and learners are passive and

listen (Ferguson, 2008). Rather, there should be a focus on the learner's learning process and teachers need to use a variety of methods and strategies to make the curriculum engaging, meaningful and accessible to a variety of learners with different needs and abilities (Department of Education, 2001; Ferguson, 2008).

Such differentiated and flexible instruction methods are argued to be beneficial in the inclusive classroom, as they help to personalise the learning process and make it appropriate for individual learner's needs, as well as accommodating for differences in learners' ability levels, interests and learning styles (Ferguson, 2008). De Jager (2013) however found in her study that the majority of teachers in South Africa are not sufficiently trained to use a flexible and differentiated curriculum that would accommodate for learners' diverse needs and barriers to learning. Thus, given that teachers seem to indicate a lack of training regarding differentiated instruction, constructivism and group work teaching strategies, despite these being seen as useful strategies for including diverse learners in the classroom, it becomes important to explore if this holds true for teachers in different contexts (De Jager, 2013). Again, as argued previously, it is necessary to explore what teachers are doing to include learners in the classroom and if they are using any strategies which are recommended for the inclusive classroom in light of the finding that they lack training in certain inclusive classroom strategies, such as differentiated instruction (Donohue & Bornman, 2014).

Teachers in South African schools are also often faced with limited resources and very large classes with an average learner teacher ratio of 31:1, but sometimes up to 50 or more learners (De Jager, 2013; Department of Basic Education, 2014b; Engelbrecht et al., 2006; Taylor, 2008). In such situations it is very difficult and time-consuming to accommodate for and include the diverse needs of all learners and create positive learning environments as well as implement strategies recommended for the inclusive classroom, such as differentiated instruction and group work (De Jager, 2013; Engelbrecht et al., 2006). Moreover, in order to

implement teaching strategies recommended for the inclusive classroom, such as learner-centred and differentiated teaching, teachers need to know their learners needs, abilities and characteristics, such as learning styles, which takes time and is especially time-consuming when there are very large classes filled with diverse learners (De Jager, 2013; De Vita, 2001; Engelbrecht et al., 2006; Tomlinson, 2000; Vayrynen, 2003).

Given the importance assigned to the role of teachers in achieving the goals of inclusive education as well as the fact that inclusive education is the educational policy in South Africa it becomes important to look at how teachers achieve inclusion of all learners in their classrooms and ensure accessibility of the curriculum through their methods and teaching strategies (Department of Education, 2001; Hay & Beyers, 2011). However, as mentioned, not many studies have looked at what teachers in South Africa are actually doing in the classroom to include diverse learners (De Jager, 2014; Engelbrecht et al., 2006). Furthermore, Donohue and Bornman (2014) argue that in tackling problems in implementing inclusive education at the school level the Department of Education needs to determine teachers' level of preparation for educating a range of diverse learners within one classroom. Therefore it becomes necessary to examine and explore teachers' level of preparation for and actual teaching strategies in the inclusive classroom to determine if teachers are prepared for implementing inclusive education (Donohue & Bornman, 2014) and this study aims to do that.

## 1.3) Research aims:

The broad aim of the study is to explore how teachers in mainstream schools in South Africa attempt to ensure all learners are included in the classroom as active participants in the learning process. This aim will be achieved by identifying the teaching strategies that teachers use in their classroom practice, and whether this leads to the inclusion of learners with and without barriers to learning within mainstream classrooms. In particular the study will focus on teachers' use of learner versus teacher-centred teaching strategies as well as differentiated instruction.

## 1.4) Research questions:

Main question:

What teaching strategies are teachers in South African mainstream schools using to facilitate inclusive education in the classroom?

Sub questions:

i. Do teachers prefer a learner-centred or teacher-centred approach to teaching?
ii. Is differentiated teaching being employed in classrooms to ensure inclusiveness?
iii. What role do large classes and limited resources have on teachers' abilities to implement differentiated teaching?
iv. To what extent and how are individual learners' learning styles, interests and culture taken into consideration by teachers?

With regards to questions four, this question ties in with themes related to the other three questions, particularly with those identified in question two therefore question four will be addressed together with question two.

# Chapter 2: Literature Review:

## 2.1) Inclusive Education and the South African context:

Throughout the world the focus on education has been to make it more inclusive (Ruijs, Van der Veen, & Peetsma, 2010). This means that there has been a trend towards including learners with disabilities into mainstream schools which began in the 1980s (Ferguson, 2008; Ruijs et al., 2010). Prior to inclusion, learners with disabilities were generally placed in separate classes or schools and sometimes even denied access to education (UNESCO, 2001). Today, however, inclusive education is about more than just including learners with disabilities into general educational settings; rather it is about embracing all types of diversity and involves including the local community to help meet the diverse learning needs of all learners (Ainscow & Sandill, 2010; Broderick, Mehta-Parekh, & Reid, 2005; UNESCO, 2001). Thus inclusive education is meant to create schools where all learners are accepted and included despite their individual characteristics or difficulties and is it based on the ‘‘belief that the right to education is a basic human right,’’ (UNESCO, 2001, pp. 16).

In embracing diversity in the classroom inclusive education is thus meant to help meet everyone’s right to basic education and thereby contribute to a more equal and just society (Engelbrecht, 2006; UNESCO, 2001). This is because by embracing learners’ diversity, inclusive education attempts to help eliminate social exclusion that arises from negativity towards diversity (Ainscow & Sandill, 2010). Specifically, within the South African context this is important given South Africa’s history of apartheid and discrimination where the population was segregated along racial lines in all aspects of society, including education, resulting in tremendous inequalities (Engelbrecht, 2006). Thus, as a result, inclusive education in South Africa is now endorsed, not just as a strategy for education, but as a strategy likely to contribute to a socially just and democratic society (Engelbrecht, 2006).

In referring to social justice it can be said to be a basic search for equality as well as fairness in rights, resources and treatment for marginalised members of society (Hay & Beyers, 2011). In terms of education in South Africa the policy of inclusive education does attempt to contribute to this idea of social justice by promoting the inclusion of all learners into mainstream schools despite their barriers to learning, in so far as this is beneficial to the individual learner and class of learners (Hay & Beyers, 2011). There are also attempts to redistribute resources and assist schools that were previously disadvantaged in order to enable access to quality education for all (Engelbrecht, 2006; Hay & Beyers, 2011). Moreover, education as a basic human right in the Constitution (Republic of South Africa, 1996) implies that all learners have the right to equal access to education that meets their diverse needs (Engelbrecht, 2006).

### 2.1.1) The White Paper 6 and a pedagogy of possibility:

Within the White Paper 6 (2001) inclusive education is defined as education that recognizes that all children have the ability to learn and need assistance at some point in their educational lives. It involves a shift away from a pedagogy of exclusion towards a pedagogy of possibility that considers learners' barriers to learning, different learning styles and strengths (Department of Education, 2005). A pedagogy of possibility is concerned with educational activities that open up alternative futures (Amsler, 2014) and make it possible to achieve a diversity of ''differentiated human capacities'' (Simon, 1987, p. 371). It focuses on facilitating a means of comprehending and representing the social world in ways which encourage expanding the range of social identities that are possible and available for people to inhabit (Simon, 1987).

Given South Africa's history of Apartheid where the majority of the population was oppressed, it becomes important to focus on a pedagogy of possibility because within a

pedagogy of possibility there is an emphasis on using education to free people from their oppression (Kallaway, 2010). A pedagogy of possibility attempts to eliminate inequalities and in developing such a pedagogy there needs to be an emphasis on developing learners' own efforts to understand the world and their knowledge must be grounded in their own experiences, needs and circumstances (McLaren, 1999). In utilising a pedagogy of possibility it is necessary to enable and allow learners to be active and to think about possibilities for new ways of being in the world (McLaren, 1999). This links with inclusive education in that it attempts to reduce inequalities and learners are expected to be active and critical participants in the learning process which also, as will be seen later, links with learner-centred teaching (Department of Education, 2001; Brown, 2003). This is in line with the White Paper 6 (2001) which focuses on fostering active participation in education by all learners as this is viewed as a means of developing individuals who will one day participate in society as equals (Department of Education, 2001).

### 2.1.2) Policy on Screening, Identification, Assessment and Support:

In identifying any barriers to learning and disabilities that learners may experience the Department of Basic Education (2014a) has developed the Policy on Screening, Identification, Assessment and Support (SIAS). This policy document has been developed in order to identify barriers to learning and ensure learners are able to participate actively and be included within the curriculum and classroom (Department of Basic Education, 2014a). Within this policy document it is stipulated that teachers need to initially screen and identify learner barriers and disabilities, especially during Early Childhood Development (ECD) (Department of Basic Education, 2014a). The SIAS (2014) policy document stipulates clear guidelines for identifying learners with barriers and providing assistance and interventions for learners based on the level of their barrier to learning.

The teacher is not alone in identifying and supporting learners with barriers or disabilities (Department of Basic Education, 2014a; Donald et al., 2006). Teachers can enlist the help of the School Based Support Team (SBST), District Based Support Team (DBST), parents or caregivers and health practitioners, such as psychologists and speech therapists, in identifying, diagnosing and providing interventions for learners' barriers and disabilities (Department of Basic Education, 2014a). It is important to note, however, that teachers do play an essential role in this process (Department of Basic Education, 2014a). This is because the teacher needs to initially screen all learners when they are admitted to school and at the start of each educational phase (Department of Basic Education, 2014a). In addition they need to use the Learner Profile to record their findings (Department of Basic Education, 2014a). Teachers need to collaborate and communicate with parents or caregivers in order to gather information about any difficulties or barriers learners may be experiencing as parents and caregivers constitute a valuable source of information regarding learners and their abilities and need to be involved in any interventions (De Jager, 2013; Department of Basic Education, 2014a; Donald et al., 2006). Once a learner has been identified as having a barrier or disability it is the responsibility of the teacher to function as the case manager and ensure the learner receives the necessary support and interventions by coordinating with the SBST and DBST in order to ensure the appropriate intervention programmes are implemented (Department of Basic Education, 2014a). However, the Human Rights Watch (2015) argues that within South Africa there is a lack of support staff within many DBSTs that could provide assistance and services to learners in order to help meet their needs within the mainstream school.

### 2.1.3) Teacher training for the inclusive classroom:

With regards to achieving the goals of inclusive education highlighted above, the primary and most important resource is argued to be teachers whose main objectives are to ensure that all

learners are included and given equal opportunity to actively participate in the learning process (Department of Education, 2001; Lomofsky & Lazarus, 2001). Thus, it becomes important to consider teachers' teaching strategies given that teachers are responsible for creating learning opportunities and removing barriers in order to meet the needs of all learners in the inclusive classroom (Stanovich & Jordan, 2002). In terms of developing teachers' skills and strategies for the inclusive classroom, Williams, Olivier and Piennar (2009) state that teacher training programmes only began to gradually introduce strategies and skills for ensuring inclusion of all learners into the classroom between 2002 and 2007. For teachers who qualified before 2002 they thus lack pre-service training for the inclusive classroom (Williams et al., 2009). Currently, it is also argued that there are still insufficient university programs as well as pre-service and in-service teacher training programs that address inclusive education (Human Rights Watch, 2015). Specifically with regards to in-service training it has been argued that, in addition to being insufficient, training does not consider the context in which schools operate (Engelbrecht, 2006).

Many teachers have, thus, not been well prepared nor properly trained for developing skills and strategies for the inclusive classroom that accommodate for diverse learners needs and help to overcome barriers to learning that learners may experience (Engelbrecht, 2006; Williams et al., 2009). Thus, it is argued that in preparing teachers to accommodate for and address the needs of diverse learners there is a need to train and prepare teachers for using multi-level teaching methods that can address the diverse needs of all learners in the classroom (Human Rights Watch, 2015).

Naiker (2006) also points out that most teachers in South Africa are not properly trained or prepared for inclusive education as they lack exposure to the knowledge that informs inclusive education as well as appropriate pre and in-service training. He argues that teachers have simply been ‘‘orientated to Inclusive Education and Revised National Curriculum

Statement policy goals and aims,'' (Naiker, 2006, pp. 3). With regards to the Curriculum Assessment Policy statements (CAPS) teachers are provided with specific details regarding what they must teach as well as how they should teach it (Department of Basic Education, 2011). Specifically, it stipulates the aims for each subject as well as the specific skills that need to be developed and knowledge that needs to be learned, along with suggestions of the kind of activities that teachers can use in achieving these aims and developing the relevant skills (Department of Basic Education, 2011). However, Naiker (2006) argues that this focus on policy goals and aims does not contribute to developing skills that teachers can use in the inclusive classroom. Thus, teachers may be exposed to and given ideas and suggestions regarding how to teach and what strategies and activities to use but there is still a need to develop teachers' skills in using the teaching strategies and activities that have been suggested in the CAPS documents (Department of Basic Education, 2011; Naiker, 2006). Moreover, even when training has involved practical activities, Naiker (2006, pp. 4) states that there is still an ''absence of a theoretical framework,'' thus teachers still lack an understanding of the theories of learning that underpin these activities. This lack of understanding regarding theories of learning is said to make it difficult to change teachers' ways of thinking and the strategies and methods they subsequently use in the classroom (Naiker, 2006).

Within South Africa several studies have also found that teachers highlight that they lack the knowledge, skills and training necessary to implement teaching strategies and methods of instruction that are argued to be beneficial in including diverse learners (De Jager, 2013; Engelbrecht et al., 2006). Specifically, De Jager (2013) found that the vast majority of teachers in her study, which explored South African secondary-school teachers' use of differentiated teaching methods, indicated that they had received inadequate pre-service training in teaching learners with barriers to learning. Teachers in De Jager's (2013) study

also highlighted the need for more regular in-service training regarding inclusive teaching strategies. Teachers have stated that they do not feel that they are well prepared for teaching in the inclusive classroom rather they feel incompetent due to their lack of skills regarding inclusive teaching (Williams et al., 2009). The Department of Basic Education (2015) also points out that many teachers do not have the skills to deal with and address the needs of learners with barriers to learning nor are they able to effectively ensure all learners are involved and actively participate in the curriculum. Additionally, a study by Harber and Serf (2006) found that students training and studying to be teachers indicated that they lacked role models regarding good practice teaching methods and strategies as many of their lecturers gave advice and strategies for teaching but did not follow these themselves in the lectures.

More recently the Human Rights Watch (2015) also found that South African teachers lack training and awareness regarding inclusive education methods and the range of disabilities learners may present with and they lack knowledge and practical training regarding needs learners may have as a result of their disabilities. Teachers within ordinary mainstream schools are argued to not be sufficiently trained or qualified to teach learners with disabilities (Human Rights Watch, 2015). This lack of understanding and practical skills for accommodating for learners' disabilities on the part of the teacher is argued to constitute a barrier for learners with disabilities who require specific support (Human Rights Watch, 2015). In order to improve the educational system and achieve the aims of inclusive education it is thus argued that there is a need to ensure teachers are equipped with skills that will enable them to support and accommodate learners with diverse needs in their classrooms (Department of Basic Education, 2015).

### 2.1.4) Unequal distribution of resources across South African schools:

During apartheid in South Africa, African, Indian and coloured learners' school experiences and environments were characterised by a lack of resources as well as teachers who lacked qualifications and were poorly trained whereas white learners attended schools that had an abundance of resources and well-trained teachers (Bray, Gooskens, Kahn, Moses & Seekings, 2010). There were thus vast inequalities and differences in educational experiences for learners of different races during this time with many African, Indian and coloured learners receiving education that was of a much lower standard than that of white learners (Bray et al., 2010; Engelbrecht, 2006). This unequal distribution of resources and educational provision continues to impact education and schools today (Bray et al., 2010; Engelbrecht, 2006). This is because there are still vast discrepancies between schools with regards to resources, with many schools still experiencing a severe shortage in resources and teachers who lack the skills for developing an inclusive environment in their classrooms despite attempts to address this and redistribute resources more fairly (Bray et al., 2010; Engelbrecht, 2006). This lack of resources and skills directly impacts the implementation of inclusive education as it impairs teachers' ability to utilise teaching strategies and methods that have been shown to be beneficial in the inclusive classroom (De Jager, 2013; Engelbrecht, 2006; Engelbrecht et al., 2006). The Human Rights Watch (2015) has also found that there is insufficient funding for inclusive education, and much more funding is placed in special schools than ordinary mainstream schools. There is argued to be a need to increase funding in inclusive education in order for mainstream schools to obtain the resources that would enable them to accommodate for and meet the needs of learners with disabilities and barriers to learning (Human Rights Watch, 2015).

## 2.2) Teacher versus learner-centred teaching strategies:

### 2.2.1) The teacher-centred teaching strategy:

In looking at teachers' teaching strategies they can broadly be divided into two groups, namely teacher-centred and learner-centred (Kemp, 2013). The teacher- centred teaching strategy focuses on transference of information and knowledge (Brown, 2003; Kemp, 2013). This methods aligns itself with the talk and chalk method of instruction (Budd, 2004). One of the main methods used in this teaching strategy is that of direct instruction where there are little to no open ended questions or problem based project work (Brown, 2003). This leads to little to no creativity or exploration in such classrooms as these classrooms tend to be quite rigid and very structured (Polly, Margerison, & Piel, 2014). Within this strategy there is also a primary focus on learner achievement and the teacher is at the centre of and controls the learning process (Brown, 2003). In such classrooms learners are thus taught exactly what they need to know in order to acquire the relevant information and they passively receive this knowledge (Polly et al., 2014). Acquiring the relevant and correct information is more important in such classrooms than the process of information acquisition (Polly et al., 2014).

### 2.2.2) The teacher-centred strategy in South Africa:

This teacher-centred approach was the dominant teaching strategy used in Southern Africa prior to the mid-1990s and learning was seen as a set of predetermined contents to be learned by rote (Vavrus, Thomas & Bartlett, 2011; Vayrynen, 2003). Teachers in South African schools, specifically, were also expected to follow an authoritarian approach and focus on content to be learned and memorised (Harber & Serf, 2006). During this time, as is consistent with the teacher-centred strategy, South African teachers therefore relied on rote-teaching methods thus learners passively received information without any critical engagement with or exploration of the information (Bray et al., 2010).

Furthermore, during apartheid, theories of learning that informed teaching practices promoted the idea of teachers as controllers of the classroom and Psychopedagogy, which was part of fundamental pedagogy which informed the educational theory of apartheid, emphasised ‘‘innate’’ ideas (Naiker, 2006, pp. 3). Teaching during Apartheid was about presenting established facts, activities and mental drills that would invoke these innate ideas (Naiker, 2006). Learning was therefore about repetition and involved an authoritarian approach because knowledge was ‘‘seen as fixed, [and] innately known,’’ (Naiker, 2006, pp. 3). Many teachers today come from this background where teachers are seen as controllers of the classroom and therefore it is often still seen that teachers exert much control in the classroom and utilise the teacher-centred approach and subsequently learners are often not given opportunities to be active or think critically (Bray et al., 2010; Engelbrecht, 2006; Naiker, 2006).

In the study by Bray et al (2010) the continued reliance on this authoritarian teacher-centred approach is seen. In this study several teachers, particularly those in the schools that lacked resources and had less funding, partially as they were not allowed to charge school fees or could only charge minimal amounts because parents here could not afford to pay school fees, tended to simply give learners information and facts by reading or writing the information on the chalk board (Bray et al., 2010). Learners in many of the classrooms were not encouraged to think about or engage with the information rather they were simply expected to give the correct answer without any meaning or explanation for the answer being provided or discussed (Bray et al., 2010). Teachers tended to utilise teacher-centred methods here because there was a pervasive lack of discipline and disorder among learners in their classes (Bray et al., 2010). Learners here also tended to not listen to the teachers and were unruly thus teachers tended to utilise methods of rote-learning and copying notes off the chalkboard in order to ensure learners were quiet (Bray et al., 2010). This disorder and lack of discipline in

some of the schools is argued to stem, in part, from social factors such as lower socio-economic status, violence and disorder that exists in the neighbourhoods in which these schools and learners live and is seen in many South African neighbourhoods and schools (Bray et al., 2010). Additionally, in large classes it is also often difficult to maintain discipline and order, thus making the teacher-centred approach more feasible and useful in maintaining structure and order in the classroom as the teachers retain control in such classrooms, whereas in the learner-centred classroom teachers are required to relinquish control in order to develop active and autonomous learners (Bray et al., 2010; Brown, 2003; De Jager, 2013; Polly et al., 2014).

2.2.3) The learner-centred teaching strategy:

In contrast to the teacher-centred teaching strategy is the learner-centred strategy which is concerned with building learners' conceptual understandings and is based on a constructivist view of knowledge (Brown, 2003; Kemp, 2013). Within this teaching strategy there is a focus on constructing and building relevant knowledge, rather than simply expecting teachers to transfer information and learners to subsequently acquire relevant knowledge (Kemp, 2013). Metacognition which is about how one learns is of much importance in this learner-centred strategy (Brown, 2003). Therefore, unlike with the teacher-centred approach, the processes by which learners acquire information are important and taken into consideration in planning and executing lessons (Brown, 2003). What is important here is how learners learn, not simply that they acquire the relevant information (Brown, 2003).

More responsibility is also placed on learners for their own achievement, while the teacher functions more as a facilitator who provides instructions and techniques to assist learners with constructing their own learning and knowledge (Brown, 2003; Polly et al., 2014). Teachers here use different and varied methods to present information in ways which allows

for learners' current ideas and ways of thinking to be triggered, explored and questioned (Brown, 2003; Kemp, 2013). When using this strategy teachers need to ensure that their lessons are active, inductive, collective and involve reflection and critical thinking (Vavrus et al., 2011; Vayrynen, 2003). This is because knowledge is seen here as not being fixed or simply passed on but involves a process of active construction through social interaction (Donald et al., 2006). Therefore, when using the learner-centred strategy learners are not passively receiving knowledge, instead they are expected to engage with, construct and invent it, they are active participants and this is argued to help learners develop critical thinking capabilities and knowledge (Polly et al., 2014). Additionally, when using this strategy learners will often work in groups or pairs, ask questions and explore the information presented to them to help them question existing ideas and construct relevant knowledge (Kemp, 2013; Polly et al., 2014).

### 2.2.4) The learner-centred strategy and the focus on the individual:

It is important to note that at the centre of the learner-centred strategy is the individual learner and the teacher is expected to become aware of individual learner's needs, abilities, interests and characteristics and plan lessons to accommodate each individual learner and their unique characteristics and needs (Brown, 2003; Burman, 2008). Given that South African classes tend to be very large this becomes a very difficult task to achieve and is not always feasible (De Jager, 2013). Moreover, there is a focus on the individual within this approach which is consistent with more Western individualistic societies but not necessarily more collectivistic societies which focus on the group and community, not the individual (Brown, 2003; Lee & Tseng, 2008). The focus on the individual within the learner-centred approach promotes the idea of the ideal and normal child who is autonomous and self-regulating yet not all cultures see children and learners in this way (Lee & Tseng, 2008). This focus on the individual thus

often leads to the social and cultural context being overlooked and not taken into consideration (Lee & Tseng, 2008).

Given that South Africa is composed of many diverse cultural groups, some of which are individualistic but most of which are collectivistic, one must be careful in applying a strategy that focuses too much on the individual at the expense of the group and community as this exclusive focus on the individual may not be the best or the most relevant approach across all cultures (Burman, 2008; Eaton & Lowe, 2000; Lee & Tseng, 2008). Moreover, within South Africa there is often disjuncture between a teacher's cultural background and beliefs and those of the inclusive classroom leading to conflict between the beliefs and culture of the teacher and the demands and expectations of the inclusive classroom (Harley, Barasa, Bertram, Mattson & Pillay, 2000).

There is also a need to be sensitive towards the cultural context in which the individual learner exists and learning takes place as this influences the learning process thus teachers, when using the learner-centred approach, should not exclusively focus on the individual learner at the expense of the context (Milambiling, 2001, as cited in Brown, 2003). Furthermore the focus on developing learners who are active and critical is not consistent with the beliefs and views of many cultures in South Africa and some teachers are subsequently hesitant with utilising such strategies (Harley et al., 2000). Care thus needs to be taken in applying the learner-centred approach across different cultural contexts and it is essential to be sensitive towards the cultural context in which the learner-centred strategy is being implemented (Burman, 2008; Harley et al., 2000). This is because, as argued by Burman (2008), the learner-centred approach tends to be based more on Western middle class ideals and values which are not necessarily appropriate across all cultural and economic contexts. Moreover, the Guidelines for Inclusive Teaching and Learning (2010) in South Africa highlight that learners cannot be discriminated against based on their culture and there

is a need to ensure inclusion of learners in terms of their cultural background. Teachers, therefore, need to be knowledgeable of and consider learners' cultural background in conducting inclusive lessons (Department of Basic Education, 2010).

It is important to note that even though inclusive education is more learner-centred and focuses on each individual learner, within South Africa there is also an emphasis on including the community and parents in implementing inclusive education in schools (Brown, 2003; Burman, 2008; Department of Education, 2001). Parents and caregivers play an important role in learners' education and they are a valuable support system for the learner (De Jager, 2013; Department of Education, 2001; Donald et al., 2006). It is therefore important for teachers to work and collaborate with parents and caregivers (De Jager, 2013; Donald et al., 2006). Parents and caregivers can also be a valuable source of information and in communicating with parents and caregivers teachers can learn about learners' needs and barriers (De Jager, 2013; Donald et al., 2006). Furthermore, parents and caregivers can be involved in supporting and encouraging learners' performance and intervention strategies for dealing with learning barriers as they can help to provide individualised support and attention (Donald et al., 2006). It is important though for teachers to communicate clear reasons to parents and caregivers as to why they need to help as well as clear ways as to how they can help learners (Donald et al., 2006). Thus, the focus is not solely on the individual and collaboration with parents and caregivers is essential to achieving the goals of inclusive education (Department of Education, 2001; De Jager, 2013; Engelbrecht, 2006). However, several studies have found that within South Africa there is generally a lack of involvement from parents and caregivers which may in part result from the low socio-economic status of many South African families where parents often work more than one job and are often uneducated and thus do not have the time nor ability to help their children with regards to

school work (De Jager, 2013; Engelbrecht et al, 2006; Nel, Muller & Rheeders, 2011; Theron and Nel's, 2005).

2.2.5) The learner-centred strategy and inclusive education in South Africa:

In terms of the South African context the learner-centred teaching strategy is, however, still in line with the White Paper 6, which argues that inclusive education must create learners who are active and critical participants in the learning process (Department of Education, 2001). This also concurs with guidelines for inclusive education set out by the Department of Basic Education (2010) which argues for the need for the learner to be at the centre of all aspects of the lesson and given responsibility for their own learning, thus there is a need to focus on each individual learner and their needs and abilities. Additionally, it is argued in these guidelines that knowledge is constructed by learners individually and collectively, and this needs to be encouraged by teachers (Department of Basic Education, 2010; Vayrynen, 2003). Learners should not be expected to just reproduce knowledge (Department of Basic Education, 2010; Vayrynen, 2003). This is because within inclusive education in South Africa there is a focus on constructivism where knowledge is constructed by the learner and not simply transferred, which is consistent with the learner-centred approach (Brown, 2003; Kemp, 2013; Naiker, 2006).

The emphasis within the learner-centred strategy of focusing on each individual learner and their individual and unique needs and abilities is, however, not necessarily always feasible within South Africa as classes tend to be quite large, sometimes with up to 50 learners (Brown, 2003; De Jager, 2013). With regards to learner-to-teacher ratio within ordinary mainstream schools there is no weighting system based on learners' disabilities and barriers to learning that is used to determine the maximum learner-to-teacher ratio per classroom (Human Rights Watch, 2015). As a result there are no regulations that adjust the learner-to-

teacher ratio in accommodating for the needs of learners' with disabilities and barriers in such classrooms (Human Rights Watch, 2015).

In such situations it is not necessarily possible to continually focus on every learner's individual needs and abilities (Brown, 2003; Burman, 2008; De Jager, 2013; Lee & Tseng, 2008). Similarly a study examining learner-centred teaching in Turkey found that in large class sizes, with an average of 36 learners, teachers felt they could not adequately implement learner-centred teaching (Altinyelken, 2011). It was argued that smaller classes were needed in order to effectively enable active learner participation as active learner participation is time-consuming and requires much of the teacher's attention (Altinyelken, 2011). Large class sizes as well as the lack of discipline and pervasive disorder and disobedience in many classes also make it difficult to ensure learners are constantly active and reflecting critically on what they have learned, as is required in the learner-centred approach (Bray et al., 2010; De Jager, 2013). Therefore it is important to question and consider how feasible it is to use a learner-centred strategy when classes are very large and it is not necessarily possible for teachers to teach to the individual needs of each and every learner (Burman, 2008; De Jager, 2013). It also tends to take longer to instruct learners and set up activities in the learner-centred strategy as teachers function more as facilitators and learners need to take on more active roles while the teacher steps back and acts more as a guide rather than fully controlling and leading the lesson (Polly et al., 2014). The learner-centred classroom, thus, tends to be more difficult to manage as teachers are required to relinquish control in order to allow learners to be more active and autonomous in their learning process and develop internal discipline (Burman, 2008; Department of Education, 1998; Polly et al., 2014).

This role of teachers as leaders and facilitators, rather than controllers of the classroom, where learners are expected to have internal discipline is encouraged within the South African school context (Department of Education, 1998; Harley et al., 2000). However, as

discussed, it is important to keep in mind that this may not always be the best strategy especially when classes are very large and there are unruly learners and much disorder in the class, as is often the case within South African classes (Bray et al., 2010; Harley et al., 2000). Moreover, De Jager (2013) found that teachers indicated that they lacked knowledge about utilising different techniques for managing learners' behaviour and maintaining order in the classroom.

In discussing discipline within the learner-centred classroom it is also important to consider attentional problems, such as attention deficit hyperactivity disorder (ADHD) which has been identified as a frequently occurring disability among learners in ordinary mainstream schools within South Africa (Department of Basic Education, 2015). In identifying learners who are disobedient and frequently misbehave in the classroom teachers need to ensure there are no attentional difficulties that are responsible for the learner's disobedient behaviour (Donald et al., 2006). Furthermore, it is essential to identify attentional difficulties as these can be a factor that contributes to a learner's impaired cognitive performance (Donald et al., 2006).

With regards to resources many schools in South Africa still lack many basic resources and this impairs the ability of schools and teachers to overcome barriers to learning and implement strategies, such as learner-centred teaching, which are said to promote the inclusion of all learners into the classroom (Bray et al., 2010; Department of Education, 2001; Engelbrecht et al., 2006). Faced with insufficient resources, such as a lack of textbooks, no electricity and no chairs and tables, teachers in a study by Harley et al (2000) were found to rely more on ''teacher talk or verbal exchange with learners,'' (Harley et al., 2000, pp. 297). This, as discussed previously, was also found in Bray et al's (2010) study where teachers in the schools with a lack of resources tended to simply read from textbooks or write information on the chalk board without engaging learners. It is important to note that these teachers were not necessarily ineffective and some were still able to conduct good

lessons despite the lack of basic resources and reliance on a more teacher-centred strategy (Harley et al., 2000). Although in Bray et al's (2006) study many of the learners indicated that they found such lessons boring and did not seem to learn effectively.

2.2.6) Effectiveness of the learner-centred strategy:

The learner-centred strategy may have certain limitations yet it has still been found to be a useful teaching strategy for including learners who are diverse (Jordan & Stanovich, 1998; Polly et al., 2014). In support of the learner-centred teaching strategy in the inclusive classroom a study by Jordan and Stanovich (1998) found that teachers who were effective in including learners with diverse needs focused on developing independence in their learners and directed the learners to a deeper understanding of the information, instead of merely giving them the information. In another study by Polly et al (2014) which compared the use of the teacher and learner-centred teaching strategies across 10 Mathematics classes that were identified as either predominately teacher or learner-centred and where there were learners of high, average and low ability levels, support for the learner-centred teaching strategy was found. Specifically, in this study it was found that children from learner-centred classrooms did significantly better than those from teacher-centred classrooms on the majority of tasks (Polly et al., 2014). It was argued that the learner-centred classroom allows learners to construct the relevant knowledge and build schemas that are meaningful to them (Polly et al., 2014). This is important in inclusive education as Naiker (2006) argues that inclusive education is learner-centred and lies within the framework of constructivism where knowledge is built by the learner.

In further support of the learner-centred approach a study examining the effectiveness of the teacher versus the learner-centred approach in a pre-calculus first year university class found that the students did better on assessments when exposed to the learner-centred approach than

those exposed to the teacher-centred approach (Davis & Lu, 2015). It is important to note that in this study at the start of most of the learner-centred lessons new material would be presented in a brief lecture based introduction thereby using a more teacher-centred approach to present new information, although guided discovery based worksheets were also used occasionally to introduce new material (Davis & Lu, 2015). In another study conducted by Noyes (2012) in England it was found that learner-centred teaching was associated with increased motivation in and more positive attitudes towards learning mathematics among the learners in the study.

2.2.7) South African teachers' lack of theoretical knowledge regarding the learner-centred strategy:

Within South Africa Naiker (2006) argues, however, that teachers often lack the theoretical knowledge to utilise the learner-centred strategy. This is because, as discussed previously, Naiker (2006) argues that teacher training focuses on policy goals and aims and not on epistemological issues that would help teachers understand the changes in teaching and learning that are needed for the inclusive classroom. Thus since teachers are not well-informed about the theories of knowledge, such as constructivism, that underpin the learner-centred approach it is argued to be subsequently difficult to change their teaching practices (Donohue & Bornman, 2014; Engelbrecht, 2006; Naiker, 2006). In line with this are findings from Harley et al's (2000) study where it was found that some teachers still saw their role as transmitters of knowledge and viewed knowledge as fixed and incontestable. Such teachers are argued to be less likely to develop learners' creative and critical thinking skills or use methods such as debates where learners are given the opportunity to be active and critical in their learning (Harley et al., 2000). Thus, teachers' views of knowledge here informed their teaching practices (Harley et al., 2000). Additionally, in the study by Engelbrecht, et al (2006) it was found that teachers reported that they lacked the knowledge to address learners'

needs effectively and they found the new teaching methodologies including constructivism, group work and cooperative learning, which are often used in the learner-centred approach, challenging to implement.

### 2.2.8) Hard versus soft subjects in choosing the teacher or learner-centred strategy:

It is important to note that teachers' use of the learner and teacher-centred approaches does not only vary as a result of class size, resources and knowledge regarding the two approaches but can also vary as a result of the content and discipline area they are teaching (Kemp, 2013; Lindblom-Ylanne, Trigwell, Nevgi, & Ashwin, 2006). Specifically, two studies conducted among university lecturers have found that in hard disciplines teachers rely more on teacher-centred approaches whereas in soft disciplines teachers rely more on learner-centred approaches (Kemp, 2013; Lindblom-Ylanne et al., 2006). In distinguishing hard and soft disciplines Biglan (1973) argues that hard disciplines are those with a specific paradigm and consist of well-defined rules and content to be taught, such as physical sciences, and soft disciplines are those that do not have a single well-defined paradigm and thus are more varied with regards the content and methods to be covered, such as history.

## 2.3) Differentiated instruction:

In line with learner-centred strategies is Tomlinson's concept of differentiated instruction (Tomlinson, 2001). Tomlinson (2000) defines differentiated instruction as a way of adapting instruction to accommodate for the individual needs and differences of diverse learners. This involves the teacher varying their teaching methods in order to respond to differences among learners, particularly differences in learners' ability levels, interests and learning profiles, which includes factors such as learner's learning style, personality, culture, gender and intelligence which influence their preferences and how they learn and approach learning

situations (Anderson, 2007; Broderick et al., 2005; Lawrence-Brown 2004; Levy, 2008; Patterson, Connolly, & Ritter, 2009).

### 2.3.1) Differentiation of content, process, product and learning environment:

What is most important when using differentiated instruction is that all learners need to be included as active participants and no learner should be left behind which is argued to be achieved through the use of variation in teaching methods and strategies based on learners needs, abilities, preferences and interests (Anderson, 2007). In creating variety through differentiated instruction teachers can vary the content (the information and skills that learners need to learn), the process (the learning activities that are used to engage learners and help them understand the content), the product (projects that demonstrate what learners have learnt by enabling them to use and apply their new knowledge and information) and the learning environment (the classroom set up) (Anderson, 2007; Broderick et al., 2005; Department of Basic Education, 2010; Tomlinson, 2000).

In varying the content of the lesson teachers can use a variety of materials that are appropriate for different ability levels, needs or interests and they can make use of flexible groupings where learners can work independently or in pairs or groups of similar or different ability level learners who can help each other (Anderson, 2007; Tomlinson, 2000). Teachers can also use different ways of presenting information, such as using a variety of auditory or visual methods for presenting new information to learners (Tomlinson, 2000). With regards to the process component of the lesson teachers should use different levels of activities, where higher level activities are presented to learners with higher level abilities and easier, but similar and related, activities are presented to learners whose ability levels are not as advanced (Anderson, 2007; Tomlinson, 2000). Teachers could also vary the support and amount of time they provide learners with for an activity, specifically providing more support

and time to learners who may be experiencing difficulties with the work (Tomlinson, 2000). Similarly, teachers could vary activities based on learners' interests and learning styles (Anderson, 2007; Tomlinson, 2000).

With the product component of the lesson, teachers need to provide learners with an assortment of ways to show what they have learned as well as allow learners to work independently or in groups with other learners (Anderson, 2007; Tomlinson, 2000). The reason for the product component is for learners to recall and apply what they have learnt and the use of differentiated products allows for learners of various levels to make their own decisions, take responsibility for their learning and provides opportunities for them to show what they have learnt in ways that reflect their interests, learning styles and strengths (Anderson, 2007; Tomlinson, 2000). In differentiating the learning environment teachers can create different areas in the classroom that include, for example, spaces where learners can engage in independent work and other areas where learners could work in groups with other learners (Tomlinson, 2000). As a result of using variety in teaching and varying these four aspects of the learning situation it is argued that the teacher will be able to respond to and include the different individual needs of diverse learners (Broderick et al., 2005; Department of Basic Education, 2010; Tomlinson, 2000).

### 2.3.2) Differentiated instruction and important barriers to consider in the South African context:

In using differentiation in the South African classroom there are several barriers and disabilities that have been identified as particularly important and relevant to this context (Department of Education, 2001; Donald et al., 2006). One of the most important potential barriers to consider is that of language because within South Africa there are 11 official languages as well as many other languages that are spoken as home languages (Department

of Basic Education, 2011; Donald et al., 2006; Theron & Nel, 2005). Thus, many children enter schools where the medium of instruction is different to that of the home language (Donald et al., 2006; Theron & Nel, 2005). Previously, in approaching the language situation a subtractive approach has been used where the first language of the learner had been devalued and viewed as out of place in the classroom (Donald et al., 2006). Such an approach has been said to reduce the quality of teaching and learning and make lessons less active as students may not feel competent nor confident when the medium of instruction is not their first language (Donald et al., 2006). It is suggested now that teachers use an additive approach, where a second language is added to the first language and taught alongside the first language (Donald et al., 2006).

In using an additive approach in differentiating lessons teachers can use interpretation whereby teachers and learners can help interpret for other learners who do not understand the medium of instruction (Theron & Nel, 2005). Teachers can also code-switch, whereby they vary the language they use and use the language in which learners are proficient when explaining and teaching (Theron & Nel, 2005). However, teachers are limited in using these strategies by the number of languages they can speak (Theron & Nel, 2005). Moreover, given the diversity of languages within the South African context teachers are likely to often encounter learners who are only proficient in languages which they themselves are not proficient in (Theron & Nel, 2005). Even though, interpretation of instructions into the home language of learners who are not fluent in the medium of instruction does help to include learners by enabling them to understand and follow the lessons, care needs to be taken to ensure it is not over-used or relied on too often. As Donald et al (2006) argues in order for learners to become more competent, fluent and confident in a language, it is necessary for learners to engage in active language interaction whereby they use and communicate in the language that is being taught and which they are learning (Donald et al., 2006).

Within the South African context it is also recommended that teachers consider differences in learners' socio-economic background, emotional needs and barriers to learning, such as visual and hearing barriers, when differentiating their lessons and the curriculum (Bray et al., 2010; Department of Education, 2001; Engelbrecht, 2006; Williams et al., 2009). Given the vast socio-economic inequalities and differences that exist between much of the population in South Africa it is necessary to consider this factor in differentiating and creating inclusive lessons and classrooms (Harley et al., 2000; Bray et al., 2010). Visual and hearing disabilities are commonly encountered in the South African classroom and it is therefore essential that the teacher accommodates for these when differentiating their lessons and the curriculum (Department of Basic Education, 2015). However, it has been found that within South Africa there is a lack of support services and learning support materials, such as sign language and Braille, which could be used to help accommodate for these learners and include them in the mainstream classroom and curriculum (Human Rights Watch, 2015). Emotional barriers are also important to consider because as Donald et al (2006) argues it is inevitable that some learners will enter the classroom with emotional difficulties and teachers need to accommodate for this when differentiating lessons in terms of learners needs in order to ensure they are included in the classroom. In accommodating for emotional difficulties and barriers it is also suggested that teachers create a positive and accepting classroom environment that is based on tolerance and where learners are not punished as a result of their emotional difficulties (Donald et al., 2006). Teachers must work with parents and caregivers and where necessary refer the learner to an appropriate specialist, such as a psychologist (Donald et al., 2006).

2.3.3) Factors that hamper the use of differentiated instruction within the South African context:

While the variation that is recommended in differentiated instruction may be useful in accommodating for needs of diverse learners, as with the learner-centred strategy, it is important to keep in mind that classes in South Africa tend to be very large (De Jager, 2013). When there are many learners in a class it is very difficult for teachers to sufficiently differentiate and continuously teach to the individual needs and abilities of every learner (Burman, 2008; De Jager, 2013). Furthermore, in creating a variety of activities and ways of presenting information much time is needed and when classes are very large much more time, which many teachers do not have, is going to be needed to plan lessons that include sufficient variation in order to accommodate for the diverse needs of all learners (De Jager, 2013; Engelbrecht et al., 2006). In addition, such classes tend to be more difficult to control and manage (De Jager, 2013; Engelbrecht et al., 2006).

In the context of large classes it is argued to be beneficial to provide extra lessons where possible to learners who are struggling to follow and keep up with the curriculum in class and thereby help to address some of the needs and barriers learners may be experiencing (Donald et al., 2006). During extra lessons there are generally fewer learners and thus those who struggle in the class can be provided with more individual support and attention (Donald et al., 2006). Even if there are not fewer learners, extra lessons still provide additional time for addressing aspects of the curriculum which learners may be struggling to comprehend (Donald et al., 2006). However, planning lessons that are inclusive is very time consuming (Engelbrecht et al., 2006) and in De Jager's (2013) study teachers indicated that they did not have enough time for planning differentiated lessons and often have many after school commitments limiting teachers time available for extra lessons.

With regards to planning differentiated lessons and teachers' limited time, the CAPS documents do provide teachers with suggested activities that they can use as well as suggestions outlining general lessons (Department of Basic Education, 2011). However, teachers do need to still expand on these suggested lesson plan outlines as well as ensure the lesson plans and content fit the context and needs of the learners in their classroom (Department of Basic Education, 2011). Additionally, in under resourced schools many teachers have to take on multiple roles, such as counsellor and administrator, leaving them with less time to plan lessons that are differentiated and include varied activities, whereas better resourced schools have specialists who take on these roles leaving teachers to focus mainly on their role as teachers (Harley et al., 2000).

Differentiated instruction, also requires the use of many resources as teachers are expected to plan lessons that include a variety of activities and information, such as different worksheets for learners of different abilities and with different interests, as well as different ways of presenting information, such as videos, pictures, listening activities and so on (Broderick et al., 2005; De Jager, 2013). Within South Africa, however, there are still vast discrepancies between schools with regards to what resources they have and many schools still lack basic resources, thus it is not always easy or even feasible for teachers in South Africa to include much variety and differentiate lessons in order to teach to all learners ability levels and needs (Bray et al., 2010; De Jager, 2013; Engelbrecht et al., 2006). Specifically, De Jager (2013) found in her study that teachers indicated that they lacked resources that they needed to utilise and employ differentiated activities. Thus, once again it can be seen that the unequal distribution of resources limits many teachers' time and ability in creating lessons and classrooms that are inclusive (Bray et al., 2010; Harley et al., 2000).

Despite these limitations, since differentiated instruction calls for the use of variety in the teaching and learning process it is often argued to be a useful method for ensuring inclusion

of diverse learners in the classroom and requires teachers to be flexible and adept at modifying the curriculum and their instruction methods to meet learners' diverse needs (De Jager, 2013; Jordan & Stanovich, 2002). In order to develop this flexibility and adeptness in modifying the curriculum and instruction methods Tomlinson (2000) suggests that teachers need to frequently reflect on the differentiation methods that they use to determine their effectiveness. It is also very important that teachers have an image of what they want their class to look like and what they want students to be able to do by the end of a learning unit in order to plan, guide and assess the methods they use and determine whether or not their methods were successful (Tomlinson, 2000). Additionally, it is suggested that teachers should plan in detail their management techniques, such as the instructions they will give learners (Tomlinson, 2000). Teachers should discuss with each other what differentiation methods do and do not work in their classrooms in order to support and learn from each other (Tomlinson, 2000).

With regards to the South African context De Jager (2013), however, found that secondary school South African teachers in her study stated that they did not reflect on their teaching methods and they seldom shared good practice ideas with their fellow teachers. Furthermore, the teachers in the study stated that they had received insufficient training for implementing differentiated instruction methods thus it is important to consider how or if teachers utilise differentiated instruction strategies given the finding that teachers indicate that they receive a lack of training regarding this strategy (De Jager, 2013).

Differentiated instruction methods are, as mentioned, seen as useful and beneficial for inclusive education as learners are tasked with playing a vital role in their own learning process as they have to explore, be creative and make decisions throughout (Anderson, 2007). Differentiated instruction, therefore, concurs with what is required in the inclusive classroom in South Africa where differences between learners must be accommodated for and learners

should be encouraged to be active participants in the learning process (De Jager, 2013; Department of Education, 2001; Stanovich & Jordan, 2002). In further support of the use of differentiated instruction in inclusive classrooms in South Africa, the Department of Basic Education (2010) argues for teachers to adopt a differentiated curriculum that allows for learners who are different with regards to their skills and knowledge to access the curriculum. Furthermore, there are plans to carry out training workshops in the near future in order to ensure teachers are able to differentiate the curriculum and meet the diverse needs of their learners (Department of Basic Education, 2015).

### 2.3.4) Support for using differentiated instruction in the inclusive classroom:

In support of using differentiated instruction in the inclusive classroom there is evidence that demonstrates its effectiveness when used in inclusive classrooms that consist of diverse learners (Simpkins, Mastropieri & Scruggs, 2009; Tieso, 2005). Tieso's study (2005) found support for differentiated instruction as learners with diverse abilities who were instructed with this model demonstrated significantly better achievement in mathematics than learners who were merely exposed to their textbooks. A study by Simpkins et al (2009), which looked at the effect of differentiated curriculum in a diverse ability fifth grade class, found that overall learners did better after exposure to the differentiated curriculum, than those who were not. Overall, with regards to inclusive education in South Africa, however, De Jager (2013) found that while teachers found differentiated teaching advantageous, most teachers are not trained to use a flexible curriculum and do not have the resources, time or appropriate training to implement differentiated teaching methods. Additionally, classes are often too large making it difficult to accommodate diverse ability levels and maintain discipline while using differentiated instruction methods (De Jager, 2013).

## 2.4) Bloom's Taxonomy and differentiated instruction:

A tool that is useful in ensuring differentiation of teaching activities and assessments, particularly in terms of learner's abilities levels, in the inclusive classroom is the revised Bloom's taxonomy (Krathwohl, 2002; Eber & Parker, 2007). It is a tool which can be used for classifying educational objectives and with regards to knowledge and the cognitive domain, which are the focus of most classrooms, it allows for classification that is hierarchically ordered (Krathwohl, 2002). The levels in order are: remember, understand, apply, analyse, evaluate and create (Krathwohl, 2002). It is generally argued though that activities that fall into the last three levels are of equal difficulty and thus these three levels are often seen as equivalent to each other (Krathwohl, 2002). Within this taxonomy it is also thought that learners need to achieve lower level skills and abilities before moving onto more complex skills and ability levels (Krathwohl, 2002).

Teachers can use Bloom's taxonomy to categorise their classroom activities and test items in order to ensure they include activities and items that fit a range of levels from Bloom's taxonomy (Eber & Parker, 2007). This will help to ensure that learners of a lower ability level will be able to complete some tasks, while at the same time ensuring higher ability level learners are still challenged (Krathwohl, 2002; Eber & Parker, 2007). Additionally, Bloom's taxonomy encourages teachers to not only assess learners memory of facts, as that is simply the first level of the taxonomy, but to also assess higher order levels of thinking and encourages critical thinking and mastery of skills (Eber & Parker, 2007). This is in-line with the goals of inclusive education as defined by the White Paper 6 (2001) as well as with the CAPS (2011) documents which stipulate that teachers need to ensure formal assessments include items and activities that cover the different cognitive domains.

Classifying activities and test items in terms of Bloom's taxonomy is therefore beneficial as it helps teachers to ensure they have included variety in terms of complexity level and ensures teachers are assessing different levels of knowledge (Eber & Parker, 2007). It is important to note that it is not always possible to simply classify objectives, activities or test items into one level as they may overlap more than one level or area of knowledge (Krathwohl, 2002).

## 2.5) Learning styles:

Another factor that is of much importance in the inclusive classroom is that of learning styles because it is necessary to ensure inclusion of learners' preferences in terms of processing information (Department of Basic Education, 2010; Vayrynen, 2003). Learning styles are also an important factor to consider in differentiating lessons as they form part of a learner's learning profile and thus influence how teachers differentiate and include variety in their lessons (Anderson, 2007; Tomlinson, 2000). In referring to learning styles they can be argued to be an individual's preferred and habitual way of acquiring and processing information presented to them (Hatami, 2013). It is their preferred way of understanding, interacting with and responding to the learning situation (Keefe, 1979, as cited in De Vita, 2001). Since learners have different learning styles and do not all learn in the same way teachers need to become aware of their specific learners' preferred learning styles (Manolis, Burns, Assudani, & Chinta, 2013). In considering learning styles it is important to also consider the cultural background of learners (De Vita, 2001).

### 2.5.1) Cultural background and a learner's learning style:

Teachers need to consider learners' cultural backgrounds because learning styles are said to vary as a result of cultural background (De Vita, 2001). This is because it is argued that culture influences the way a person processes information and interacts with their world and as a result a learner's cultural background will influence their preferences with regards to

learning styles (De Vita, 2001). Within South Africa there are many diverse cultures and subsequently classrooms are filled with learners from many different cultural backgrounds (Eaton & Lowe, 2000; Harley et al., 2000).

In support of this De Vita (2001) found, in a study exploring the learning styles of British learners and international learners, that in comparison to the British learners there was greater variance in the learning styles of the international learners who were a "culturally heterogonous group," (De Vita, 2001, pp. 173). Thus it can be argued that teachers need to be aware of learners' learning styles as well as their cultural background in order to adapt their lessons and teaching methods to accommodate for the different learning styles of their learners and thereby ensure inclusion of all learners in the classroom (De Vita, 2001; Vayrynen, 2003).

### 2.5.2) The VARK model of learning styles:

In identifying learners learning styles there are many different models (De Vita, 2001; Prithishkumar & Michael, 2014; Zapalska & Dabb, 2002). One well known model of learning styles focuses on three styles of learning, namely auditory, visual and kinaesthetic (Zapalska & Dabb, 2002). Auditory learners are best able to remember information when they hear it and prefer lecture type lessons (Zapalska & Dabb, 2002). Visual learners learn best by seeing models, images and words (Zapalska & Dabb, 2002). Lastly, kinaesthetic learners are best able to learn when there are activities that involve movement and the use of the sense of touch, such as through games or outings (Zapalska & Dabb, 2002). Neil Fleming adapted these three sensory preferences for processing information to develop the VARK model of learning styles (Zapalska & Dabb, 2002).

Within the VARK model visual learners learn best by seeing (Zapalska & Dabb, 2002). However, visual (VR) is broken up into a preference for visual information presented as text

which refers to a read/write preference (R) and a preference for videos, charts and diagrams (V) (Prithishkumar & Michael, 2014; Zapalska & Dabb, 2002). 'A' refers to aural which refers to a preference for receiving new information via speech (Zapalska & Dabb, 2002). Such learners remember information best when they hear it and are best suited to teacher-centred approaches that use lecture type lessons (Kemp, 2013). The 'K' refers to kinaesthetic which includes a preference for using the five senses to learn new information, for example through movement (Prithishkumar & Michael, 2014; Zapalska & Dabb, 2002). In making accommodation for different learning styles it is important to bear in mind that most learners use more than one learning style (Prithishkumar & Michael, 2014). This implies that in order to assist learners to access the curriculum and succeed in every lesson teachers need to include a wide range of activities bearing the VARK model in mind (Vayrynen, 2003).

Thus it can be seen that teachers play a pivotal role in implementing and achieving the goals of inclusive education (Department of Education, 2001; Engelbrecht, 2006; Lomofsky & Lazarus, 2001). In order to ensure inclusion of all learners despite their diversity and any barriers to education that they may experience it is argued to be beneficial for teachers to utilise the strategies of learner-centred and differentiated instruction (De Jager, 2013; Department of Basic Education, 2010; Naiker, 2006; Polly et al., 2014; Simpkins et al., 2009; Tieso, 2005). However, as highlighted previously teachers within South Africa lack the knowledge, skills and training to implement these strategies (De Jager, 2013; Donohue & Bornman, 2014; Engelbrecht et al., 2006). Additionally, many schools in South Africa have large classes and limited resources which further complicate the use of such teaching strategies (De Jager, 2013; Taylor, 2008). Thus this study aims to explore how teachers in mainstream schools in South Africa attempt to ensure all learners are included in the classroom as active participants in the learning process.

# Chapter 3: Theoretical Framework:

Inclusive education within South Africa is based on a constructivist view of knowledge (Naiker, 2006). However, since this study is focusing on teaching strategies in the inclusive classroom important theoretical concepts here include Vygostky's zone of proximal development (ZPD) and mediation which takes places within the ZPD as well as the concept of scaffolding which is linked to the concepts of mediation and ZPD (Donald et al., 2006; Harland, 2003).

## 3.1) Vygotsky's Zone of Proximal Development and mediation:

Vygotsky's theory of cognitive development stresses the importance of social interaction and the cultural context in development and acquisition of knowledge and culturally specific higher mental functions (Bodrova, 1997). Thus the role of the teacher is imperative in learning and development (Bodrova, 1997). Social interactions are important because all knowledge and mental functions are argued to be social in origin and develop from interactions with more knowledgeable others, such as the teacher, who helps one to develop mental tools such as language (Bodrova, 1997). The importance of social interactions within Vygotsky's theory thus highlights that learners need to be active when learning and not just passively receive new knowledge which is in line with the learner-centred approach (Bodrova, 1997; Brown, 2003). Within the inclusive classroom the more knowledgeable others whom learners interact with could be the teacher who interacts with the learners or they could be other learners who interact with each other in group or pair work activities that are used in learner-centred and differentiated methods (Anderson, 2007; Kemp, 2013).

Also, Vygotsky stressed that development happens through learning and is influenced by the cultural context (Bodrova, 1997). As discussed previously, it is thus imperative to consider learners' cultural context when planning and conducting lessons and when differentiating

lessons (Anderson, 2007; Harley et al., 2000). Learning and development thus takes places through practical activities in the social environment which are influenced by the cultural context and involves interaction in a learner's ZPD (Bodrova, 1997; Donald et al., 2006). Thus, rather than simply receiving and memorising new information, the learner needs to take on an active role and interact with the teacher and other learners in the classroom which is seen in the learner-centred approach (Brown, 2003; Kemp, 2013).

In talking about Vygotsky's concept of ZPD this refers to the difference between what learners can learn on their own, their zone of current development, and what they can learn through mediation with someone more knowledgeable, which is said to be their ZPD where learning is argued to take place (Donald et al., 2006; Harland, 2003). Within a learner's ZPD it is believed they are unable to learn optimally on their own, but have the potential to learn through mediation with someone more knowledgeable who uses mental tools such as language or physical signs to help learners understand and acquire new knowledge (Bodrova, 1997; Donald et al., 2006; Harland, 2003; Huebner, 2010). Through this process of mediation with a more knowledgeable other, such as the teacher or other learners, a learner actively constructs, interacts with and adapts their current understandings and meanings in order to fit them into meanings that are more generally understood and accepted within their cultural context (Donald et al., 2006). Therefore, in constructing new knowledge learners will be influenced by their existing knowledge as well as the social learning situation and their cultural context (Bodrova, 1997; Harland, 2003). Through this process of learning and teaching that takes place in a learner's ZPD they will develop mental tools which help them enhance their mental functioning and become more independent in their learning and this will impact their development (Bodrova, 1997). Learners are thus active, not passive, in their own learning and they are gradually able to take more responsibility for their own learning (Donald et al., 2006).

With regards to the inclusive classroom where learners have diverse ability levels and different ZPDs teachers need to identify individual learner's ZPDs and ensure mediation takes place within a learner's ZPD and connects with their potential (Donald et al., 2006). Therefore teachers need to differentiate the lesson content and process in order to account for difference in learners' current abilities and ZPDs (De Jager, 2013; Donald et al., 2006). Large class sizes, which are common in South Africa, as well as teachers' lack of skills in utilising differentiated teaching methods may however impair teachers' ability to do this (De Jager, 2013; Engelbrecht et al., 2006; Naiker, 2006).

### 3.2) Scaffolding:

Linked to mediation and learners' ZPDs and useful in the inclusive classroom is the idea of scaffolding, developed by Bruner (Donald et al., 2006; Harland, 2003). Scaffolding involves the teacher, as the mediator, interacting with and assisting learners' performance within their ZPD (Bliss, Askew, & Macrae, 1996). When new concepts and skills are first introduced the teacher interacts with learners to provide support and models key knowledge structures and strategies, connecting this to the learner's current knowledge and strategies in order to help them understand and learn (Donald et al., 2006; Harland, 2003). This involves the use of a more learner-centred approach as teachers do not just transmit knowledge to learners and learners are expected to be active in their learning (Brown, 2003; Donald et al., 2006). Important in the process of scaffolding is that the teacher must not simplify a task or concept but rather keep it constant and simplify a learner's role by modifying and adjusting the help they provide for the learner (Bliss et al., 1996).

The point of scaffolding in this way is to enable learners, through mediation with a more knowledgeable other (the teacher or other learners), to grasp and understand concepts and ideas that they would have difficulty understanding on their own (Holton & Clarke, 2006).

This is achieved by stimulating activity within a learner's ZPD through the use of a stimulus, such as a question or demonstration, that helps them construct new knowledge, challenge and correct incomplete and incorrect ideas and recall ideas that have been forgotten (Donald et al., 2006; Holton & Clarke, 2006). In stimulating activity in learners' ZPDs it is important for teachers to differentiate how they do this based on each learner's needs, abilities and preferences (Anderson, 2007; Donald et al., 2006). Through this process of scaffolding learners then need to be given the opportunity and provided with activities that allow them to practice, adapt and refine their new ideas and understandings (Donald et al., 2006). The support provided by the teacher is temporary and it needs to be gradually reduced and eventually removed as learners grasp the new concepts (Donald et al., 2006; Harland, 2003; Holton & Clarke, 2006). In scaffolding the teacher, thus, takes on the role of a facilitator and mediator who provides techniques and materials to stimulate learners' learning while the learner takes on an active role and becomes more independent in their own learning, which is consistent with the learner-centred approach (Brown, 2003; Donald et al., 2006; Polly et al., 2014).

Mediation, however, as indicated earlier does not only depend on the teacher (Donald et al., 2006). Since it involves social interactions it can also take place at a peer level through co-operative learning in groups or pairs which encourages learners to be active participants in the learning process and stimulates cognitive conflict between students thereby encouraging questioning of current understandings (Donald et al., 2006). These ideas of mediation, ZPD and scaffolding are thus important in the inclusive classroom as they link to differentiated instruction and the learner-centred strategy which have been found to be useful teaching strategies in the inclusive classroom (Brown, 2003; De Jager, 2013; Huebner, 2010; Morgan, 2013; Polly et al., 2014). This involves teachers differentiating and adjusting their instructions and the curriculum in order to accommodate for, scaffold and mediate based on

individual learner's specific needs and abilities and teach to learners' own ZPDs in order to ensure optimal learning takes place (Huebner, 2010; Morgan, 2013). Additionally, the learner is expected to take on a more active role in their own learning and become more independent and responsible for their own learning as the teacher functions as a mediator not a transmitter of knowledge (Brown, 2003; Donald et al., 2006; Polly et al., 2014).

Therefore, in mediating, scaffolding and teaching to learners' ZPDs teachers can utilise the learner-centred approach (Brown, 2003; Donald et al., 2006; Polly et al., 2014). However, within classes with a large number of learners, limited resources and time constraints, which is common in South Africa, such strategies of mediating, scaffolding and teaching to all learners' ZPDs would be very difficult to implement and utilise and this must be kept in mind in exploring teachers' teaching strategies in the inclusive classroom (Bliss et al., 1996; De Jager, 2013). Moreover, as discussed previously, teachers have been found to lack the skills for differentiated and learner-centred teaching, which include skills in identifying learners needs and ability levels, their ZPDs, as well as ensuring active learner participation and teaching to each individual learner's ability level and needs, which relates to mediating lessons and scaffolding (De Jager, 2013; Engelbrecht et al., 2006; Naiker, 2006; Williams et al., 2009). This suggests that teachers need further training to ensure that are able to effectively mediate and scaffold learners' learning process within the inclusive classroom (De Jager, 2013; Engelbrecht et al., 2006; Naiker, 2006; Williams et al., 2009).

# Chapter 4: Methods:

## 4.1) Context:

The study was conducted in the Gauteng province in one education district, specifically in Johannesburg East. The researcher accessed public mainstream primary schools. The grades taught at all the schools ranged from Grade R to Grade 7 and all schools were co-ed, thus consisting of a mix of male and female learners. With regards to the context of the schools three were located within lower-middle income suburbs and one was located in an upper income suburb. The medium of instruction at all of the schools was English.

In terms of the resources available at the school all four schools had most of the resources as listed in the School Survey Checklist (see Appendix H). All four schools had textbooks, school readers and workbooks for the learners and three of the schools had a library available for the learners.

In terms of resources that the schools did not have, most did not have specialised professionals except one school who had one learning support specialist and another school had a psychologist. During the focus group, however, teachers at the one school did state that there is access to off-site psychologists and counsellors. Also, only one of the schools had access to computers for each learner in the class. None of the schools had ramps and thus did not have resources to accommodate learners in wheelchairs. Only one school did not have external sports coaches and one school stated that they did not have a supportive district support team, although another school highlighted that they had a very supportive district support team.

The teacher-to-learner ratios at the schools varied. One school had a teacher-to-learner ratio of below 1:30 and two other schools indicated that they had a teacher-to-learner ratio of between 1:31-1:35. One school had a teacher-to-learner ratio of 1:41- 1:45.

4.2) Design:

Since the study aimed to explore and gain a better understanding of the experiences and actions of teachers in the inclusive classroom as well as how they think about inclusive education and how to achieve inclusiveness, the design was descriptive and exploratory (Willig, 2008). This is because the study explored whether teachers were using strategies recommended for the inclusive classroom and described and explained what teachers were doing in their inclusive classrooms (Willig, 2008). Thus, it described how teachers were implementing inclusive education and the strategies they were using. In order to explore and describe teachers' experiences and teaching strategies in the classroom in rich detail qualitative methods were used to gather and analysis the data (Willig, 2008).

4.3) Sampling:

A purposive non-probability sample of convenience was used as such a sample is easily accessible and available (Gravetter & Forzano, 2009). Also, it helped ensure the sample selected was familiar with inclusive education as specific schools were approached, specifically public primary schools as such schools follow the inclusive education policy as laid out in the White Paper 6 (2001). Primary schools were used for the sample as early identification of barriers to learning and early provision of support and intervention programmes for such barriers is of much importance in the inclusive education policy in South Africa (Department of Education, 2001). The sample was selected from schools in the Johannesburg East district.

The aim was to have at least five focus groups, with one from each school, consisting of four to six teachers as participants in each. Five schools were originally included in order to ensure the results would be robust and help make the results more transferable. A group size of 4-6 was aimed for in order to ensure the group was large enough to ensure and encourage discussion among participants while at the same time making sure that all participants could be actively involved because if there were too many participants it may have been difficult for all to remain actively involved (Willig, 2008).

Of the five schools that agreed to participate, one was too busy and was unable to participate in the end. With regards to the remaining four schools there were a total of 14 participants. In the first school five teachers volunteered to participate, but during the focus group one teacher had to step away for the majority of the time due to other unforeseen commitments. At the second school four teachers volunteered to participate and were involved in the focus group. At the third school the majority of the teachers were unavailable in the afternoons due to after school commitments and only one teacher was able to volunteer, so an individual interview was conducted with this teacher. This teacher was included even though there were not enough participants from the school to form a focus group so as to help enlarge the sample size and ensure that there were at least four schools included in order to enhance the representativeness of the sample. At the last school five teachers volunteered but only four were able to attend in the end and two had to leave for reasons unknown to the researcher shortly after the focus group began.

### 4.4) Procedure:

First permission to conduct the study was obtained from the relevant bodies. Specifically, verbal permission to conduct the study in the relevant schools was obtained from the school principals telephonically and then formally with a signed consent form. Written permission

was also obtained from the Gauteng Department of Education research officials (see Appendix I). Internal ethical permission to conduct the study was also obtained from the Human and Ethics Research Council (non-medical) (see Appendix J).

Once permission to conduct the study was obtained from the relevant bodies the researcher contacted the principals of the schools who had agreed to participate telephonically and via email to determine a day and time for the researcher to address the staff about the research project. The researcher then met with the staff during school breaks and morning meetings for about 15 minutes to discuss the research project. At the meeting the researcher explained to the participants the nature and purpose of the study and what would be required of them if they volunteered. Additionally, the researcher provided them with the opportunity to ask any questions and provided those who volunteered with the participant information sheet detailing the research that had been discussed. For those who volunteered to participate in the focus groups the researcher discussed with them when would be a suitable time to conduct the focus group and took down their contact details. In one school the principal met with the researcher to discuss the details of the research and took the participant information sheets to her staff. Following the principals meeting with her staff, the research contacted the principal and was given a day and time to conduct the focus group.

The focus groups were conducted at the specific schools in the school staff rooms and lasted on average 45 minutes. At the start of each focus group participants were re-informed about the voluntary nature and purpose of the study as well as the fact that confidentiality and anonymity cannot be guaranteed within the focus group, although they were asked not to discuss anything said in the focus group outside of the focus group. They were also informed that anonymity and confidentiality would be guaranteed in the report. Following this they were asked to sign the informed consent form and fill in the demographic questionnaire and then the focus group was conducted. When the researcher met the staff for the focus group,

principals were also asked to complete the School Survey Checklist (see Appendix J). Each survey was assigned a two digit coding system that was also assigned to the demographic questionnaires from that school in order to assist with linking each school to the data collected from that school. The coding system was assigned to each demographic questionnaire in order to also ensure anonymity and confidentiality. After the focus group the researcher transcribed the data verbatim and conducted the data analysis. All information was kept confidential and only seen by the researcher and supervisor.

4.5) Data collection:

Data were collected via focus groups as well as one individual interview. Focus groups were used as they allowed for participants to interact with each other and stimulate, challenge, defend, extend and develop ideas (Willig, 2008). Additionally, the use of a focus group helps to reduce the dominance of the researcher and redirects the focus to the participants and their ideas (Willig, 2008). Given that the data being collected were not of a sensitive nature focus groups were an appropriate data collection method (Willig, 2008).

An interview schedule for the focus group was developed based on the literature review (see Appendix B). Specifically, the questions focused on teaching styles and strategies that have been recommended and shown to be beneficial in the inclusive classroom. Questions about whether and how teachers use teaching strategies, such as differentiated instruction and learner-centred teaching, which have proven to be beneficial in the inclusive classroom, were included. Questions about factors that may assist or hamper achieving inclusiveness in the classroom were also included.

Additionally, a demographic questionnaire (see Appendix A) was included in order to gain a clear understanding and picture of the characteristics of the sample. Items included questions about teaching experience, qualifications and class sizes as well as general demographic

questions. Principals from each school that participated were asked to complete the School Survey Checklist (see Appendix H) in order to have a clear picture regarding the resources available at each school. This survey took about three minutes to complete and included items about the resources available at the school, specialised support staff available, teaching materials and number of learners as well as the average teacher-to-learner ratio.

### 4.6) Data analysis:

Data were initially transcribed verbatim. Each participant was coded in order to ensure anonymity in the results. Analysis of the data was conducted using Thematic Content Analysis. Thematic Content Analysis allows for qualitative data to be presented descriptively (Braun & Clarke, 2006; Joffe & Yardley, 2004). Furthermore, it enables the researcher to identify, analyse and report themes, which are patterns, found in the data (Braun & Clarke, 2006). Thus, it involved identifying common themes throughout the text which described important aspects of the data related to the research question (Braun & Clarke, 2006; Joffe & Yardley, 2004). The computer programme ATLAS was used in order to assist with the Thematic Content Analysis.

The six steps suggested by Braun and Clarke (2006) were utilised in analysing the data and were as follows:

4.6.1) First, the researcher familiarised herself with data by transcribing, reading and re-reading the data and in the process taking notes about initial ideas regarding the data (Braun & Clarke, 2006).

4.6.2) Second, initial codes were generated by highlighting and identifying interesting features of the data that were relevant to the research questions and the process was thus more deductive (Braun & Clarke, 2006; Joffe & Yardley, 2004 ).

4.6.3) Third, the researcher searched for themes by grouping codes and identifying themes and subthemes relevant to the grouped codes (Braun & Clarke, 2006).

4.6.4) Fourth, the themes were reviewed in order to ensure they were coherent, independent of other themes and addressed the research questions (Braun & Clarke, 2006).

4.6.5) Fifth themes were defined and named. Names that captured the content of theme and were concise were chosen (Braun & Clarke, 2006). In defining the themes a detailed analysis of each has been provided (Braun & Clarke, 2006).

4.6.6) Lastly, the report was written up, and in writing up the report an argument was developed and the findings from the study conveyed to the reader (Braun & Clarke, 2006). Evidence to support the identified themes was provided from the data (Braun & Clarke, 2006).

Demographic data were analysed using SPSS in order to obtain descriptive statistics detailing the characteristics of the sample in the study.

## 4.7) Reflexivity:

With regards to reflexivity the researcher acknowledged that she continuously influenced and shaped the research (Willig, 2008). In particular, the researcher acknowledged, in terms of epistemological reflexivity, the assumptions that she made throughout the research process influenced the research and findings and this was kept in mind (Willig, 2008). During the research process and especially the data collection and interviews the researcher kept a reflexive journal in order to take note of how her background, interests, beliefs and values may have influenced the research process, the interviews and the interviewees (Willig, 2008).

4.8) Trustworthiness:

In evaluating the quality of qualitative research it is important to consider the trustworthiness of the research (Cope, 2014). In striving for trustworthiness there are four criteria that should be met, namely credibility, transferability, dependability and confirmability (Cope, 2014; Morrow, 2005; Shenton, 2004). Credibility refers to the truth of the data and the analysis and representation of the data by the researcher thus it refers to the internal consistency (Cope, 2014; Morrow, 2005). In ensuring credibility it is useful to triangulate the data through the use of a wide range of participants (Shenton, 2004). Also, it is beneficial to utilise strategies that ensure honesty from participants, such as by ensuring participants are aware that participation is voluntary and that they can refuse to answer any questions or withdraw if they want to (Shenton, 2004). The researcher should also provide "thick descriptions," (Shenton, 2004, pp. 69) of participants' experiences and the context (Morrow, 2005). Other ways of establishing credibility include allowing for peers to scrutinise and analyse the research project, as well as through the use of reflexivity where the researcher continuously evaluates the research process and decisions are made based on the awareness that a researcher's own subjectivity, beliefs and values might impact the research process (Cope, 2014; Shenton, 2004). Additionally, an audit trail that can be reviewed by others should be kept and this should include materials such as transcripts from focus group discussions, notes made during the research process and data analysis as well as drafts of the report (Cope, 2014).

The second criterion transferability refers to the extent to which the results can be applied to another setting or group (Cope, 2014; Shenton, 2004). In order to determine the transferability of the results it is necessary for the researcher to provide detailed information about the research process, procedure, context and participants (Cope, 2014: Morrow, 2005). The third criterion dependability refers to the consistency of the data and is similar to the idea of reliability in quantitative studies (Morrow, 2005). In ensuring dependability it is important

that the research process is described in sufficient detail so as to make it repeatable (Morrow, 2005). Once again an audit trail is useful here (Morrow, 2005).

The final criterion is confirmability and is based on the concern that the research results must reflect the participants and situation being researched and not the beliefs or biases of the researcher (Cope, 2014; Morrow, 2005). In demonstrating confirmability of the results the researcher needs to clearly describe how interpretations and conclusions were made based on the data by providing, for example, detailed quotes that represent each of the themes found in the data (Cope, 2014).

In striving to ensure trustworthiness of the qualitative research being conducted here, the researcher has strived to continuously meet these four criteria of trustworthiness. In order to ensure credibility the researcher included a range of participants from multiple schools, tried to ensure participants were honest in their responses by emphasising the voluntary nature of participation and that participants could withdraw or omit any answers if they wished without being subjected to any negative consequences. The researcher has also provided detailed descriptions in the report of participants' experiences and the context and her work has been continuously evaluated by her supervisor. Furthermore, the researcher has continuously reflected and made notes regarding her subjectivity and beliefs and the impact of this on the research. Detailed information about the research process, procedure and context has been provided as well as detailed information about the participants was obtained through the use of a demographic questionnaire and reported on. This information will be used to determine the transferability of the results. In order to ensure dependability enough detail of the research process has been provided so as to make it repeatable and an audit trail, including drafts of the research proposal and report as well as notes made throughout have been kept. To ensure confirmability detailed quotes have been provided to justify identified themes.

4.9) Ethical considerations:

Internal ethical permission to conduct the study was obtained from the Human and Ethics Research Council (non-medical). Additionally, permission to conduct the study in mainstream public schools was obtained from the Gauteng Department of Education. Verbal and formal written permission was also obtained from the principals of the relevant school. Specifically, a formal letter of permission and signed consent from the principals of the relevant schools was obtained.

All participants who volunteered to participate in the focus groups were given a participant information sheet with the details regarding the nature and purpose of the study as well as the contact details of the researcher and research supervisor. Participants were informed of the voluntary nature of the study and that there would be no benefits if they chose to participate nor would they be disadvantaged in anyway if they chose not to participate. Also, they were informed about what it involves beforehand and were notified of their right to withdraw at any moment should they wish to, without being subjected to any negative consequences. Furthermore, participants were informed of their right to not respond to any questions if they did not want to answer. Participants were asked to sign a consent form giving consent to participate in the focus group and a consent form giving consent for the focus group to be audio recorded before each focus group was conducted.

Within the focus groups it was not possible to guarantee anonymity or confidentiality, although participants were be asked not to discuss anything from the focus groups outside of the focus groups. In order to guarantee confidentiality and anonymity within the results and report, interviews were transcribed in private settings and with the use of headphones, no names were linked to the transcriptions and participants were coded. Additionally, electronic recordings were downloaded onto a password protected computer for storage and deleted

from the recording device once downloaded. The downloaded recordings, together with notes and transcriptions containing data, have been kept securely on a password protected computer accessible only to the researcher and relevant supervisor and the identity of the participants were not be included on any notes. The demographic questionnaires were coded in order to link them to the School Survey Checklist of each school.

Results will be disseminated via a research report that will be made available to all those who participate. Additionally, the final research report will be uploaded to the University of Witwatersrand's online system as well as be available in the library and may be published in journal articles and presented at conferences.

# Chapter 5: Results and Discussion

This chapter aims to provide the results of the research study based on the Thematic Content Analysis of the qualitative data. The discussion of the results will be integrated with the results in this section. With regards to question four, this question ties in with themes related to the other three questions, particularly with those identified in question two therefore question four will be addressed together with question two.

## 5.1) Demographic Details:

Before addressing the above research questions, an overview of the sample characteristics will be provided based on the descriptive statistics run for the demographic data obtained.

There were a total of 14 participants involved in the focus groups across the four schools. The average age of the sample was 44 years old, with a range of 24- 58 years old. The majority of the sample (71,4%, n=10) was female. In terms of educational level most participants had a Degree (35,7%, n=5) or Masters Degree (35,7%, n=5), with only one participant indicating that they had a PhD and 21,4% (n=3) of participants indicated that they had a Diploma. With regards to the race of the participants 64,3% (n=9) were Black, 28,6% (n=4) were White and one participant was Indian. An equal number of teachers indicated that they had a class size of 21-30 learners (42,9%, n=6) and 31-40 learners (42,9%, n=6), and a smaller number of teachers indicated that they had a class size of 41-50 learners (14,2%, n=2) (see table one). The vast majority of teachers (78,5%, n=11) included in the sample indicated that they do not teach in their home language (see table two). With regards to teaching experience the majority of teachers (64.3%, n=9) in the sample have been teaching for more than 15 years, 28,6% (n=4) of the teachers have been teaching for 10 years or less and one teacher has been teaching for 11-15 years. In terms of how long teachers have been at their current school,

where the focus groups were conducted, 85,7% (n=12) indicated that they have been there for 10 years or less and 14,3% (n=2) indicated that they had been there for 11 years or more.

Table one:

*Class Size*

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 21-30 | 6 | 42.9 | 42.9 | 42.9 |
| | 31-40 | 6 | 42.9 | 42.9 | 85.7 |
| | 41-50 | 2 | 14.3 | 14.3 | 100.0 |
| | Total | 14 | 100.0 | 100.0 | |

Table two:

*Medium of Instruction Same as Home Language for Teacher*

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 3 | 21.4 | 21.4 | 21.4 |
| | No | 11 | 78.6 | 78.6 | 100.0 |
| | Total | 14 | 100.0 | 100.0 | |

## 5.2) Thematic Content Analysis:

### 5.2.1) Sub-question one: Teacher-centred versus learner-centred approach:

In examining the teachers' approach to teaching in the inclusive classroom two themes were identified, namely teaching style and knowledge of learners.

#### Teaching style:

*Teacher-Centred and Learner-Centred Approaches:*

In terms of teachers' teaching style in the inclusive classroom two styles were discussed which were the teacher-centred and the learner-centred approach to teaching. Teachers across all the focus groups and individual interview pointed out that, *''we use the learner-centred approach,''* in the inclusive classroom. This approach was said to be in line with the Curriculum Assessment Policy statements (CAPs) as *''the CAPs is inclined to the [sic] learner-centred.''* Furthermore, in line with the learner-centred approach and the inclusive classroom where teachers are expected to facilitate the active participation of learners (Brown, 2003; Polly et al., 2014) three teachers in one focus group also argued that teachers are often, *''just kind of facilitating rather than taking the whole lesson yourself,''* which allows learners to take more of a lead and be active participants. In terms of inclusive education as outlined in the White Paper 6 (2001) this use of the learner-centred approach by the teachers here is in line with this policy document's recommendations and expectations of inclusive education where the focus is on developing the active participation of all learners in the inclusive classroom, rather than having learners remain passive recipients of knowledge.

The learner-centred approach was also argued by teachers from two of the focus groups to be a beneficial approach to teaching in the inclusive classroom as learners are more active in the lessons. This is consistent with findings from studies by Polly et al (2014) and Jordan and

Stanovich (1998) which have also found that learner-centred teaching results in better performance outcomes compared to teacher-centred teaching in classes with learners who have diverse needs and ability levels as it fosters independence and encourages learners to engage with the curriculum.

In particular the teachers here argued that in using the learner-centred approach learners are more active because, *''You involve learners throughout. They also come and demonstrate on the board, in the group work, whatever they do just to be learner-centred... So it's usually [sic] involve them, just introduce the lesson five to eight minutes then it's them who work everything [sic].''* This is in accordance with the constructivist and active aspects of the learner-centred approach whereby learners are presented with the basic instructions and information but they need to take an active role in order to explore and question the information so that they can build their knowledge and understanding of the information (Brown, 2003; Kemp, 2013; Polly et al., 2014). Constructivist approach to teaching and learning also concurs with the Department of Basic Education's (2010) guidelines for inclusive education, which argues for learners to be encouraged and guided by the teacher to construct their own knowledge in the inclusive classroom.

In five instances across two focus groups it was also suggested that the learner-centred approach helps to ensure lessons are inclusive by engaging and involving learners as it makes the lessons more interesting and exciting, *''I found it terribly boring to make it particularly teacher-centred so I do make it learner-centred and sometimes you know I have a combination of both. Learner-centred because you want the learners to be engaged and involved.''* The argument that learner-centred lessons are more interesting is consistent with the ideas that in such lessons learners are meant to have an active role and engage with information and given that the learner is the centre and focus of such lessons teachers need to consider and ensure inclusion of learners' interests and needs (Brown, 2003; Polly et al.,

2014). Furthermore, this argument in the focus group is consistent with a finding by Noyes (2012) that learners demonstrated increased motivation and more positive attitudes towards learning when exposed to a learner-centred teaching approach. Thus, the use of the learner-centred approach within inclusive education helps to ensure learners are included in the classroom and curriculum as it involves and engages them in the lessons (Brown, 2003; Noyes, 2012; Polly et al., 2014).

Although, teachers across all the focus groups and individual interview highlighted that the learner-centred approach was useful and beneficial in the inclusive classroom five teachers from three of the focus groups stated that their decision and choice to use a learner-centred or teacher-centred approach was, *''subject specific.''* In particular these teachers suggested that subjects such as Mathematics and English were better suited to using a teacher centred approach. Specifically, one teacher stated that, *''I also taught English for many years and I think that the teacher-centred approach is very critical to the subject because you need to, you know, teach rules. You need to ah teach grammar, language. There are certain boundaries one has to work within. But once you set... once you lay the foundation you then can work around that in terms of the application of the knowledge using the learners.''* This is in line with findings from Kemp's (2013) and Lindblom-Ylanne et al's (2006) studies which found that teachers relied more on a teacher-centred approach when teaching hard disciplines that had well defined content and rules to be taught. However, these two studies were conducted with university lecturers and it would thus be beneficial to further examine this finding with regards to primary schools that follow an inclusive education policy in future studies (Kemp, 2013; Lindblom-Ylanne et al., 2006).

Another teacher stated that, *''I think especially with maths and English it has to kind of start with the teacher starting everything and then becoming more involved as they understand it.''* Five teachers across three of the focus groups reiterated this idea that in using the learner-

centred approach in the inclusive classroom there is still a need to begin with a more teacher-centred approach in order to explain and introduce new information and topic areas and lay down the foundation. This is corroborated by David and Lu's (2015) study that found the learner-centred approach to be associated with better mathematics performance but within this study most lessons did begin with a brief lecture based introduction in order to introduce new information.

*Limits of the Learner-Centred Approach:*

Despite the learner-centred approach being seen as useful in the inclusive classroom, teachers from all the focus groups and individual interview pointed out that it was not necessarily the most efficient approach or the best approach for meeting goals and objectives that are stipulated by CAPs. Furthermore, five of the teachers from three of the focus groups indicated, in line with what one teacher said, that, *''in most spaces it becomes teacher centred because now I need to explain.''* Another teacher, when asked if she relied more on the teacher or learner-centred approach said that *''hmm initially the learner input. But ah I would say about 80% ah teacher.''* This is consistent with Bray et al's (2010) study where it was found that South African teachers in three Cape Town schools still rely heavily on a teacher-centred approach as they lacked the resources, skills and time for the learner-centred approach which is encouraged to be used in the inclusive classroom. It is important to note though that many of the teachers in the focus groups and individual interview here also pointed out that they were Mathematics and English teachers, and thus it is possible that teaching hard disciplines affected their teaching approach resulting in a more teacher-centred approach, as discussed above (Kemp, 2013; Lindblom-Ylanne et al., 2006).

Specific factors that teachers indicated made the learner-centred approach less efficient and hindered their use of it in the inclusive classroom include the fact that it requires, *''really a*

*lot of work,''* as was stated by one of the teachers. This finding is corroborated by Polly et al (2014) who states that the learner-centred approach does require much effort and work because the teacher functions more as a facilitator who guides the lesson and learners take the lead.

Disruptive behaviour was mentioned by two teachers in one focus group as another impediment to implementing and utilising a learner-centred approach within the inclusive classroom. As one teacher stated in his approach to teaching, *''it's teacher centred because if you say learner centred they [learners] are so disruptive.''* The learner-centred approach does require teachers to relinquish control as the teacher in this approach is expected to step back and let learners take an active role, while the teacher acts more as a guide (Polly et al., 2014). This reduced control often contributes to making it more difficult to maintain discipline in large classes (Bray et al., 2010; De Jager, 2013; Polly et al., 2014). In support of teachers' argument here, studies have found that teachers do often revert to using teacher-centred instead of learning-centred teaching methods in their inclusive classrooms, particularly when the classes are large as is common in many South African public schools (Bray et al., 2010; De Jager, 2013). It has also been found that where there is generally much disorder and disruptive behaviour among learners teachers have been seen to rely more on a teacher-centred approach which is more authoritarian and where they thus have more control (Harley et al., 2000; Harber & Serf, 2006; Bray et al., 2010). A possible reason for teachers' reliance on the teacher-centred approach when faced with disruptive learners is De Jager's (2013) and Engelbrecht et al's (2006) finding that South African teachers indicate that they lack knowledge and behavioural management strategies regarding how to maintain discipline and order within the inclusive learner-centred classroom. In order to help South African teachers maintain discipline while using the learner-centred approach in the inclusive

classroom it is thus important to help them develop techniques for managing learners' behaviour (De Jager, 2013; Engelbrecht et al., 2006).

Therefore, even though the learner-centred teaching approach is recommended for the inclusive classroom as a strategy that helps to include learners as active participants, teachers in the focus groups here, consistent with other studies in South Africa, often felt the need to revert back to the teacher-centred approach (Harley et al., 2000; Department of Education, 2001; Department of Basic Education, 2010). This is because the teacher-centred approach is seen as being more efficient and effective in explaining new concepts and ideas to learners, as less time-consuming and as more effective in meeting curriculum deadlines as learners are not actively involved and the teacher can thus take the lead and push the lesson forward in order to ensure the necessary content is covered (Brown, 2003; Kemp, 2013; Polly et al., 2014). Also, the teacher-centred approach is seen as being more useful in ensuring discipline and order in the classroom because the teacher is in control and such lessons are very structured and rigid (Polly et al., 2014).

Knowledge of learners:

*Knowing Learners and Establishing Learners' Needs:*

Teachers acknowledged that in order to ensure education is inclusive it is important to know learners and establish their needs so as to ensure the inclusion of all learners within the classroom and curriculum. This was discussed by four teachers from three of the focus groups. They pointed out that they often establish learners' baselines and determine learners needs in the beginning of the year in order to ensure all learners are included and supported in terms of what they can do and what they need help with. One teacher, for example, stated, *''what I normally do is when I start in the beginning of the year, I don't give them easy things to do I start with difficult things. And from there I downgrade and I know exactly where they*

*are. You are on a level 1 , level 2, level 3 or a level 4 or whatsoever and from there on you work with the child.''*

Determining learners' needs at the beginning of the year is consistent with the requirements of the SIAS (2014) policy in which it is stipulated that teachers need to complete a Learner Profile (LP) for each learner in order to know each of their learners and understand their needs and barriers. The teachers' acknowledgement here of being able to establish their learners' needs within their inclusive classroom environments is also consistent with findings from De Jager's (2013) study where the vast majority of teachers indicated that they can identify their learners' weaknesses as well as their strengths. Establishing what learners needs are is also important in terms of the learner-centred approach where the individual learner is the focus and the teacher therefore needs to know what each individual learners' needs, abilities, interests and characteristics are in order to accommodate each learner and ensure they are included in the classroom and curriculum and actively involved by using the appropriate teaching methods and approaches (Brown, 2003; Burman, 2008).

5.2.2) Sub-questions two and four: Use of differentiated teaching:

In looking at teachers use of differentiated teaching four themes were identified which are differentiated instruction and tasks, learners' differences, learners' barriers to learning and the importance of language. The theme of learners' differences includes differences in terms of learners' culture, learning styles and interests and as such it ties in with questions four, thus question four will be addressed in this section.

Differentiated instruction and tasks:

*Differentiating Instructions:*

In differentiating instructions in the inclusive classroom teachers across all the focus groups and individual interview acknowledged the need to sometimes present instructions in more than one way in order to ensure all learners understand and are able to follow and are thus included in the curriculum and lessons. Three teachers from three of the focus groups also spoke about sometimes providing learners with individualised and differentiated instructions if need be. For example, one teacher said, *''often I explain to the whole class and I say if you've got a problem come to me and I explain it differently to the child. Or if I know a child in my class he struggles with English I will bring him to me and I'll show him on the paper exactly what to do.''* This is consistent with the requirements of differentiation and inclusive education as teachers need to differentiate and vary their instruction methods based on learners' needs in order to accommodate for and include learners' in terms of their individual differences (Department of Basic Education, 2010; Tomlinson, 2000).

Even though, teachers in the focus groups and individual interview here therefore acknowledged the importance of using differentiated instruction as a way of meeting the objectives of inclusive education, they argued that they lack practical training and skills for teaching in the inclusive classroom. As one teacher stated, "t*eachers are not fully trained for such [inclusive education]."* Corroborating this previous studies have found that South African teachers lack the knowledge and skills for differentiated instruction as they have not been well trained for using this teaching strategy (De Jager, 2013; Engelbrecht et al., 2006). There has also been found to be a lack of staff development activities for addressing diversity in the inclusive classroom and teachers have indicated that they lack effective strategies, including differentiation and learner-centred strategies, for addressing diversity in the

classroom all of which will be discussed in detail in the subsequent sections (De Jager, 2013; Engelbrecht et al., 2006).

*Differentiating based on Cognitive and Academic abilities:*

In differentiating and varying lessons as a means of making them inclusive teachers focused on differentiating tasks and instructions based on learners' academic and cognitive abilities and needs, which was brought up eleven times across all the focus groups and the individual interview. Teachers from all the focus groups and the individual interview on seven occasions spoke about differentiating worksheets and tasks in order to ensure they cater for and are inclusive of different ability levels. As one of the teachers stated, *''When I planned lessons, especially with mathematics I usually do one column that's slightly easier, then the second column is slightly more and then the third column.''* Another teacher spoke about ensuring lessons catered for learners different ability levels in terms of reading ability by varying the difficulty level of tasks given to learners in order to include all learners in terms of their reading level. She said, *''when you are planning your lessons if it's a reading lesson it means whatever the gifted children are going to read is not going to be the same as what you are going to give to someone who is struggling. You have to make your work less challenging to such a learner.''* As is consistent with the requirements of differentiated instruction in the inclusive classroom, teachers thus varied their lessons in order to accommodate for diversity and differences among their learners in order to ensure they are included in terms of their differences (Anderson, 2007; Department of Basic Education, 2010). However, teachers here focused mostly on differentiation of the process component, which involves the learning activities which were varied in order to include their diverse learners, and teachers focused mostly on differentiation in terms of ability levels (Anderson 2007; Broderick et al., 2005).

Differentiated instruction and inclusive education is, however, about more than ability levels and varying the process component of lessons (Anderson 2007; Broderick et al., 2005; Department of Basic Education, 2010). Teachers also need to respond to, accommodate for and ensure learners are included in terms of differences among learners' interests, learning styles, personalities, culture and gender as these influence their preferences and how they learn and approach learning situations (Anderson, 2007; Broderick et al., 2005; Department of Education, 2001; Lawrence-Brown 2004; Levy, 2008; Patterson et al., 2009). In meeting the objectives of inclusive education and ensuring learners are included in all aspects of the classroom and curriculum teachers need to vary not only the process component of the lesson but also the content and product component of the lesson and the learning environment (Anderson, 2007; Department of Basic Education, 2010). Given that teachers in the focus groups did not discuss all the different aspects of the lessons that can be differentiated in creating an inclusive learning environment, it is possible to argue that teachers are not well trained for using differentiated instruction in the inclusive classroom as was found in De Jager's (2013) study. This should be investigated further to more accurately determine the reason for teachers not discussing all the different aspects of differentiated instruction.

*Differentiated support:*

Teachers on two occasions in two of the focus groups also indicated that they would ensure all learners are included in their lessons by varying the amount of support given to learners based on their ability levels and speed of work, whereby slower and lower ability level learners would be given more individualised assistance than faster and higher ability level learners. For instance one teacher stated, *''because of the nature of their speed of work they are slow to finish work so I can during that time when I give others [extra work] go to them individually and assist them to work faster and I select which [questions] I am suppose to give.''* Variation of support provided for learners based on their needs is also consistent with

the requirements of differentiated instruction and inclusive education as learners will need different amounts of support given their diverse needs and abilities (Anderson, 2007; Department of Basic Education, 2010; Tomlinson, 2000).

It is not, however, always easy or feasible within the diverse inclusive classroom for teachers to vary the support given especially when classes are large (De Jager, 2013; Engelbrecht et al, 2006; Theron & Nel, 2005). It has been found that teachers struggle with providing varied and effective support that ensures learners with barriers are fully included in the lessons and curriculum, particularly within large classes which are commonly found in South Africa (De Jager, 2013; Engelbrecht et al., 2006; Theron & Nel, 2005). This is argued to occur because teachers have indicated that they lack skills and support structures for providing adequate support to learners based on the learners' specific needs and it has been indicated that large classes make it difficult to effectively support learners' needs and ensure the objectives of inclusive education are achieved (De Jager, 2013; Engelbrecht et al, 2006; Theron & Nel, 2005). This corroborates the argument by teachers in the focus groups and individual interview in this study, as teachers suggested that large classes and lack of support and skills make it difficult to differentiate support given to learners based on learners' individual needs. As one teacher stated, *"sometimes the big number of learners we have in our class is a challenge because the teacher cannot attend to the individual needs."* Another teacher argued that teachers lack specialised skills for addressing and supporting learners with certain barriers, in particular she argued that, *"Yes we are not at all equipped say for deaf children and blind children."*

Varied support in terms of increased time allowances for completing activities and assessments as a means of ensuring inclusion of slower learners in the curriculum and lessons was discussed by one teacher who indicated that at their school, *''We have a learner who takes I think a bit more time than the average learner to complete tasks so what we have done*

*to accommodate that learner is um when we writing formal tests and exams we allocate a bit more time to that learner.''* This was not brought up in any of the other focus groups. The fact that teachers here mostly did not discuss or indicate that they differentiate in terms of time allowances as a means of ensuring inclusion of all learners is consistent with De Jager's (2013) findings. De Jager (2013) found that teachers seldom provided extra time for learners in accommodating for learners' barriers and needs and ensuring they are included in the lessons and assessments in terms of their needs. Variation in terms of time allowances based on learners needs and barriers is, however, an important aspect of inclusive education and teachers are expected to provide learners with extra time if they need it as a result of a barrier to learning that they experience (Anderson, 2007; Department of Basic Education, 2013).

*Pair and Group Work:*

In seven instances across all the focus groups and individual interview teachers spoke about utilising pair or group work and pairing learners based on their abilities and needs in order to enable learners to assist and help include each other, rather than solely relying on individual tasks and activities. For instance it was said, *''I understand which are the learners who would need more time in understanding instructions and I would obviously pair them with capable...other capable learners and then you do just do the walk around to ensure you know that they understand that.''* The use of group and pair work is consistent with learner-centred and differentiated teaching, and thus in line with the expectations of inclusive education (Anderson, 2007; Department of Basic Education, 2010; Kemp, 2013; Polly et al., 2014). This is because it helps to make learners more active in the lessons and can help to vary activities done in class and support given to learners as they help and support each other thereby ensuring inclusion of all learners in the classroom and curriculum (Anderson, 2007; Kemp, 2013; Polly et al., 2014). Moreover, the use of group work is also consistent with Vygotsky's concept of mediation as mediation does not only depend on the teacher but can

also take place between learners when learners of lower ability levels are paired with more knowledgeable learners thereby allowing for cooperative learning (Donald et al., 2006). This is because learning that takes place within a learner's ZPD is argued to take place through mediation with someone more knowledge who assists their learning process and this person can be the teacher or other learners (Bodrova, 1997; Harland, 2003; Huebner, 2010). Thus, by using pairs and grouping learners of different abilities together teachers can help ensure inclusion of all learners as learners of lower ability levels will be assisted by those of higher ability levels who will help ensure they are included in the curriculum and lessons and not left out (Donald et al., 2006).

On three occasions teachers also spoke about letting learners peer teach in order to differentiate and make learners more active instead of the teacher simply teaching the learners all the time, specifically one teacher said, *''Also maybe having them tutor each other, peer teaching. You can involve them in that way. They can demonstrate for the class or teach each other.''* The use of pair and group work is suggested as a useful strategy for ensuring inclusion through differentiated instruction and the teachers here saw it as a positive strategy to use in ensuring differentiation and inclusion of all learners in the classroom (Anderson, 2007). Although, teachers in the focus groups and individual interview here mentioned peer teaching as a useful strategy in the inclusive classroom, Engelbrecht et al's (2006) study found that this strategy was not used effectively by teachers as learners did not always work well collaboratively and did not help each other. This corroborates the statement of one teacher from the focus groups here who said, *"a learner can't teach each other. They ridicule each other. They now start making fun out of that."* Thus, it is important for teachers to first ensure that learners are able to work together collaboratively before using this strategy in the inclusive classroom and closely monitor whether learners do work well together in

order to maintain discipline and order in the inclusive classroom when using peer teaching (Engelbrecht et al., 2006).

*Bloom's Taxonomy:*

In discussing differentiation as a strategy that can be used to meet the objectives of inclusive education two teachers in this study also spoke about using, *''Bloom's taxonomy in setting the tests.''* This was described as useful because it ensures that even, *''the easy ones [weaker learners] also have a chance of getting something right.''* Although, it was also suggested by one of the two teachers that there is a need to ensure that both teaching and assessments are conducted according to Bloom's taxonomy in order to meet the objectives of inclusive education, *''Ah I'm guided by Blooms taxonomy, ah um of of [sic] the different levels, the different cognitive levels and my worksheets and assessments are generally aimed towards that. You know I try and vary the questioning from the, from the [sic] various levels of thinking the low order, middle and higher order thinking levels. Just to get a cross section ah I still am trying to get you know into the practice of teaching and questioning those levels you know before the assessment takes place because I think it's very important that ah we don't only assess according to the Blooms taxonomy but we also teach according to the Blooms taxonomy of scales.''*

The use of Bloom's taxonomy is useful in and consistent with the requirements of inclusive education because in using it in setting activities and assessments it helps to enable all learners to succeed on at least some of the questions or activities (Krathwohl, 2002). This is because by hierarchically categorising items based on the different levels in the cognitive domain of Bloom's taxonomy teachers can ensure items and activities are selected from each level thus ensuring learners of all ability levels are included and able to perform optimally on some items or in some activities (Krathwohl, 2002). Furthermore, Bloom's taxonomy can be

used in the inclusive learner-centred classroom because it is not only recall of facts, which is the first level, that is assessed in using this taxonomy but rather this taxonomy also encourages teaching and assessment of higher level and critical thinking and mastery of skills which is developed when learners are active participants instead of simply passive recipients of information (Krathwohl, 2002; Brown, 2003; Kemp, 2013). The development of learners in to active and critical thinkers is also consistent with the requirements of inclusive education as stipulated in the White Paper 6 (2001).

However, as mentioned only two teachers across all the focus groups and the individual interview mentioned Bloom's taxonomy. Given that theoretical concepts were seldom brought up or discussed it is possible to argue that, consistent with Naiker's (2008) argument, South African teachers lack exposure to theoretical knowledge that underpins inclusive education and inclusive teaching strategies. This is further corroborated by Donohue and Burman (2014) who argue that South African teachers lack appropriate knowledge and skills for teaching diverse learners in the inclusive classroom. In De Jager's (2013) and Engelbrecht et al's (2006) studies it was also found that teachers indicated that they did not receive sufficient training or staff development opportunities for developing knowledge and skills for the inclusive classroom. Thus, it can be argued that there is a need to further develop teachers' knowledge and theoretical understandings with regards to inclusive education (Donohue & Bornman, 2014; Naiker, 2008).

Learners' differences:

Although, differentiation in terms of cognitive abilities was mainly discussed as a means of meeting the objectives of inclusive education, the need to include learners by differentiating the lessons and curriculum based on learners' culture, learning styles, interests, personality and other factors, such as socio-economic factors were also discussed.

*Individual Differences:*

In line with differentiated instruction and inclusive education five teachers in three of the focus groups highlighted the need to consider learners' individual differences and diversity among learners in the inclusive classrooms (Anderson, 2007; Department of Education, 2001). In terms of this one teacher defined inclusive education as education that is about, *''catering for all the individual differences in the classroom.''* This is congruent with inclusive education and what differentiated instruction is argued to be about- a way of adapting lessons and instruction to accommodate for learners differences and needs (Department of Education, 2001; Tomlinson, 2000). Thus, differences among learners are an important aspect of the inclusive classroom and should be focused on (Department of Education, 2001; Tomlinson, 2001).

*Cultural Differences:*

Culture and the need to consider cultural differences among the diverse learners in the inclusive mainstream classroom were brought up four times across two of the focus groups and the individual interview. In talking about the importance of culture in the inclusive classroom one teacher mentioned that, *''I always find that cultural barriers tend to play a role as well. And I will give you an example, you know when you teach to... when I teach to grade 7s you often find that ah you need to make eye contact if you doing a speech or something like that and somehow with certain learners that come from a particular ah cultural background eye contact is not considered respectful. So ah one needs to be very aware of the different um...the norms and for me I think that is also part of inclusivity.''* Another teacher mentioned the importance of trying to include all cultures as, *''South Africa is a is a [sic] country that has diverse cultures, different kinds of cultures, different languages, so I think in our teaching we also have to bear in mind not to uplift one language*

*or one culture. So just try to cover all the cultures in the country and try maybe also to have a culture day whereby children can come and show off their cultures, different kinds of food and their religions...''*

The importance of ensuring inclusion of learners by differentiating lessons in terms of culture within the South African classrooms is corroborated by Harley et al (2000) who argues that it is important for teachers to differentiate lessons in terms of cultural aspects because South African classrooms are filled with learners from many diverse cultural backgrounds (Eaton & Lowe, 2000; Harley et al., 2000). Moreover, the White Paper 6 (2001) stipulates that inclusive education involves inclusion of all learners in terms of their cultural backgrounds. Differentiation and inclusion in terms of culture in the inclusive classroom is important because culture is an aspect of learners' learning profiles and can influence their learning styles, thus teachers differentiating lessons in terms of the cultures of learners in the classroom helps to ensure learners' needs and differences are accommodated for and ensures learners are included in the curriculum and classroom in terms of their cultural background (De Vita, 2001; Tomlinson, 2001). Being aware of learners different cultures and ensuring lessons are varied in order to make them relevant to learners' cultural backgrounds is also consistent with learner-centred teaching (Brown, 2003; Burman, 2008). This is because at the centre of this strategy is the learner who the teachers needs to know in order to ensure they are included in all aspects of the curriculum and classroom (Brown, 2003; Burman, 2008). Thus, learners' diversity in terms of their cultural background is an important factor for teachers to consider in including learners in the curriculum and classroom and in meeting the objectives of inclusive education (Department of Education, 2001). However, as discussed inclusion in terms of culture was not discussed often and this can be argued to possibly result from teachers' lack of knowledge, training and skills for the inclusive classroom as was found by De Jager (2013) and Engelbrecht et al (2006) and argued by Naiker (2006).

*Differences in Learning Styles:*

Learners' learning style, which is one aspect of their learning profile, was also mentioned as important to consider in ensuring all learners are included in the curriculum and classroom (Tomlinson, 2000). The importance of learning styles was mentioned on four occasions by three teachers in three of the focus groups. As one teacher said, *''some learners are visual, some are kinaesthetic, so when I introduce a topic I often, you know, separate my teaching plan into groups where I can incorporate those different learning styles of learners.''* Differentiating lessons and tasks and ensuring inclusion of learners in terms of learning styles is in line with the expectations of differentiated instruction and teaching as well as inclusive education (Anderson, 2007; De Jager, 2013; Tomlinson, 2000; Vayrynen, 2003). This is because differentiated instruction and inclusive education require teachers to consider learners' learning styles in order to ensure learners can engage with and process information through their preferred means and thereby ensure learners are included in terms of their preferences (Vayrynen, 2003; Zapalska & Dabb, 2002).

Teachers within the focus groups here, as can be seen in this quote, discussed learning styles in terms of the VARK model (Zapalska & Dabb, 2002). It is suggested by Zapalska and Dabb (2002) that including varied activities in terms of the four learning styles of the VARK model teachers are able to ensure learners are able to access the curriculum in terms of their preferred mode of learning and processing information, thereby ensuring all learners are included in terms of their interests and learning preferences (Anderson, 2007; Tomlinson, 2000). Differentiation of activities based on learners' learning styles in the inclusive classroom is also consistent with De Jager's (2013) argument as she argues that teachers need to be able to recognise learners' learning styles and accommodate for these in order to meet the objectives of inclusive education and ensure learners are included in the curriculum and classroom.

*Differences in Learners Interests:*

In terms of planning lessons that include learners' interests and are personalised for learners, this idea was only brought up twice. One teacher mentioned that she gave learners a research task and when they researched the given topic she included their personal interests because as she stated , *''how I started the section was that I asked them to research an entrepreneur that interested them and I would give them guidelines as to what I'm looking for in terms of content.''* Although, differentiation in terms of interests was seldom discussed across the focus groups and individual interview, it is argued to be an important aspect of and in line with the requirements of inclusive education, thus it needs to be taken into consideration when accommodating for learners' diverse differences and ensuring inclusion of learners in the classroom and curriculum (Anderson, 2007; Broderick et al., 2005). This is because Donald et al (2006) argues that by ensuring lessons are differentiated and relevant to learners in terms of their interests it will help to ensure that they are more active, engaged and motivated and thus included in the curriculum. Similarly to culture, consideration of learners interests is also an important aspect of the learner-centred approach because learners are the centre of such lessons and teachers need to be knowledgeable about learners' interests and include learners' interests in their lessons in order to ensure learners are included in the curriculum and classroom and thus meet the objectives of inclusive education (Brown, 2003; Burnman, 2008; Department of Education, 2001).

It is possible that teachers did not discuss making accommodations for learners' interests, as well as their culture and learning styles often because of a lack of knowledge and training in inclusive education teaching strategies including a lack of training in differentiating instruction and the curriculum content (De Jager, 2013; Engelbrecht et al., 2006; Naiker, 2006). As mentioned previously De Jager (2013) and Engelbrecht et al (2006) have found that teachers have indicated that they lack knowledge and training in inclusive education,

differentiated instruction and in strategies for accommodating diversity among their learners, such as learner-centred teaching. However, this should be researched further in order to determine more clearly why teachers did not discuss these aspects of differentiation as well as to determine if they actually do not differentiate in terms of this in their classroom practice.

*Other Differences among Learners:*

One teacher also discussed the need to differentiate tasks based on learners personalities, *''I will also look at personality you know in our classes we have different children they don't think alike, some are shy, some are reserved, some are extroverts so I would also give activities that will calm the extroverts and also make the shy ones open up.''* This is consistent with Levy's (2008) argument that learners enter the classroom with many different personalities and this needs to be considered in understanding their learning profiles and developing differentiated and learner-centred activities that accommodate for their preferences and preferred ways of approaching learning activities (Anderson, 2007; Tomlinson, 2000). Thus, it is important for teachers to consider and accommodate for differences in learners' personalities in order to ensure learners are included in the curriculum and classroom (Levy, 2008).

In three of the focus groups four teachers also mentioned the need to consider differences among learners in terms of their socio-economic background when making the curriculum and lessons inclusive. In talking about an assessment question from the Department of Education, one teacher discussed how it was not inclusive in terms of learners' socio-economic backgrounds and subsequently not relevant to their life or personal experiences. In particular he said, *''there was a simple question there let's say the lady went into the lift going up to the 7$^{th}$ floor pressing buttons this and that. And I thought you know what this is unfair. Up to a certain extent for some of the learners in our school you can't just take that*

*they've been into a block of flats with a lift or whatever. Do they exactly know what a lift is? And then I thought what about kids in the rural area.''* This acknowledgement of diversity in terms of learners' socio-economic background as well as the need to accommodate for this is congruent with inclusive education guidelines within the White Paper 6 (2001).

In particular within the White Paper 6 (2001) it is noted that learners may experience barriers to learning as a result of socio-economic deficits and thus socio-economic factors need to be considered by teachers in accommodating for learners needs and barriers to learning (Department of Education, 2001; Engelbrecht, 2006). Consistent with this Engelbrecht (2006) emphasises that within the South African context this is an especially important factor to consider given that there are vast socio-economic inequalities that exist within the population and classes will thus often have learners from different socio-economic backgrounds. Furthermore, in support of the idea that South African classrooms are diverse in terms of socio-economic background in can be seen in the study by Bray et al (2010) that socio-economic status did not only vary across schools based on the community in which they were located but also varied in terms of the learners within each school and classroom. This is because learner's from lower-socio economic areas, often in townships, have been found to often travel long distances each day to schools in more affluent areas, located in the suburbs, as such schools tend have better resources (Bray et al, 2010; De Kadt, Norris, Fleisch, Richter, & Alvanides, 2014). Thus, given the movement of learners from lower-socio-economic neighbourhoods to schools in more affluent neighbourhoods the socio-economic background of learners in the inclusive South African classroom is diverse and needs to be considered in creating inclusive classrooms and lessons (Bray et al., 2010; De Kadt et al., 2014; Engelbrecht, 2006).

Learners' barriers to learning:

In discussing differences that exist among the diverse learners within mainstream schools, it can thus be seen that teachers did indicate that there was a need to consider learners' diverse cultures, interests and learning styles in creating an inclusive environment in the classroom. However, in discussing differences and barriers which need to be considered in the inclusive classroom the teachers tended to focus more on barriers to learning that learners experience such as hearing and visual problems, which were mentioned more frequently as well as language which was mentioned often.

*Hearing and Visual Barriers:*

In nine instances across all the focus groups and the individual interview teachers indicated that they often identify learners who have hearing and visual problems in their classrooms and then subsequently adjust and plan their classroom structure to ensure these learners are included. As one teacher stated, *''we get kids in our class who might sit with visual problems. Then we make a plan. I'm sure we all do it.''* The fact that teachers mentioned on multiple occasions that they have learners with disabilities within their mainstream classrooms is congruent with the requirements of inclusive education as stipulated within the White Paper 6 (2001) as all learners have the right to be included in ordinary mainstream classrooms as far as this is beneficial for them.

Teachers in one of the focus groups also pointed out that they often had learners in their classes who had severe sight problems, in terms of this one teacher stated, *''we have children, a lot especially in grade four, a lot who are partially blind and who wear glasses whereby you can see that this child can hardly see...''* Two teachers in two of the focus groups also indicated that they made accommodations for learners with such barriers in their classrooms, *''with visual impairments also you can find this ah ah try to broaden...make your writing*

*bigger. We are not talking about blind, only those with visual impairments. Bring them closer to you. Try to enlarge your hand writing.''* It was also pointed out that there are often learners with hearing impairments in mainstream classrooms and two teachers in one focus group indicated that they accommodated for this by adjusting their classroom layout and seating in order to include these learners. Specifically, one teacher stated that, *''those with hearing impairments you have identified them if you are really a teacher in your teaching experience... what you do you seat those with such hearing problems in front. We try to do what you call lip see [sic], as you are teaching let...pronounce the words and they see. Especially those with hearing impairments they can read your pronunciation...sometimes you be using lip see method.''*

It is not surprising that teachers in the focus groups and individual interview here frequently discussed visual barriers and disabilities when discussing barriers among learners that they encounter as this is consistent with findings from the Department of Basic Education (2015). Specifically, it has been found that visual disabilities make up the second highest enrolment of disabilities in ordinary mainstream schools in the Gauteng province, which is where this study was conducted. Hearing disabilities, which were also discussed as a frequently encountered disability by the teachers here, have been found to be the category of disability with the fifth highest rate of enrolment within the Gauteng province (Department of Basic Education, 2015). Thus, given that teachers here discussed this as a barrier and disability that they encounter often is not inconsistent with the findings of the Department of Basic Education (2015). However, teachers here did not mention specific learning disabilities or mild to moderate intellectual disabilities which is surprising and incongruent with the findings of the Department of Basic Education as these categories of disability have been found to have the highest and second highest enrolment in ordinary mainstream South African schools. Within the Gauteng province they are respectively the fourth and third

highest, and thus they have been found to be present in ordinary mainstream classrooms more frequently than hearing disabilities which were frequently mentioned in the focus groups and individual interview (Department of Basic Education, 2015).

In discussing specific barriers and disabilities that the teachers in the focus groups encounter among their learners it can be seen in the quotes above that the teachers also mentioned certain methods that they utilise in accommodating for the learners' barriers to learning. Specifically they indicated that they varied the way in which they presented the information as well as the classroom set-up and arrangement in order to accommodate and include learners with visual and hearing problems. This is consist with suggestions by Donald et al (2006) who suggest that teachers need to rearrange seating arrangements and set-up in order to accommodate for learners with physical, hearing, visual or other disabilities. This also concurs with differentiation of the content component of the lesson and learning environment whereby it is suggested that teachers differentiate the way in which they present information and the classroom set-up in order to ensure inclusion of all learners based on their needs (Anderson, 2007; Tomlinson, 2000).

*Emotional Barriers:*

Also mentioned in terms of barriers that learners experience within mainstream inclusive classroom were emotional problems which were highlighted by three teachers in three of the focus groups. As one teacher stated, *''you've got to look at the emotional side of a child before you can teach them. Doesn't matter if it's a clever child or not a clever child. You have to look at the emotional side.''* This was because teachers here argued that learners often came to school with emotional problems which affect their school work. In terms of this one teacher stated, *''then there is also um ah the huge factor about emotional concerns. Ah you have some learners who are you know emotionally...who come from you know an emotionally*

*troubled background and you find that often this affects the child's work ethic and work...''* Teachers indication that they encounter emotional problems is consistent with Donald et al's (2006) argument that being confronted with and dealing with emotional difficulties amongst learners is a natural and expected aspect of being a teacher. This is corroborated by findings in Engelbrecht et al's (2006) and Nel et al's (2011) studies which found emotional problems to be a common barrier among learners within the South African classroom.

Furthermore, the teachers' statements here are in line with Williams et al (2009) who states that learners' needs and barriers to learning may be based on emotional factors and in developing differentiated instruction and teaching methods that address learners' needs such factors need to be considered. Thus, it is not unusual for teachers to be confronted with emotional difficulties in the inclusive classroom, and as is highlighted by the teachers in the focus groups and individual interview, in developing an inclusive classroom it is necessary to know learners' emotional needs and difficulties and accommodate for these which is also corroborated and argued by Donald et al (2006).

*Poor Concentration:*

Another barrier that five teachers across all the focus groups and individual interview brought up with regards to learners in the inclusive mainstream classroom was that of poor concentration. Although, it was acknowledged by one teacher that this may be a result of other learning problems experienced by the learners. In terms of this one teacher said, *''I think [teacher's name] mentioned concentration. I think that could be one of the bigger problems that we deal with in the class... its caused most probably because of learning problems experienced in the earlier development, earlier grades.''* This is corroborated by Donald et al (2006) who highlight that problems with attention and concentration may be linked to other cognitive difficulties and teachers need to be aware of this.

One teacher also discussed the need to consider learners' level of concentration in ensuring they are included, involved and focused throughout lessons, *''I would also consider the level of concentration of my learners. Um some learners cannot ah concentrate for a period of 30 minutes so I would make my lessons um interesting.''* Additionally, three teachers from three different focus groups also mentioned that they have had learners with ADHD and that this was described as a barrier that they need to consider in planning their lessons. One teacher, for example, when asked about what barriers to learning she considered in planning her lessons stated, *''I think ah most ah concerning are learners who have ADHD, dyslexia and also language barriers as well.''*

The Department of Basic Education (2015) has identified ADHD as the most frequently occurring disability among learners in ordinary mainstream schools within Gauteng. Therefore it is not surprising that teachers across the three focus groups and the teacher in the individual interview brought it up and discussed ADHD and poor concentration as a learning barrier that they often encounter in their classrooms.

The importance of language:

An important factor to consider in the inclusive South African classroom that came up was that of language and barriers to learning that occur because of the diversity of languages within the South African context. This was brought up and discussed across all the focus groups and individual interview. Within the South African context it is essential to consider language and ensure inclusive teaching strategies are created with language in mind because within South Africa there are eleven official languages, although there are still many other languages spoken (Department of Basic Education, 2011). Given this diversity of languages present within the South African context learners often enter classrooms where the medium of instruction is not their home language, thus teachers need to accommodate for this as all

learners have the right to educational opportunities regardless of the language they speak (Department of Education, 2001; Williams et al., 2009). In line with the diversity of language present within the South African context teachers in the focus groups and individual interview identified language difficulties that arise because learners are not all fluent in English, which was the medium of instruction at all four schools in the study, as a common barrier to learning that they experienced in the inclusive classroom. Additionally, teachers discussed many ways in which they made accommodations in their lessons in terms of the language they used as well as learners use of language, whereby learners were enlisted as translators for peers who were not proficient in English.

*Language Barriers:*

Across all the focus groups and individual interview teachers were aware of the need to consider language differences among their diverse learners in order to ensure inclusion of all learners. As one teacher specified in talking about what inclusive education is, *''I think its education that caters to all the learners taking into consideration their language background.''* Language was, however, seen as a barrier to learning among learners and was brought up and discussed across all the focus groups and individual interview on eleven occasions by seven teachers. One teacher pointed out that, *''Also language, we've got a lot of language barriers.''* Another teacher, when asked if they experienced any barriers in terms of language, stated that, *''that's the main thing [the main barrier].''* In particular the medium of instruction across all four of the schools included in the study was English, although, not only the teachers but also many learners were not first language English speakers. This was brought up and indicated in five instances across three of the focus groups and thus for many learners although the medium of instruction at all the schools involved in the study was English, *''their [the learners'] home language is not English.''* This was described as a

challenge for learners, *''There is a big language problem because... they [the learners] read in English but think in their home language. That's challenging.''*

The teachers' identification of language barriers that arise because learners are not proficient in the medium of instruction is corroborated by De Jager's (2013) study which found that language was identified as a barrier to learning as learners were often insufficiently competent in the medium of instruction, as similarly to the study here, this was often different to their home language. Furthermore, within the White Paper 6 (2001) it is acknowledged that learning barriers and subsequent needs may result from differences between learners' home language and the medium of instruction. Theron and Nel (2005) also point out that many learners in South Africa learn in English as their parents and caregivers often view English as the best language for learners to learn in, but this is not their home language thereby resulting in language difficulties and language barriers in the classroom. In Theron and Nel's (2005) study, consistent with this study, it was also found that the vast majority of teachers and learners were not first language English speakers although they were all at schools where English was medium of instruction.

Teachers in the focus groups and individual interview also suggested several ways in which they dealt with and accommodated for the language difficulties and barriers that they encounter in their classroom in order to ensure inclusion of all learners in their classrooms and the curriculum.

*Interpreting:*

Teachers across the three focus groups on five occasions also indicated that because many of their learners were not fluent in the medium of instruction, English, they actively involve other learners, who are more fluent in English, to help explain and sometimes interpret and translate for learners who do not fully understand the English instructions. One teacher for

instance said, *''I would meet learners from different provinces like Limpopo, they would be taught in their home language and here our medium of instruction is English. So you know what I would do when a child cannot understand English I would ask someone next to... I would speak in English and then I would ask someone, a partner, to interpret that in that [sic]... in her home language.''* Using peers to interpret when other learners do not understand was also found in Theron and Nel's (2005) study as a strategy that teachers used in addressing language barriers and ensuring inclusion of learners in the curriculum and classroom when learners are not fluent in English. Theron and Nel (2005) do, however, point out that this strategy is not always possible for teachers to use as learners may not have the same home language and thus would not be able to translate for each other. The use of interpretation by the teachers here is, however, in line with Donald et al's (2006) argument that teachers should follow an additive, rather than a subtractive, approach in their attitudes towards language in the classroom, in addressing language barriers and in meeting the objectives of inclusive education.

One teacher also stated that in ensuring all learners are included in his lessons and able to follow and understand he would use more than one language himself when giving instructions and he would, *''code switch when you [sic] are teaching. If you see that they are a little bit confused and you start speaking in their home language, that ok I mean this when I say this ok. That's when they start catching up.''* Code-switching was also identified as a strategy for addressing language barriers and ensuring inclusion of learners in the curriculum and classroom in Theron and Nel's (2005) study. Although, in order to use this strategy teachers need to be proficient in the language in which learners are proficient and given the diversity of languages within South Africa teachers are not always able to use this strategy (Theron & Nel, 2005). Teachers do also, however, need to be careful in ensuring they do not rely too heavily on interpretation and code-switching as Donald et al (2006) and Theron and

Nel (2005) argue that in order for learners to become more competent in a language, and specifically here in English as it is the medium of instruction in these schools, it is necessary for learners to use and communicate in the medium of instruction.

*Grading Language:*

In two of the focus groups teachers on four occasions also spoke about grading their language, whereby they would, *''break down, bring down your instruction to simple [sic]. Make it simple so that everyone understands what you are talking about. Even if possible instructions can also be given using pictures instead of saying them verbal [sic], especially to children who behave [sic] in language barrier.''* In addition to simplifying their language teachers on two occasions in two of the focus groups also spoke about explaining new words as they indicated that there are many words learners are unfamiliar with so, *''Anything new I simplify. I break it down into its simplest form. And then what I normally do is I explain new words. Ask them if they know. Let them look up in the dictionary ah because there's many many [sic] words you find they don't know the meaning of the word um so that's my ya my differentiate [sic].''*

The use of this strategy is consistent with the objectives of inclusive education and differentiated instruction as it involves varying the process component of the lesson as the teachers indicate in this study that they vary the way in which they present instructions by simplifying and clarifying the language used while at the same time exposing learners to challenging vocabulary (Tomlinson, 2000). Grading language is also congruent with the requirements of scaffolding learners' learning experiences because it ensures the language used falls within learners ZPD and is not beyond what they can comprehend thus ensuring learners are included in the lessons and curriculum as they should be able to understand and follow the lessons (Bliss et al., 1996; Harland, 2003). Also, by grading and simplifying the

language used teachers can connect this language to learners' current knowledge and help them understand and learn and thereby ensure they are included (Harland, 2003). Moreover, the teachers' indication here that they grade and clarify English vocabulary used is consistent with the findings of Theron and Nel's (2006) study as they also found that in addressing and accommodating for language barriers in order to ensure inclusion of all learners in the curriculum and classroom teachers reported using these strategies.

### 5.2.3) Sub-question three: Role of large classes and limited resources on teachers ability to implement differentiated teaching and to ensure inclusiveness:

With regards to factors that affected, and in general hampered teachers' ability to utilise teaching strategies recommended for the inclusive classroom, such as differentiated and learner-centred teaching, and ensure inclusive education in their mainstream classrooms the following themes were identified: Lack of resources and support staff; heavy workload; time constraints; lack of training and skills; the curriculum and the Department of Education; and lastly the family.

#### Lack of resources and support staff:

*Resources:*

When asked about what factors may affect the implementation of inclusive education in the classroom two teachers at one school indicated that there was a lack of resources which hampered their ability to implement inclusive education. This was because they did not always have items that they talked about in the classroom. One teacher said, *''sometimes the resources that the teacher might want to use won't be available therefore the teacher will tend to now use other methods that will be excluding other learners who will now want to maybe to [sic] see what you are talking about or want to touch what you are talking about.''*

Lack of resources was also suggested as hampering teachers use of the learner-centred approach as it was indicated by one teacher that to, *''enable your lessons to be learner centred is that learners need to be actively involved and one way to do this is to make sure you have lots of resources during your lessons.''* However, many schools in South Africa still lack resources and it has been found in such situations that teachers often rely more on a teacher-centred approach where learners are not active or involved but rather simply given the information verbally by the teacher or through notes written on the board (Harley et al., 2000; Bray et al., 2010).

The teachers' argument here that there is a lack of resources that hamper implementing inclusive education is also consistent with findings from De Jager's (2013) and Engelbrecht et al's (2006) studies where teachers argued that they lacked the resources for implementing differentiated instruction and accommodating for diversity which was argued to hamper their ability to implement differentiated and inclusive education. Furthermore, Bray et al (2010) and Engelbrecht et al (2006) have shown in their studies that despite attempts to redistribute educational resources following the end of apartheid, there are still vast inequalities that exist between schools, with many still lacking basic resources thus corroborating teachers' arguments here that there is a lack of resources in schools. The need for resources to assist in making lessons more inclusive is also supported by Broderick et al (2005) and De Jager (2013) who argue that resources are needed to implement differentiated and learner-centred teaching, as teachers need to plan lessons with diverse activities and present information in ways consistent with learners' preferences, interests, abilities and learning styles. This therefore highlights that there is a need to improve resources across schools which are lacking resources in order to ensure teachers are able to effectively implement teaching strategies recommended for the inclusive classroom and thereby meet the objectives of inclusive education (De Jager, 2013; Donohue & Bornman, 2014; Engelbrecht et al., 2006).

*Financial Resources:*

One teacher also spoke about the importance of financial resources and argued that a lack of funds makes it difficult to be able to afford resources that are necessary in ensuring all learners are included and that their barriers are accommodated for in the classroom and school. In talking about finances and the need for sufficient financial resources this teacher said, *''the ability of a school to be able to afford ah your facilitators who are specialist in their field. For example your skilled therapist, your skilled remedial workers, your OTs, your speech therapist possibly and ah psychologists. There is an absolute need... So yes it costs the school money, it comes at a price... Number two if you have um physically disadvantaged kids one needs to ensure your structures are in place in your school, for example ramps and things like that. That requires a fair amount of capital expenditure, it needs to be budgeted. So yes some schools don't have that ah that facility. That availability of funds. And um to maintain class sizes that are that are [sic] conducive to good teaching one needs more teachers. That also boils down to finances as well.''*

This is in line with the argument that many schools lack resources because lack of funding results in a lack of resources available at the school that could be useful for ensuring inclusion of learners (Bray et al., 2010; De Jager, 2013). This is also consistent with Bray et al's (2010) and Engelbrecht et al's (2006) studies which found that schools with a lack of funding that results from parents not paying schools fees as they are unable to afford this, were also found to have fewer resources, including support staff, libraries, and computer centres, than schools that were better funded and had more financial resources as more parents paid school fees. Schools where most parents pay school fees tend to be better resourced as they also tend to charge higher fees and be located in more affluent neighbourhoods than schools that are classified as no-fee schools which are located in socio-economically poor neighbourhoods where parents cannot afford to pay school fees (Bush &

Heystek, 2003; Human Rights Watch, 2015). No-fee schools are allocated more funds by the South African government than schools that charge fees, however, these funds do not counterbalance or match the fees paid by parents at schools that are allowed to charge fees as such schools can increase fees to limit the impact of reduced state funds thus there continues to be vast discrepancies between more affluent schools that charge fees and no-fee schools (Ahmed & Sayed, 2009; Bush & Heystek, 2003).

Furthermore, Donohue and Bornman (2014) corroborate this teacher's statement here as they argue that the Department of Education has not provided sufficient funding to schools in order to enable them to obtain the necessary resources that would allow them to make their schools and classrooms inclusive. Donohue and Bornman (2014) also argue that there is a need for the Department of Education to provide schools with the necessary funding to obtain the resources they need for effectively implementing inclusive education. Within the report from the Human Rights Watch (2015) it was also found that there is insufficient funding for inclusive education and that there is a need to increase funding in order to enable mainstream schools to obtain the necessary resources for accommodating for learners diverse needs and disabilities and thereby meeting the objectives of inclusive education.

*Technological Resources:*

In two of the focus groups teachers on two occasions also spoke about the need for technology in the classroom that can help accommodate for learners barriers and ensure lessons are inclusive. In terms of this one teacher said, *''and another thing we don't have much of... we are still using the chalk board method which doesn't necessarily cater for all. Ma'am has mentioned we have learners who are partially blind and most of the time like this is the size of the class [pointing to the far wall on the other end of the staff room] and you find that from the chalk board to where they [sic] seated is quite [sic] distance. Even you can*

*try to put them forward they still stand up and try to go look. Whereas if we were having a more kind of projected view you can easily just enlarge everything for everyone.''* In line with these two teachers indication that there was a lack of technological resources all four schools reported in the School Survey Checklist that there are no smart boards in the classrooms and only one school indicated that there were computers for each learner in a class. Although, all the schools did indicate that they do have a computer centre with internet access.

The teachers argument here that there is a need for assistive technology in order to include learners with certain disabilities in the curriculum and classroom is corroborated by the Department of Basic Education (2015) which does also acknowledge that there is a need for assistive technology in accommodating learners with visual problems as a lack of access to assistive technology is identified as a barrier to learning (Department of Basic Education, 2014a). Furthermore, it is argued and recommended by the Department of Basic Education (2015) that there is a need for assistive technology to be made available and utilised in accommodating for learners' barriers and disabilities in ordinary mainstream schools. However, in line with the teachers' argument here that there is a lack of assistive technology, Donohue and Bornman (2014) argue that the Department of Education has failed to provide the funding needed to obtain assistive technology devices. The Department of Basic Education (2015) does also acknowledge that within mainstream schools there is a need for assistive technology devices to be utilised more optimally in accommodating learners with disabilities and ensuring education is inclusive of all learners and their needs.

*Screening Assessments:*

Another resource important for achieving the objectives of inclusive education that teachers on three occasions in one of the focus groups and individual interview indicated was lacking

at their schools was that of appropriate screening assessments. Screening assessments were argued to be important in ensuring learners are included in the curriculum and classroom as it is necessary to identify any barriers they may experience as this would facilitate the full inclusion of learners with barriers because it would enable teachers to adjust their teaching methods and lessons plans in order to accommodate for learners barriers and needs. In failing to screen and identify learners' barriers teachers argued that they are not able to accommodate all barriers which hampers learners' school performance if they have a barrier to learning. In terms of this one teacher said, *''and of course with reading and understanding if you have barriers to that it affects all of your subjects. So what happens is the child is faced with low self-esteem if it is not diagnosed properly at the start. You know and there was a time, and I'm detracting now, but there was a time in our education system where we used to do hearing tests and reading tests and eye tests and they were considered, you know, priority because, you know, they impacted learning and I feel, you know, these issues need to be addressed as part of inclusivity and you know what you are dealing with.''*

The White Paper 6 (2001) does, however, argue that hearing and visual testing should be conducted in community based clinics during pre-school years in order to ensure early identification of any impairment and in schools early identification of barriers was said to focus on foundation phase, which is Grade R to 3. Additionally within the SIAS (2014) policy document it is stipulated that Early Childhood Development (ECD) must include early identification of and intervention for barriers to learning and ECD practitioners need to be trained in following the SIAS policy. Learners should be diagnosed early as the SIAS (2014) policy document requires teachers to complete the LP at the start of each educational phase thus learning barriers and disabilities should not go unidentified. Although, in line with the teachers' argument here that learners with barriers and disabilities are often not identified early, De Jager (2013) found that teachers and student teachers were often unable to identify

learners' needs or barriers and that there is a need to improve pre-service training in terms of developing skills in identifying learners' barriers in order to ensure teachers are able to make their lessons and classrooms inclusive in terms of learners' needs.

*Support Staff:*

With regards to specialised support staff, such as psychologists, speech therapists, occupational therapists and remedial teachers who are needed to help accommodate for learners' barriers to learning and needs, six teachers across all of the focus groups and individual interview spoke about a lack of and need for specialists and assistance in order to ensure the inclusion of learners with barriers in the curriculum and classroom. In terms of this one teacher said, *''and I have to tell you inclusivity cannot ah be managed just by one teacher and I think there is a need for specialists and there is a need for assistance at all levels. You know even if you have a handicapped learner you need that learner to move at their pace within the rest of the environment. But it requires assistance in the normal environment.''* It was indicated that it is important to have relevant support staff in order to ensure lessons and the classroom are inclusive especially given that today's classrooms are large and filled with diverse learners who have many different barriers to learning and needs (Theron & Nel, 2011). Thus, one teacher stated that *''it [inclusive education] can be a manageable affair if you have the relevant facilitators. I ah think it becomes challenging when you are as an educator faced alone with all these barriers. I think it becomes quite ah a challenging task. And I speak from experience. Just last week with the grade one children I had I think 30 learners in the class and we started reading and ah of course I'm not an experienced foundation phase teacher but over five days I realised that there is at least a handful of five kids who demand your constant attention and what happens is you compromise quality teaching and you also actually I think ignore some of your brighter learners because you want to maintain the status quo. So I think there is not justice for all in that kind of situation.*

*I think the need for facilitators are absolutely critical to a high functioning classroom environment in today's ah education system, because we have such diversity of children.''*

Moreover, the lack of specialised support staff at the schools was also reported in the School Survey Checklist. Specifically it was reported that there were in general no learning support specialists, Psychologists, Speech therapist or Occupational therapists across the four schools. Although, one school indicated that they have a learning support specialist and another school indicated that they have a Psychologist.

The teachers' argument that there is a lack of specialist support staff which is needed for implementing inclusive education within mainstream schools is consistent with the study by De Jager (2013) where the vast majority of teachers also indicated that there was a lack of support structures, including psychologists, speech therapists, occupational therapists and class assistants. Nel et al (2011) also found that teachers indicated that there was a lack specialised support services that could help accommodate for learners' barriers and disabilities and ensure inclusion of all learners despite their barriers to learning. Within the report compiled by the Human Rights Watch (2015) it is further argued that within South Africa inclusive educational support services are insufficient and DBST's are not always fully functional. The White Paper 6 (2001) does, however, stipulate that in inclusive education learners should have access to specialised support if they need such support yet as is seen here as well as in De Jager's (2013) and Nel et al's (2011) studies teachers feel that specialised support services are lacking and needed in order to ensure inclusive education is achievable.

It was also reported by three teachers in two of the focus groups that there is a lack of remedial teachers at schools, *''the minister of education wants the [sic] inclusive education to be implemented in schools yet they don't support schools, they don't send special teachers to*

*do remedial [teaching].''* This is corroborated by Nel et al (2011) who found that across 129 schools in Gauteng there were only 61 remedial teachers which is argued to be insufficient for achieving the objectives of inclusive education given that classes tend to be very large and teachers indicated that there are many learners with barriers and disabilities who need assistance (De Jager, 2013; Department of Basic Education, 2015). Additionally, two teachers in two focus groups on three occasions indicated that there is a lack of counsellors at schools. In terms of this, one teacher stated, *''how about them bringing even counsellors and remedial teachers to help us.''* Another teacher pointed out that in dealing with learners emotional difficulties, *''as a teacher we are not psychologist, we are not counsellors. We try to be everything, so I think it's one of the hindrances or things that are ah a problem to fully implement inclusive [education].''* This is corroborated by De Jager's (2013) and Nel et al's (2011) studies which also found that in order to ensure inclusive education is achievable there is a need for more counsellors and psychologists for addressing learners barriers, particularly emotional barriers as this was found to be a common barrier among South African learners in Nel et al's (2011) study.

One teacher at another school did, however, point out that in their area there was access to off- site counsellors for the learners, *''the department office somewhere up there. Ah I think they've got a psychologist or two there and also counsellors and what not. And that's the way to...it's not us teachers that works with it, it's the HOD that works with that.''* In line with this teachers statement as well as teachers arguments that there is a need for specialist support services within inclusive education The Department of Basic Education (2014a) has indicated that they will provide specialised support services, including remedial education, counselling and therapeutic services at a district level in order to meet the needs of learners who experience barriers to learning and ensure they are included in the curriculum and classrooms of mainstream schools. Additionally, the Department of Basic Education (2014a) stipulate

that the DBST should be approached by teachers and schools and involved in providing specialised support services, including remedial education, psychologists, counsellors, speech therapist and occupational therapists when necessary based on the intensity of the learner's barrier or disability. However, as mentioned teachers here, consistent with De Jager's (2013) and Nel et al's (2011) studies, feel that specialised support services are not adequately available and there is thus a need to improve access to support services and staff in order to help ensure inclusion of learners within mainstream schools regardless of their barriers to learning.

Heavy workload:

*Large Classes:*

Eight teachers across all three focus groups and the individual interview spoke about the difficulty in ensuring inclusiveness in their classrooms as their class sizes were very large, especially given that the learners all have diverse needs and abilities. This was mentioned on twelve occasions. As reported in the School Survey Checklist in general the schools had classes with about 30 or more learners, with one school indicating they had an average of 41-45 learners in their classes. Despite the variance in the teacher learner ratio, during the focus groups and individual interview teachers at all schools indicated that class sizes were too large. This is consistent with findings in De Jager's (2013), Engelbrecht et al's (2006), and Nel et al's (2011) studies which also found that teachers are often confronted with very large classes that have 30 to 40 or more learners.

It was further argued that teachers struggle to teach large classes which are filled with *''heterogeneous''* learners as one teacher describe. It was specifically said, *''Yes, it's far more difficult to educate the children and our numbers are huge, well we lucky enough to keep our numbers small. DOE wants us to sit 40 in a class, we've got 30 and I struggle.''* In

line with the teachers' arguments here that large classes make it difficult to educate all learners Nel et al (2011) argues that very large classes potentially result in teachers having classes with a higher proportion of learners with disabilities and barriers to learning that teachers need to ensure are accommodated for in order to ensure inclusion of all learners in the classroom and curriculum.

Teachers further argued that given the large class sizes there is not always enough time to attend to the individual needs of the diverse learners in the inclusive classroom. This was brought up on three occasions in three of the focus groups. As one teacher stated, *''I think it [inclusive education combined with large classes] is a bit time consuming and taxing to the teacher because imagine in a 30 minute lesson we have to cater for everybody there with the different activities, different methods.''* Similarly, Engelbrecht et al (2006) found that given large class sizes teachers find it difficult to create a classroom environment that is positive and inclusive of all learners' needs and teachers found it difficult to utilise methodologies linked to learner-centred and differentiated teaching strategies, such as group work and co-operative learning, recommended for the inclusive classroom. This is consistent with De Jager's (2013) study where it was argued that overcrowded classes make it difficult to implement differentiated and learner-centred instruction and maintain discipline, as teachers discussed earlier. Teachers have been found to therefore often rely on teacher-centred teaching as a result of large classes and this strategy has been argued to be less effective in ensuring inclusion of all learners as teachers simply lecture and transmit information without actively engaging learners when using this teaching approach (Bray et al., 2010; Brown, 2003; De Jager, 2013).

In dealing with the problem of large classes in achieving the objectives of inclusive education one teacher spoke about the importance of extra lessons after school to help learners who were struggling in class and unable to receive individual attention and assistance in the large

classes where there were often more than 40 learners. Extra lessons are beneficial, he explained because, *''we talking a smaller group of learners and then that's where you can sit with them. Well you identify them in the class in the mainstream school and then they must come to the extra class where you can sit down with them one on one or one to a group of five maybe and explain.''* The benefits of extra lessons are corroborated by Donald et al (2006) who argues that in the context of large classes and limited class time where teachers need to ensure curriculum deadlines are met it is beneficial to provide extra lessons where there are fewer learners as those who are struggling can be provided with more individual support and teachers can therefore help ensure these learners are included in the curriculum (De Jager, 2013; Donald et al., 2006).

Extra lessons after school, however, are not always feasible as teachers in another focus group said they were often unable to help learners after school as, *''most of our learners come from far away from this place so you can't have them after school. Transport will have to take them back to their homes. So sometimes you find that you need to help them in the afternoon but you can't because of time and transport.''* The argument that learners often travel long distances to school is corroborated by De Kadt et al's (2014) study which found that many children from Soweto do not attend their nearest school but rather travel substantial distances to attend schools, often in the suburbs. Teachers' argument that there is not always sufficient time for extra-lessons after school was also found in De Jager's (2013) study as teachers often have to engage in many activities after school, including extra-mural activities and in-service training.

In addressing the problem of large classes the Human Rights Watch (2015) argues there is a need for a weighting system that determines the appropriate teacher-to-learner ratio. Such a weighting system should weight learners with disabilities against learners without to determine the appropriate teacher-to-learner ratio within mainstream classrooms in order to

ensure classes are not to large or unmanageable for teachers and thereby help ensure teachers are able to accommodate for learners' barriers and needs and include them in the curriculum and classroom within mainstream schools (Human Rights Watch, 2015).

Time Constraints:

*Lack of Time:*

In talking about factors that impede the implementation of inclusive education in the classrooms teachers indicated that there is a, *''lack of time to implement it.''* This was brought up on eleven occasions by seven teachers across all the focus groups and the individual interview. Furthermore, five teachers in three of the focus groups indicated that time constraints in meeting curriculum deadlines made it difficult for them to ensure inclusiveness of all learners in the classroom. This is because, *''you find that the curriculum itself it is designed in such a way that there are certain things that need to be covered in a certain period so you find sometimes that a teacher finds it difficult to be inclusive because you need to catch up with the time.''* Three teachers in one of the focus groups and the individual interview also indicated that the need to meet curriculum deadlines and associated time constraints made it difficult to use a learner-centred approach in the inclusive classroom because, *''one has to be teacher focused as well because at the end of the day you have to complete a goal and you have to complete your targets of achieving your curriculum.''* Similarly, another teacher stated that, *''we are all guided by CAPs we have objectives that we need to meet. Ah and in meeting that the only way that it can be achieved is by a purely teacher focused approach.''* The teachers' argument here that the teacher-centred approach is more efficient in meeting deadlines is corroborated by the fact that teachers have more control when using this approach and less time is needed as information is simply transferred

to learners with little engagement or interaction on the part of the learner (Brown, 2003; Kemp, 2013).

Teachers indication that they do not have sufficient time for implementing inclusive education is also corroborated by the fact that much time is needed to plan and implement differentiated and learner-centred teaching as teachers need to plan a variety of activities and learners are expected to be active, instead of just being presented with the information, while the teacher functions more as a facilitator (Brown, 2003; De Jager, 2013; Engelbrecht et al., 2006; Polly et al., 2014). In line with this, De Jager (2013) and Engelbrecht et al (2006) found in their studies that teachers lacked time for implementing inclusive strategies, including learner-centred and differentiated teaching strategies, as these strategies require much effort and time to plan and carry out and teachers do not have much time available for this because of their heavy workloads, large classes and curriculum deadlines (Department of Basic Education, 2011). Polly et al (2013) also argue that with the teacher-centred approach information can be presented in a much shorter time than with the learner-centred approach, as the teacher-centred approach is more straight forward and direct with presenting information which corroborates the teacher's argument above that there is a need to use the teacher-centred approach in meeting curriculum deadlines.

The teachers' indication that they are restricted in implementing inclusive teaching strategies by time-constraints in meeting curriculum deadlines is in part corroborated by the CAPS (2011) documents which do outline specific content and skills to be covered every two weeks. This is also corroborated by findings in De Jager's (2013) study where teachers indicated that the curriculum requires much work and given teachers workload and classes sizes it is often difficult to achieve. However, the specific time-frames outlined in the CAPS (2011) documents for what needs to be covered every two weeks are indicated to be approximate rather than rigid time frames that are said to function as guidelines.

Two teachers in two of the focus groups also suggested that in keeping up to date with the deadlines and time outline of the curriculum learners were sometimes excluded and unable to fully follow the curriculum as they indicated that, *''They [the learners] fall behind because you can't sit on one topic because 10 children can't do that, you just have to fold your head and try help as much as you can.''* In line with this teachers do have very specific requisites pertaining to how long they can spend on each subject each week, in addition to the suggested minimum content and skills to be covered every two weeks thus restricting the amount of extra time they have to spend on content that learners may be struggling with (Department of Basic Education, 2011).

Given the amount of work that is expected to be covered within limited time periods, three teachers in two of the focus groups suggested that the Department of Education policy makers were impractical and had unrealistic expectations with regards to achieving the objectives of inclusive education in terms of time constraints. It was said, ''*you can't even believe that this amount of work is what a small grade one child, six year old, is suppose to comprehend within a week. It's just too much so I think some of these policy makers, they do it just based on theory yet they are not aware of whether it is going to be practical to use in class or not. They don't care about that.''* This argument that policy makers are impractical is consistent with Donohue and Bornman (2014) who argue that the Department of Education has been ambiguous and failed to provide sufficient details with regards to how inclusive education will be implemented.

<u>Lack of training and skills:</u>

*Unqualified for Inclusive Education:*

Teachers across all the focus groups and the individual interview argued that they were not fully qualified for inclusive education. In particular two teachers from two of the focus

groups indicated that they did not receive sufficient practical training at tertiary institutions and that, *''our degrees are very theoretical. They do not cater for inclusivity. They do not cater for even diagnosing the various types of barriers to education or barriers to learning. And I think that needs to be looked at. So teaching institutions needs to have a module on how to diagnose and identify. So once you identity and diagnose you then can um monitor and develop and support. But if you cannot identify you cannot support.''* This teachers argument pertaining to the need for developing skills in identifying learners disabilities and barriers is acknowledged by the Department of Basic Education (2015) as they have acknowledged that there is a need within inclusive education to not only develop teachers' knowledge and skills in addressing and accommodating learners' barriers, but also in identifying learners with barriers in their classroom. In line with this De Jager (2013) also found that teachers indicated that they are not able to identify learners' barriers. Thus, there is a need for pre-service training at tertiary institutions to help teachers develop skills for identifying disabilities and barriers among their learners (De Jager, 2013).

The argument that teachers have received insufficient training for implementing inclusive education is consistent with Naiker's (2006) argument that teachers are not sufficiently trained for the inclusive classroom. However, Naiker (2006) argued that teachers have received insufficient theoretical training regarding the theories of learning that underpin teaching strategies recommended for the classroom, which contradicts the teacher's argument here that their training was too theoretical and not sufficiently practical. This should be investigated in future studies.

In support of the teachers' views that they are not sufficiently trained for inclusive education De Jager (2013) found that teachers indicated that they are not trained for using a differentiated and flexible curriculum that is necessary for ensuring learners are included in the curriculum and that their needs and barriers are accommodated for as they received

insufficient pre-service training. Further corroborating teachers' views in the focus groups and individual interviews, the study by Williams et al (2009) found that teachers do not feel prepared for the inclusive classroom as they feel that they lack the skills for inclusive teaching. Additionally, Engelbrecht et al (2006) found that teachers felt they were not prepared for dealing with learners' diverse needs or abilities within inclusive mainstream classrooms. The Human Rights Watch (2015) has also found that teachers lack the knowledge regarding learners' disabilities and barriers and do not have sufficient training or practical skills for addressing the needs of learners with disabilities and barriers to learning. Donohue and Bornman (2014) also argue that there is a lack of teachers in South Africa who are knowledgeable about and have the skills for teaching diverse learners within one classroom in ways which do not result in substantial increases in their workload. There is thus still a need to develop pre-service training programmes that equip teachers with the theoretical knowledge as well as the practical skills and strategies for implementing inclusive education (Department of Basic Education, 2015; Donohue & Bornman, 2014; Naiker, 2006). Pre-service teacher training that takes place at tertiary institutions is thus argued to need to focus more on and include more programs that address inclusive education and develop teachers' practical skills for and theoretical understandings of the inclusive classroom within mainstream schools (Human Rights Watch, 2015).

*In-Service Training:*

In talking about in-service training for inclusive education it was indicated by one teacher that although there is some it is not sufficient, *''I think you have the few and far between courses that NAPTOS offers that possibly will lend to that [training for inclusive education].''* This is consistent with what De Jager (2013) found where teachers argued that there was a need for more regular in-service training regarding inclusive education and skills for the inclusive mainstream classroom. Engelbrecht et al (2006) also found that teachers felt

there was a lack of in-service development opportunities for developing skills in addressing learners' barrier. Engelbrecht (2006) has also argued that teachers' in-service training pertaining to inclusive education is insufficient and not relevant to the context of many schools.

In-service teacher training for inclusive education is important and needed in order to further develop and enhance teachers' skills and competencies in identifying and teaching learners who experience barriers to learning and thereby ensuring inclusion of all learners (De Jager, 2013; Department of Basic Education, 2015). The Human Rights Watch (2015) further argues that there is a need for more in-service training programs that focus on inclusive education and developing teachers' practical skills for addressing learners' diverse needs. Thus, the Department of Education needs to implement comprehensive, enhanced and more effective in-service teacher training for inclusive education in order to ensure teachers develop the necessary skills for implementing teaching methods that meet the objectives of inclusive education in their classrooms (Donohue & Bornman, 2014). Corroborating the view that in-service training for developing skills and teaching strategies for the inclusive classroom needs to be enhanced the Department of Basic Education (2015) has indicated that over the next four years there are plans to develop and carry out training programmes in order to develop teachers' skills in utilising a differentiated teaching approach in meeting learners' diverse needs in the inclusive classroom.

*Lack of Specialised Skills:*

Six teachers across all the focus groups and individual interview on nine occasions also stated that they lack specialised skills for teaching and ensuring inclusion of learners with more severe barriers such as partial blindness and deaf learners, yet they still have such learners in their mainstream classes and are expected to teach them. As one teacher said, *''we have*

*children, a lot especially in grade four , a lot who are partially blind and who wear glasses whereby you can see that this child can hardly see. So I think that they need a specialised school. And that is what inclusive education is again, they want children to be included yet it is disadvantaging these kids in a certain way because the teachers are not fully trained for such.''* Moreover, another teacher said, *''teachers don't know how to go about it. To help these learners who are struggling.''* The Human Rights Watch (2015), in line with the teachers' views here, argues that there is a need to train more teachers in using sign language and Braille in order to accommodate for learners with visual and hearing disabilities within mainstream classrooms.

The Department of Basic Education (2014a) has stipulated that in meeting the objectives of inclusive education, whereby all learners have the right to be included in mainstream schools, specialised support services, including remedial education and teachers trained in Braille, should be made available for learners with barriers that are more intense, yet teachers in this study said that they feel unsupported by the Department of Education. This is because, they argue, they are not provided with teachers who can assist with remedial teaching, *''the minister of education wants the inclusive education to be implemented in schools yet they don't support schools. They don't send special teachers to do remedial or to do whatever in schools it...all is left to the school.''* Teachers in two of the focus groups also pointed out that they are expected to do remedial teaching but, *''we not remedial teachers and DOE forces that down on us. Remedial, remedial work.''* This lack of remedial support within mainstream inclusive classrooms, as mentioned previously, is corroborated by Theron and Nel's (2005) study which found there was a lack of remedial teachers across the schools they sampled. Teachers' indication that they lack specialised skills for accommodating for barriers in the inclusive classroom is also corroborated by Williams et al (2009) who argue that many South African teachers have not been trained or equipped with the skills needed for teaching in an

inclusive classroom. Furthermore, there are plans by the Department of Basic Education (2015) to train more teachers in how to use Braille, thus supporting the teachers' argument that there is a need to train more teachers with specialised skills for accommodating for specific learning barriers and ensuring learners are able to be included within mainstream classrooms regardless of their barriers to learning.

With regards to teachers' indication that they do not have specialised skills for accommodating certain barriers, this is acknowledge by the Department of Basic Education (2014a) as it has stipulated that specialised support services be made available to teachers should they need it and teachers should communicate with the SBST and DBST in order to access these services. It is expected that the SBST should provide teachers with training and support in accommodating such learners, as far as possible, in the mainstream classroom (Department of Basic Education, 2014a). However, as can be seen in the teachers statements here they feel such support and services are lacking and they feel burdened in dealing with learners with serve disabilities as they argue that they do not have resources for dealing with severe barriers and disabilities within mainstream classrooms. This is supported by findings from other studies as it has been found that specialised support services have not been adequately available in addressing learners' barriers and meeting the objectives of inclusive education (De Jager, 2013; Nel et al., 2011). Moreover, corroborating teachers' argument that they lack specialist skills for addressing and accommodating for certain barriers is the fact that the specialist skills are said to be beyond their scope of practice (Department of Basic Education, 2001; 2014a). Therefore, it can be argued here as well that there is still a need to further develop teachers' skills for teaching in the inclusive classroom and there is a need to improve the availability of support services in order to effectively accommodate for learners needs and ensure they are effectively included within mainstream classrooms (Bornman & Donohue, 2014; De Jager, 2013; Nel et al., 2011).

The curriculum and the Department of Education:

*Exclusion in terms of the Curriculum:*

Five teachers from three of the focus groups indicated that it was difficult to always include learners and make sure they comprehended the curriculum because, as mentioned, they are restricted by the curriculum laid out by CAPS as well as curriculum deadlines that they need to meet.

In line with the views of three of the teachers, one teacher stated, *''as per the CAPs you are meant to follow the syllabus content very rigidly and it's almost like it's dictated to you what you are meant to follow every day and each school is dynamic in its activities and its functions and hence one fit does not...one fit is not possible for every school.''* Additionally, two teachers from two of the focus groups argued that the Department of Education books and assessments are not truly inclusive as was said by one of the teachers, *''their books are not inclusive at all. These DOE books are not inclusive, they are catering for let me say from moderate to upper. Lower [ability level learners] they won't even comprehend what's going on in them.''*

However, the teachers' arguments here are inconsistent with the guidelines laid out in the CAPS (2011) documents which stipulate that teachers do not need to rigidly stick to the deadlines and they can adjust and select the content to be covered, although there are certain prescribed skills that need to be covered within each two week period. Additionally, within the CAPS documents it is indicate that teachers can supplement the content supplied to them in order to make sure it is relevant to their learners based on their context, needs and abilities and thereby ensure it is inclusive it terms of their learners needs and individual differences (Department of Basic Education, 2011). This is, however, time-consuming and teachers do not always have time for supplementing and differentiating activities as they have a heavy

workload and teachers, as indicated in previous studies, highlighted that they lack the skills for differentiating their lessons and the skills for inclusive teaching and strategies (De Jager, 2013; Engelbrecht et al., 2006; Williams et al., 2009). Thus, it can once again be argued that there is a need for further training and support for teachers in order to help them adjust the curriculum to meet the specific needs of their learners and ensure their lessons and classrooms are inclusive of all their learners (De Jager, 2013; Department of Basic Education, 2011; Engelbrecht et al., 2006).

*Standardised Assessments:*

Two teachers in two of the focus groups argued that although they are expected to ensure inclusion of all learners by varying their teaching and activities used in the classroom based on learners individual strengths, needs and weaknesses, they are still expected to use standardised assessments in assessing what learners have learned. This was suggested to be problematic because learners are not assessed on the basis of the same work. One teacher indicated that the lack of standardisation in differentiated worksheets makes it difficult to prove if a learner has failed. Specifically it was said, *''the only problem with that [differentiated teaching] is when it comes to assessing the child. Cause how do... if I differentiate a worksheet for say my weakest child and I give the child who's the strongest a different worksheet, what am I assessing and how do I compare? Or how do I fill out a support form and fail the weak child. If they get all the sums wrong, ah all the sums right on their differentiated worksheet and the top child gets three or four sums but on the more difficult worksheet they get those few wrong. How do I compare it in an assessment scale? Because the DOE wants us to say this person failed and this is why they failed. So they've actually got us stuck with not being able to pro... [sic] we can't prove that a child is failing if we differentiate.''*

The CAPS (2011) documents, however, indicate that informal classroom activities, including worksheets completed daily, are to be used as informal means of assessments that can provide information and feedback regarding learners' performance and thereby guide future lesson planning for the inclusive classroom. Inconsistent with the teacher's argument that learners need to be assessed with different assessments in terms of formal assessments, it is indicated in the CAPS (2011) documents that assessments, in line with Bloom's taxonomy, need to include activities and items that are varied and appropriate for different cognitive levels, rather than giving learners different activities and items as all learners should be presented with the same assessment that assesses different levels of cognitive understanding (Krathwohl, 2002). It is formal assessments that need to be recorded and teachers can but are not required to record informal assessments (Department of Basic Education, 2012). Additionally, formal assessments need to be presented in various ways to all learners and varied activities that are completed by all learners need to be used in order to ensure there is adequate information regarding learners' achievement or lack thereof across the range of skills for each subject, thus it is not expected that learners should be presented with entirely different activities or assessments (Department of Basic Education, 2012).

In addition to battling to fail learners who are struggling one teacher also pointed out that they are forced to pass learners and that this is not necessarily in the learners' best interests. This is because in passing when they have actually failed the curriculum the learners move up to higher grades but still struggle as their problems and barriers have not been dealt with and thus they are not fully included in the curriculum or classroom as they move to a higher grade where they are unable to adequately cope. In terms of this one teacher said, *''Ah but that [previous learning problems] gets passed on in the system we running now. So kids who fail, I mean they can fail twice in a phase and then they get passed on, they must pass. So they pass with their problems.''* The Department of Basic Education (2013) does indicate that

teachers can fail learners if they show a lack of competence and will not be able to cope with the following grades work. However, consistent with the teachers argument here that they are forced to pass learners and can only fail learners a limited number of times it is stipulated that teachers can only fail learners once in a phase (foundation, intermediate, senior, further education and training), although if a learner failed a year in a previous phase it is indicated that teachers cannot fail the learner (Department of Basic Education, 2013). Instead teachers are expected to provide the necessary support to ensure the learner is included in the curriculum and classroom and ensure the learner achieves an appropriate level of competence for progressing to the next grade (Department of Basic Education, 2013). However, as found in this study and previous studies teachers are often unable to provide the full support that learners need given large class sizes, time constraints, limited skills, limited support staff and lack of resources (De Jager, 2013; Engelbrecht et al., 2006).

The family:

*Including the Family:*

One of the factors that were brought up in three of the focus groups as important in achieving the goals of inclusive education was the involvement of the learner's family. In talking about ensuring learners do not fall behind and stay up to date with what is happening in the curriculum, one teacher stated, *''I think parent involvement is very important. Again if you have that support at the school it helps.''* The family was suggested to be a valuable source of information regarding the learner by two teachers in one of the focus groups. As it was said, *''it's very important to work very close to the family if you can. You get a lot of information. And I make appointments, come in, have a chat with them. You know- so to see more or less what's going on.''* In line with the above De Jager (2013) argues that parents and caregivers are an important resource within inclusive education and need to be involved in their

children's education by providing support to their children and collaborating with teachers. The Department of Basic Education (2015) also argues that it is important to involve parents and caregivers as they can help to support learners and prevent them from dropping out. Parents and caregivers thus play a central role in learners' education within the inclusive education policy and need to be involved in their children's education (Department of Education, 2001).

Teachers in two of the focus groups also spoke about the need to enlist the help of the family in helping learners who are struggling in class by sending home extra homework for the parents to do with the learner in order to ensure learners are not left behind or excluded from the curriculum. As one teacher said, *''And I also borrow books from you [referring to another teacher in the focus group] and photocopy and send work home and I work with the parents and say your child is missing this in their foundation. Please can you work at home because there is not enough time [in class].''* This idea is supported by Donald et al (2006) who states that by working collaboratively with parents and caregivers, teachers will be in a better position to provide interventions in accommodating for learners' needs and barriers within the inclusive classroom as parents and caregivers can help to encourage and support the learner's school performance. This is because in accommodating for learners' barriers and needs there is a need for much individual attention and support which cannot always be provided adequately in overcrowded classrooms, which as mentioned are common across schools in South Africa (De Jager, 2013; Donald et al., 2006; Theron & Nel, 2005). Therefore, sending home extra homework, as mentioned by teachers here, can be used by teachers as a means of meeting the objectives of inclusive education by creating home programmes where parents and caregivers provide learners with extra supervised time to assist in developing and practicing skills that the learner is battling with in the classroom (Donald et al., 2006). However, teachers must ensure parents and caregivers are provided

with a clear understanding of the need for the activities at home and detailed explanations of what to do and parents and caregivers should be encouraged to provide and discuss feedback with the teacher (Donald et al., 2006).

Despite the importance of having parents involved in learners' education teachers in two of the focus groups indicated there was a lack of parent involvement and one teacher said, *''in this school I find a total lack of involvement from parents' side.''* Similarly in De Jager's (2013), Engelbrecht et al's, (2006), Nel et al's (2011) and Theron and Nel's (2005) studies it was found that teachers in South Africa indicated that there is generally a lack of parent involvement in the schools. Teachers in the focus groups and individual interview here did acknowledge that the lack of parental involvement may be due to *''socio-economic factors [that] do play a role.''* As teachers at the one school pointed out, *''they [parents are] working two or three jobs a day and they don't spend a lot of time with their children.''* This is corroborated by Engelbrecht et al (2006) who argued that given the socio-economic deprivation that is not uncommon that within many communities in South Africa parents are often unable to meaningfully assist learners with their education as a result of fatigue from long work hours and sometimes because they themselves are illiterate. In such situations it is important for teachers to discuss with parents whether they have time to help learners and if necessary try to involve other family members, such as older siblings or other extended family members (Donald et al., 2006).

De Jager (2013), Engelbrecht et al, (2006), Donald et al, (2006) and Theron and Nel (2005) all argue that there is thus still a need to develop collaborative partnerships between parents and caregivers and teachers as well as learners in order to ensure education is inclusive. This is important because parents and caregivers form a valuable resource that needs to be utilised in order to help accommodate learners with barriers and disabilities and ensure they are included in the classroom and curriculum (De Jager, 2013: Donald et al., 2006; Engelbrecht

et al., 2006; Theron & Nel, 2005). As Nel et al (2011) argue it is not possible for teachers to fully address the needs of learners with barriers and disabilities alone, they need the help of parents and caregivers in effectively addressing learners' needs and meeting the objectives of inclusive education.

5.2.4) Sub-question four: Consideration of learners' learning styles, interests and culture:

With regards to what teachers took into consideration in planning inclusive lessons and ensuring inclusive education is achieved within their classroom two themes were identified which include those of learners' differences, and learners' barriers to learning which were discussed together with question two.

5.3) Limitations of the study:

Due to the qualitative nature of the study the results are not generalisable as they have low external validity given the small sample size (Willig, 2008). The research and related findings in this study are thus only applicable to the population of public mainstream primary schools in Gauteng urban areas and cannot be generalised to other populations.

This study was also limited in terms of the size of the sample. The aim of the study was to have 5 focus groups with 4-6 participants in each but due to time constraints and teachers' school related commitments after school few participants volunteered and at some schools participants had to leave early due to last minute commitments. One school also stopped responding to the researcher's emails and phone calls when she tried to set up a meeting to meet with the teachers to discuss the focus groups. In future studies, more schools should therefore be included in the sample to help ensure a larger sample size that is more representative and that the findings are more likely to be generalisable.

Another limitation of this study involved the researchers' subjectivity. Once again given the qualita5ive nature of the study there was an element of the researcher's subjectivity in the collection and interpretation of the data (Willig, 2008). However, in order to limit the effects of the researcher's subjectivity, the researcher consulted with a supervisor throughout the process and conducted the study with schools that were not familiar to the researcher or supervisor.

Within the focus groups since there are multiple participants listening and interacting with each other it is possible that participants responded in socially desirable ways. Participants' responses may thus not be a completely true reflection of what they actually do in the inclusive classroom. However, in order to limit the occurrence of this participants were informed that they did not have to answer any questions that they did not want to and they were asked to not discuss anything said in the focus group outside of it.

### 5.4) Directions for future research:

The sample of this study included mainstream public primary schools in middle to upper income urban Gauteng areas. Future research could therefore possibly include schools from different demographic areas and other provinces within South Africa.

Teachers indicated that their use of a teacher versus learner-centred teaching strategy depended on the subject they were teaching. Studies have found that for university lecturers the choice between teacher and learner-centred teaching depends on whether they are teaching a subject that is considered a hard or soft subject (Kemp, 2013; Lindblom-Ylanne et al., 2006). This could be investigated in terms of primary schools to determine if it is an applicable explanation for teachers' choice and use of teaching strategies in this context.

One main area of concern that was identified in this study was teacher's indication that they lack training, knowledge and skills for the inclusive classroom. Future research could examine teacher's pre-service and in-service training programmes as well as their feelings of competence following such programmes. Teachers in the focus groups here also indicated that their training was too theoretical and not sufficiently practical in terms of developing practical skills that they can use in the inclusive classroom, however, Naiker (2006) has previously argued that training is not sufficiently theoretical. Thus, future studies could examine whether teacher training programmes do sufficiently cover theoretical and practical content and skills that teachers need for the inclusive classroom.

Teachers also did not discuss all the different aspects of differentiation when discussing their use of differentiated instruction in the inclusive classroom. Although, this was suggested to possibly result from teachers lack of training in differentiated instruction (De Jager, 2013), future studies could examine if this is true or not and observe teachers in the classroom to see how they actually use differentiated instruction as well as other strategies recommended for the inclusive classroom.

## Chapter 6: Summary and Conclusion:

Inclusive education is the educational policy that is followed in South Africa (Department of Education, 2001). Teachers play an essential role in the implementation of this policy as they directly interact with learners in the classroom and directly encounter learners' diverse needs (Department of Education, 2001; Forlin & Chambers, 2011). Thus, the aim of this study was to explore how South African teachers ensure inclusion of all learners in their classroom and the curriculum through the teaching methods they use in ensuring their teaching is in accordance with inclusive education. Specifically, differentiated and learner-centred teaching strategies were focused on as these have been recommended for the inclusive classroom (Department of Education, 2001). The learning barriers among learners that teachers consider in ensuring inclusive education as well as factors that hamper their ability in ensuring inclusion of all learners in their classroom and the curriculum were also explored.

The findings of the study indicate that teachers do use differentiated and learner-centred teaching strategies in ensuring inclusion of diverse learners and accommodating for barriers to learning. Lack of time, heavy workload, large class sizes, disobedience and insufficient pre and in-service training were identified as factors which limit teachers' ability to use these methods in the inclusive classroom. With regards to the learner-centred strategy in particular, teachers suggested that the use of this strategy was subject dependent.

The curriculum was also argued by the teachers here to be exclusionary at times. In particular it was indicated that the content was at times irrelevant to some learner's experiences and context. Curriculum time constraints were argued to limit teachers' discretion in allocating extra time to ensure inclusion of learners who are struggling. Given the diverse ability levels of learners and the need to differentiate based on learners' needs and barriers to learning standardised assessments were argued by the teachers to be problematic. However, CAPS

(2011) documents indicate that differentiated classroom activities should be used to guide lesson planning not to formally assess learners and formal assessments should be differentiated in terms of Bloom's taxonomy to ensure different levels of ability are assessed.

In discussing barriers and differences among learners that teachers consider when differentiating lessons to ensure insclusion of learners, teachers' discussions focused on differentiation in terms of cognitive and academic abilities. Differentiation in terms of differences in culture, learning styles, interests, personality and socio-economic background were discussed much less frequently, however, they are also important factors to consider in ensuring inclusion of all learners. It was suggested that teachers' lack of training regarding differentiated and inclusive education may have contributed to this.

Barriers that teachers discussed as important to consider and accommodate for in the inclusive classroom included hearing, visual and emotional barriers and poor concentration. This is consistent with previous findings that these are commonly occurring barriers to learning within the South African inclusive classroom (De Jager, 2013; Theron & Nel, 2005). Language was also identified as an important barrier to learning that needs to be accommodated for in the inclusive classroom. This consistent with the fact that many diverse languages are spoken in South Africa and that many learners are educated in a language that is not their home language (Theron & Nel, 2005). Teachers discussed several strategies that they used in accommodating for language barriers in their inclusive classrooms, including the use of interpretation, code-switching and grading of language, which have previously been identified as strategies used by South African teachers (Theron & Nel, 2005).

In discussing barriers to learning teachers did also discuss that they felt unqualified for accommodating for many barriers. Teachers argued that they lacked the specialised skills necessary for teaching learners with disabilities and that there was insufficient support

services for assisting teachers in accommodating their learners' barriers to learning. Teachers also argued that they were not adequately trained for identifying learners' barriers to learning, although teachers did acknowledge the importance of knowing their learners strengths and needs. In addition to this lack of screening assessments were identified by teachers as another factor that hampers their ability to identify barriers to learning among learners and subsequently their ability to include learners with barriers to learning.

Support from learners' families was identified as essential to achieving the goals of inclusive education. Teachers indicated that they did try to involve families but they also argued that there was often a lack of family involvement, possibly as a result of socio-economic factors.

Teachers therefore indicated that they do attempt to ensure inclusion of all learners in their classroom through the use of their teaching strategies, including differentiated and learner-centred teaching methods. However, teachers here have indicated that there is a need for further training and development of skills necessary for implementing inclusive teaching strategies and there are multiple obstacles that need to be addressed in order to meet the objectives of inclusive education within South Africa.

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## Appendix A: Demographic questionnaire

Instructions:

Please answer the following questions by writing in the space provided or by placing a tick in the appropriate box.

1. Number of years of teaching experience:

| | |
|---|---|
| Less than 5 years | |
| 6 – 10 years | |
| 11 – 15 years | |
| More than 15 years | |

2. Number of years teaching at this school:

| | |
|---|---|
| Less than 5 years | |
| 6 – 10 years | |
| 11 – 15 years | |
| More than 15 years | |

3. Gender:

| | |
|---|---|
| Female | |
| Male | |

4. Age:

Please specify:_____

5. Level of Education:

| | |
|---|---|
| Diploma | |
| Degree | |
| Honours | |
| Masters | |
| PhD | |
| Other | |

5. Race:

| | |
|---|---|
| Black | |
| White | |
| Coloured | |
| Indian or Asian | |
| Other | |

6. Number of students in your class:

| | |
|---|---|
| 10 or less | |
| 11-20 | |
| 20-30 | |
| 30-40 | |
| 40-50 | |
| More than 50 | |

7. Home language:

Please specify: _____

8. Is your language of teaching the same as your home language?

| | |
|---|---|
| Yes | |
| No | |

**Appendix B: Focus Group Interview Schedule:**

I will start the focus group with a basic introduction of myself and the purpose for the study specifically that I am conducting research on inclusive education and teaching strategies and that it is part of my Masters programme. Participants will be re-informed about the nature and purpose of the study. Additionally, participants will be re-informed about the voluntary nature of participation and that they can choose to not answer questions they do not want to. Additionally, they will be informed that they can withdraw at any time if they so wish. Again they will be told that no benefits will result from participating and they will not be subjected to any negative consequences or disadvantages if they choose to withdraw. They will be made aware that the focus group discussion will be audio-recorded but if anyone is uncomfortable with this then they may choose to withdraw. They will also be re-informed that due to the fact there are multiple participants within a focus group it will not be possible to guarantee anonymity or confidentiality; however they will be requested to not discuss anything said within the group outside of the focus group. Additionally, they will be re-informed that their names will not be included on any transcriptions (as they will be coded) or within the report, so anonymity and confidentiality will be guaranteed within the reporting of the results. Before starting the focus groups participants will be given the opportunity to ask any questions and will be asked to sign the consent form and complete the demographic questionnaire.

Focus Group Questions:

1. How do you understand inclusive education?
2. When planning lessons that will include all learners what types of barriers to learning and differences among the learners do you consider important to accommodate for?
3. How do you implement inclusive education in your classroom?

4. Do you use differentiated instruction in your classroom? Please elaborate.
5. Is your teaching style more learner or teacher-centred? Please elaborate.
6. Do you think it is easy or difficult to ensure inclusiveness in the classroom? Please elaborate.
7. What factors do you think might make it difficult to implement inclusive education strategies?
8. Anything you want to add?

**Appendix C: Principal Information Sheet:**

Psychology
School of Human & Community Development

Private Bag 3, Wits 2050, South Africa. Telephone: +27 11-717-4500/2/3/4. Fax: +27-11-717-4559

Dear Principal,

My name is Nicola Lake and I am conducting research for the purpose of obtaining my Masters degree in Research Psychology at the University of the Witwatersrand. The area of research in this study is teaching strategies that teachers use to ensure inclusive education in their classroom. I would like to invite you to take part in this study which will look at inclusive education and the strategies that teachers use to implement it, with a focus on the use of differentiated teaching and learner-centred strategies as well as any difficulties that may impair the use of these teaching strategies within the inclusive education context.

Participation in the study would require your staff to participate in a focus group consisting of 4-6 participants. Participants will be asked questions regarding their teaching strategies and how they ensure inclusiveness in their classrooms. These discussions will be audio recorded. This focus group would be scheduled at a time that is convenient for the relevant participants. Participation in the study is voluntary and your staff will not be disadvantaged in anyway if they choose not to participate. There are no expected risks or benefits that would result from

participation in the study. Your staff may choose to leave out any questions that they are uncomfortable with answering. Confidentiality and anonymity will not able to be guaranteed within the focus group due to the fact there are multiple participants. However, within transcribing and reporting the data confidentiality and anonymity will be guaranteed as recordings will be transcribed in a private setting or with the use of headphones and participants will be coded so that no names will be included in the transcriptions or report. If direct quotes are used in the report, no identifying information will be included. All gathered data will be securely stored on a password protected computer and will only be accessed by myself and my supervisor. All data will be destroyed after being stored for an allocated time set out by the University.

General feedback from the results of the study will be made available in a summary which will be available in each schools staffroom once the research is completed in the first term of 2016. On request, a copy of the final research report will be sent to you.

If you choose to allow your teachers to participate in the study please sign the Principal Consent form. Once signed please return the form to me.

Your participation in the study would be much appreciated.

Kind regards

Nicola Lake.

Please feel free to contact me if you have any questions.

Researcher: Nicola Lake

Phone number: 0765243002

Email: nicolalake@hotmail.com

Supervisor: Anwynne Kern

Phone number: 011 717 4506

Email: anwynne.kern@wits.ac.za

**Appendix D: Principal Consent Form:**

Psychology
School of Human & Community Development

Private Bag 3, Wits 2050, South Africa. Telephone: +27 11-717-4500/2/3/4. Fax: +27-11-717-4559

I _____ consent to this study being conducted by Nicola Lake to investigate teaching strategies used by teachers in South African mainstream classrooms to ensure inclusive education.

Signed: Date:

_____ _____

**Appendix E: Participant Information Sheet:**

Psychology
School of Human & Community Development

Private Bag 3, Wits 2050, South Africa. Telephone: +27 11-717-4500/2/3/4. Fax: +27-11-717-4559

Dear Educator,

My name is Nicola Lake and I am conducting research for the purpose of obtaining my Masters degree in Research Psychology at the University of the Witwatersrand. The area of research in this study is teaching strategies that teachers use to ensure inclusive education in their classroom. I would like to invite you to take part in this study which will focus on the use of differentiated teaching and learner-centred strategies as well as any difficulties that may impair the use of these teaching strategies within the inclusive education context.

For participation in this study you will be required to take part in a focus group consisting of about 4-6 participants, which would take about one hour. In the focus groups you will be asked questions about your teaching strategies and style as well as how you ensure inclusiveness of all learners in your classroom. Participation in the study is voluntary and you will not be disadvantaged in anyway if you choose not to participate. There are also no expected risks or benefits that would result from participation in the study. You may choose to leave out any questions that you are uncomfortable with answering. Focus group

discussions will be audio-recorded. Confidentiality and anonymity will not able to be guaranteed within the focus group due to the fact there are multiple participants, although all participants will be asked not to discuss anything from the focus group outside of the focus group. Within transcribing and reporting the data confidentiality and anonymity will be guaranteed as recordings will be transcribed in a private setting or with the use of headphones and participants will be coded so that no names will be included in the transcriptions or report. If direct quotes are used in the report, no identifying information will be included. All data gathered will be securely stored on a password protected computer and will only be accessed by myself and my supervisor. All data will be destroyed after being stored for an allocated time set out by the University.

If you choose to participate please complete the attached consent form and I will contact you to discuss a day and time that is convenient for the focus group to be conducted.

General feedback from the results of the study will be made available in a summary which will be available in each schools staffroom once the research is completed in the first term of 2016. On request, a copy of the final research report will be sent to each principal.

You participation in the study would be greatly appreciated.

Kind regards

Researcher: Nicola Lake

Phone number: 0765243002

Email: nicolalake@hotmail.com

Supervisor: Anwynne Kern

Phone number: 011 717 4506

Email: anwynne.kern@wits.ac.za

**Appendix F: Participant Consent Form for Focus Group:**

Psychology
School of Human & Community Development

Private Bag 3, Wits 2050, South Africa. Telephone: +27 11-717-4500/2/3/4. Fax: +27-11-717-4559

I _____ consent to being part of the focus group for the study being conducted by Nicola Lake to investigate teaching strategies used by teachers in South African mainstream classrooms to ensure inclusive education. I am aware that my participation is voluntary and that I do not have to answer any questions that I do not want to. I know that within the focus group my responses will not be confidential or anonymous as there will be other participants but I, as well as the other participants, are expected to not discuss anything said in the focus group outside of the focus group. Also, I am aware that my responses will be confidential and my identity will be kept anonymous within the report. Furthermore, I know that my responses will be audio-recorded.

Signed: Date:

_____ _____

**Appendix G: Participant Consent Form for Audio Recording:**

Psychology
School of Human & Community Development

Private Bag 3, Wits 2050, South Africa. Telephone: +27 11-717-4500/2/3/4. Fax: +27-11-717-4559

I _____ consent to having my responses audio recorded in the focus group. I am aware that my name and identity will not be linked to any recordings. Additionally, I am aware that these recordings will be transcribed and used for the research and that secure copies of the audio-recordings and transcriptions will be kept on a password protected computer. Furthermore, I am aware that only the researcher and her supervisor will have access to the recordings.

Signed: Date:

_____ _____

**Appendix H: School Survey Checklist:**

| Code: |
|---|

**Identifying Information**

**School Name:** _____

**Number of learners in the school:** _____

**Educator – leaner ratio:**

| Below 1 : 30 | 1 : 31 -1 : 35 | 1:36 – 1 : 40 | 1 : 41 – 1 : 45 | Above 1 : 45 |
|---|---|---|---|---|

- Please check next to the features that are present in your school at the present time.

| | | | |
|---|---|---|---|
| Blackboards | | Parent involvement in school | |
| Overhead projectors | | School Governing Body | |
| White boards | | Supportive district support team | |
| Smart boards | | Sporting equipment | |
| Library | | External sport coaches | |
| Computer centre | | Swimming pool | |
| Computer per student in class | | Tennis court/netball court | |
| Printers | | Cricket/soccer field | |
| Internet access | | Textbooks | |
| Fax machines | | School readers | |
| Photocopy machine | | Workbooks supplied to learners | |
| Scanner | | Tuck shop | |
| School Based support team | | Classroom per educator | |
| Learning support specialist | | Substitute educators | |
| Psychologist | | School hall | |
| Speech therapist | | Bathrooms per 3 grades | |
| Occupational Therapist | | Ramps for wheelchairs | |

## Appendix I: Gauteng Department of Education Research Approval Letter:

**GAUTENG PROVINCE**
Department: Education
REPUBLIC OF SOUTH AFRICA

**For administrative use:**
**Reference no: D2016 / 050**

# GDE RESEARCH APPROVAL LETTER

| | |
|---|---|
| Date: | 28 April 2015 |
| Validity of Research Approval: | 28 April 2015 to 2 October 2015 |
| Name of Researcher: | Lake N.M. |
| Address of Researcher: | 34 Elder street; Fairmount; Johannesburg; 2192 |
| Telephone / Fax Number/s: | 011 640 3202; 076 524 3002 |
| Email address: | nicolalake@hotmail.com |
| Research Topic: | Embracing diversity in the inclusive classroom |
| Number and type of schools: | FIVE Primary Schools |
| District/s/HO | Johannesburg East |

***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);
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



*Making education a societal priority*

**Office of the Director: Knowledge Management and Research**
9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7710, Johannesburg, 2000 Tel: (011) 355 0505
Email: David.Makhado@gauteng.gov.za
Website: www.education.gpg.gov.za

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 consent and learner.
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 completion of the study the researcher must supply the Director: Education Research and Knowledge Management with one Hard Cover, an electronic copy and 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/head office level the Director and school 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

.....

**Mr Tshipinare Marumo**

**Acting Director: Education Research and Knowledge Management**

**DATE:** 28 APRIL 2015



*Making education a societal priority*

**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

## Appendix J: Human and Ethics Research Council (non-medical) Internal Ethical Approval Letter:

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

HUMAN RESEARCH ETHICS COMMITTEE (SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT

| | |
|---|---|
| CLEARANCE CERTIFICATE | PROTOCOL NUMBER: MPSYC/15/008 IH |
| PROJECT TITLE: | Teachers' Teaching Strategies in South African Inclusive Classrooms. |
| INVESTIGATORS | Nicola Lake |
| DEPARTMENT | Psychology |
| DATE CONSIDERED | 17/06/15 |
| DECISION OF COMMITTEE* | Approved |

This ethical clearance is valid for 2 years and may be renewed upon application

DATE: 17 June 2015

CHAIRPERSON
(Professor Brett Bowman)

cc Supervisor: Mrs Anwyne Kern
Psychology

DECLARATION OF INVESTIGATOR (S)

To be completed in duplicate and **one copy** returned to the Secretary, Room 100015, 10th floor, Senate House, University.

I/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure be contemplated from the research procedure, as approved, I/we undertake to submit a revised protocol to the Committee.

**This ethical clearance will expire on 31 December 2017**

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES