



**EDUCATORS' PERCEPTIONS OF INCLUSIVE EDUCATION FOR LEARNERS
WITH PHYSICAL DISABILITIES**

By

**NONDUMISO YOLANDA MPU
Student No: 201414074**

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DECLARATION

I hereby declare that this thesis is my own work and that any assistance received has been fully acknowledged in the text. No part of this thesis has been previously submitted to any Higher Education institution inside the country and abroad.

Ny Mpu

Nondumiso Yolanda Mpu

27/02/2018

Date



Prof E.O. Adu (Supervisor)

09/03/18

Date

DEDICATION

I would like to dedicate this thesis to my late father and mother, may their beautiful souls rest in perfect peace. It is never easy to lose people you love, especially parents. But in God's hands, I know that you found safety. I wish you were both alive to witness and celebrate this great milestone with me. It is not an easy thing to forget you but as I am entering this yet another level, let me say, 'Guys this is for you'. To all the people out there who are stigmatised because of their inabilities to perform certain things in life like everyone else; disability is only a condition and not a life sentence. 'Rise up and stand your ground'; everyone has a fair share of disability.

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ABSTRACT

There is a grave concern that in South Africa, the total population of learners between the ages of 5 and 18 was estimated at approximately 14.6 million – of which near 1,000,000 are disabled. The record in addition to this regard estimates that the wide variety of children with disabilities who are of school-going age, yet are out of school, could be as high as half a million. The motives why disabled children are not attending school are manifold; however paramount among them is that their needs are not catered for. Inclusive education entails changing values, attitudes of people, specifically of educators and learners, policies and the practices inside schools. Since post apartheid there is only one known policy which reveals that only 20% of learners with disabilities were accommodated in special schools. Current statistics show that only about 64,200 learners with disabilities or impairments are accommodated in about 380 special schools. This indicates that, potentially, 280,000 learners with disabilities or impairments are unaccounted for. Analysis of the data reveals the extent of the disparities in provision for learners with disabilities, for example: The incidence of disabilities in the Eastern Cape constitutes 17.39% of the disabled population, yet the province has only 10.79% of the total number of special schools. Gauteng has 17.14% of the disabled population but has 25.26% of the schools. The Western Cape has 5.47% of the disabled population but has 21.58% of the schools. This mismatch between needs and provision is a direct result of previous apartheid policies that allocated facilities on a racial basis. Inclusive education calls for an education system, which does no longer discriminate, however welcomes all individuals, providing support and services so that every child benefits equally in mainstream schools around their regions as only 41 special schools are in the Eastern Cape. Educator perceptions as the key personnel in the inclusion and in the implementation of policies related with classroom related issued play centre stage and need to be considered.

Keywords: Assistive devices, Braille, Collaboration, Disabilities, Inclusive education, Inclusion, Impairments, policies, perceptions, White Paper 6.

ACRONYMS

ABLES	- Abilities Based Learning and Education Support
AAC	- Augmentative and Alternative Compu-typing
CAPS	-Curriculum and Assessment Policy Statement
DANIDA	-Danish Development Agency
DBST	- District Based Support Teams
EFA	- Education for All,
ILST	- Institutional Learner Support Teams
NSEPPG	- National Special Education Policy, Plans and Guidelines”
SMT	- School Management Teams
SBST	- School-based Support Team
SIAS	- Screening, Identification and Support Strategy
SEN	-Special Education Needs
UDL	- Universal Design for Learning
WHO	-World Health Organization

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CHAPTER ONE

1.1 INTRODUCTION AND HISTORY

In recent years, the exercise of inclusive education has been broadly espoused as a perfect model for pedagogy, both in South Africa and internationally (Maher, 2009). Inclusion is extensively understood as the manner by means of which learners; who previously might have been taught in a separate special education system, due to the disabilities they reveal in, might now learn in regular inclusive, mainstream institutions that have taken the duty of changing and enhancing to offer the support vital to facilitate access and participation (Walton, Nell, Hugo and Müller, 2009). This highlights the need for frameworks that empower educators with the necessary skills to cater for learners with diverse needs. Universal Design for Learning (UDL) is one such framework that conceptualises and addresses the need for a more flexible curriculum designed to lower the barriers and to enable learners with widely varying needs to be included in the learning process (Brand, Favazza and Dalton 2012;).

1.2 BACKGROUND TO THE STUDY

An inclusive school is a mainstream school that offers pleasant education for all learners; that provides quality education for all learners by meeting the full range of learning needs in a reasonable manner (Department of Education, 2005). As the South African education system is not without its own flaws, from poor infrastructure to the provision of proper education, parents express a list of other concerning issues with regards to the dedication and capability of the mainstream education system to meet the educational needs of learners with disabilities (Dalton, McKenzie and Kahonde, 2012).

The employment of special educators is seen by few parents and schools as a mechanism to help support and facilitate the learning process of an individual learner with disabilities in mainstream schools to mitigate these challenges. The recommendations for full service/ Inclusive schools (Department of Education, 2010) refers to the appointment of private educator assistants at full-service schools and states that they should have clearly identified roles. Pointers emanating from studies performed in the Gauteng public school education system in South Africa included a suggestion that magnificence assistants may want to serve as support corps, for this

reason, relieving educators' workload and permitting them to concentrate on their essential duty of teaching (Nel, Müller and Rheeders, 2011). The pointers for complete careers on inclusive schools relatively rule that educator assistants are school-based total workforce who do not necessarily work with individual learners but are there to support the educator.

According to Naicker (2000: 1), "apartheid education, produced a dual system of education which included a mainstream and a special education component. These were also characterized by racial disparity." Stofile (2008: 1) concurs with this view by stating that: "Prior to 1994, the general education system in South Africa enforced separate education systems for Indians, blacks, coloureds, and whites, and this led to discriminatory practices that excluded the majority from access to quality education. Each department of education had a dual system that separated learners with special education needs from the so called 'normal learners'." Learners with special education needs were placed in special schools and the so-called normal learners in mainstream schools. However, not these departments of education made provision for learners with special education needs and thus they were "mainstreamed by default." In the South African education context, this has resulted in a massive exclusion of disabled children from education (Department of Education 2001).

Despite the development of an inclusive education policy to address this exclusion, one of the issues that hamper progress is the lack of educator skills in adapting the curriculum to meet a range of learning needs (Chataika, Mckenzie, Swart and Lyner-Cleophas 2012). Educator training programmes do not appear to be adequately addressing this need, resulting in stress for educators and the lack of progress of learners with disabilities (Chataika *et al.*, 2012; Engelbrecht 2006). In line with the data quoted in a 2010 Department of Basic Education Report by the Minister of basic education, Mrs Angie Motshega (Department of Basic Education, 2010), the total population of learners between the ages of 5 and 18 was estimated at approximately 14.6 million – of which nearly 1,000,000 were disabled. The record in this regard estimates that the wide variety of learners with disabilities who are of school-going age, yet are out of school, could be as high as half a million. The motives why disabled learners are not attending school are manifold; however paramount among

them is that their needs are not catered for in mainstream schools (Engelbrecht, Nel, Smit, and van Deventer, 2016).

In accepting this approach, it is essential to acknowledge that the learners who are most vulnerable to barriers to learning and exclusion in South Africa are those who have historically been termed 'learners with special education needs', i.e. learners with disabilities and impairments. Their increased vulnerability has arisen largely because of the historical nature and extent of the educational support provided. (White Paper 6, p.21).

According to Donohue and Bornman (2014), support provisions in a global context depend upon the learner's disability; however, it might also consist of unique gadget, educational provisions and resorts, for example, greater time for the duration of assessment and evaluation, an educator's duty is to help offer the learner with higher levels of support desires and one-on-one coaching. However, widespread inconsistencies exist between coverage and practice. The assistance needed is frequently no longer furnished in mainstream schools in South Africa due to, amongst others, restricted monetary and human resources, in addition to accessibility. Du Plessis (2013) indicates that collaborating with other support providers might give the educators confidence in the accommodation of diversity in the classroom. Consequently, it is important to investigate how educators reflect on the consideration of the roles that the District Based Support Teams (DBST) together with the Inclusive Education teams (IE teams) must play in supporting them in setting up inclusive schools. Searching globally, in the United Kingdom, scholars like Mostert, Kavale, and Kauffman (2008), who prefer a more traditional special education, have expressed their concerns in excessive debates with researchers which include Gallagher and Heshusius, (2004), who are robust believers in inclusive education. It is important to bear in mind that educational practices labelled as 'inclusive education' have a strong local flavour. Even though the inclusive rhetoric and rules may also journey across borders and from language to language, the educational practices which can be tightly connected to the local tradition have proved to be more difficult to convert (Alur, 2009; Bach, 2009; Mitchell).

Countries such as the United States of America and Israel have legislations regarding the combination of learners with disabilities into mainstream classroom education (Fuller, 2004). Philosophies concerning the education of learners with Special Education Needs (SEN) have changed dramatically over the last past two decades. Numerous International countries including America, United Kingdom and New Zealand have led inside the attempt of enforcing policies which foster the integration and the inclusion of learners with Special Needs into the mainstream education system (Neilson, 2005; O'Brian and Ryba, 2005).

Learners with disabilities should have access to regular schools/mainstream schools, which would accommodate them within a child-centred pedagogy capable of meeting their needs. With reference to Inclusive education within the Sub-Saharan African countries like Lesotho, Malawi, Botswana, Namibia, Mozambique, and Zimbabwe, it's far evident that the educational opportunities for all, inclusive of learners with special education needs (LSEN) remained at a coverage announcement stage within general education guidelines (Booth and Pather, 2010). Swaziland as a developing country is eager to follow worldwide developments so that it can increase its human resources. In respecting the rights of her marginalised participants, Swaziland embraced the international announcement that set the basis of Education for All (EFA), which designated the choice to attain access to primary Education for All. The Swaziland government followed the Inclusive Education (IE) policy in 2008 (Booth and Pather, 2010).

The intention of adopting the policy was to divert from the precept of exclusion of the individuals with disabilities through special schools that were in the area several years after independence to 'inclusion' into the mainstream. Thus, the researcher's interest is that of examining the educators' perceptions of Inclusive education for learners with physical disabilities in mainstream classrooms and to establish which strategies other countries use in addressing the issue of inclusion and to use them as best practices in the model of inclusive education in the country. In comparison, two decades before now, the Papua New Guinea (PNG) government formulated an inclusive education policy entitled "National Special Education Policy, Plans and Guidelines" (NSEPPG) which endorsed the integration of learners with disabilities in the well-known regular education system. The formulation of the "National Special

Education Policy, Plans and Guidelines” (NSEPPG) were a reform in the Papua New Guinea’s education system to merge general and special education, creating a unified education gadget. This merger within the two separate systems of education to a reformed inclusive education was not an initiative taken through Papua New Guinea alone but to staff through in-service programme.

An in-service programme is an approach to staff improvement that aims to help graduate educators to upgrade skills and knowledge in inclusive education whilst on their jobs (O’Gorman and Drudy, 2010). Pre-service programmes include two to a few years of intensive education for potential educators at the Educator schools and Universities in Papua New Guinea (Margolin, 2011). Because of the scarcity of support services in mainstream schools in South Africa, the parents of learners with disabilities often advocate for the placement of the learners in mainstream inclusive classroom settings. Using educators to assist individual learners with disabilities in mainstream classrooms in South Africa is currently a recourse that is not funded by the state. In precept, that is problematic in developing countries like South Africa, as only a small percentage of parents can afford the cost of using the services of private facilitators.

A study conducted by Eloff, Engelbrecht, Oswald, Swart and Yssel (2007) suggests that, in South Africa, advocating for inclusion inside the mainstream school regularly entails emotional and monetary sacrifices, for an example, the value of extra tutoring to enable a learner to stay in a mainstream classroom (Engelbrecht, Oswald, Swart, Kitching and Eloff, 2007). Parents can also be responsible for the price of related services, including physical therapy, speech therapy, and occupational therapy (Engelbrecht et al., 2006). Research conducted by Giangreco and Doyle (2007) reveals that when parents resolve to employ private facilitators, they are playing an important role in providing individual and ongoing support to learners with disabilities, where the school may not have the capacity and funding for this provision. In addition, they also invest into their child’s mainstream placement.

Therefore, as a matter of urgency, ‘mobilization’ of the many out-of-faculty learners of school going age (department of education, 2001) has been recognized as one in every of numerous key strategies for the successful implementation of inclusive education. One of those strategies that are of specific relevance to this study is the

restructuring and re-conceptualization of education guide offerings (department of education, 2001). This study hopes to establish the perceptions that educators have in South African schools in the implementing of inclusive education for learners with physical disabilities into mainstream/normal classrooms. It additionally sought to set up the boundaries, which those educators have, to accommodate freshmen physically in mainstream school rooms, and hopes to provide suggestions for development. The point of interest is on schools within the Eastern Cape because the researcher is familiar with the vicinity.

Research like that done by Human Rights Watch (2015); and DoBE (2015) shows that quality education for learners with disabilities remain a first-rate challenge. Similarly, the “learners with disabilities” (UN, 2014:5/9) document asserts that lack of education is a key concern for most learners with disabilities. Two important reasons informing this scenario are “educators who are untrained on how best to teach learners with disabilities and occasional expectations” (UN, 2014:5/9) of these learners. In this regard, Donohue and Bornman (2015:54) assert that educators of learners with disabilities themselves seem to be aware of the lack of educational progress caused by educators’ personal low expectations of and goals for these learners. This results in inadequate guidance. In a study carried out by using Olsen and Hagen (2015:185), they discovered that in school in their study, “a significant number of learners are unable to follow the teaching taking place.” Educators have a significant impact on the learning of learners (Waitoller, 2013), especially in diverse classrooms, catering for learners with or without disabilities. Parents play an important role in the inclusion of their children living with disabilities to assist educators in this exercise.

Some parents with financial resources hire individual or private educators to propose and campaign for the inclusive placement for learners with disabilities in mainstream schools, understanding that support systems, nevertheless, need to be advanced in mainstream schools. The role of the private educator deserves to be explored and clarified but the guidelines (2010) furthermore emphasize that inclusive schools may not require individual parents to pay for educator assistants as a remedial action for the inclusion of their learners.

In line with Forlin (2001) and Vaillant, (2010), educators play an important role to

ensure that learners in inclusive classrooms can learn regardless of their abilities, but they also acknowledge that many educators face barriers with the process of implementing inclusive education and seem not to have skills that would enable them to deal with the complexities of inclusive education. Many educators in mainstream schools lack a special education and training background in inclusive education and this could result in barriers in the process of the implementation of inclusive education. Moreover, their lack of knowledge about special education needs may likely influence their behaviour towards the acceptance of learners with disabilities (Subban and Sharma, 2006).

This study, therefore, focuses on educators' perceptions of inclusive education for learners with physical disabilities in mainstream classrooms. This study was conducted in the Eastern Cape where it was revealed in White Paper 6, (p13), that the current the current Profile and Distribution of Special Schools and Learner enrolment based on data from our Education Management Information System (EMIS) (Department of Education, Pretoria), the incidence of disabilities in the Eastern Cape constitutes 17.39% of the disabled population, yet the province has only 10.79% of the total number of special schools.

- Gauteng has 17.14% of the disabled population but has 25.26% of the schools.
- The Western Cape has 5.47% of the disabled population but has 21.58% of the schools.

This mismatch between needs and provision is a direct result of previous apartheid policies that allocated facilities on a racial basis. These policies also centralised provision within the Western Cape and Gauteng so that, today, most learners attend residential special schools in a province other than their own since no facilities are available in their province of residence. A comparison between the overall incidence of disabilities and the number of learners accommodated in school also reveals stark disparities, for example:

- 0.28% of learners in the Eastern Cape are enrolled in special schools, yet the overall incidence figure for the population of disabled persons (of all ages) is 17.39%.

- This pattern is repeated across provinces, indicating a significant number of learners who - based on the traditional model - should be receiving educational support in special schools are not getting any.
- While the national total incidence figure for disabilities (of all ages) is 6.55%, the total number of learners in special schools is 0.52%.

1.2 Problem Statement

- In 2002, only 73% of learners with disabilities aged 7 to 15 years were attending school. By 2012, this figure has reached the threshold of up to 92%. Even as this represents a 19% boom in the number of school attendance of 7 to 15-year-olds with disabilities, a high quality indication of the progress of the inclusive nature of education in South Africa, it additionally means that 8% of such learners did not attend school (Department of Basic Education, 2013). In 2010, of the country's 14.6 million learners and youth, it was envisioned that close to 1,000,000 have been disabled and/or experienced barriers to learning (Department of Basic Education, 2010). In 2013, only 88% of South African learners attended school (Statistics South Africa, 2014) and in 2014 this figure dropped by 1% to 87% (Statistics South Africa, 2015).
- However, the figures for 2013 and 2014 covered almost universal school attendance amongst the 7 to 15-year age group. For those learners who have not been attending school at some stage in both 2013 and 2014, many unique reasons have been mentioned, such as visual impairments, deaf and dumb, cerebral palsy and incapacity were ranked fifth among them. This translates into about 10% of the learners who are of school-going age; however, who are not attending any school (Statistics South Africa, 2014; Statistics South Africa, 2015).
- Historically, learners with severe disabilities were educated in segregated settings, with little or no social or academic interactions with peers without disabilities (McLeskey, Landers, Williamson, and Hoppey, 2012; Sailor, 2014; Sailor and McCart, 2014). Although some progress has been made, a large percentage of learners with severe disabilities are still educated in separate classrooms or settings (Kurth, Morningstar, and Kozleski, 2014). This

approach to education occurs despite the substantial body of research on the benefits of inclusive education for learners with severe disabilities. Research demonstrates that learners with severe disabilities can learn academic, communication and social skills (Browder, Spooner, Ahlgrim-Dezell, Harris, and Wakeman, 2008; Dessementet, Bless, and Morin, 2012; Kurth and Mastergeorge, 2012), communication (Foreman, Arthur-Kelly, Pascoe, and King, 2004), social (Boutot and Bryant, 2005; Carter, 2011;), and self-determination (Shogren, Palmer, Wehmeyer, Williams-Diehm, and Little, 2012; Wehmeyer, Palmer, Shogren, Williams-Diehm, and Soukup, 2013) in inclusive settings. Furthermore, placing learners with disabilities in a general education setting can increase learning expectations for all learners (Kurth and Mastergeorge, 2010).

- Limited systemic changes in schools (Ryndak, Jackson, and White, 2013) have resulted in little progress toward inclusion for learners with severe disabilities in the full range of general education contexts and curricula. The most salient characteristic of current efforts to promote inclusion and access to the general education curriculum is that the focal point has shifted primarily from where a student receives his or her educational programme, to what and how the student is taught (Wehmeyer, 2009).
- Placement in a mainstream classroom alone does not guarantee improved outcomes for learners with severe disabilities, effective supports for learning and participation must also be in place. A growing body of best practice for supporting learners with severe disabilities in general education classrooms exists (e.g., Alquraini and Gut, 2012; Downing and Peckham-Hardin, 2007). Across this body of work, common features are accommodations and adaptations, a culture of belonging, professional collaboration, and engagement with peers. Although these are currently considered best practice, further research is needed to understand how they are implemented in inclusive classrooms to support learners with severe disabilities. A small number of observational studies of inclusive classrooms for learners with severe disabilities suggests the benefit of including these learners in general education, while also indicating a need for more information about how these practices can be implemented.

- For example, Lee, Wehmeyer, Soukup, and Palmer (2010) completed an eco-behavioural analysis of inclusive high school classrooms using a time sampling method, finding that curricular adaptations were positively associated with higher academic engagement and on-task behaviours. Similarly, Soukup, Wehmeyer, Bashinski, and Bovaird (2007) used a time sampling method to investigate eco-behavioural characteristics of inclusive classrooms and found curricular adaptations were routinely provided to learners with severe disabilities. However, McDonnell, Thorson, and McQuivey's (2000) eco-behavioural observation of elementary school learners with and without disabilities, using time sampling methodology, found that, compared with other learners, those with severe disabilities were more likely to receive instruction exclusively directed at them and largely provided by special education staff and peers. In their analysis, general education teachers frequently provided prompts, praise and error correction.

Before further discussing the disability issue, it is vital to note the common disabilities that are common in learners that are in South African schools.

In South Africa, there are currently many examples of learners with disabilities consisting of Down's syndrome, behavioural disability, autism, physical and sensory disablement, cerebral palsy and dyspraxia, who have not been included in mainstream schools because of the severity of their conditions. At the same time as some of those learners have educators who assist and support them within the mainstream curriculum, Brummer (1996) and Lazarus (in Lomofsky and Lazarus, 2001) highlight that there is a degree of barriers as to the precise role of other stakeholders in supporting educators in their endeavour to making sure that their efforts are monitored and appreciated. Before commenting on the duties of educators in educating and supporting learners with physical disabilities by way of imposing inclusive education into mainstream classrooms, it is far more important to understand their perceptions and views on what an inclusive education entails. The reason prompted the researcher into embarking on the study was to understand what inclusive education entails and what other scholars have differentiated between the most common terms "inclusive education and inclusion".

1.1.1 Inclusive education and inclusion definition

In October 1996, the Ministry of Education decided to investigate the position of special needs learners who experienced learning difficulties and learners with disabilities (DoE, 2001). Two task teams were established to perform this task and to make recommendations about how to improve all aspects of what were called 'special needs and support services' in education and training in South Africa. These task teams were the National Commission on Special Needs in Education and Training and the National Committee on Education Support Services (DoE, 2001).

To overcome the needs of learners being educated in special schools has been a matter of concern for the public that has called for this discrimination to come to an end. To remedy this situation there were calls for embarking on an inclusive education of these learners into mainstream schools. The fundamental principle of inclusive education is that all mainstream schools ought to accept and provide education for all learners. Schools should provide education by adapting to the needs of each individual child (Grey, 2010; Thomazet, 2009). Inclusive education is not always concerned with just a few learners but, as pointed out in UNESCO (2001), "... inclusive education is concerned with all learners, with a focus on those who have traditionally been excluded from educational opportunities such as learners with special educational needs and disabilities, learners from ethnic and linguistic minorities...", (As cited in Thomazet, 2009). It is concerned about the principle that every individual has the right to education irrespective of their ability, gender, ethnicity or social status. All it is concerned with is to offer possibilities for all, and this includes that the less privileged should also have access to education. Inclusive education requires an education system that caters for all learners. For this reason, policies should continuously be revised and education continuously restructured to accommodate learners with special educational needs (Du Plessis, 2013).

Inclusion acknowledges that all learners with support can learn and that all learners should have full access to and be enabled to participate using a common curriculum (Department of Education, 2014). In relation to that, adaptation needs to be made to the curriculum and to the physical environment, so that schools can cater for all

learners. In keeping with UNESCO (2007), "... inclusive education means that the school provides a good education to all pupils irrespective of their varying abilities." Moreover, it is each school's duty to be prepared to accept and include all learners (Artiles, Kozleski, Dorn and Christensen, 2006; Thomas and Vaughan, 2004; Ainscow, 2005). "All learners must be treated with respect and ensured equal opportunities to learn together.... (as stated in Coskun et al., 2009)."

Inclusive education entails changing values, attitudes of people, specifically of educators and learners, policies and the practices inside schools (Polat, 2011). Inclusive education calls for an education system which is no longer discriminatory, however, it welcomes all individuals providing support and services so that every child benefits equally. Before further expanding on the issue of inclusive education, it is critical to unpack the term inclusion and inclusive education by reflecting more on their history.

Inclusive education is a contested term and, in latest years, its ideas have gained multitudes of interest (Opertti and Brady, 2011). Yet the confusion about what the term implies remains (Booth and Ainscow, 2002; Ainscow, 2005, 2007; Ainscow and Miles, 2008; O'Gorman and Drudy, 2010; Opertti and Brady, 2011). The ambiguous nature of the character of inclusive education is meditated through distinctive authors (Booth and Ainscow, 2002; Ainscow and Miles, 2008; O'Gorman and Drudy, 2010; Opertti and Brady, 2011). As Slee (2004, cited in Ainscow, 2007), puts it, "...certainly the term has travelled so much that it becomes jet lagged" (p.3), but, as time goes on, individuals and organizations have described the meaning of inclusive education in a manner that satisfactorily suits their context. The selection of authors in this section is based on their perspectives concerning the definition of inclusive education. In keeping up with Opertti and Brady (2011:460), the definition of inclusive education is that, "Inclusive education is a holistic reform strategy for education systems aiming to achieve quality education for all. The key role of inclusive educators is to meet the diverse learners' needs and, especially those at risk of marginalization, underachievement and who are undermined, segregated and excluded from the regular education systems." As stated earlier, inclusion acknowledges that all learners with support can learn and that all learners should

have full access to and be enabled to participate using a common curriculum (Department of Education, 2014).

Moreover, according to O’Gorman and Drudy (2010), inclusive education is regarded as an education supplied for learners with and without disabilities inside the regular classroom where learning is supplied, but includes diversifications which might be made by the regular/mainstream classroom educator to reply to the precise characteristics which respond to the unique needs of each learner. In line with this, it is necessary that educators have enough skills and knowledge to adhere to this duty. This study, therefore, sought to establish educators’ views on and perceptions of inclusive education for learners with physical disabilities in mainstream classrooms. With respect to the educators’ roles, Opertti and Brady’s (2011) underscore the fact that the educators’ role in reaching an inclusive pedagogy is quite crucial.

In UNESCO’s (2007) definition the emphasis is on well-prepared educators who are capable of practicing inclusion both inside and outside of the classroom, by adjusting their methods to accommodate the different conditions that would enable disabled learners’ success in education. Further to that, O’Gorman and Drudy (2010) point out that educators’ adaptation to educating all learners irrespective of disabilities is what characterizes inclusive education. While these authors define the meaning of inclusive education in their own different ways, they are cognisant of the fact that the key considerations are within the inclusion perspective. The inclusion perspective, those authors write about, always consists of the perception of educators’ roles and their teaching practices, including their beliefs and attitudes, along with the model and professional growth. Previous research has confirmed the importance of every of these key considerations that are mentioned in the subsequent sections. Loreman (2009) provides a synthesis of the features of inclusive education evident in a few sources situated firmly on the functions encompassing key capabilities and categories.

Those functions encompass:

- All learners attend their community school.

Schools and districts have ‘zero-rejection’ coverage in terms of registering and coaching learners in their vicinity. All learners are welcomed and valued.

- All learners attend in normal, heterogeneous classrooms with same-age friends.
- All learners follow substantively similar programmes, with a curriculum that can be tailored and modified if wished. Modes of guidance are numerous and responsive to the wishes of all.
- All learners contribute to ordinary faculty and school room, studying, sports and activities.
- All learners are supported to make buddies and to be socially a hit with their friends.
- Adequate resources and group of workers in education are supplied within the school and district to assist inclusion (Loreman, 2009, p.43).

1.1.2 Conceptualizing inclusive education

A few inclusive education scholars, inclusive of Mittler (2012) and Ainscow and colleagues (for example Ainscow, Dyson, Goldrick, and West, 2011), conceptualize the assignment of inclusion as being that which identifies and removes obstacles to participation in education. Certainly Slee (2011) and Graham and Slee (2008) even go to the extent of signifying that the unique school-everyday schools' dichotomy is no longer a beneficial manner of framing education, and that obstacles that exist in both sectors should be removed with the intention to produce what is, ultimately, in contrast to either (that is, they advise the 'irregular faculty'). In keeping with Slee (2011), the irregular school is neither a special nor an 'ordinary' school, however one which has been re-predicted and restored to getting rid of boundaries to inclusion in an anticipatory way. He states that "Reforming education is a manifold and complex task that reaches into the deep structures of education and schooling to produce different policies, practices and cultures" (Slee, 2011:164). Although Macedo (2013) has similarly argued that worldwide policies like the US 'No Child Left Behind Act' (2001) create synthetic strains, but he concedes that the very concept of inclusion is to blur strains and to broaden education devoted to the uniqueness of learners.

1.1.3 Measuring inclusive education

Berlach and Chambers (2011) describe the preliminary step to inclusive education as having "...an accurate understanding of 'what is' ... in preparing for 'what may be' on a much broader scale" (p. 52). Not dissimilar to IQ tests that purport to measure

intelligence in the absence of an agreed upon definition of what that is, inclusive education measurement instruments are forced to provide their own definition of inclusion (or at least make it implicit within the criteria used) earlier than imparting regions for examination. Following the above definition of inclusion from UNESCO (2012) used in this report, schools should be equipped to each receive learners with numerous attributes, in addition, educators have adopted proactive methods to take away limitations to full participation. Schools must undertake the functions of inclusion, whilst at the same time being organized to dismantle mechanisms and practices that entrench exclusion (Forlin, 2013). Measuring, therefore, includes reviewing inclusion from the perspective of a whole-school approach together proffered by way of the UNICEF definition of "Inclusion is really about how well child-friendly schools are doing at making practical changes so that all learners, regardless of their background or ability, can succeed" (2010, p. 31). Winter and O'raw (2010) mention 10 themes associated with inclusive education as the:

- Provision of information
- Physical features
- Inclusive school policies
- Student interactions
- Staffing and personnel
- External links
- Assessment of achievement
- Curriculum
- Teaching strategies.

Donald, (2010) notes that inclusion is predicated on respect for diversity at all levels of education. Therefore, we need to deal with all learners, irrespective of their background, capability or instances and there must be flexibility in the curriculum when it comes to the desires of the learners with barriers to learning due to disability. Furthermore, adaptations need to be made for individual learners regarding capability and learning style. Aside from the flexibility of the curriculum, knowing the learners and their characteristics are taken into consideration as essential in an inclusive classroom (Pearce, 2009). The issue of inclusion needs to be

accommodated and good practices, policies or procedures that occur in schools should be aligned to create an environment where disability is celebrated. Several studies suggest that educators ought to know their learners better by collecting information, such as what they know, what they can do and what their interests are.

This assist educators to have a review of the curriculum and to exercise flexibility focusing on where, how to adapt it and the way the educator may focus wherein their learners are now. It is advised that educators use the learners' profile, as well as probe from preceding educators and parents to accumulate information that can assist them in understanding the learners well. Therefore, from the inputs of the previous educators, the information that can assist them in understanding the learner better, it is suggested that, preferably, inclusive educators may even use their information of their learners to assist in developing their very own strengths. Knowledge about the learners gives the educators the capacity to offer them different pathways to achievement (Pearce, 2009).

The study conducted by Pearce et al. (2009) points out that inclusion has been reviewed in Australia and it is reported that the inclusion of learners with disabilities in mainstream schools is considered challenging. Educators in an inclusive school are expected to have special understanding of their learners' barriers to learning and an understanding of the impact of these barriers in all areas of development. This, in keeping with Pearce (2009), requires a vast new set of skills, including the capacity to individualize teaching methods, to manage diverse teaching systems and to accommodate challenging learners' behaviours and to accommodate hard learner behaviours.

According to Avramidis (2010), educators view learners with emotional and behavioural difficulties as causing significantly greater concern than learners with other difficulties such as learning difficulties caused by physical impairments. However, according to Du Plessis (2013); Pearce et al. (2009) studies show that educators complain about the lack of skills to deal with these learners. Since 1994, in South Africa there is a more inclusive dispensation of understanding diversity. The policy on Special Needs Education: Building an Inclusive Education and Education System (Department of Education, 2001), hereafter referred to as White Paper 6, states that as far as practically possible, support must be provided at local

mainstream schools. Believing in and supporting a policy of inclusive education is not enough to ensure that such a system will work in practice (Department of Education, 2001), nor does it ensure that it will necessarily translate into what occurs within the classroom (Donohue and Bornman, 2014).

The inclusive education policy, as outlined in White Paper 6, recognizes that each learner is unique and therefore each has each a unique feature of learning needs. The underlying principle of inclusive education is to offer an education that is as equitable as viable for all learners, while adapting it to the needs of each learner (Thomazet, 2009). White Paper 6 accepts that a broad range of learning needs exists among the learner population at any point in time, and that, where these are not met, learners may fail to learn effectively or be excluded from the learning system. In this regard, different learning needs arise from a range of factors, including physical, mental, sensory, neurological and developmental impairments, psycho-social disturbances, and differences in intellectual ability, life experiences or socio-economic deprivation. Different learning needs may also arise because of:

- Negative attitudes to and stereotyping of differences.
- An inflexible curriculum.
- Inappropriate languages or language of learning and teaching.
- Inappropriate communication.
- Inaccessible and unsafe built environments.
- Inappropriate and inadequate support services.
- Inadequate policies and legislation.
- The non-recognition and non-involvement of parents.
- Inadequately and inappropriately trained education managers and educators.

To understand what is meant by the term “physical disability/physical impairment”, it is vital to explain the term as well as clarify a few examples of these disabilities. Physical impairment may additionally arise in numerous tiers of severity from barely perceptible to profound. General characteristics of learners with physical impairment/disabilities are that they experience demanding situations in the region of mobility and bodily vitality. With some of the neurologically associated physical impairments, there may be an incapability to control muscular movements voluntarily

(Bartshaw, Pellegrino and Roizen, 2007). Some of those disabilities are discussed as follows: Spinal bifida: Culatta (2003: 216) defines this disability as a congenital deviation of the neural tube - the spinal cord with the spinal column, which commonly surrounds and protects it. It is a neurological abnormality, which may completely influence many different systems of the body.

- Traumatic paraplegia and quadriplegia: is the incapacity to transport and a lack of sensation in the lower limbs, while quadriplegia involves all four limbs. Injuries or damage to the spinal column suppresses the transmission of impulses between the brain and the muscle mass (Batshaw, 2007).
- Post-poliomyelitis: According to World Health Organization (2010, Poliomyelitis commonly known as polio is an acute illness, which results in physical disability (WHO, 2010). Polio is a highly infectious disease that mainly affects young learners.
- Deafness: is one of the most prevalent disabilities with an estimated prevalence of 3-6 over 1000 live births in developing countries (Swanepoel, Storbeck, Friedland, 2009). Deafness is usually defined as the sensory impairment of not being able to hear, and usually suggests the need for hearing aid, speech therapy and use of sign language and gestures as a means of communication. Additionally, Swanepoel et al. (2009) argue that deafness has been often synonymous with “deaf and dumb”, “hearing impaired” or “concrete bound.”

Some of these learners as mentioned earlier experience barriers to learning due to their conditions and require assistive devices but experience barriers in accessing them due to several factors. In this segment, it is vital to explore these barriers and later touch base on the factors that are a hindrance to accessing assistive device. As this study is focusing on learners with disabilities, therefore, the focus is always on curriculum and schools or learning institutions. White Paper 6 as the current document concerned with learners experiencing learning needs is quoted as saying that;

‘One of the most significant barriers to learning for learners in special and ‘ordinary’ schools are the curriculum....’ In this case, barriers to learning arise from different aspects of the curriculum, such as:

- The content (i.e. what is taught).
- The language or medium of instruction.
- How the classroom or lecture is organised and managed.
- The methods and processes used in teaching.
- The pace of teaching and the time available to complete the curriculum.
- The learning materials and equipment that is used.
- How learning is assessed.

Furthermore, there are other hindrances that can be detrimental to learners with disabilities; which are the assistive devices like wheelchairs, Braille, hearing aids, etc. In the following segment, the factors affecting gaining access to these devices are discussed.

1.2.1 Factors affecting gaining access to assistive devices in South Africa

- **Leadership and governance:** The supply of mobile devices is usually a low region of priority for lots of governments in the growing international locations which include South Africa. As a result, it does not mirror in the nationwide legislation, guidelines or strategies. A worldwide survey was conducted in 2005 on the implementation of the United Nations Standard Rules on the equalization of opportunities for individuals with disabilities. The results showed that, of 114 countries that responded to the survey, 50% including South Africa had not passed relevant legislation and 48% did not have policies in place relating to the provision of assistive devices (South-North Centre for Dialogue and Development, 2006).
- **Physical environment:** Many barriers within an individual’s environment can limit a child with physical disabilities and the use of assistive devices. Physical environment can make it difficult or impossible to use assistive devices effectively (Wearmouth and Wielandt, 2009; Ameratunga et al., 2009). For example, an individual will not be able to use a wheelchair of good quality in

an inaccessible house, school or workplace. In South Africa many buildings, including schools, banks, government offices, and sport places are not accessible for learners with physical disabilities.

- **Awareness, cultural and social barriers:** Researchers have found out that many learners with physical disabilities and their families in the developing world including South Africa have limited awareness of the benefits of assistive devices and the services available to ensure access to them. For example, a study on the living conditions of people with disabilities in Lesotho demonstrated that there was a gap of 25.4% between the expressed need for assistive device services and awareness of these services (Kamaleri and Eide 2011). Social and cultural barriers may also affect the use of mobility devices – for example, orthotic for lower-limb weakness often come ready-fitted with a shoe, which means they cannot be used in places of worship and homes where shoes are not allowed. Learners in need of assistive devices face obstacles in accessing them because of their age, socioeconomic status, and severity of impairment or place of residence (Eide and Loeb, 2006).
- **Affordability:** Limited financial resources for many families living with physically disabled learners in South Africa have a significant impact on accessing assistive devices and related services for their learners. In the 2005 global survey it is mentioned that 36% of countries, South Africa being among these countries, had not allocated financial resources for developing and supplying assistive devices (South-North Centre for Dialogue and Development 2006). Many countries, including South Africa, rely on out-of-pocket payments as a means of financing, which may suggest why learners with physical disabilities and their families purchase more than half of all assistive devices directly (Albrecht et al., 2013). Affordability is highlighted as one of the main reasons why learners with physical disabilities do not receive needed health care in South Africa. With higher rates of unemployment and poverty than non-disabled people, many learners with physical disabilities are unable to afford assistive devices and related services (WHO, 2011).
- **Service delivery:** Services relating to the provision of assistive devices include referral, assessment, prescription, funding, ordering, product

preparation, fitting/adjusting, user training, follow-up, and maintenance and repairs. In South Africa, these services are often in short supply and located far from the places where most learners with physical disabilities live.

Where non-governmental organizations are involved in service delivery, they rarely have the financial means or capacity to develop sustainable service delivery systems for the whole country. Their services are focused on providing specific types of devices, and targeted at specific types of disability, age groups and/or geographical areas, where available services are centralized in major rehabilitation centres in large cities. Travelling to these centres can be costly and time consuming for learners with physical disabilities and their families, and public transport is often not accessible (Dejong et al., 2002; Penny et al. 2007). In many centres in South Africa, services relating to the provision of assistive devices are often inadequate and of low quality since materials and components are not always available. Inadequate service delivery can put learners with physical disabilities at risk of secondary conditions, for example, if prostheses are not fitted properly, the device may be abandoned, or if wheelchairs are provided without appropriate cushions, pressure sores can develop.

- **Human resources:** Lack of properly trained personnel constitutes a major barrier to the provision of appropriate assistive device services (Pearlman et al., 2008; Jensen et al., 2004, Magnusson and Ramstrand, 2009). Many countries report inadequate, unstable or non-existent supplies of rehabilitation personnel (Al Mahdy 2002; Bo, 2008; Stanmore and Waterman, 2007; WHO, 2011) and unequal geographical distribution of this personnel. South Africa faces the same challenges; there is a very high shortage of rehabilitation personnel (including prosthetics, ortotistics, rehabilitation doctors, occupational therapists and physiotherapists) resulting in very limited access to therapy and assistive technologies (Tinney et al. 2007). Many developing countries do not have educational programmes for rehabilitation professionals. For example, according to the 2005 global survey, the 37 countries had not acted to train rehabilitation personnel and 56 countries had not updated the medical knowledge of health-care providers on disability

(South-North Centre for Dialogue and Development 2006). Various manuals and guidelines and training programmes have been developed (WHO, 2008), but the implementation is not universal and is often under resourced. In addition to the lack of trained personnel, existing personnel do not have access to continuing education programmes, which allow them to maintain and update their skills and knowledge.

- **Production:** In South Africa, the production of assistive devices occurs in big cities but in some regions, it does not exist. There is limited access to the materials and equipment needed to produce assistive devices. Market-related factors also limit the production, for example, lack of awareness limits the demand for assistive devices because learners with physical disabilities and their families in many areas in South Africa are often unaware of the existence and benefits of these devices and may have limited purchasing capacity. With a restricted market, there are few/no incentives for the public or private sector to engage in the production of assistive devices. Where local markets are too small, local production may not be cost-effective. Duty and import taxes associated with assistive devices are also discouraging local businesses from importing them. Several barriers within an individual's environment can limit a child with physical disabilities and the use of assistive devices.

Moreover, some physical barriers associated with infrastructural architecture can make it difficult or impossible to use assistive devices effectively (Wearmouth and Wielandt, 2009; Ameratunga et al., 2009). For example, an individual will not be able to use a wheelchair in inaccessible environments like house, school or workplace. In South Africa many buildings, including schools, banks, government offices, and sport places are not accessible for learners with physical disabilities and even the transport mode is not user friendly.

Within the discussion of imposing inclusive education, several authors suggest components which might be essential in this manner, which include education, assets, legislation and educators in assisting these learners. The latter are regarded as key individuals in the development and implementation of inclusive education (Hegarty 1994; Meijer 2003; Norwich 1994). Because educators are defined as such (Ainscow 2007), several studies have tried to establish what attitude educators hold

towards inclusive education. Some of these stated that educators are positive towards the general philosophy of inclusive education (Abbott 2006; Avramidis, Bayliss, and Burden 2000; Avramidis and Norwich, 2002; Marshall, Ralph and Palmer, 2002), whereas other research has established that educators have serious reservations about inclusive education in practice (Florian 1998; Pearman, Huang, and Mellblom 1997; Ring 2005).

1.2.2 The importance of assistive devices

These devices are appropriate for learners who experience mobility difficulties because of a broad range of health conditions and impairments, including amputation, arthritis, cerebral palsy, poliomyelitis, muscular dystrophy, spinal-cord injury, spinal bifida, stroke and visual impairment. They are also relevant for older people who experience mobility difficulties. Studies have shown that assistive devices, when appropriate to the user and the user's environment, have a significant impact on the level of independence and participation which people with disabilities are able to achieve (WHO 2011). They have been reported to reduce the need for formal support services (WHO 2011) as well as reduce the time and physical burden for caregivers (Allen et al., 2006). The use of these devices creates opportunities for education and work, and contributes to improved health and quality of life (May-Teerink 1999; Eide and Oderud 2009; Shore 2008). Assistive devices may also have an impact on the prevention of falls, injuries, further impairments and premature death. Investment in provision of assistive devices can reduce health-care costs and economic vulnerability, and increase productivity and quality of life for learners with physical disabilities (SIAT, 2005). Learners using assistive devices because of their disabilities, as mentioned earlier, have numerous barriers in mainstream schools. Because of this view, the researcher had a concern on what the educators' perceptions concerning learners with disabilities in their classrooms.

In an inclusive education and training system, a wider spread of educational support services was created in line with what learners with disabilities require. This means that learners who require low-intensive support will receive this in ordinary schools and those requiring moderate support will receive this in full-service schools. Learners who require high-intensive educational support will continue to receive such support in special schools. (p 14)

Based on this view, educators' understanding of special education needs of these learners may also probably have an impact on their conduct in the direction of recognition of learners with disabilities (Subban and Sharma, 2006).

This study, therefore, focuses on educators' perceptions of inclusive education for learners with physical disabilities in mainstream classrooms. The recommendations for full-carrier or Inclusive schools (2010: 30) state that the hallmark of inclusive schools is an ongoing effort to find effective ways to make certain that learners access and make progress in the mainstream curriculum, even those receiving the individualized education and guide had to be successful. As such, aid is crucial to make sure that the inclusion of learners with disabilities in mainstream schools is made possible. The researcher asserts that this phenomenon warrants intensive research on the possibilities of this inclusion. A recent South African study conducted by Mtsweni (2013) confirmed this research's supposition that while there is a growing phenomenon of employing educators to support learners with disabilities in mainstream schools, there is a clear concern of their perceptions of inclusive education for learners with physical disabilities in mainstream classrooms. This process, as good as it is, has its shortfalls which have been discussed later in the study. Prior to that, the aim of this study hopes to answer the following research questions.

1.4 Research Questions and objectives

What are the educators' perceptions of inclusive education for learners with physical disabilities in mainstream classrooms?

1.4.1 Sub-research questions:

- How much do educators know about inclusive education?
- What are the educators' views regarding the inclusion of learners with physical disabilities in mainstream classrooms?
- What support do educators require from District Based Support Teams (DBST) to help them improve their practices?
- What practices can be employed for the future improvement of the model of inclusive education in South African schools?

1.4.2 Aims and objectives

This study hopes to:

- Investigate how much educators know about inclusive education.
- Examine educators' views regarding the inclusion of learners with physical disabilities in mainstream classrooms.
- Determine which support educators require from DBST to align their teaching methods with the needs of learners with physical disabilities.
- Establish what practices can be employed for the future improvement of the model of inclusive education in South African schools.

1.5 Significance of the study

The study hopes to pick out and identify techniques and interventions that may be useful for the future improvement of inclusive education in South African schools. The focal point is on educators, policy makers, curriculum developers and various educational stakeholders at different levels to take measures that this study hopes to overcome, to lessen the prevailing problems of implementing inclusive education in South Africa. Reference was drawn from other researchers who've performed research in inclusive education globally. This study hopes to contribute to research knowledge in the field of inclusive education through effective strategies and good practices used by other countries and to establish what we have achieved so far in fulfilling the mandate of inclusive education and the policies thereof.

1.6 Delimitation of the study

South African education is segmented into mainstream schools wherein most learners are registered and wherein the general curriculum is taught. These segments include private (former model C) schools wherein the medium of instruction is either English or Afrikaans; and special schools where learners with special education needs are segregated away from their regions and peers. This study focuses on all these segments. The study site is schools within the jurisdiction of the Eastern Cape. The population or sampling body constituted of educators from mainstream, private and special schools within the Mthatha education district. To further acquire information the researcher further visited one of the Youth Care

Centres to acquire information through observation of what really is in this type of an establishment. This was done to establish what can be regarded as an assisting device by checking what they have that is not in the schools mentioned earlier. This could be achieved by observing surroundings, physical structures, psychosocial environments and the pedagogical environment or classroom interactions with educators from the site whose duty is to educate learners with /out disabilities and to execute ways to enhance the model of inclusive education in mainstream schools. This is a rare sector and the researcher is not familiar with the proceedings that take place from it.

1.7 Contextual Definition of Terms

The study of educators' perceptions of inclusive education for learners with physical disabilities covers a variety of concepts. To ensure a clear understanding of the problem to be investigated it is necessary to explain some of these concepts:

Inclusive Education

In this study, this term was used to refer to the restructuring of special education to permit all or most learners to be integrated in mainstream classes through reorganization and instructional innovations, e.g. co-operative consultation and team teaching (Engelbrecht and Jansen, 2013:19). Inclusive education refers to the placement strategy that integrates general and special education learners with the goal of instructing all learners, regardless of the type of disability or level of severity in their neighbourhood school, in general classroom with their non-disabled counterparts in a public educational environment without any form of exclusion from any academic programmes (Ikujuni, 2012, Distance Education Programme, 2014).

Disability

According to this study, the definition of Engelbrecht and Jansen (2013:118) for disability as a defect that can take place at any stage of life or at birth was proper. They further alluded to the fact that the nature and degree of severity of the disability may influence the impact of such a disability on a learner, the family and all those involved with the learner. For those learners with physical or sensory difficulties, the nature of the problem has been often clearly recognizable. In other cases, it may not

be obvious to the educator that the learner has a problem at all, for example, intellectual problems, such as retaining information or concentrating on required classroom tasks for any length of time. Based on the above, the definitions of “impairments” and “disability” overlap and a clear distinction between the two terms is not possible, hence this study used both concepts.

Physical disability

The term physical disability in this study is associated with mobility and movement limitation, the inability to use limbs and trunk effectively because of paralysis, stiffness, pain, etc. Other physical disabilities include impairments which limit other facets of daily living, such as respiratory disorders and epilepsy. Individuals with physical disabilities often experience stigma concerning their physical competence and bodily appearance. This leads to impairment in social interactions and devaluation of an individual (WHO, 2012).

Integration

The term integration has, in literature, been used interchangeably with inclusion but there are those who consider that each has a different definition. Integration pertains to the mainstreaming of learners as part of an ambition to integrate the disabled into the community in respect of the different spheres of community life. In the United States of America (USA) the term mainstreaming was used and in the United Kingdom (UK) integration was used. Learners in special schools were segregated from the mainstream schools and those learners with special needs who were in mainstream schools were integrated (Farrell, 2012:53). Integration, therefore, according to this study, refers to an effort on the part of schools to recreate, in a mainstream setting, what special needs schools do for learners with disabilities.

Mainstreaming and inclusion

According to the study, inclusion has been described as a total integration process with special education support given according to the special education learner’s needs provided primarily within the general education classroom (Ritter, Michel and Irby, 2010: 10); whereas Villa and Thousand (2012:20) describe inclusion as the “principle and practice of considering general education as the placement of first choice for all learners.” The Guidelines for Full-service/ Inclusive Schools (2010) describes mainstream institutions as schools with an inclusive orientation that

provide quality education for all. Within an inclusive education system, the aim is to transform the mainstream in ways that will increase its capacity for responding to all learners.

The Salamanca Statement, 1994, is an international policy initiative which envisions that “Mainstream schools with an inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all” (1994, p. ix). Central to understanding the purposes for mainstreaming and inclusion, “least restrictive environment” can best be described as the general education classroom (Schwartz, 2013:40). A complement to mainstreaming, inclusion can best be described as the “full-time education of learners with and without disabilities in regular classroom settings” (Engelbrecht, 2012:112). White Paper 6, p. 17 also distinguishes between mainstreaming and inclusion as follows:

Table 1: The distinction between the terms mostly used in inclusive education

Mainstreaming/Integration	Inclusion
Mainstreaming is about getting learners to ‘fit into’ a kind of system or integrating existing system.	Inclusion is about recognising and respecting the differences among all learners and building on the similarities.
Mainstreaming is about giving some learners extra support so that they can ‘fit in’ or be integrated into the ‘normal’ classroom routine. Learners are assessed by specialists who diagnose and prescribe technical interventions, such as the placement of learners in programmes.	Inclusion is about supporting all learners, educators and the system so that the full range of learning needs can be met. The focus is on teaching and learning actors, with the emphasis on the development of good teaching strategies that are of benefit to all learners.

Mainstreaming and integration focus on changes that need to take place in learners so that they can 'fit in'. Here the focus is on the learner.	Inclusion focuses on overcoming barriers in the system that prevent it from meeting the full range of learning needs. The focus is on the adaptation of and support systems available in the classroom.
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Source: White Paper 6, (2001, p 17)

Special Schools

The Special schools term, according to this study, is used as schools that provide education to learners who need high level individualized and specialized support on a high-frequency basis.

The role of these schools is two-fold: full time provision of appropriate and quality education and support to those learners who are enrolled at these schools and providing advice, guidelines, training and mentoring on a consultative and part time basis to both educators and learners in mainstream schools regarding curriculum, assessment and instruction matters (DoBE, 2011a).

Diversity:

In this study, this term was used to refer to their conceptualization of difference, and to produce non-hierarchical plural identities. The school that values diversity does not separate or exclude anyone, but instead celebrates the plurality of its community, to the benefit and inclusion of all (Benjamin, 2012).

1.8 Contribution to the body of knowledge

An extensive review of the literature on inclusive education revealed that empirical research on the perspectives of educators in inclusive education in South Africa was negligible in earlier years. Moreover, the supporting roles of educators are absent in official policy documents, including the Guidelines for Full-Service/ Inclusive Schools (2010). The need for this research is not only to determine best inclusive practices, but to increase the repertoire of support strategies that schools, educators, communities and parents can use to ensure that diverse learning needs are met (Walton, 2009). It is recognized that the outcomes of the various research studies before this one is limited; it confirms that the functions of educators providing

individual support is primarily confined to the more affluent groups in South Africa, as it is not funded by the state (Giangreco and Doyle, 2007).

Due to the limited scope of this project and the research design used, the intention is not to offer a generalized conclusion, but to provide some insight into the support that is provided to accommodate the needs of individual learners with disabilities within mainstream contexts. To achieve this objective, an in-depth interpretive study highlights the perceptions of educators, using a restricted number of educators from mainstream, special and private schools which was seen preferable to provide more insight to fulfill this endeavor. Furthermore, this research aimed at doing comparative analysis of the strategies and policies that other countries are using to make the issue of segregation of these learners a thing of the past.

To respond to some of the main issues that are topical in the, “Learning for Democracy in an inclusive education system: Implications for Educator Development National Workshop Report, 2-3 December 2013”; one of the long-standing objectives of school reform has been to fulfill a clear mandate to all sectors within education to take responsibility for ensuring that the constitutional rights of learners with disabilities are realized. In this report, it is emphasized that, it is now 12 years into the 20-year implementation trajectory plan set out in Education White Paper 6 and thus, it is important to critically assess what has been achieved and to explore new and radical strategies to accelerate and strengthen the implementation of the policy towards 2021. This study, therefore, also hoped to establish how far we are in terms of adherence to this mandate.

1.9 Thesis contents

Chapter 1: (Introduction/Background); this chapter describes the background, research problem, and research questions of the thesis, aim and objective of the study, the significance of the study as well as contribution to new knowledge and contextual definition of key terms as they were used throughout the study.

Chapter 2: (Literature Review and Theoretical Framework): This describes the theory that informs the study and its relevance to it. Bronfenbrenner’s bio-ecological

Systems theory is the theoretical model that guided the study. (Literature Review) the key literature in the field of inclusive education, policies and educational support services, with a focus on their perceptions of inclusive education for learners with physical disabilities in mainstream classrooms were discussed in this chapter.

Chapter 3: (Methodology): discusses the research paradigm, research design and research methodology, outlining the selection of participants, data generation methods, mode of analysis, and ethical considerations.

Chapter 4: (Discussion of Findings): This chapter describes and discusses the results in relation to the aim and objectives of the study.

Chapter 5: Draws conclusions and makes recommendations for further research, highlighting the study's strengths and limitations, and, ultimately, provides a summary of the researcher's reflections.

Conclusion

This chapter describes the background, research problem, the significance and research questions of the thesis, aims and objectives of the study as well as contribution to new knowledge and contextual definition of key terms as they were used throughout the study, various relevant concepts were explained and the chapter outline was given. The next chapter will focus on the theoretical framework that guides the study and scholarly reviewed related literature.

CHAPTER TWO

2.1 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Introduction

This chapter is organized in two sections, it explains first, the theoretical framework that guides the study and later, the related literature used to complete the study. This chapter focuses and discusses the interpretive paradigm which guided this study. The theoretical framework is the theory of social change and, more specifically, structural-functionalism (Van den Bergh, 1963) which favours a unitary concept of society which emphasises social integration. It is relevant and important to be aware of the paradigm that informs this research. In keeping with Naicker's definition (1999), a paradigm is a framework for identifying, explaining and solving issues. According to philosophical traditions underpinning Interpretive research, these include Phenomenology e.g. Zuboff (1988), Ethno-methodology e.g. Suchman (1987) and Hermeneutics e.g. Boland and Day (1989).

Terre Blanche, Durrheim and Painter (2006) also concur with Walsham (1995) by referring to paradigms as all-encompassing systems of interrelated practice and thinking that define for researchers the nature of their enquiry along three dimensions, namely, ontology, epistemology and methodology. 'Interpretive studies assume that people create and associate their own subjective and intersubjective meanings as they interact with the world around them. Interpretive researchers thus attempt to understand phenomena through accessing the meanings participants assign to them', (Orlikowski and Baroudi 1991). 'Interpretive methods of research start from the position that our knowledge of reality, including the domain of human action, is a social construction by human actors and that this applies equally to researchers. Thus, there is no objective reality which can be discovered by researchers and replicated by others, in contrast to the assumptions of positivist science', (Walsham 1993).

Ontology specifies the nature of reality that is to be studied and what can be known about it. Epistemology specifies the nature of the relationship between the researcher and what can be known. Methodology specifies how the researcher may go about practically studying whatever he or she believes can be known (Terre

Blanche et al., 2006). The interrelatedness of these dimensions means that the responses given in any question, taken in any order, limit how others may be answered (Denzin and Lincoln, 2011).

Denzin and Lincoln (2011) further state that the ontological dimension specifies the form and nature of reality and what can be known about it. For example, if a “real” world can be assumed, then what can become known about it is how things really are and how things can work. The epistemological dimension refers to the nature of the relationship between the researcher and what can be known. If, for example, a “real” reality is assumed then the posture of the researcher must be one of the objective detachment or value-free to be able to discover how things really are and how things work. How the researcher can go about finding out whatever he or she believes can be known is what is referred to as the methodological dimension. For example, a “real” reality pursued by an objective inquirer requires control of possible confounding factors, whether the methods are qualitative or quantitative.

As mentioned in Chapter 1, this study is approached qualitatively from within an interpretive paradigm. The main aim of the interpretive paradigm for this study is to understand the subjective world of human experience. It is relevant for this study as it is aimed at investigating the perceptions of educators on inclusive education regarding learners with physical disabilities. Researchers within this paradigm aim to obtain a viewpoint of the participants as opposed to that of the researcher directly involved (Cohen, Manion and Morrison, 2007). Furthermore, interpretive researchers begin with individuals and set out to understand their interpretations of the world around them. The interpretive paradigm can be also called the “anti-positivist” paradigm because it was developed as a reaction to positivism (Mack, 2010; Cohen et al., 2007). The anti-positivist approach argues that the social world can be understood only from the standpoint of the individuals who are part of the ongoing action being investigated. It emphasizes the ability of the individual to construct meaning, thus it is sometimes referred to as constructivism. One of the advantages of this approach is the close collaboration between researcher and participant, while enabling participants to tell their stories.

The intention of the research, in line with Creswell (2007), is to rely as much as possible on the participants' views of the situation. Consequently, the researcher's intention is to make sense of the meanings others have about the world. Mack (2010), states that the interpretive paradigm was heavily influenced by hermeneutics and phenomenology.

Hermeneutics

Hermeneutics is the study of meaning and interpretation in historical contexts (Mack, 2010). The meaning-making cyclical process is the basis on which the interpretive paradigm was established (Mack, 2010). Another strong influence is the philosophical movement of phenomenology. A phenomenologist advocates the need to consider human beings' subjective interpretations or their perceptions of the world as our starting-point in understanding social phenomena (Mack, 2010). The role of the researcher in the interpretive paradigm is to understand, explain and demystify social reality through the eyes of different participants (Cohen et al., 2007). The main principle of interpretivism is that research can never be objectively observed from the outside; rather, it should be observed from the inside through the direct experience of people. The shift to inclusive ideas is not separate from the shift in paradigms that occurred late in the twentieth century. Within education, this shift is a move from a medical deficit model to a social system change approach (Swart and Pettipher, 2005).

Phenomenology

The word phenomenology is derived from the Greek word *phainesthai* which means "bring to light" (Van Rensburg, Landman and Bodenstein, 1988: 489). In this study, challenges that face the teachers in special schools when teaching EE are the phenomena under scrutiny. According to Lester (1999), phenomenology is the study of experience from the perspective of the individual, 'bracketing' taken-for-granted assumptions and usual ways of perceiving. According to Giorgi (1994: 212), bracketing is a process whereby "one simply refrains from positing altogether; one looks at the data with the attitude of relative openness." Creswell (2013) stated that phenomenological research does not focus on theory building, but the tenets of phenomenology attempt to build the essence of the experience from the point of view of the participant.

Creswell (2014: 14) defined phenomenological research as “a design of inquiry coming from philosophy and psychology in which the researcher describes the lived experiences of individuals about a phenomenon as described by the participants.” Van Manen (1990) concurred that, in phenomenology, experience is the starting point. In this research approach, factual accuracy is not of significance as the focus is on the person’s lived experience of what it is like to teach inclusive education in mainstream schools. Given the emphasis, phenomenological studies do not attempt to generate wider explanations; rather, their focus is on providing research accounts for individuals in a specific setting. Before exploring further details about the models involved in inclusive education, the theories that led to inclusive education are discussed in the section below and the paradigm shift was further explained.

2.1.1 Theories applicable in inclusive education

This phase explores diverse applicable theories, developments and problems within their next fields and the resulting influence on inclusive ideology and practices. These theoretical underpinnings are “associated with the practice of full inclusion or why others would possibly desire more than a few alternative placement options from segregated to included unique settings for learners with special education needs (SEN)”, (Zaretsky, 2005). These theoretical underpinnings are: the psycho-medical model, the sociological model, cultural model and schools’ improvement model (Clough and Corbett, 2000). These perspectives are not mutually exclusive. Regularly, all of them have become influential through the controversy that they generated.

Drawing from as far back as the 1950s and 1960s, the psycho-medical model was prevalent. It can be considered as a device of extensively medicalized ideas which essentially noticed disabilities as “deficits” and, in turn, encouraged unique (or separate) education for people with disabilities. On this model, disabilities are regarded as individual pathologies which warrant a call for medical treatment. Segregated schools had been formed for unique desires learners (Kivirauma, 2004). By the 1960s and early 1970s, this model ceased to achieve its usefulness (Fulcher, 1989) and, at some stage in this era, educational psychology had taken over in terms of developing the fields of special, integrative and inclusive education. New approaches emerged, and, in the long run it was argued that special needs learners

need to be taught in mainstream schools, instead of alternative establishments (Long, 2011).

According to the medical model, learning difficulties are explained solely in terms of the deficits within the child. It is a model of diagnosis and treatment. It focuses on pathology, and it deals with the specific pathology in a centered way. When applying this model to education, learners with any type of difference or specific disabilities are singled out and the origin of the difference is looked for within the learner (Swart and Pettipher, 2011). Some educators seem to believe that learners with barriers to learning should be removed from mainstream schools and taken to special schools. However, this model has come under a lot of criticism and a holistic view of the child is now demanded (Avramidis, 2012).

2.1.2 Medical and Social models of disabilities

Contemporary issues in disability and inclusion in education have their origin in the discourses of the medical and social model of disability (Slee, 2008). The models of disability are associated with different value systems, attitudes and behaviors with contrasting ideas between disability and inclusion (Pearson, 2009). Within these models, arguments about learners with disability gaining equal access to education provoked worldwide movements to support an inclusive education. A summary of each model/theory and its definition is provided in the next section.

2.1.3 The medical model of disability

The medical model of disability viewed disability as a sickness or disease of some sort whereby only the medical profession could intervene with treatment to correct it as much as possible (Mulvany, 2000). This theory of disability views the problems experienced by disabled people as the consequence of a disease (Kett, Lang and Trani, 2009). These ideas made it possible for the medical professionals to measure a person's limitation and devise corrective procedures to ensure the greatest degree of normalization. For example, when a wheelchair user is unable to get into a building because of the stairs, the medical model would suggest that it is the way the wheelchair is made that restricts the disabled person's access to the building. The medical model equated an individual's health status, impairment and capacity limitation, and failed to address social factors such as discrimination, prejudice and the inaccessibility disabled people faced (Officer and Groce, 2009). It saw disability purely as a problem of the person with disability, without considering the difference

between the type of impairment and the disability (Mulvany, 2000). The medical model perceived that because of the physical and psychological defect in their bodies, disabled people were more dependent, unintelligent, unattractive, helpless and childlike and unable to fulfil tasks (Fisher and Goodley, 2007; Badley, 2008).

2.1.4 The social model of disability

The social model of disability is defined as a theory that sees disability as a product of specific social and economic structures and aims to address issues of oppression and discrimination of disabled people that are caused by institutional forms of exclusion and by cultural attitudes embedded in social practices (Terzi, 2004). The social model believes that attitudinal and environmental barriers are the predominant obstacles existing in society: able-bodied people tend to fix their gaze on the disability of people rather than noticing their abilities (Mulvany, 2000). It advocates that places like buildings, schools and playing grounds should be made suitable to accommodate people with varying disabilities (Chappell et al., 2001). The social model of disability aims to eradicate the attitudinal and environmental problems faced by disabled persons by understanding them as full members of the society and adjusting situations to enable them to adapt and function within their society (Kett, Lang and Trani, 2009). From this perspective, the social model of disability has shifted the negative stereotypical attitudes towards people with disabilities and drawn people to appreciate that everyone, able-bodied or disabled, is equal. Therefore, the social model is credited with having the incremental influence that sparked human rights movements across the globe (Kett, et al. 2009; Terzi, 2004) and called for disabled people to participate in all aspects of life, including an inclusive education (Chappell et al., 2001).

2.1.5 Paradigm shift

A paradigm shift is a radical change in the way one views the world. The medical model (which was popular from the early 1900s) is a model of diagnosis and treatment. It is highly focused on pathology, sickness, the nature and etiology of the presenting problem, and dealing with the specific pathology in a centred way (Swart and Pettipher, 2005:5). When applying this model for education, learners with any type of difference or disability are singled out and the cause or origin of the difference is believed to be located within the child. Subscribing to this model leads

to a belief system that regards some learners as, at best, disadvantaged and in need of individual fixing and, at worst, as fundamentally deficient and, therefore, beyond support (Engelbrecht, 2004). There is much criticism of the medical model and many view it as problematic in understanding education today.

Sheridan and Gutkin (2000) point out that although assessing, diagnosing and treating pathologies of learners is relevant for much medical work, it is too restrictive in scope for educational support services. They continue to point out that neither education, support professionals nor learners, function in isolation. They are all influenced by the multiple systems that surround them and the many systems of which they are a part. "This simple observation has the most profound implications that we cannot serve learners effectively by de-contextualising their problems as internal pathologies, as the medical model would have us do. We must understand how dysfunction relates to the larger systems that encompass our clients, and find ways to intervene effectively with these systems" (Sheridan and Gutkin, 2000).

In view of this one can clearly see that a paradigmatic shift was required, a move away from medical understandings to a more holistic view of the child. This change came in the form of theories, such as Bronfenbrenner's bio-ecological model for human development (Swart and Pettipher, 2005). This model is a significant theory that can be used as a framework to analyze the different systems in inclusive education and this research. The researcher cited mostly from this theory and briefly explain what the theory entails and how it is relevant to an understanding of inclusion and the theoretical context of this research.

2.1.6 Urie Bronfenbrenner's Theory of Human Development: Its Evolution from Ecology to Bio-ecology

We describe the evolution, over three phases, of Bronfenbrenner's theory from an ecological to a bio-ecological theory. Phase 1 (1973–1979) culminated in the publication of the Ecology of Human Development (1979). Phase 2 (1980–1993) saw almost immediate modifications to the theory, with more attention paid to the role of the individual and greater concern with developmental processes. In Phase 3 (1993–2006) proximal processes were defined and placed at the heart of bio-ecological theory. Regardless of the precise timing of these phases, what is clear is

that the theory underwent significant changes between its inception and its final state. Unfortunately, as Tudge et al. (2009) pointed out, this fact has been ignored by many scholars. Tudge et al. analyzed 25 studies published between 2001 and 2008 (i.e., well after the beginning of the final stage in the theory's development), whose authors stated that their research was based on Bronfenbrenner's theory. Of those, only four were based on the most recent form of the theory, and most described the theory simply as one of contextual influences on development, completely ignoring the centrepiece of the theory in its final incarnation: proximal processes. As Tudge et al. argued there is nothing wrong with deliberately basing one's research on an earlier version of the theory or even on a subset of its key concepts; however, for theoretical confusion to be avoided, one should be explicit about the specific theoretical basis for the study. Proximal processes are discussed briefly in the section below to give clarity.

2.1.7 Proximal processes

Krishan (2010) states that the proximal or near-processes involve all the transactions between the child and the immediate surroundings that are responsible for the child's competencies and general well-being. These transactions drive development. Bio-ecological theory advocates that by strengthening human relationships (proximal processes) within supportive environments, it is possible to increase the extent of development realized into positive outcomes (Bronfenbrenner and Ceci, 1994). Hence, through strengthening human connectedness in supportive mainstream learning environments, it is possible to increase the extent of learning outcomes.

Bronfenbrenner and Ceci (1994) advance that this way of thinking allows one to recognize that many characteristics that are attributed largely to heritability, such as disability, can be impacted by environmental systems to produce developmental changes. In this vein, educators engaging in proximal processes in inclusive education contexts have the potential to play a key role in making inclusive education effective for learners with disabilities in mainstream schools.

Bronfenbrenner (2001) asserts that proximal processes are the primary mechanism through which development, effective functioning (Swart and Pettipher, 2011) and learning outcomes are actualized. He asserts that these interactions are the most powerful forces determining human development and learning outcomes

(Bronfenbrenner, 2001). The importance of relationships (individual–individual and individual–context) and how these relations influence the individual’s quest for learning, is highlighted within this theoretical framework (Smith, 2011). This makes this model relevant for a close examination of the relational aspects of support pertinent to learning in mainstream classrooms.

Proximal processes range from very direct influences such as learning experiences, individual beliefs and attitudes, to more indirect (or distal) influences such as socio-economic factors and public policy. Each level of influence, from direct to distal, has the potential to increase risk or offer protection for the learner with disabilities. A direct proximal influence is the role of the learning facilitator and the attitude and beliefs of parents and educators. Bronfenbrenner’s bio-ecological theory represents the family and the school as systems, influenced by larger social, political and economic realities (Seligman and Csikszmentihalyi, 2000). The socioeconomic resources for parents, who can afford to employ private educators, are more distal influences, which directly influence the proximal processes and serve as a protective resource. It is also acknowledged that there may be elements of risk involved in one-on-one facilitation for the learner with disabilities. Research cited in Giangreco and Doyle (2007) cautions that the utilization of paraprofessionals in international contexts has been associated with inadvertent, detrimental effects, for example, over-dependence, isolation, and stigma interfere with peer interactions, and interference with educator involvement.

2.1.8 Bronfenbrenner's Bio-ecological Theory

Bronfenbrenner (2001) defined his bio-ecological theory as “an evolving theoretical system for the scientific study of human development over time” (pp. 6963–6964).¹ It incorporates a four-element model involving the synergistic interconnections among proximal processes, individual characteristics, context, and time (the PPCT model). In other words, as he wrote, these four elements simultaneously influence development; their effects are not merely additive because they are a part of “an interactive system” (Bronfenbrenner, 1999, p. 10). As Bronfenbrenner and Ceci (1993) noted in the first published definition of proximal processes, “human development takes place through processes of progressively more complex

reciprocal interaction between an active evolving bio-psychological human organism and the individuals, objects, and symbols in its immediate environment” (p. 317). They went on to write:

“The form, power, content, and direction of the proximal processes that affect development vary systematically as a joint function of the characteristics of the developing individual and the environment (both immediate and more remote) in which the processes are taking place and the nature of the developmental outcomes under consideration” (Bronfenbrenner and Ceci, 1993, p. 317). Given the extent of these changes, and to avoid theoretical incoherence, scholars should be cautious about stating that their research is based on Bronfenbrenner’s theory without specifying which version they are using. Urie Bronfenbrenner’s theory of human development underwent considerable changes from the time it was first proposed in the 1970s until Bronfenbrenner’s death in 2005. It is, therefore, unfortunate that too many scholars treat the theory as though it deals solely with the influence of context on learners’ or adolescents’ development and take no account of what came to be the central aspect of the theory, namely proximal processes, and how individual characteristics, context, and historical time mutually influence those processes (see Tudge, Mokrova, Hatfield and Karnik, 2009).

Bronfenbrenner’s model is an example of a multidimensional model of human development and it has great relevance to understanding how different levels of systems in the social context interact in the process of child development. Bronfenbrenner (1979) believes that child development happens within four nested systems. The first is the “micro-system” which constitutes a pattern of activities, roles and interpersonal relations between individuals and the systems in which they actively participate, such as the family, the school or peers (Swart and Pettipher, 2011).

This is a critical distinction. On the one side, mechanists argue that to understand means to simplify what is complex, to break things down to examine what are assumed to be separate causal factors. For this reason, this theory is relevant for my study as its main research question is to establish the educators’ perceptions of inclusive education for learners with physical disabilities in mainstream classrooms.

The question was to simplify the complex issues of segregation and exclusion of these learners and to examine what we assume to be the causal factors of this exclusion from the educator perspective. Treating Bronfenbrenner's theory as one of the effects of the context on individual development is thus to treat it as a mechanist theory. The mechanist paradigm is one "in which foundationism, atomism, and reductionism are bedrock concepts" (Overton and Lerner, 2012, p. 376). The researcher cited from Bronfenbrenner's bio-ecological theory as the relevant theory that framed the study and it was discussed as follows:

Bronfenbrenner's bio-ecological model is valuable for application to educational support provisioning, as it allows for an assessment of the influences, interactions and interrelations between learners with disabilities, educators, parents and educators in the mainstream school setting (Pieterse, 2010). The core of the bio-ecological systems model of human development is the idea of proximal processes. However, Donald, Lazarus and Lolwana (2010) describe proximal interaction as the close, face-to-face, and usually sustained social interactions, which become progressively complex and result in learning and development. As this research focuses on the proximal interactions pertinent to the processes involved in facilitating and supporting learners with disabilities, Bronfenbrenner's bio-ecological systems model of human development was deemed appropriate to provide a framework for drafting question items whose responses could assist in establishing educators' perceptions of the teaching of learners with physical disabilities into mainstream classrooms.

In a pilot study that was conducted by Maher (2009) in the Kwa-Zulu Natal Province of South Africa regarding inclusive education, the study looked at educators and parents, learners and workers to determine how these various parties perceived the extent to which inclusive education was being implemented in their communities. It was discovered that the ostracism of learners with disabilities was perceived as a barrier by participant groups. Educators were found to have put the blame on negative societal attitudes towards disability within mainstream schools and considered this a justification for maintaining separate schooling of learners with special needs. In the same study, parents and children perceived that learners might be safer in special schools, due to the negative attitudes portrayed by other learners and educators (Maher, 2009).

Bronfenbrenner's bio-ecological framework for human development applies socio-ecological models of human development. Bronfenbrenner postulates that to understand human development, consideration of both the ecological system in which growth occurs, as well as the biological and genetic aspects of the person in human development is paramount. Inclusive education is grounded in the bio-ecological system of Bronfenbrenner which emphasizes that there is a complexity of influences, interactions, and interrelationships between the individual (learner) and multiple other systems (Swart and Pettipher 2011). The bio-ecological theory allows for the exploration of the development of inclusive education as constructed and restricted by aspects operating on different systems. It also allows for an examination of how practices are shaped by the interactive influence of individuals and their social environment (Bronfenbrenner, 2005).

The interrelated nature of the ecological systems implies that educators, learners with disabilities, families, schools and the learning context, are integrally involved in a learning environment (Hines, 2008). To provide holistic support within a socio-ecological approach to inclusive education, as opposed to providing individualized intervention, all the influences, interactions, and interrelationships are explored by role players in the relevant systems working together in collaborative partnerships (Engelbrecht 2007; Swart and Pettipher, 2011). The first level is the "micro system" which constitutes a pattern of activities, roles and interpersonal relations between individuals and the systems in which they actively participate, such as the family, the school or peers (Swart and Pettipher, 2011).

The second level is what Bronfenbrenner refers to as the "mesosystem". At this level the family, school and peer group interact with one another, causing adaptations in each of the systems. An example would be of the school management taking ownership of the establishment of inclusive schools and interacting with other role players. The understanding gained might help educators to understand that, as contextual factors might hinder learning, they are considered important to the formation of collaborative relationships. "Implementing inclusion is not possible without paying attention to developing relationships between the different systems", (Swart and Pettipher, 2011).

This is the immediate environment experienced by the child, where proximal interactions occur. This type of interaction refers to face-to-face, usually continuous social interactions. When looking at how this theory informs inclusion, it can be deduced that implementing inclusive education is not possible without paying attention to relationships developing between the different Microsystems (Swart and Pettipher, 2011). This needs to be done to give educators an idea of the effects of contextual factors on the child's functioning and it is relevant to understand the potential for collaborative relationships.

The third level is referred to as Exosystem. This is including other systems in which a child is not directly involved, but which possibly influence the people he or she has proximal relationships within the micro-systems, (Donald, 2006). Examples could include the education system (e.g. curriculum, inclusive policies, constant restructuring of education policies and documents on inclusive education, parents' work place and how educators perceive inclusive education). This framework is relevant to the study when the researcher seeks to understand the perceptions of educators regarding the role of District Based Support Teams (DBST), as well as the Inclusive Education Team (IE Team), in establishing inclusive schools. Educators do not work in isolation as schools are made up of school management, learners and parents. All these components should work collaboratively for the successful establishment of inclusive schools.

A fourth and the last level is what Bronfenbrenner refers to as the "macro-system". It involves dominant social, cultural and economic structures, as well as beliefs, values and practices that influence all systems. This system includes ideologies and discourses inherent in the systems of a specific society (Donald et al., 2006). Examples could include democracy, social justice, equality and freedom from discrimination. The principle of inclusion, according to Swart and Pettipher (2011), is derived from this level.

Encompassing these four systems is what Bronfenbrenner refers to as the Chrono-system. Swart and Pettipher (2011) describe this system as developmental time frames that cross through and affect the interactions between the systems and, in turn, their influences on individual development. Within inclusion, one should be aware of the potential barriers, assets and support factors (both internal and

external) that exist for learners, educators and all the other systems that exist in and around a school. It is in the interaction between any of the above levels that barriers may occur or supports exist. The process of interactions of the layers of learners with disabilities is affected by relations between settings and by the larger context in which the settings are embedded in collaborative partnerships. These systems are clarified in the Figure 1 below.

Figure 1 underneath illustrates the systems stated above by Bronfenbrenner's, (2001) bio-ecological model

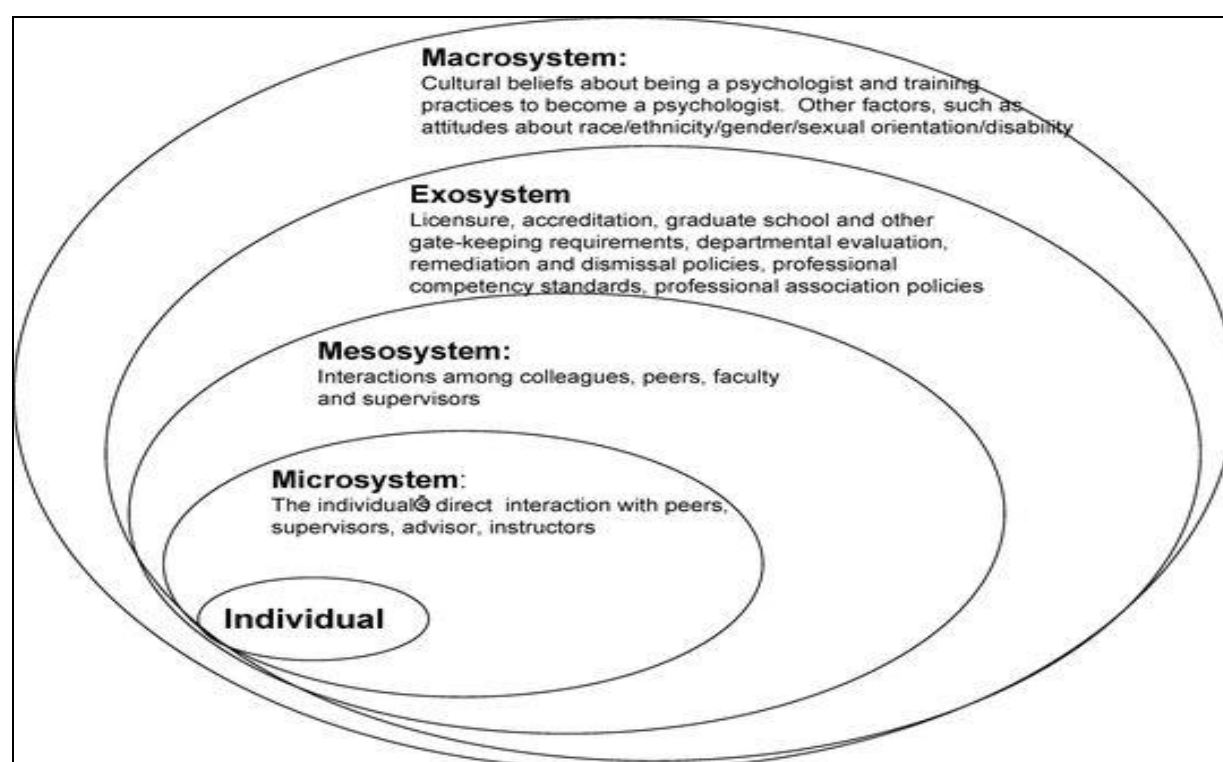


Figure 1: Bronfenbrenner's Bio-ecological model (Bronfenbrenner, 2001)

As Tudge et al. (2009) and Rosa and Tudge (2013) made clear, however, even in the 1970s Bronfenbrenner's theory was ecological, with development having to do with emergent properties stemming from the interaction of individual and environment. By the early 1990s, and the introduction of proximal processes and the PPCT model of the bio-ecological theory, there was even less reason to view the theory as one of independent effects (as required by mechanist theories). Overton (2013, 2015) provided no direct evidence supporting his placement of

Bronfenbrenner into the mechanist camp; instead, he seems to have relied on Mistry and colleagues (Mistry, Contreras, and Dutta, 2012; Mistry and Dutta, 2015) and their interpretation of the theory. Overton (2015) quotes the same passage regarding Bronfenbrenner's bio-ecological approach referring to the following:

Culture is represented as the outermost layer of context or macro-system. Although this model has conceptually focused on the interplay among the various layers of the context (i.e., psychological, biological, cultural, historical, institutional), empirically, the specific layers have been treated as split-off independent variables that influence behaviour and development as efficient causes. Thus, culture is conceptualized as a feature of environmental or ecological context that exists independent of the individual (Mistry and Dutta, 2015, p. 370, as cited in Overton, 2015, p. 25)

The “specific layers” of context do not, in fact, act as efficient causes but can only ever exert an influence during proximal processes — at the same time, therefore, as the individuals engaging in those proximal processes exert an influence. Development, in Bronfenbrenner's bio-ecological system, occurs because of the synergistic relation between individual and context during proximal processes. Bronfenbrenner and Morris (2006) explicitly stated that the two “propositions” (relating first to proximal processes and second to the way they are synergistically influenced by the participating individuals, context, and time) “are theoretically interdependent and subject to empirical test. An operational design that permits their simultaneous investigation is referred to as a Process-Individual-Context-Time (PPCT) model” (p. 798).

It is worth noting, however, that Lerner (2015; Lerner, Johnson, and Buckingham, 2015) includes Bronfenbrenner's theory within the RDS paradigm, as indeed did Lerner and Overton (2008). Lerner (2015) argued that from the early 1970s Bronfenbrenner's ecological approach was bidirectional, early evidence of “a burgeoning conception of the interrelated, mutually influential relations between individuals and contexts that define the basic processes of human development” (p. 166). Similarly, writing about Bronfenbrenner's theory from the mid-1990s, Lerner et al. (2015) noted: “In the PPCT model, the *process* of development involved mutually influential relations between individuals and contexts” (p. 86).

There is clearly some difference of opinion, then, as to whether Bronfenbrenner's theory can be said to fit within the RDS paradigm. Perhaps the more serious problem is the attempt to dichotomize what, according to Pepper (1942), are three different paradigms, none of which can be subsumed into any of the others. As Tudge has argued (e.g., Rosa and Tudge, 2013; Tudge, 2008; Tudge et al., 2009), Bronfenbrenner's theory fits within the contextualist paradigm, as it clearly accepts the idea of formal cause and does not accept the notion of a final cause. Given differences at the ontological and epistemological levels, there also should be equivalent differences at the level of method. For mechanists, sometimes termed *neo-positivists* (Tudge, 2008), this essentially means carefully controlling variables to ensure that the separate effects of each can be identified and measured. Classic experimental studies are good examples in which all is held constant but there are one or more variables that are being studied. In quasi-experimental or non-experimental studies, control may be exercised statistically. Interaction effects are, of course, possible, but interaction is meant in the sense of statistical interaction, as when the effects of one variable are moderated by those of another.

The methods employed by organicists and contextualists should be quite different from those used by mechanists. Believing in formal causes or development being the result of the emergent properties arising from the interaction of two or more factors, there is no point in trying to control variables to see their effects independent of the others; there are no effects that are independent of others. The goal is to try to understand the joint, synergistic effects of several relevant influencing factors. However, conducting research in a climate of simplification means that the complexity inherent in contextualist or organicist theorizing is too often reduced to methods that while simpler to apply, are simply inappropriate. In other words, any research that reduces Bronfenbrenner's theory to the independent effect of context on development is misguided, treating his theory as mechanist rather than contextualist.

To distinguish organicist and contextualist methods, the former, but not the latter, should be concerned with three of the "defining features" that Overton (2013, p. 53) provided: order and sequence, direction, and relative permanence and relative irreversibility (each of which has to do with final cause). The other two that Overton

(2013) mentioned, namely “that inputs are not proportional to outputs” (p. 53) and that epigenesis and emergence are related to formal cause, thus are relevant to both organicism and contextualism.

Too often, as others (e.g., Abend, 2008; Thomas, 1997) have argued, the terms *theory* and *theorizing* are sloppily used, often without much or any concern with the relation between the study's theoretical “foundation” and the empirical data gathered and analyzed. O'Brien (2005) contrasted the mismatch between our field's “contextual and dynamic” worldview (a worldview that involves “a complex system of reciprocal influence”) and research that examines “direct or linear effects of individual or contextual characteristics on some outcome that is described as if it was static and immutable” (p. 888). This seems to be the case with the way in which Bronfenbrenner's theory is typically used. As we have shown, it is a contextualist theory that is too often treated, for research purposes, as though it is mechanist. Their intent is therefore to extend the critique of Tudge et al. (2009) for articles published from 2010 onward in which the authors explicitly stated that their research was based on Bronfenbrenner's theory (rather than simply citing it) and to categorize the studies according to whether the authors at least referred to the mature version of the theory and, if so, how they used the theory in their research.

2.1.9 Relevance of the Support structures within an ecological systems approach in South Africa

In the Education White Paper 6 (EWP6) (Department of Education, 2001), the policy on building an inclusive education and training system provided key strategies regarding the development of support structures. These strategies are clearly placed within Bronfenbrenner's ecological model. Bronfenbrenner (1979:3) describes the environment as a “set of nested structures” [micro, meso, exo, macro and chrono-structures] where each of these structures influences the development of the learner. Berns (2012:18) describes the microsystem as the innermost structure where the earliest effect on the learner is the interaction between the family, peers, childcare and school. Bronfenbrenner (1995:599-618) refers to these relationships as being bi-directional, meaning that adults influence the development of the learner and vice versa. Support for both learners and teachers should start in this innermost structure. If learners lack support by the adult (such as the teacher or other support personnel)

at this early stage, they are already at a disadvantage. In addition, it also has an impact on the development of the learner when the adult – the caregiver and teacher – is not supported by other adults, such as colleagues and other professionals, in his or her endeavours to support learners with barriers to learning. The micro-system is contained in the second contextual structure, called the meso-system.

The interconnections of the components of the microsystem such as the home, siblings, family, school and development of the learner are the functions of the meso-system (Berns, 2012:20). Effective interaction between these micro-systems is essential, as it influences the ability of learners to achieve their optimal learning potential. It is, therefore, in the meso-system where support is pivotal, as the reciprocal relationships between the above-mentioned role-players contribute to the optimal development of the child. All the support structures that were discussed fall under the meso-system.

The micro- and meso-systems are in the exo-system. This structure contains role-players such as the extended family, the neighbourhood, the parents' work environments and the mass media (Berns, 2012:22). These factors can play an important role in the successful functioning of the support structures mentioned earlier; however, it does not affect the learner directly. The macro-system is not context-based. It is the outer structure and it informs the micro-, meso- and exo structures. It consists of cultural values, customs, laws and national policies including, for example, the Education White Paper 6 (DoE, 2001). The larger principles affect the interactions of the other layers in a cascading manner (Paquette and Ryan, 2001:2), and this directly affects the development of the learner. Public policy, for example, determines properties of the other three systems happening in everyday life which, in turn, has an influence on the behaviour and development of the learner (Bronfenbrenner, 1979:9). It is the policies that have been implemented to give effect to inclusive education, such as the EWP6 (DoE, 2001), the Screening, Identification, Assessment Strategy (SIAS) document (DoBE, 2014), Guidelines for Inclusive Learning Programmes (DoBE, 2010) and others that have an impact on teachers and learners in need of support.

The chrono-system involves temporal change in ecological systems or even in individuals, which produces new conditions affecting development (Berns, 2012:26).

The dimension of time is encompassed in this system, because it is related to the environment of the child. Children react differently to environmental changes (Paquette and Ryan, 2001) and it is therefore necessary that support structures take note of learners' and teachers' changing needs to successfully provide support.

Support structures for schools, teachers and learners in South Africa, as formulated by the various policy documents, are, as mentioned earlier, located in the meso-system. This includes the establishment of District-Based Support Teams (DBST), Institution-Level Based Support Teams (ILST) (also called school-based support teams), Full-Service Schools (FSS) as well as Special Schools as Resource Centres (SSRC). The responsibility of the DBST is "to provide a co-ordinated professional support service that draws on expertise in further and higher education and local communities, targeting special schools and specialised settings, designated full-service and other primary schools and educational institutions."

The EWP6 (DoE, 2001) refers to the first level of support for learners and teachers in a school as the Institution-Level Support Team (ILST). This team comprises teachers, volunteers, members of the school management team, members of the District-Based Support Team (DBST) and other stakeholders from the community (such as health professionals, other governmental departments and non-governmental organisations). Its key functions are to co-ordinate support services within the school by identifying and addressing learner, educator and institutional needs, the development of learner support programmes for learners, to provide training for teachers and to encourage collegial collaborative support and, ultimately, liaise with the DBST. Should the ILST not be able to support the learner/s and teachers, and then the DBST is the next level of support that should respond to the request from the school's ILST – for additional support for schools, teachers and learners and to monitor this support provision (Nel, Nel and Lebeloane, 2013:56-57).

In his study, Makhalemele (2011) found that the DBST members indeed realise that their roles have changed and that they now include, inter alia, the provision of resources to schools; the evaluation programmes and suggestions for modifications; the provision of collaborative formal and informal support with communities, educational institutions and other sectors. It was also found in this study (Makhalemele, 2011) that the DBST members find it difficult to fulfil these changed

roles. Currently, the DBST roles are not being executed successfully, which may be due to insufficient support received from the National Department of Education and because there are gaps in the responsibilities of the national Department of Education, the provincial departments and the districts. In addition, there are other barriers that also hinder the DBST's service delivery. An example is the inadequate facilities and infrastructure that are available to DBST members to provide education support services at the district level, more specifically, the inadequate availability of transport for officials to visit schools and the limited human resources – which leads to the overburdening of those district officials who are available.

The DBST needs to support, train and mentor those teachers who need it and they should arrange specialised support from the SSRC (Johnson and Green, 2007). These SSRCs should preferably be attached to schools for them to support the learners, teachers, parents and the community. By clustering mainstream schools that fall within the same jurisdiction of the SSRC, by conducting communal workshops for example, is one way of capacitating teachers in these schools (Makhalemele, 2011:201). The DBST must also ensure that the FSS has physical, material and human resources and provide the schools with support programmes which involve skilled or specialised personnel and the use of assistive devices (organised from a central point).

Where a learner needs an ISP and additional support/out-placement, the DBST needs to ratify this. In the case where learners have physical or sensory disabilities, they should be assessed by the DBST. Furthermore, the DBST must also assist teachers with the curriculum, to make it more flexible (in terms of their teaching methods and assessment); they must also provide illustrative learning programmes, learning support materials and assessment instruments; and on-going training and support to ensure that teachers make the curriculum accessible to all learners (Makhalemele, 2011:26-29).

In what is obviously a trans-disciplinary approach, the SSRCs, DBSTs and hospital (therapists) services must be employed to assess what devices are needed and they should do the fitting thereof (Makhalemele, 2011:38), while the school must assist in giving learners free access to assistive devices through the Department of Health. Teachers should receive continuous support on how to use assistive technology and

the DBST should also assist the subject advisors with the curriculum to make it more accessible for all learners (Makhalemele, 2011:45). Furthermore, full-service schools (FSS) should have the capability to deal with a diversity of learning needs, irrespective of the disability or differences in learning style or pace or social difficulties experienced. This should be done by establishing strategies to assist curriculum and institutional transformation as well as by providing additional support to teachers and learners from other mainstream schools (DoBE, 2010). Teachers at these schools also need to provide various levels of support to neighbouring schools, for example, they can share resources, skills and technology; ideas on how to prepare learning materials and good practice examples.

Special Schools as Resource Centres (SSRCs) should, in collaboration with the DBST and FSS, exchange knowledge with surrounding mainstream schools, provide professional development to teachers as well as sustainable support to learners and teachers (DoE, 2001; DoE, 2005). In recent years, Learning Support Educators (LSEs) have been appointed at District Offices as members of the DBST. These educators are assigned to various schools where they provide assistance regarding the identification and support of learners experiencing barriers to learning. At a national workshop entitled, “Learning for Democracy in an Inclusive Education System: Implications for Teacher Development”, these learning support educators (LSEs) are recognised as contributing immensely in building partnerships, providing teacher professional development, supporting the ILST and networking with community role players (DoE, 2005).

2.1.10 Relevance of the bio-ecological model to teaching and learning

The bio-ecological model is used as a tool to emphasize the complexity of influences, interactions, and interrelationships between the individual (learner) and multiple other systems (Swart and Pettipher, 2011). It also establishes that, in learning, the influential environment is not merely the immediate context in which the person seeks learning; it is also argued that a complex and dynamic relationship exists between the learner, the mainstream school, the broader education system and the social, political and economic context of which they are all part. By identifying the interconnectedness within and between these systems, it facilitates a better understanding of inclusive education.

Applying the bio-ecological model of learning and teaching thus requires a focus on the mechanisms alongside the context of learning and teaching as equal determinants of the learning outcome (Smith, 2011). This establishes the basis for understanding learners within their ecology as active participants in their learning, where optimal learning occurs through interactions that are bidirectional and reciprocal. This allows for the exploration and examination of how the learning processes are constructed and shaped by the interactive influence of educators, and learners with disabilities in the mainstream education context. A premise posited by Bronfenbrenner is that human development is a joint function of both individual instigative persons' characteristics and the environmental context in which the individual is situated (Lewthwaite, 2011). It emphasizes that individual attributes and characteristics of the environment, the micro-system, could enable or constrain the learning experiences of learners with disabilities in mainstream settings (Lewthwaite, 2011).

All schools are made up of many levels or layers of functioning (learners, parents, educators, school management, curriculum, other schools in the area, policies, the wider community, national education issues, etc.). Directly or indirectly, functioning in one area affects functioning in another. When changes are made at a management level, it is experienced in different ways by all the other constantly interacting systems. In the same way, if attitudes or actions in one classroom change, the effects can filter through into other systems and areas of school functioning. For example, a child may take a new thought or idea discussed in class on to the sports field or to the family dinner table that evening. In the same way, the educator might chat about this same idea in the staffroom or the idea may inform her behaviour or subsequent actions. Therefore, although the effects one system has on another may be clear and obvious, they may also have a ripple effect on another. On the assumption that successful implementation of inclusive education policy largely depends upon educators, studies of their perceptions have been carried out internationally in educational institutions to understand why educators continue to hold negative views about inclusion ((Avramidis and Norwich, 2012)). This behaviour is caused by several issues, amongst others, is the lack of support from relevant personnel, lack of proper knowledge and skills. To align with this fact, research in South Africa has found that educators experience the implementation of inclusive

practices in their classrooms as stressful and they report that becoming effective in inclusive practices in a classroom can be demanding if there are limited and inefficient support structures available (Donohue and Borman, 2014; Dreyer, 2011; Nel et al., 2013).

2.2. LITERATURE REVIEW

The literature review in this chapter highlights the views, conceptions and misconceptions on inclusive education. The following sections of this chapter specifically explore research literature related to inclusive education and inclusion. It also reviews the literature on factors that influence educators' perceptions towards inclusion in mainstream schools. This chapter first unpacked what disability and inclusion are, then the barriers experienced by learners with disabilities. It presents the difference between integration and inclusion, and it defines inclusion. It then discussed each sub-research question into main headings for literature review, and later considered sections on relevant empirical studies.

2.2.1 Definition of disability

Defining what disability is stays complicated, as there are many one-of-a-kind companies of disabilities and inside those companies, there are big individual variations. This means that trying to outline incapacity is complicated and frequently quite arguable. Disability is “the umbrella term for impairments, activity limitations and participation restrictions, referring to the negative aspects of the interaction between an individual (with a health condition) and that individual’s contextual factors (environmental and individual factors)”, (World Report on Disability, 2011: 4)

The report also elaborates, “Disability is complex, dynamic, multi-dimensional, and contested. The transition from an individual, medical perspective to a structural, social perspective has been described as the shift from a ‘medical model’ to ‘social model’ in which people are viewed as being disabled by society rather than by their bodies”, (World Report on Disability, 2011: 4). The worldwide category of Functioning (ICF), as mentioned in UNESCO (2009:101), relating to ‘educating learners with Disabilities in Inclusive Settings’, defines incapacity as “The outcome of the interplay between someone with impairment and the environmental and attitudinal barriers s/he may also face or a restrict or incapability to perform an

activity in the manner or in the range considered every day for a human being, in most cases because of impairment.” Incapacity in the Ethiopian context is known to refer to the UN definition, in line with 2007 populace and Housing Census of Ethiopia (p.179), someone who became not able to carry out or is confined in terms of carrying out sports that others can do due to congenital or long-time physical/mental disabilities changed into being recognized as a disabled individual.

Short-term difficulties due to temporary conditions were excluded. In general, an individual was defined as disabled if, due to physical or mental injuries, he or she could not fully perform activities that other healthy individuals could do. The medical model and the social model are often presented as dichotomous, “but disability should be viewed neither as purely medical nor as purely social: individuals with disabilities can often experience problems arising from their health condition. A balanced approach is needed, giving appropriate weight to the different aspects of disability” (World Report on Disability, 2011: 4).

Some of the disabling outcomes of impairments may be reduced if learners could:

- a) Interact with friends, peers and adults in their community,
- b) Experience several environments that decrease the impact of impairment, for example, homes that haven't any steps,
- c) Be taught with the aid of parents and educators who help them to examine new capabilities, and
- d) Meet and learn from different humans with disabilities who can emerge as role fashions and sources of inspiration (UNESCO, 2009:7).

2.2.2 Definitions of inclusive education

Inclusive education is a contentious term that lacks a decent conceptual consciousness, which may result in a contribution to some misconception and harassed exercise. When it comes to schools, learners with incapacity, the United Nations Educational, Scientific and Cultural Organization (UNESCO) first stated in 1994 that inclusive schools were the most effective way to counter discriminatory approaches and attitudes towards learners. International legislation and policy

subsequently evolved to challenge exclusionary practices and focus attention on equity and access to high-quality education for all, while respecting diversity (UNESCO, 2008). According to UNESCO (2009) "... an 'inclusive' education system can only be created if ordinary schools become more inclusive – in other words, if they become better at educating all learners in their communities (p. 8)". Article 24 of the UN Convention of the Rights of Persons with Disabilities recognizes that education should be accessible "... without discrimination and based on equal opportunity ... within an inclusive education system at all levels ..." It is far widely stated, nevertheless, that learners with disability deserve to enjoy special forms of exclusion which vary relying upon their disability, home, and the culture or class to which they belong (UNICEF, 2013).

According to du Plessis (2013: 78), "inclusive education in the South African context is defined as a learning environment that promotes the full personnel, academic and professional development of all learners irrespective of race, class, gender, disability, religion, culture, sexual preference, learning styles and language." Stubbs (2002: 21) stated that "Inclusive Education represents a shift from being preoccupied with a particular group to a focus on overcoming barriers to learning and participation." Makoelle (2013) stated that the implementation of inclusive education in South Africa came amidst the process of phasing in an outcomes-based curriculum (OBE) which is based on the same assumptions as inclusive education, that is, on the belief that all learners can learn and succeed and that they have full control over their learning.

As stated in the White Paper 6 (DOE, 2001: 16), the tenets of inclusive education and training, are described as:

- acknowledging that all learners and youth can learn and that all learners and youth need support;
- accepting and respecting of the fact that all learners are different in some way and have different learning needs which are equally valued and an ordinary part of our human experience;
- enabling education structures, systems and learning methodologies to meet the needs of all learners;

- acknowledging and respecting differences in learners whether due to age, gender, ethnicity, language, class, disability or HIV-status;
- broader than formal schooling and acknowledge that learning also occurs in the home and community, and within formal and informal modes and structures;
- changing attitudes, behavior, teaching methodologies, curricula and the environment to meet the needs of all learners;
- maximizing the participation of all learners in the culture and curricula of educational institutions and uncovering and minimizing barriers to learning; and
- Empowering learners by developing their individual strengths and enabling them to participate critically in the process of learning.

Inclusion in education is recognized as a basic human right and the foundation for a more just and equal society (European Agency for Development in Special Needs Education, 2012). Interpretation of inclusive education is, however, an increasingly contentious term that challenges educators and educational systems to think about the work of teaching and learning in different ways and from varied perspectives. According to Grima-Farrell, Bain and McDonagh (2011, p. 118), “Inclusive education represents a whole-school concern and works to align special education with general education in a manner that most effectively and efficiently imparts quality education to all learners.”

The issue of equity has been a major force internationally, underpinning the movement towards a more inclusive educational system and the way in which inclusion is defined (Forlin, 2012). Loreman (2009) argues “...most educators know very well what inclusion is, but it is sometimes politically expedient for them to manipulate the term to suit whatever practice they happen to be currently engaged in, be it inclusive or not” (p.43). It is also possible that the lack of a tight conceptual focus that inclusive education suffers from may have contributed to misconception and confused practices (Berlach and Chambers, 2011). In the words of Graham and

Jahnukainen (2011), "While some might say that we have witnessed the 'globalization of inclusion', questions remain as to what has spread" (p. 263).

2.2.3 The effects of impairments on inclusion

How can the diversity of learning needs and potentials be properly addressed in an inclusive setting to ensure education for all (e.g. learners with hearing impairments/who're deaf, learners with learning disabilities, learners with significant physical disabilities)? Given the impact that impairments have on the learning requirements of many learners with disabilities (Cockcroft et al., 2010; Lynch et al., 2011; Miles et al., 2011), there were relatively few articles overall that looked at how impairments affect inclusion (just 13% in total). Those that take an impairment focus, however, repeatedly stress that educators in mainstream settings cannot adequately meet the demands placed on them by the presence of learners with specific learning requirements in their classes without appropriate support services; specialist resources; additional training; and appropriate assistive technology.

Several studies concentrated specifically on deaf/hearing-impaired learners (Chandee and Suksakulchai, 2012; Cockcroft et al., 2010; Johnstone and Corce, 2010; Miles et al., 2011; Mukhopadhyay and Moswela, 2010; Musengi et al., 2013; Mutasa, 2010; Nkolola-Wakumelo and Manyando, 2013; Obilade, 2015). A key theme in these studies centered on language (specifically sign language) and whether deaf learners are best educated in inclusive settings where access to a fluent sign language is less certain. Interestingly, most of these studies focus either on what is happening in schools for the deaf or in deaf units, bringing into question the efficacy of current teaching approaches which still largely rely on oral methods. However, most articles suggest that sign language is often not the core methodology used in the instruction of deaf learners and that most educators (even specialist educators for the deaf) are not at all confident in the local sign language. This calls into question the extent to which even specialist schools are aware of the learning needs of deaf learners.

Mukhopadhyay and Moswela (2010), for example, reported that schools for the deaf in Botswana seemed to make little adaptation to the curriculum to assist their deaf

learners. A particularly good illustration of that was the continued teaching of science topics such as music and sound, using the same approach as would be used for hearing learners. Overall educators continued to favour using didactic methods with very little student interactions. Given that the sign language skill of the educators is generally very poor, lessons were a constant struggle for everyone. This study aims at focusing on how well do educators really understand the needs of deaf learners and, about the role of sign language in education and that was compared with those centres that have educators who are specializing in deaf education.

In a similar study, Nkolola-Wakumelo and Manyando (2013) focused specifically at the use of sign language in teaching deaf learners in two schools for the deaf in Zambia. What they found was that most educators felt their training in sign language was inadequate and their observed sign language skills were regarded as generally poor. Although well over half the educators revealed that they were offering lessons in Zambian Sign language to the learners, observations revealed that what was being taught as sign language was simply an attempt to symbolize spoken English. Given the central role played by language and communication in promoting effective learning and general development in deaf learners (Knoors and Marschark, 2012; Marschark and Knoors, 2014), it seems considerably that more needs to be done in low and middle-income countries (LMICs) to focus on how that is going to be achieved more effectively.

Chandee and Suksakulchai (2012) looked at how Deaf learners developed Nicaraguan Sign Language just by the fact of coming together over several generations in boarding schools; despite being banned from signing in class and being taught using a strictly oral-aural approach. This new language evolved through a process of peer education with no external input from their educators, with a similar peer learning process happening in Thai boarding schools. A very similar, in a smaller scale, example of peer language learning was also shown to be happening in Deaf units in Uganda (Miles et al., 2011). Learners, who had previously been placed in a specialist school for the Deaf and acquired Ugandan Sign Language but had been transferred to a unit attached to a mainstream school, were found to be transmitting their language skills to younger learners who had joined the unit. These

learners were developing a level of sign language fluency that was not evident in other units where there were no experienced signers to learn from. These studies suggest that sign language acquisition should be prioritized in education programming for deaf learners and that peer education should be actively encouraged so that deaf learners can learn to interact with other deaf sign language users to build up their confidence, language and social skills. Deaf learners who learn a natural (native) sign language (with or without accompanying spoken language) do better during their early years in education and develop stronger social relationships with their family and peers compared to those who have only been exposed to spoken language (Marschark and Hauser, 2012).

The only study to focus specifically on deaf learners in mainstream schools suggests that it is not only language that impacts on effective inclusion (Cockcroft et al., 2010). Educators need to consider different approaches to both the curriculum and their teaching style if they are to take adequate account of the learning needs of deaf learners: 'While the findings of this study are not aimed at excluding deaf learners from an inclusive education environment, they do suggest that several teaching adaptations may be necessary to ensure these learners optimum participation and learning.' (p. 208). Educators should be prepared to change the way they teach if their classrooms have deaf learners. Not just in terms of sign language but in the way, they introduce concepts, in the way they utilize visual aids and, most importantly, in the pacing of their lessons (Cockcroft et al., 2010).

The other group of learners who were the focus of several articles was that of learners with learning disabilities (Hove, 2014; Narayan et al., 2005; Rao, 2008; Rydstrom, 2010; Thomas and Whitten, 2012). Typical of the conclusions is Rydstrom's (2010) study of learners with learning impairments mainstreamed into regular schools in Vietnam. The view of the educators involved in the study was that learners with intellectual disabilities were not being taught to any great extent when they are in mainstream classes. In contrast, specialist unit staff were seen to be attempting to develop alternative curriculums for learners with 'learning difficulties' and, or cognitive disabilities. Hove (2014) also raised concerns about the efficacy of closing specialist schools for learners with intellectual impairments in South Africa

whilst provisioning in regular schools was still so poor. Mainstreaming is not providing them with the level of attention, curriculum adaptation and opportunities for developing positive self-esteem and life skills that they require, so closing specialist schools was impacting on their learning opportunities. Sociological response perspectives emerged from the critique of the psycho-medical model. The key movement of this perspective was “social construction” rather than “individual deficit” (Clough, 2000).

In the period (1950s-1960s) there was an emerging critique pointing out that the earlier mentioned two perspectives placed emphasis on analysis of schools and society, but there was no advice available for classroom educators. Curricular approaches emerged from this perspective within the 1960s and 1970s. It was the related parallel development of curriculum and teaching approaches which helped to foster a more inclusive school culture (Clough, 2000). In this approach, a highly specific task-analysis programme may be intervention at the curriculum level. The special curriculum was a set of teaching plans that was maintained for many years and powerfully reinforced the separateness of mainstream and special schools in the UK. It emphasized that special education educators need knowledge and proficiency relating to behavioral objectives, goal setting, task analysis and programme writing in their training programme for the 21st century (Mittler, 2004). There were two important contributions from this approach.

Firstly, a direct connection between disability assessment and the educational curriculum was made. Secondly, there was recognition that educational difficulties are not exclusive to learners, but rather linked to instructional conditions (Clough, 2000). According to Clough (2000), sound comprehensive schooling results from a systematic organization that highlights strategies for school improvement. Booth and Ainscow (1998) indicated that this was the time for the removal of boundaries. In the 1990s, another perspective in the critiques of disability studies emerged influenced by school improvement strategies as well as the other perspectives. These critiques often emerged from outside education detailing an explicit political response, different from that of the psycho-medical model (Clough, 2000). The theory explains

the complexity of inclusion, as well as the multidimensional nature of the change required by schools to embrace and practice inclusion (Swart and Pettipher, 2011).

2.2.4 Barriers for learners with Disabilities

Historically, inequity in the provision of quality education and support was most evident in the “Special Needs sector”. The Report of the Human Rights Commission of 2004 showed that learners with special needs in rural areas experience the worst forms of education exclusion. Not only are there very few special schools in rural areas, they do not exist in many deep rural areas, and where they do exist, they are in the most deplorable conditions and do not always have qualified personnel and specialists support personnel. This inequality in the provision of education support to learners with special needs was further confirmed by the Department of Education report of 2007. According to this report, in 2007, 408 special schools across the country provided education to 91,280 learners identified with special needs. Typically, the best resourced special schools are in the urban areas and they attract the best qualified specialists. The quality of education offered in many of these special schools is very limited and many learners enrolled in some of the schools never progress beyond Grade 1.

Some of the challenges that contribute to the poor provision of education and support in special schools include:

- Limited skills among teachers and support personnel
- Unavailability of professional expert support personnel
- Inadequate personnel, especially non-teaching personnel and care professionals in hostels
- Lack of learning and teaching support material and other material resources;
- Lack of assistive devices;
- Poverty and reliance on disability grants for payment of school fees by learners;
- Inadequate transport
- Infrastructure challenges

To address these past and current challenges, in 2001 South Africa adopted the inclusive education policy: Education White Paper 6: Special Education Needs

Building an Inclusive Education and Training System. This policy outlines strategies for the provisions of education support for learners who experience barriers to learning and development. According to this policy, one of the key strategies for improving education support to learners experiencing barriers to learning and development is through the establishment of an inclusive education and training system (Report Guidelines, 2014). At the centre of this system, it is found that the following barriers are noticed as being evident for learners with disabilities in general.

- **Individual Barriers**

a) Communication – if a child has a different first language than many of their peers, their educator, and/or the learning material available in the school (this includes learners who have sign language as their first language as well as those who use Braille as written language).

b) Poor motivation – if learners have little or no motivation for learning, due to many different factors, often related to the environmental and attitudinal barriers listed above.

c) Insecurity, low self-esteem and lack of self-confidence – (this is likely to be the result of a combination of environmental, attitudinal, and individual barriers – Some of which are listed above).

d) Abuse – learners suffering from psychological, physical, and/or sexual abuse are likely to experience serious barriers to learning, development, and participation.

These can be avoided if there is a comprehensive intervention for schools and families, as well as a support system (education and health professionals). Learners with disabilities (especially those living in segregated education institutions) are particularly vulnerable to abuse in several ways such as gender:

e) Gender – girls with disabilities experience many of the same barriers that non-disabled women and girls face, but their social isolation and dependence on their families often magnifies these barriers, and their consequences. Women and girls with disabilities fare less well on most indicators of educational, professional,

financial, and social success than their non-disabled female and disabled male counterparts do.

f) Lack of social competence – many learners experience social difficulties, difficulties that may create barriers to learning, development and participation, and ultimately marginalization in, and exclusion from school.

Other difficulties include, interacting and playing with other learners; communication; behaving in ways that are socially and culturally “acceptable,” as well as difficulties in accepting boundaries (some of these are related to environmental and attitudinal barriers).

g) Temperament – if a child has moods and rages, is an introvert and has difficulty communicating with her/his peers (as well as parents and educators), finding it difficult to adapt to new and changing situations, is easily distracted, has a short attention span, and reacts very intensely on positive as well as negative experiences (many of these temperament/behavioural patterns are related to environmental and attitudinal barriers).

h) First-generation learners – if the child is the first in her/his family to go to school; additional support (support system) may be needed to prevent barriers to learning from emerging cultural, language and religious minorities – many learners belonging to a minority group face enormous barriers to learning, development and participation. Without targeted support and an inclusive, learning-friendly environment, the barriers these learners face may become permanent in nature. Learners with disabilities from a minority background will often face additional barriers, and the consequences of the barriers they face will often be more severe than for their non-disabled peers, UNESCO (2009).

- **Environmental and Attitudinal barriers**

a) Limited or no access to early intervention programmes – the disabling effect of impairment will be multiplied unless there is access to quality early intervention programmes (support systems). Attitudinal barriers could be perceived as the basis of all other barriers and these are commonly reflected in labelling,

misunderstanding people's rights and opportunities, misconceptions, expectations of workload or developing stereotypes (UNESCO, 2009).

b) Educators, school administrators and school inspectors – if they discriminate against learners who are perceived to be different from most of their peers. This may be caused due to lack of funding or resources, lack of training, or heavy workload.

c) Legal and regulatory systems—if these are discriminating, segregating and excluding.

d) Curricula issues – if these are rigid and do not respond to a diversity of abilities, needs and circumstances amongst learners.

e) Teaching approaches and teaching/learning material – if these are not learning-friendly, nor responsive to the diversity of needs and abilities among learners.

f) Assessment and evaluation system – whether these exclusively or primarily assess the academic level of learners, according to general standards, rather than individual progress - ideally the academic, social, emotional and physical development should be assessed and evaluated.

g) School and classroom environments – when these are not inclusive, learning-friendly, or even physically accessible.

There are strategies that can be used to assist learners with various types of disabilities in schools to practice inclusion. The following section discusses those strategies.

2.3 Strategies to assist learners with various types of disabilities

This section discusses three methods for including learners with Learning Disabilities (LD) in inclusive classrooms. This discussion further include: co-teaching, differentiated instruction, and peer mediated instruction and interventions. First, various forms of co-teaching were reviewed with several selected benefits provided.

2.3.1 Co-Teaching

Though inclusion can occur with or without involvement from a special education teacher, a co-teaching arrangement is typical (Solis, Vaughn, Swanson, and McCulley, 2012). By working together, the general and special education teacher are better able to provide support for learners with Learning disabilities (LD) than the former could independently. As such, the need to remove learners with LD for specialized instruction is eliminated. Although the definition of co-teaching is commonly simple, as suggested here, it is often operationalized broadly.

For instance, Vaughn, Schumm, and Arguelles (1997) described five evidence-based models for co-teaching. One such model is described as, One Teach, One Assist. In this model one teacher is responsible for instructing all learners while the second provides additional support for those who need it. A benefit to using this model is that not only learners with LD benefit but all learners who need additional support are provided with extra instruction in the general education environment. Station Teaching is another model for co-teaching. Learners are divided into three separate groups in this model. During a block period, each group works with one of the two educators in addition to having an independent work time. All learners can benefit from this model by being able to receive small group instruction. In another model, Parallel Teaching, educators are required to plan lessons together before splitting learners in two groups. The educators then teach the same lesson to these two small groups. In this model, not only do learners get the benefits of working in small groups, educators also benefit by learning from each other's expertise. Alternative Teaching is a co-teaching model where one teacher is responsible for teaching and the other is responsible for pre-teaching and re-teaching concepts to learners who need additional support.

Finally, in a Team Teaching model, educators provide instruction together in the same classroom. Educators may take turns leading instruction or may model student behaviour while the other teacher is instructing (e.g. how to take notes or ask questions appropriately). Research regarding the effectiveness of co-teaching is limiting. For instance, Scruggs, Mastropieri, and McDuffie (2007) suggested that the model was being used less effectively than it could be regarding the (lack of) a role being played by special education educators. Earlier, Murawski and Swanson (2001)

concluded a lack of an empirical basis for the use of co-teaching, though more recent research (e.g., Scheeler, Congdon, and Stansbery, 2010) has used technology to provide immediate feedback to co-educators with success. However, as stated above, co-teaching is not the only means by which to educate learners with LD in inclusive classrooms. It is possible for an individual teacher to differentiate their instruction for this purpose as well. In the next section, the second strategy called differentiated instruction is discussed.

2.3.2 Differentiated instruction

Differentiated instruction involves learners with LD, and others with diverse learning needs being supplied with instructional methods and materials that are matched to their individual needs (Scruggs, Mastropieri, and Marshak, 2012). The use of differentiated instruction requires general and special educators to possess flexible teaching approaches as well as to be flexible in adjusting the curriculum based upon student need (Obiakor, Harris, Mutua, Rotatori, and Algozzine, 2012). Tomlinson (2001) provides five guidelines for successfully differentiating instruction in inclusive classrooms. Tomlinson (2001) provides 5 hints for efficiently differentiating education in inclusive classrooms.

Table 2: The guidelines for differentiating instructions in inclusive classrooms.

Guidelines for efficiently differentiating instruction in Inclusive classrooms

-
1. Clarify all key concepts and generalizations
 2. Use assessment as a teaching device to extend education
 3. Make critical and creative thinking a goal of lesson design
 4. Engage every scholar in studying
 5. Offer stability of duties between what is assigned by the instructor and decided on by the student
-

Source: Tomlinson (2001)

2.3.3 Strengthening Support Services

According to White Paper 6, this strengthened education support service have, at its centre, new district-based support teams that will comprise of staff from provincial district, regional and head offices and from special schools. The primary function of these district support teams are to evaluate programmes, diagnose their effectiveness and suggest modifications. Through supporting teaching, learning and management, they build the capacity of schools, early childhood and adult basic education and training centres, colleges and higher education institutions to recognise and address severe learning difficulties and to accommodate a range of learning needs. At the institutional level, in general, further and higher education, require institutions to establish institutional-level support teams. The primary function of these teams is to put in place properly co-ordinated learner and educator support services. These services support the learning and teaching process by identifying and addressing learner, educator and institutional needs. Where appropriate, these teams should be strengthened by expertise from the local community, district support teams and higher education institutions. District support teams provide the full range of education support services, such as professional development in curriculum and assessment, to these institutional-level support teams.

The Ministry also investigates how, within the principles of the post-provisioning model, designated posts can be created in all district support teams. Staff appointed to these posts can, as members of the district support team, develop and co-ordinate school-based support for all educators.

The Ministry recognises that the success of our approach to addressing barriers to learning and the provision of the full range of diverse learning need lie with our education managers and educator cadres. Accordingly, and in collaboration with our provincial departments of education, the Ministry, through the district support teams, provide access for educators to appropriate pre-service and in-service education and training and professional support services. The Ministry also ensures that the norms and standards for the education and training of educators, trainers and other development practitioners include competencies in addressing barriers to learning and provide for the development of specialised competencies such as life skills, counselling and learning support. Special schools in their settings will be converted to resource centres and integrated into district support teams so that that they can

provide specialised professional support in curriculum, assessment and instruction to neighbourhood schools.

This new role will be performed by special schools and settings in addition to the services that they provide to their existing learner base. To ensure that special schools and settings are well prepared for their new role, we will conduct an audit of their current capacities and the quality of their provision, raise the quality of their provision, upgrade them to resource centres and train their staff to assume these new roles as part of the district support team (DoE, 2005). These issues came up with many concerns as educators' views pertaining to inclusion of learners with disabilities seems an issue as they are the key personnel in the implementation of the whole process. It is imperative then to focus more on their assumptions, their beliefs and their attitudes in the inclusion of learners with physical disabilities in mainstream classrooms and thereafter to respond to one of the research questions.

2.3.4 Assumption, beliefs and attitudes of educators regarding the inclusion of learners with physical disabilities in mainstream education classrooms

Landsberg (2005) states that assumptions, beliefs and attitudes are directly translated into actions and teaching practices and can then inform decision-making. Attitudes are defined as educators' positive or negative perceptions of what is happening within their classroom regarding the learners who have barriers to learning (Cross and Shelton, 2009). Attitudes are seen to be set once they are formed and are known to be very difficult to change, therefore, if educators develop positive attitudes towards inclusion before they start teaching, then their attitudes towards implementing inclusive education will become more positive (Lambe and Bones, 2007). Research has indicated that educators often have very different definitions of inclusion and inclusive education, and the definition that they believe in is seen to affect the way educators implement inclusive education in the classroom (Hays, 2009).

Educators need to ensure that learners with barriers to learning are provided with opportunities, just like other learners, to construct and engage with knowledge necessary for living a society (Chappell, 2008). Many educators feel that teaching learners with barriers to learning is beyond their area of expertise and so they should

not be expected to teach those learners without assistance (Fox, 2013; Gaad, 2014). Educators have reported several obstacles that prevent the successful inclusion of all learners in the classroom; namely class size, lack of resources and educator training (Lifshitz, Glaubman and Issawi, 2009).

O'Rourke and Houghton (2008), found that the perceived lack of teaching expertise, limited allocated planning time and a limitation of resources were the most frequently raised concerns in relation to the implementation of inclusive education. The perceived views of educators who are seen to accommodate learners with physical disabilities in mainstream classes needs to be addressed (Engelbrecht et al., 2013). The failure to address the educators' views and concerns may result in difficulties with the implementation of inclusive education as well as contribute to educator stress. Inclusive education aims to eliminate barriers to learning which are inherent in the system itself, which may consist of physical barriers to access, curriculum barriers or barriers that are created by the climate of the learning environment for the learners, more especially those with physical disabilities, to name a few (Engelbrecht et al., 2013). The barriers educators experience in implementing inclusive education are discussed in detail as it often affects perceptions towards inclusion in the entire thesis.

A limited number of studies have been conducted on the attitudes of educators towards inclusion in South Africa (Schimper, 2013; Wylde, 2014). Research conducted by Schimper (2013) and Wylde (2014) reported that most of their respondents were positive towards inclusive education, and this indicated the educators' dedication to the underlying rationale for the practice of inclusive education. Many other studies that have been done on educators' attitudes towards inclusive education have suggested that attitudes are strongly influenced by the nature of the learners' disabilities. Educators came out to be more positive towards including learners with barriers to learning do not require extra instructional or management skills on the part of the educator (Engelbrecht et al., 2006; Hays, 2009). There is evidence that suggests that educators demonstrate improved positive self-evaluation regarding their ability to teach learners with barriers to learning was associated with higher positive attitudes towards inclusive education (Lifshitz et al., 2014). Another possible reason why inclusion has struggled in South

Africa is due to the African culture and beliefs on disabilities (Gaad, 2014). Many Africans associate disabilities with witchcraft or as a phenomenon of God mediated forces. Many negative views and attitudes towards disabilities stem from the following held misconceptions and the lack of proper understanding towards the medical side of disabilities (Gaad, 2014). These perceptions may filter down into the community, school and the educators whose views and perceptions could hinder the effective implementation of inclusive education (Gaad, 2014).

a) Educator Stress

Educator stress is best described as a complex process that involves an interaction between the educator and the environment that includes a stressor and a response (Engelbrecht et al., 2013). This is seen to involve unpleasant emotions such as tension, frustration, anxiety, anger as well as depression (Engelbrecht et al., 2013; Moolla, 2014). Educators are seen to experience four types of stress in terms of their profession. These being difficulties with learners, time pressures, poor ethos due to poor staff relations and poor working conditions (Engelbrecht et al., 2013; Moolla, 2014). The implementation of inclusive education could be seen to place additional demands on educators, potentially causing stress. It is assumed that educator stress is reduced if there are minimal discrepancies between educators' views on the availability of resources and support and their perceived need for those resources and support that are seen to be used in an inclusive educational environment (Engelbrecht et al., 2013).

b) Curriculum related issues

The curriculum within a school reflects the economic, social and cultural conditions of the community and gives all members of society a voice (Chappell, 2008). OBE is inclusive by nature and focuses on learners, learning at their own pace, and takes into consideration the barriers to learning found in the classroom (Hays, 2009; Lomofsky and Lazarus, 2010). Research has indicated that educators are generally too inexperienced to be able to handle the demands of the new curriculum (Curriculum 2005) and this could result in educators being reluctant to introduce new concepts and approaches to their teaching (Hays, 2009). Recently, Curriculum 2005 changed and this required educators to adapt themselves to further changes.

This is due to many educators perceiving themselves as incapable of managing diverse classrooms (Hays, 2009). The curriculum is seen to be an external barrier to learning and it therefore obliges educators to use different teaching methods to address these concerns (Hays, 2009). Ghesquiere, Moors, Maes and Vanddenberghe (2012) indicated that educators differentiated teaching methods in the hope of differentiating the curriculum; however, the educators in their study did not adapt the goals, content and evaluation methods to each individual need. Avramidis, et al. (2010) reported that educators perceived material resources as vital components in adapting the curriculum for learners with different barriers to learning. Changes to existing educational aids are fundamental to enable learners to participate in classroom activities and routines (Hays, 2009; Wylde, 2013).

O'Rourke and Houghton (2008) and Moolla (2014) mentioned mechanisms or skills that are effective in the implementation of inclusive education, these being co-operative learning, explicit and individualized instruction, peer support, curriculum differentiation and instructional strategies as well as educator collaboration. Meanwhile, Shongwe, (2015) reports the following effective strategies for teaching in a mainstream inclusive classroom, namely group work, which provides support for learners with barriers to learning from their educators and their peers in the classroom. Group work may also create a better understanding of cooperative learning and is beneficial to effective classroom management (Shongwe, 2015). Fox (2013) stated that if educators used a structured teaching style, and appropriate support was provided, then the successful inclusion of learners, irrespective of the type or severity of their disability is possible. Following is a list of strategies for organizing curriculum delivery.

(c) Organising curriculum delivery in schools

i). Schools should be organised around specialised curriculum support programmes rather than a category of disability. Curriculum support programmes should address the following curriculum support needs:

- Learning and cognition
- Hearing

- Vision
- Mobility
- Communication
- Skills and vocational
- Complex, multiple and pervasive disability
- Behaviour and psycho-social factors

ii. When planning the programmes schools should consider personnel qualification, use, distribution and capacity building, curriculum delivery, physical infrastructure, learning and teaching support materials (LTSM), assistive devices and technology and ICTs.

iii. Every school that offers a programme should develop the necessary expertise and become a centre of excellence in that programme.

iv. A school that indicates that it offers a form and level of support must ensure that it is equipped in all respects to offer such support. (Guidelines, 2014: p6-7).

c) Training issues

In South Africa, educator education has been characterized by fragmentation and involves deep disparities in both duration and quality (Engelbrecht, 2013). Many educators are seen to be disadvantaged due to their poor quality of their training within the field (Engelbrecht, 2013). In the past, in-service training was predominantly provided by universities, educator-training colleges and non-governmental or private organizations (Logan, 2012). These were generally uncoordinated with no clear overall policy guidelines formulated by government education departments (Logan, 2012).

This resulted in educators determining their own development programmes to be able to meet the needs and knowledge necessary (Logan, 2012). The problems found with these in-service training programmes were that they were predominantly inaccessible to all educators in South Africa; this was due to their cost, entry criteria and qualifications, language proficiency of the educators, travelling costs as well as the workload (Logan, 2012).

All the factors mentioned above created barriers that prevented educators from benefiting from these training services. Internationally funded government

programmes like the Danish Development Agency (DANIDA project) and the South African Co-Operation Programme in the Education sector (SCOPE) funded various in-service programmes in which a cascade model was used to introduce and support inclusive education in several South African provinces (Amod, 2014; Logan, 2012). The cascade model was designed for one or two representatives from each school to attend the programs and then relate the knowledge and skills they learnt to their fellow colleagues (Engelbrecht, 2006).

Problems occurred when representatives had to transfer their knowledge and skills to their colleagues, who often seemed disinterested in the activity or time constraints made it impossible to relay all the information (Engelbrecht, 2006). Another cause for the poor outcomes of training programmes in South Africa has been poor educator collaboration, which has resulted in educators working in isolation (Logan, 2012). The absence of a team or whole school approach in many school districts results in external professional development courses being restricted to individual educators and classrooms; this resulted in small pockets of learners benefiting (Logan, 2012).

Educators' prior knowledge of inclusive education from pre-service training, as well as in-service training was found to have more positive attitudes towards inclusion than educators who had not gained that knowledge (Logan, 2012; Wylde, 2013). Training that involves administrative issues surrounding inclusive education, exposure to the best inclusive practices, collaboration with colleagues and parents, as well as the availability of support structures are viewed as fundamental aspects of educator training in inclusive education (Amod, 2014; Engelbrecht et al., 2013).

They also state that educators should be provided with extensive training in managing emotional and behavioural problems of learners in the classroom to address barriers to learning within the classroom. In a study conducted in 2007, educators that were trained to teach learners with barriers to learning expressed more positive attitudes towards inclusion compared to educators that had not had any previous training (Lambe and Bones, 2007). The National Professional Educators' Organisation of South Africa (NAPTOSA) criticised the trainers of

many of these programmes for discouraging educators from being critical and asking questions within the training programmes (Logan, 2012). Inclusive education would be a difficult task if there is no future education and training for educators. This is due to the proven fact that educators' perceptions or attitudes become more favourable and positive with more training in the inclusive policies and skills (Amod, 2014; Avramidis and Norwich, 2012).

As the studies mentioned above purely focus on educators' perceptions of the training courses, this study needs to take into consideration that perceptions represent subjective experiences and not always the reality. Educators may have had excellent training, but they may have perceived it to be insufficient and unhelpful (Hays, 2009; Logan, 2012). The researcher reiterates the views of others, such as Logan (2012) and Moolla (2014) on how possible training in South Africa can be given the large number of educators needing training with the limited financial resources available. Before the above-mentioned strategies can be acquired, it is vital to establish the perceptions and preparedness of educators as they are the key elements in the successful implementation of inclusive education. The following subsection illustrates how far they are through reference from previous studies.

The preparation of educators to implement inclusive education is a recurrent theme through the literature. Whether that is pre- or in-service training for inclusive education to work, educators need to be effectively prepared and hold positive attitudes towards inclusion (Ahsan et al., 2012). It should be remembered that inclusive education is a relatively new concept and, as shown previously, one that does not yet have an agreed understanding or approach. Commonly the teaching workforce in LMICs is made up from those who learned to teach mainstream classes and those who learned special education. There are still a lot of educators who do not have the practical or theoretical knowledge base from which to design inclusive lessons (Donohue and Bornman, 2015). It is this lack of preparation amongst those charged with delivering new inclusive education policies that is contributing towards high levels of stress experienced by educators and leading to concerns about the practical realities of inclusion (Donohue and Bornman, 2015; Emam and Mohamed, 2011; Hettiarachchi and Das, 2014). This is important to consider because more

experienced educators tend to be less positive about inclusion than those who are newly qualified (De Boer et al., 2010; Moburg and Savolainen, 2003; Muwana and Ostrosky, 2014). Whilst it is not clear exactly why this is the case it is assumed to link with general changes in attitudes amongst younger people as well as more recent changes to incorporate inclusive education into pre-service training (Emam and Mohamed, 2011).

It is likely therefore, that training has an impact on improving the attitudes of educators but concerns are still being raised that the current content of courses falls short on providing relevant practical skills (Emam and Mohamed, 2011). As Hettiarachchi and Das (2014) note from their study of educators in Sri Lanka: 'The lack of specific knowledge and training on inclusive methodologies dis-empowers mainstream educators from supporting learners with special educational needs in their classroom' (p. 151). A lack of apparent preparedness to adopt inclusive education practices and to respond to the needs of all learners, concerns many new educators. Nketsia and Salovita (2013) surveyed final year student educators in Ghana and found that only a third felt completely confident about the prospects of teaching learners with special educational needs. That is even though pre-service training includes the concept of inclusive education and that general awareness was quite high.

In Zambia, student educators showed a high level of support for the principle of inclusive education but 90% also held the belief that learners with disabilities should be taught by specialists because it involves significant changes to general classroom practice (Muwana and Ostrosky, 2014). What happens during pre-service training is very important in ensuring new educators maintain both a positive attitude and a belief that they can teach inclusively. Studies suggest that attitudes are generally very positive, especially early on but that during courses learners become less sure about the practicality of inclusion (Muwana and Ostrosky, 2014; Oswald and Swart, 2011). Significantly, educators who have a major special education component to their training are much more likely to maintain positive views about inclusive education and report higher self-efficacy around adapting classroom practices (Hettiarachchi and Das, 2014; Muwana and Ostrosky, 2014). Likewise, the more

knowledge educators have about specific impairments the more positive they tend to report feeling towards inclusion (de Boer et al., 2010; Malak, 2013).

These findings are important because they suggest that training needs to address the practical realities of implementing inclusion rather than just its theories and principles. Addressing concerns about how new educators are going to implement inclusive practices in situations with limited resources, large classes and high teaching loads would seem to be where pre-service training could most effectively focus (Oswald and Swart, 2011). How can mainstream educators and specialist educators become effective supporters and promoters of quality inclusive education?

Several studies focus on training experiences because there is a very strong link between self-efficacy and educators' attitudes towards inclusion (de Boer et al., 2010; Emam and Mohamed, 2011; Miles, 2009; Miles and Singal, 2009). Where educators doubt their own abilities, they may hold more negative attitudes towards inclusion overall (Emam and Mohamed, 2011). Low self-efficacy; meaning a lack of confidence over the ability to create inclusive classes, impacts negatively on educators' attitudes towards inclusion (de Boer et al., 2010). Significantly, Arbeiter and Hartley (2002) found that where educators were more negative about integration they paid far less attention to the individual needs of the learners in their classes: 'Attitudes may have a stronger impact on the response to learners with disabilities in classrooms, than the availability of resources or the technical knowledge of specialised teaching strategies by educators.' (p.74).

This is obviously a complex area which de Boer et al. sum up well, '...findings of studies regarding educators' attitudes present a confusing picture. Educators seem to endorse inclusive education in general, but do not like to be involved when it concerns their own teaching practice....' (p.333, de Boer et al., 2010).

Overall, the more positive educators are about inclusion during initial training the more accepting and accommodating they tend to be in practice. And if they are exposed to learners with disabilities in their pre-service training, during teaching practice, for example, they are more likely to retain less negative views about inclusion (de Boer et al., 2010; Donohue and Bornman, 2015).

Although there is often an assumption made that inclusive classes help to increase the social acceptance of learners with disabilities amongst their nondisabled peers and improve social justice, this is not necessarily what happens in practice (Ngcobo and Muthukrishna, 2011; Rydstrom, 2010). A lack of social acceptance can have very serious long-term consequences, especially in terms of mental health and academic success, so inclusion needs to be managed with care (de Boer et al., 2012).

If disabled learners are going to be included on an equal basis with their peers, the underlying prejudices and negative attitudes held by both educators and learners should be addressed. Otherwise, social isolation and segregation is simply perpetuated in the way learners are treated (and seated) within classrooms. As Ngcobo and Muthuskrishna (2011) note: 'The school appeared to be a site of social reproduction whereby adults enacted and reproduced unequal social spaces, often unconscious of the insidious nature of their practices' (p.362). Educators can, consciously or not, reinforce prejudices by the way they draw attention to disabled learners, by the way they act towards them or through the expectations they have about their capabilities (Ngcobo and Muthukrishna, 2011; Rydstrom, 2010; Singal, 2008); all of which can be transmitted to the disabled and non-disabled learners in the classroom.

It is possible for disabled and non-disabled learners to have a beneficial social experience from inclusion but inclusive programmes need to understand the key factors that affect attitudes. A study by de Boer et al. (2012) identified four key variables that had an impact on the attitudes of non-disabled learners towards their disabled peers. Gender, girls are more accepting than boys; age, older learners are more accepting than younger ones; experience, those who have experienced inclusion in the past are more accepting than those for whom it is new; and knowledge, those with knowledge about the causes and effects of impairments are more accepting than those who have no awareness. What this collection of articles highlights is that it continues to be very important that inclusive education programmes focus on the attitudes of educators, learners and parents in advance of learners with disabilities being placed. Attention should be paid to ensuring there is plenty of opportunity to learn about the nature of impairments, the learning needs

and styles of the learners and the importance of understanding difference and diversity within a positive, rights based discourse.

Generally, however, even though attitudes may be positive there is overwhelming concern in the literature that in practical terms, educators are not well prepared for including learners with disabilities in mainstream classes (de Boer et al., 2010). Educators are expressing that, whilst increasing the diversity of their classrooms is good for fostering social inclusion and equality, they are much more sceptical about its effectiveness from an academic perspective (de Boer et al., 2010; Deluca M, 2014; Donohue and Bornman, 2015; Moberg and Savolainen, 2003; Muwana and Ostrosky, 2014; Ocloo and Subbey, 2008).

One of the issues contributing to the problem is the prevailing pedagogy; the tendency for mainstream educators to use a didactic (teacher-centred) approach to their classroom practice (Arbeiter and Hartley, 2002). Inclusive education requires that educators use a child-centred approach, that they are aware of the individual learning needs of their learners and that they adapt the delivery of the curriculum accordingly. Arbeiter and Hartley (2002) found that, although educators in Uganda could report on what kind of strategies could be used to make their classes more inclusive (such as giving individual attention; grouping the learners; sitting deaf learners at the front; using gestures or 'sign language'), these were not often observed in practice. It seems that educators do not believe they have the professional skills or specialised support to be able to put their intentions into practice.

Several articles suggest that inclusion only works if the educators do not have to significantly modify their classroom practices or pedagogy (Donohue and Bornman, 2015; Ngcobo and Muthukrishna, 2011; Singal, 2008). Educators seem happy enough to make some adjustments to the basic classroom environment and may even adopt strategies to help provide extra support to learners with disabilities, but with no attention being paid to adapting pedagogical approaches, this does not represent inclusion (Ngcobo and Muthukrishna, 2011; Singal, 2008).

Singal's (2008) study from India cautions that, although some educators were observed to be using strategies for inclusion, such as the use of peer-mentors (pairing a disabled with a non-disabled child), their continued belief was that they did not play an especially important role in promoting the learning and participation of disabled learners. Rather, this was the responsibility of others, such as special unit staff and parents, leading to Singal's conclusion that although disabled learners were being placed in mainstream classes there was little sense that they were, 'part of the classroom' (p.525, Singal, 2008).

Many of the articles, therefore, have started to question inclusive policies, and in doing so draw attention to the fact that what is often happening in practice is integration. Inclusion necessitates that educators change their approaches to suit differing educational needs but there is a lack of evidence so far to support this happening in practice. Educators too seem fully aware that they cannot in many cases provide the level of specialist instruction that learners with disabilities may require. The overall lack of appropriate training means that educators are effectively trying to teach learners with disabilities who they find in their classes as though they were non-disabled learners.

Mainstreaming has enabled increasing numbers of learners with disabilities to enter schools but this does not equate to them being included (Ngcobo and Muthukrishna, 2011; Singal, 2008). Attitudes, beliefs and values in initial teacher education as well as the importance of positive attitudes of beginning educators in inclusive settings have been well documented (Avramidis et al. 2000; Avramidis and Norwich, 2002; Hadadian and Chiang, 2007; Van Reusen et al., 2001). However, both pre-service and in-service courses that address the skills and the attitudes of educators towards learners with disabilities are frequently deemed insufficient by educators (Bartak and Fry, 2004; Gary et al., 2002; Gould and Vaughn, 2000; Jahnukainen and Korhonen, 2003; Westwood and Graham, 2003) and many writers report a tension between meeting the special needs of some learners and disadvantaging others. Chambers and Forlin (2010) define an attitude as: 'a learned, evaluative response about an object or an issue and ... a cumulative result of individual beliefs' (p. 74). Forlin adds that beliefs influence pre-service teacher attitudes to inclusive education and that, in turn, influence their intentions and behaviours. Attitudes are formed by experience as

well as by implicit learning and may reflect an individual's individuality (Zimbardo and Lieppe, 1991). Johnson and Howell (2009) suggest that attitudes may be seen to have three related components: cognitive (i.e., the idea or assumptions upon which the attitude is based), affective (i.e., feelings about the issue), and behavioural (i.e., a predisposition toward an action that corresponds with the assumption or belief) (Wood, 2000). As a result, the formation and modification of teacher attitudes are important areas of education research (Weisman and Garza, 2002).

Meijer et al. (2006) note the need for positive teacher attitudes and for educators to create a 'sense of belonging' to support effective inclusive practice, and Cook (2002) and Silverman (2007) point out that educators' attitudes and beliefs directly affect their behaviour with learners and so have a great influence on classroom climate and student outcomes. Ainscow (2006) stresses that where learners subscribe to a belief system that regards some learners as being 'in need of fixing' or worse, as 'deficient and therefore beyond fixing' any teaching is likely to be ineffective. Pre-service teacher education must, therefore, be concerned with the promotion of teacher attitudes as well as instructional competences (Andrews, 2002; Reinke and Moseley, 2002). Pearson (2007) notes that the complexity of inclusive education should be accommodated by the inclusion of work on attitudes and beliefs in teacher education rather than 'relying solely on a technicist competency-oriented approach (Edwards et al., 2002) which is better suited to the transmission of bureaucratic and procedural knowledge' (p. 31). Pearson (2009) says that teacher education is a context in which changes in attitudes, beliefs and values do occur. Atkinson (2004) and Forlin et al. (2009) note that if the negative attitudes of pre-service educators are not addressed during initial teacher education, they may continue to hamper the progress of inclusive education efforts in schools.

2.4 Educators' views and understanding of inclusive education for learners with physical disabilities

The Education White Paper 6 on Special Needs Education (Department of Education, 2005) expects individual educators to have the skills or expertise to identify barriers to learning. In addition, they are expected to support learners in the

classroom and collaborate with other support providers. This helps to determine the levels of support needed by learners and to adapt the curriculum to meet the needs of all learners. As noted earlier, the insufficiency of training to enable educators to effectively include learners with barriers in mainstream classes has been cited as an impediment to establishing classrooms that are more inclusive. Schools are more inclined to include learners with minor and mild disabilities than learners with more severe intellectual, emotional and behavioural disabilities (Avramidis, 2013; Anati, 2012; McGhie-Richmond et al., 2013).

Anati (2012) points out that the participating schools in their study used a continuum of educational placements, ranging from the highly integrated setting of the general classroom to the highly segregated setting where instruction is delivered in special education classrooms and resource rooms. Anati (2012) further notes that educators in the United Arab Emirates agreed that integrated learning is a positive step towards the future of special education. These educators highlighted the employment of a team of specialized professionals to deal with inclusive education issues. Thus, they did not associate themselves with the forerunners in integrated learning, and rely strongly on experts such as school counsellors, special educators and doctors, revealing dependence on exclusionary practices. Nel, Engelbrecht, Nel and Tlale (2013) contend that this raises the question as to whether educators really do understand their role within an inclusive education system when learners who experience barriers to learning need support.

These are the findings by Srivastava and Srivastava, (2010) who found that educators were not supportive of learners with physical disabilities. Participants in all these works tended to claim that learners with physical handicaps are not fitted to regular classroom environments. In addition, Charema, (2010) found that educators who showed supportive understanding towards learners with physical impairments, such as hearing disabilities, did not always depict the same support for learners with academic or behavioural difficulties.

Attitudes, according to Boer, (2011:333), are “considered to have three components: cognitive, affective and behavioural states.” In this tri-component model, cognition refers to a thought; attitude refers to a feeling; and behaviour refers to an action. In this case, the cognitive component represents the educators’ beliefs or knowledge

about educating learners with special needs in inclusive settings, reflecting' feelings about educating pupils with special needs represents affective components while educators' views on how to act with a child with special needs in his/her classroom reflects behavioural component.

An attitude can be positive or negative, depending on the view or belief of a person. Educators who have positive attitudes towards inclusion have the tendency to achieve greater productivity than negative attitudes. Hence, unless educators are positive towards inclusion, learners with special educational needs do not benefit from inclusion and they will not be motivated. This implies that inclusion is successful when positive attitudes toward including special needs learners in classrooms are expressed by educators, (Alahababi, 2009).

In relation to this, Alahababi (2009: 94) states that "Educators with positive attitudes towards inclusion more readily change and adapt the ways they work to benefit learners with the range of learning needs." Educators' attitudes may be influenced by their characteristics such as their educational status, teaching experience, class size, and exposure to teaching of disabled learners, lack of funding, workload norms, and lack of trained staff in inclusive practices.

In this respect, attitudinal barriers are perceived to be the basis of all other environmental barriers, and are the most difficult to change. They are reflected in misconceptions, stereotypes, labelling, fear of the unknown, resistance, misunderstanding people's rights and opportunities, and further isolation of learners with disabilities (as cited in Birhanu, (2011: 91). The role of environmental factors in this case is crucial to the success of inclusive education, as claimed by the World Health Organization (WHO, 2011), cited in Birhanu, (2011: 96), stating that, "An accessible human and physical environment is necessary for furnishing equal opportunities for the participation of people with disabilities."

Anati, (2012) notes that educators in the United Arab Emirates agreed that integrated learning is a positive step towards the future of special education. These educators highlighted the employment of a team of specialised professionals to deal with inclusive education issues. Thus, they did not associate themselves with the forerunners in integrated learning, and, instead, relied strongly on experts such as

school counsellors, special educators and doctors, thereby revealing dependence on exclusionary practices. Nel, Engelbrecht, Nel and Tlale (2013) contend that this raises the question as to whether educators really do understand their role within an inclusive education system when learners who experience barriers to learning need support. The level of support is determined by the needs of each learner placed in a mainstream school according to the Department of Education (2014), instead of seeing the learners as part of a collaborative collective. This denies the fact that support and collaboration between all the systems and subsystems within the school, as well as the outside agencies involved with the learners, are very important. If the school does not have a culture of collaboration it eventually affects the learners tremendously (Donald, 2010).

According to the Department of Education (2001: 18), the most prominent barriers in South Africa, as identified by the Commission, are the following:

- Negative attitudes to and stereotyping of differences.
- An inflexible curriculum.
- Inappropriate languages or language of learning and teaching.
- Inappropriate communication.
- Inaccessible and unsafe built environments.
- Inappropriate and inadequate support services.
- Inadequate policies and legislation.
- The non-recognition and non-involvement of parents.
- Inadequately and inappropriately trained education managers and educators.

2.4.1 Educator Training

The other factor, which affects the outcome of inclusive practice, is educator training. An inclusive programme could be successfully implemented if the level of the educator competency is increased. Thus, the opportunities to attend courses that are

related to the inclusive education programme should be created, especially for those who lack exposure and training in special education. In this case, “Adjustments towards the pedagogical aspects can be trained internally by experienced educators for the new educators. The effort towards a collaborative teaching between mainstream and special education educators should be put in place” Agbenyega (2007:42).

Specifically, the role of educator training institutions is very important in this regard. Educator training institutes should incorporate the concept of inclusion as part of the curriculum. As Agbenyega (2007: 42) puts, “As part of the educator training program, it is recommended that education courses make room for critical discussion regarding issues and concepts of inclusion and teaching effectiveness.” In this case, trainee educators should be given opportunities to experience inclusive education in practice. From the overall presentations made above, it would be possible to generalize that training educators on Special Needs Education (SNE) and Inclusive Education (IE) is a primary concern in the educator education programme. The attempt made by the government should be intensified to meet the requirements of SNE in general and IE. The next section discusses Inclusive curriculum for learners with disabilities in mainstream classrooms.

2.4.2 Inclusive Curriculum

According to Mangal, (2007:189) the curriculum adaptation for the physically impaired learners essentially “requires ‘enrichment’, i.e., inclusion of various learning experiences and opportunities for the development of specific concepts and skills besides the existing core curriculum, meant for all learners.” To make inclusive education successful, an inclusionary approach to curriculum is required. Furthermore, assistive technology is very helpful “to support learners’ engagement in regular class and access the general curriculum. Like all other learners, learners who have Special Education Needs (SEN), including those with restricted vision, poor motor control or difficulty in reading or processing language, can benefit from using computers and other technologies as used by their peers in mainstream schools”, (Garner, 2009:87).

According to the Report on Guidelines (2014), the schools, supported by the School Management Teams (SMT), should ensure effective curriculum management. These include, but are not limited to:

- Ensuring the programme offered at the school is, as far as possible, aligned to the National Curriculum Statement;
- Ensuring there is adequate and appropriately qualified teaching and professional personnel to deliver the curriculum;
- Ensuring the availability of adequate and appropriate learning and teaching support material. These should be provided for all learners in an appropriate and relevant format, depending on the learners' needs;
- Ensuring that the principle of one textbook per subject per learner is adhered to;
- Ensuring that all learners have access to Workbooks and are supported to use these at the appropriate level;
- Mediating curriculum differentiation by making simplified versions, special editions or lower grade levels of texts available where necessary;
- Providing adequate and appropriate assistive devices and technology and ensuring that these are effectively integrated in the teaching and learning process;
- Effectively managing, retrieving, storing and maintaining Learning Teaching and Support Material (LTSM), assistive devices and technology;
- Managing timetabling and adherence to tuition time (also introducing periods for mastering of specific skills such as Braille, orientation and mobility, South African Sign Language, Augmentative and Alternative (AAC), compu-typing, etc.);
- Ensuring there are support structures, resources and systems (e.g. a School-based Support Team (SBST), database of community and other resources and clear protocols and referral systems for personnel and students on how to utilise these) community resources which include social welfare services, primary health clinics, mental health drop in centres, support services at Higher Education Institutions, programmes run by non-governmental and disabled people organisations, teacher centres, etc.;

- Managing assessment and support records (Accommodations, SNA 1 and SNA 2 and other SIAS Forms); and
- Creating a school environment that is welcoming, enabling and has high expectations for all learners.

2.4.3 Educational history of Inclusion

Over the past 37 years, the United States experienced significant changes in its system of education for students with disabilities. Prior to 1975, little attention was paid to meeting the needs of students with disabilities within a general education environment. Following the implementation of US Public Law 94–142 (Education for All Handicapped Children Act 1975), students have been included increasingly in the general education system and are increasingly expected to achieve in similar ways (and to similar standards) as their general education peers, thus supporting students with disabilities to be involved with their non-disabled peers to the maximum extent possible.

After a while, however, this system came into question as being insufficiently inclusive (Reynolds, Wang and Walberg 1987). A movement to fully include students with disabilities in US general education classrooms was the result (Fuchs and Fuchs 1994). With increasing access for learners with widely-varying needs, educational models were developed, going beyond mere accommodations and modifications, toward addressing all students' educational needs through innovative and pro-active instructional design of the general education curriculum (Hitchcock, Meyer, Rose and Jackson 2002; Simmons and Kame'enui 1996). US schools are now responsible for providing effective instruction for all children, together, in inclusive educational settings. The US No Child Left Behind Act (NCLB 2002) required teaching and learning standards to be established for all students. More specifically, NCLB required that all students: (1) be included in state-wide assessments, (2) meet assessment standards, and (3) be supported by appropriate technology (including assistive technology) to achieve this. All students, including students with disabilities, are expected to be taught, supported, and assessed in the general education environment and curriculum to the maximum extent possible.

There has been a significant shift around the globe from segregated schools to inclusion of disabled learners into mainstream schools (Mittler, 2009). The notion of including disabled learners in regular schools has had a long history, especially in developed countries (Rakap and Kaczmarek, 2010). Concerns about integration and inclusion emerged again around the time of the civil rights movement in the United States (US). In the 1960s and in the early 1970s, civil rights legislation opened the door for all learners with special needs to receive education and to participate equally in all activities of the school (Thomas, 2007). It was not until the early 1980s, after the longstanding segregation of disabled learners in special schools, that integration into mainstream education became an alternative, mainly in Western countries (Miller, 2009). Therefore, with UNESCO's Salamanca Statement and Framework for Action on Special Needs Education, the idea for inclusion replaced the concept of integration (Michailakis and Reich, 2009).

2.4.4 Historical background of inclusion in South Africa

Most recognized disabilities in South Africa are mental retardation, physical disabilities, blind or deaf and dumb. Those affected experience attitudes and ill treatment from people who are non-disabled, in most instances, in various sectors of South Africa. Because of superstitious understandings and beliefs in African communities, those who were labelled as disabled suffered a similar fate from those in white communities as disabilities were associated with curse or witchcraft (Naicker, 2009). The nature of special education policy on the part of the state during the period 1863 to 1963 was extremely oppressive. "Initially no special education provision was made by the state for African learners. It took a century for the state to provide subsidies for African deaf, blind, cerebral palsied and crippled learners. This only occurred in 1963" (Naicker, 2009: 29).

Naicker (2009) further explains that churches played a pivotal role now; they initiated the provision of special education services for handicapped white and non-white learners. They continued to provide a service for non-white learners without any state provision for these learners for the next hundred years. The state only became involved in special education in 1900, when these church-run schools were recognized. In 1928, Act 29 (Special Education Act) was passed. This led to the creation of "vocational schools" and "special schools" for white learners. The 1920s

saw the first development of intelligence tests. Many revisions of international tests were applied to white school-going learners; these tests were the first connection between education and the labour market. These intelligence tests were the precursor of categorization, labelling and the exclusive system of special education (Naicker, 2009). Implementing inclusive education involves a joint responsibility between parents, educators, District Based Support Teams (DBSTs) and the community (Du Plessis, 2013).

2.4.5 The status of special needs education and its role in inclusive education

One of the key issues that several papers raise is that the baseline status of special needs education for learners with disabilities in low income countries is already poor (Kristensen et al., 2006). Since provisioning this has traditionally been neglected, beside the attempts to rapidly create inclusive systems that can meet the needs of learners with disabilities, alongside increasing class sizes because of Universal Primary Education (UPE), seem ambitious.

Itimu, (2008) stresses that, most of African countries show only a theoretical interest in the provision of special needs education. A comparison of Malawi, Tanzania and Zambia showed that all three countries lacked sufficient resources for special needs education; showed minimal to no inter-agency collaboration around learners with disabilities; and had an urgent need to train more educators in special needs education. Few low-income countries in fact defined learners with disabilities in their education sector plans prior to the push for inclusive education, even those that were signatories to the UN Convention on the rights of Persons with Disabilities (Srivastava et al., 2013), which suggests that learners with disabilities have never been very high priority. Likewise, the same could be said for the international development sector.

Kalenga and Fourie (2012) reiterate that in South Africa learners who face barriers to learning (including learners with disabilities) are inadequately served by the system, and Srivastava et al. (2013) show that in many countries learners with special needs rarely attend school at all, even special ones. Little seems to be happening to accommodate their needs in the mainstream and, whilst some are present simply by default, many are amongst the school drop-out population. The following segment

discusses the different status of special needs education through which inclusion can be maintained.

a) Provincial level

Wildeman and Nomdo, (2007) provide comments regarding where South Africa is in terms of its quest to become more inclusive. They note, “Provinces did not conceptualize a strategic campaign and integration strategy for the inclusion of marginalized learners and youth with disabilities. Thus, in provinces where learners were successfully mobilized, the provinces did not have the requisite resources (financial and learning) to provide access to education in the existing institutions” (Wildeman and Nomdo, 2007). They also note that schools that are working on becoming more inclusive require specialized support. Education White Paper 6 proposes the establishment of district-based support teams, “which would be functional at the district level and would be actionable supporting both public ordinary and special school institutions” (Wildeman and Nomdo, 2007). The establishment of such district-based support teams is not yet a reality in all provinces, yet there are some teams that are functioning effectively at present (Wildeman and Nomdo, 2007). All provinces still have a long way to go – either in terms of getting infrastructure and resources in place or creating understandings and attitudes among educators and other professionals towards inclusion and diversity that promotes the inclusive ideals that the Education White paper 6 outlines. Looking at the historical process leading up to the present, the researcher hopes that useful insight into how the current education system has come about.

b) National level

Since the democratic dispensation was introduced in South Africa, the country has been in the process of social, political, economic and educational transformation, aimed at developing a more inclusive society (Du Plessis, 2013; Swart and Pettipher, 2011). South African educational policies promoting inclusion were formulated in the light of this view, influenced by the adoption of the South African Constitution, which legally ensured the basic human rights of

its entire people. This policy document was a sign that there had been a turning point in thinking about education within South Africa.

Daniels (2010, p. 635) argues that “It is a shift within a learner or deficit special needs model to a greater focus on barriers to learning and development, a system change or a social justice model.” This shift required an education system that accommodates all learners, with their diverse needs, under one education system. Therefore, the White Paper 6 was designed to transform the South African educational system by building integrated systems for all learners that eliminate the differences between special and ordinary schools. The recommendations in this policy document highlight the level of support needed by each learner, in contrast to the issue of placement of learners. This support is to be provided, based on the needs of each learner. For instance, learners who require low intensity support will receive support in mainstream schools, and learners who require a moderate level of support will receive that in inclusive schools. Therefore, an appropriate support system would be provided (Department of Education, 2014).

c) School level

These teams consist of educators, members of the school management team, coordinators, representatives from the behaviour committee and the social committee members, as well as the members from the Literacy and Numeracy committee. The primary focus of these teams is to coordinate learner and teacher support (Department of Education, 2001). They are to provide support by identifying and addressing learner, teacher and institutional needs. The provincial education departments provided schools with guidelines for the implementation of these support teams (Western Cape Education Department, 2003). According to Nel et al. (2013), these teams should liaise with the District Based Support Teams and other relevant support providers, such as health professionals. Apart from the roles mentioned above, Nel et al. (2013) note that these teams are also responsible for focusing on the in-service training of educators, as well as planning emergency strategies. The following section relates to the major research question for this study which establishes the extent to which educators understand the issue of inclusive education.

2.4.6 Conceptualizing inclusive education

One recurring theme in many of the articles reviewed was the lack of clarity and consistency over what inclusive education means and how it should be implemented with specific reference to learners with disabilities. Hence, in low and middle-income countries (LMICs) there are a lot of variations in educational provisions for learners with disabilities and no overriding sense around what type of placement works most effectively. Bayat (2014), and Sharma and Das (2015) note that, when conceptualizing education for learners with disabilities, key concepts like ‘integration’ and ‘inclusion’ are often used interchangeably although they are not the same. Integration is largely associated with mainstreaming learners with disabilities into regular classrooms but inclusion is about accommodating all learners. This lack of clarity has a profound impact on the understanding and implementation of inclusive education, which is contributing to a lack of overall progress on improving education for learners with disabilities (Sharma and Das, 2015).

The lack of overall clarity of the education for all (EFA) and the inclusive education agendas seem to have resulted in a tendency for LMICs to adopt the term inclusive education at policy level but one that, in practice, means the integration of learners with disabilities into mainstream schools. Kalyanpur (2011), for example, describes how Cambodia has adopted a reasonably strong inclusive education policy framework but is in fact just integrating learners with physical disabilities into mainstream classes. This happens largely because physically disabled learners can be enrolled with little adjustment on the part of the school. Any learners with more challenging disabilities were either being referred to special schools or were not in any school at all.

Pather (2013) notes a similar trend across Southern Africa where they are developing inclusive education models that are essentially focused on the integration of learners with disabilities and not considering the wider aspects of educational needs such as poverty or ethnic status, for example. Inclusive education is being implemented using an impairment/integration perspective which does not reflect the shift in thinking envisaged or promoted by the international development sector. Just to add to the complexity, this is often being done under the banner of EFA because it fits well with the overall agenda on promoting the right to education for all learners.

Kalyanpur (2011) suggests that it fits well with the situation of low to medium income countries (LMICs) face because of the constraints they have towards improving the state of their special education programmes.

2.4.6.1 Educators' conceptualization of inclusive education:

Educators' knowledge is the key to successfully implementing any educational programme. In this study, knowledge was defined as the way educators conceptualize inclusive education. Hodkinson (2005) strongly believes that the implementation of inclusive education is dependent upon the way individual educators conceptualize an idea or concept such as inclusive education. There are several studies on this issue and Lawson, Parker and Sikes (2006) used a qualitative approach to understand their experiences and conceptualizations of inclusive education. Their findings revealed that the conceptualization of inclusion varied among participants and educators' narratives about inclusive education focused on the human aspect of day-to-day involvement with individual pupils. Another study by Singal (2008) focused on knowledge and aimed to understand inclusive education at various levels of the South African education system by conducting a qualitative study.

Drawing on this view, the researcher for this study sought to establish the perceptions, views and experiences of educators in mainstream classroom situations in three cases from derived schools in the Eastern Cape. The choice of the mentioned province was triggered by the fact that the researcher is familiar with it and, therefore, it made it easier to gain access to the schools, of course, with permission granted by the Department governing the schools. The central concern of this research is to listen to participants to know more about what are their perceptions of inclusive education for learners with physical disabilities and their views in having learners with disabilities included in the mainstream classrooms. She suggests that educators' knowledge and skills for developing inclusive teaching practices, as well as the encouragement of a change in existing values, beliefs and attitudes, are essential to ensure full participation of all learners in a school setting, irrespective of their conditions. Similarly, another study by Hodkinson (2006) examined secondary educators' knowledge and understanding of inclusion. His aim

was to find out how educators in England, especially newly qualified educators, conceptualized inclusive education, as well as discovering their attitudes towards it. The author found that this population also had diverse conceptualizations of inclusion, which were mediated by classroom practices.

Hodkinson and Devarakonda (2009) examined how inclusion is understood by educators in India through a literature review and in-depth semi-structured interviews. The study findings revealed that inclusion is often not well understood and seen by educators as a vague and complex concept. The authors argue that if inclusive education is to truly become effective, then there is a requirement for educators to be able to gain more knowledge and understanding of it. Most research revealed that educators' conceptualization of inclusive education is diverse. Hodkinson (2006) reported that 40% of participants conceptualize inclusive as "education for all". These participants believed that all mainstream schools should be inclusive. In contrast, Leung and Mak (2010) found that 60.8% of participants interpreted inclusive education as education involving learners with special educational needs in mainstream schools and programmes.

Sadler (2005) found that 87.6% of educators reported that they have "limited" or "very limited" knowledge of inclusive education. None of the educators rated themselves as having sufficient knowledge. Similarly, Gaad and Khan (2007) found that educators do not have enough knowledge and training to address the needs of learners in integrated settings. Participants considered their limited knowledge to have an influence on their attitudes, suggesting that lack of knowledge may be an attitudinal barrier, as well as a practical barrier, to the implementation of inclusion. The second question associated with the study is, "What assistance do educators require from the District Based Support Teams (DBST) to help them improve their practices?" To explore more ways for establishing inclusive education in South African schools, it is imperative to view the policies that South Africa has currently employed to address disability.

2.5 A wider policy framework supporting teacher education for inclusion

Educator issues are high on policy agendas in many countries and increasing attention is being given to teacher education for inclusion. Peters and Reid (2009)

propose an advocacy model for teacher education based on principles of inclusive education and disability studies. They point out, however, that moving from the prevalent technical-rational discourses based on (special) education towards a socio-political discourse takes time because they are 'so enmeshed in our national psyche, legislation, school procedures and daily classroom practices' (p. 557). They highlight the need for societal reform, disability / diversity reform and school reform to be addressed together, to bring about a shift away from the medical or deficit model of special education. Slee (2010) says: 'Just as normalization was rejected by many disabled people as a form of assimilation that invited them to deny difference, inclusive education is compromised by holding the extant regular school as the model for reform' (p. 19).

Garcia-Huidobro (2005) points out that equity must be at the centre of general policy decisions and not limited to peripheral policies oriented towards correcting the effects of general policies that are not in tune with the logic of justice or prevention. In moving to support education for all and removing barriers to participation and learning for all disadvantaged groups, essential links must be made between the reform of the education system and other policies such as those to alleviate poverty, improve maternal and child health, promote gender equality and ensure environmental sustainability and global partnership. In some countries, the involvement of many decision-making bodies fragments policy and practice including debates around teacher education programmes (Brownell et al., 2005; Sindelar and Rosenberg, 2000). This indicates the need for clear vision and purpose and parallel changes in policy and practice to remedy discrepancies in legislation. Lesar (2007) and Kyriazopoulou and Weber (2009) developed a tool for monitoring developments towards inclusive practice. Within their indicators for legislation, they recognised the need for legislation on education to address the quality of training for educators, psychologists, non-educational personnel, etc. with special regard to dealing with diversity.

Many researchers have raised the difficult issue of terminology. Keil et al. (2006) noted that at policy level, there have been some largely unsuccessful attempts to clarify the use of different terms around inclusion and diversity and special needs and disability. In New Zealand, Alton-Lee (2003) notes that the concept of 'diversity' rejects the idea of a 'normal' group and 'other' or 'minority' groups of learners and

sees diversity and difference as central to the focus of quality teaching. OECD (2010) define diversity as: 'characteristics that can affect the specific ways in which developmental potential and learning are realised, including cultural, linguistic, ethnic, religious and socio-economic differences' (p. 21). They do, however, make a distinction between 'diversity' and 'disparity', seeing 'diversity' as an inevitable reflection of the richness of human experience as distinct from 'disparity', in which diverse characteristics are associated with different outcomes and differential treatment. O'Neill et al. (2009) also note major difficulties with terminology including 'linguistic dexterity' (Slee, 2001), where traditional special educators use the language of inclusion to describe unchanged special education practices.

Many other authors have expressed concerns about categorisation and labelling (Hart, 1996; Lewis and Norwich, 2005) and Black-Hawkins et al. (2007) argue that, at school level, these terms are used when the difficulties of the learners exceed the capacity of the school to respond. Such terms can support a view that sees difficulties as 'medical problems' which, in turn, reduce the school's sense of responsibility. In considering how national education policy can support teacher education for inclusion, there is a need to overcome the paradoxical nature of separate provision that leads to the development of separate training.

In England, for example, in the context of increasing specialisation of schools for different learners, Young (2008) suggests that the implied need for an ever-greater range of qualifications and specialism limits who educators think they can teach and quotes Seymour Sarason (1990), who says: 'School personnel are graduates of our colleges and universities. It is there that they learn that there are at least two types of human beings, and if you choose to work with one of them you render yourself legally and conceptually incompetent to work with others' (p. 258). Young points out that, if the system of licensure is such that we cannot prepare educators to teach all learners; then, there will remain some boundary categories that create divisions among learners that result in inequitable experiences, and likely, outcomes. Policies play a vital role.

2.5.1 Policies that address the issue of exclusion in South Africa

a) The role of policy and funding

Most articles focused on what is needed for successful inclusion indicate that schools primarily lack direction in what inclusive education is in practice and the resources and skills to deliver it. Therefore, whilst there may be a reasonably positive policy environment there may be little to no support for implementation. Many of the articles reviewed mention that governments are creating policies to promote education for learners with disabilities - whether that is inclusive education or more commonly some form of inclusion / special needs / special education policy. Itimu (2008), for example, mentions the progress being made in Malawi over the establishment of positive policies for Special Needs Education and comments that, despite many challenges, the government is very committed to improving the quality of SNE and is 'gaining momentum' (p158).

Generally, however, articles tend to be critical of the mismatch between seemingly comprehensive policies and the lack of priority for implementation (Anthony, 2011; Eleweke and Rodda, 2002; Johnstone and Chapman, 2009; Kalyanpur, 2008; Kalyanpur, 2011; Pather and Nxumalo, 2013). Donohue and Bornman (2014) provide a highly critical analysis of the role of policy in inclusive education in the context of South Africa. They criticise the top down approach which sees governments adopt policies that are in line with international priorities but which pay little regard to how they are going to be implemented at the level of schools and educators. In their view, inclusive education policies are a good example of what Matland described as 'symbolic implementation' policies (Matland, 1995).

Many of these policies are highly ambiguous, containing little in the way of direct statements around the plans and resources for implementation. A key issue raised in all the criticisms around policies is a lack of resources for the implementation. As Donohue and Bornman (2014) point out, a significant barrier to the effective implementation of inclusive education in South Africa (as elsewhere) is funding:

"It is difficult to envisage how significant transformations to the educational system in South Africa (e.g. mobilisation of out-of-school learners with disabilities; infrastructure changes to schools) can be made without providing provincial

departments with substantial increases in their short-term funding” (p.7). Johnstone and Chapman (2009) show that for educators their biggest complaint is that they do not have the resources they need to implement inclusion ‘educators perceived the resources they had available to them to be inadequate.’ (p.140). Likewise, the situation in Samoa would seem to bear testimony to this: ‘The difficulty is of course funding of resources, an adequately prepared inclusive education educator costs, as does the provision of advisers and technical resources’ (McDonald and Tufue, Dolgoy, 2013:278).

Kalyanpur (2008) notes the resource challenges of implementation in India. Decentralisation has led to a general reduction in funding for education from central government, forcing States to take up the difference. Unfortunately, that has led to a reduction in support for Integrated Education of Disabled Learners’ scheme (the main programme supporting learners with disabilities), yet another example of financial constraints hindering progress on implementing education policies aimed at learners with disabilities.

Vorapanya and Dunlap (2014) mention financing in relation to the challenges of implementing inclusive education in Thailand: ‘All the school leaders said that the level of national funding for schools was a long way from being sufficient to properly teach all learners.’ (p.1021). Although, in this case, there is some funding available for learners who have been certified as having a disability, this is most often not sufficient to cover the costs of specialist equipment or support required. In this case, it is parents that generally pick up the costs: ‘...most of their extra basic budget came from parents of learners with disabilities’ (p.102).

Donohue and Bornman (2014) believe the ambiguity of policies is linked to the lack of funding and is intentional. Policies like this are created to conform with international norms not as a direct result of locally led changes and are hence ‘symbolic’. The lack of funding attached to such policies is an indication that the policy has little local substance. There is certainly some consistency in the way many of the articles that are critical of policies tend to point to the influence of the international development sector on promoting inclusive education as the only progressive approach for the education of learners with disabilities. In this sense, donors have become very influential in promoting practices which are based on

socio-economic contexts that are not the same in low income countries (Kalyanpur, 2008; Kalyanpur, 2011; Kalyanpur, 2014; Le Fanu, 2014).

Kalyanpur (2011) highlights the impressive policies developed in Cambodia with statements around the need to develop 'strategies for disabled learners' (p.158), but, then, notes that: 'While such political will is encouraging, the fact is these statutes are top-down responses to international imperatives.' (p.158). In trying to comply with donor priorities, their education system is struggling to be effective: 'priorities that may not necessarily be seen as priorities, the Ministry officials have become both the creators and the victims of a fragmented education system that is trying to do too much too quickly.' (p.168). Le Fanu (2014) offers a good warning to the international development sector.

'Given the nature of local contexts of implementation, the International Development Community (IDC) should not seek to impose a single transcendent vision of educational transformation on diverse and complex realities in low income countries – even though the Ministries of Education (MoEs) of these countries may sometimes be willing to accept such programmes, given the lack of critical capacity within these MoEs, coupled with their willingness to welcome any investment in their under-resourced education systems,' (p.74).

This general situation is not helped by the fact that, at international level, there are some very significant education initiatives which don't include learners with disabilities - leaving local governments unsure about just how much priority is provided to learners with disabilities. Despite the rhetoric at international level, a study by Lei and Myers (2011) revealed that at country level the implementation of donor programmes that include learners with disabilities is poor, with the US being the only donor that could demonstrate systematic action on the ground. Their conclusion pointed to the lack of consistency in implementing disability inclusive education programmes: 'The problem is not that donors are doing nothing, so much as they are neither coordinated nor able to demonstrate consistent and/or deliberate attention to the rights of disabled learners in relation to education' (p.178).

In addition, countries are also trying to cope with the effects of implementing Universal Primary Education (UPE), again promoted by the international

development sector, which is putting huge pressure on education systems in the context of delivering effective education for all learners. Given the traditionally low status given to learners with disabilities in education in these contexts, it becomes easier to understand why disability inclusive policies remain 'symbolic'. Learners with disabilities are simply not a priority.

Conversely it should also be noted that a lack of policy regarding education for learners with disabilities can also present a challenge. Mosia (2014), for example, outlines the development of education in Lesotho. Although the Ministry of Education has made several statements around special education, including in its latest Education Sector Strategic Plan (2005) which called for a specific Special Education Policy to be developed by 2012, there is still no such policy. With no definitive statements around what inclusion and special education mean, educators are simply left to interpret these concepts for themselves. A special education policy is necessary to help standardise understanding and expectations across the system. Below is the overview on the policies currently used in South Africa in the implementation of inclusive education for learners with physical disabilities.

2.5.2 Education White paper 6

According to Donohue and Bornman (2014), when the Education White Paper 6 was first published in 2001, South Africa appeared to be following the international trend toward inclusion, but subsequent policy implementation has made little progress over the past decade. Researchers found that educators were not provided with sufficient support in implementing the policy (Dreyer, 2014; Du Plessis, 2013). Donohue and Bornman (2014, p. 10) concluded that the implementation of inclusive education is at an apparent standstill because of ambiguity about the means through which inclusive education can be achieved.

This policy document was a sign that there had been a turning-point in thinking about education within South Africa. Daniels (2010) argues that "It is a shift within a learner or deficit special needs model to a greater focus on barriers to learning and development, a system change or a social justice model." This shift required an education system that will accommodate all learners, with their diverse needs, under one education system. Therefore, the White Paper 6 was designed to transform the

South African educational system by building integrated systems for all learners that eliminate the differences between special and ordinary schools. The recommendations in this policy document highlight the level of support needed by each learner, in contrast to the issue of placement of learners. This support is to be provided, based on the need of each learner. For instance, learners who require low intensity support will receive support in mainstream schools, and learners who require a moderate level of support will receive that in inclusive schools. Meanwhile, those learners who require more specialized and intensive support will receive that in special schools (Department of Education 2001). Another important proposal made by the Department of Education (2001) relates to the need for change in the general education system, so that learners experiencing barriers to learning can be identified early, (Department of Education, 2014).

2.5.3 Policy on Screening, Identification and Support Strategy (SIAS)

The Screening, Identification, Assessment and Support (SIAS) document (DoE, 2005b) was developed to give guidance on how to assess the level of support learners need. An example of how to determine the levels, the levels of support, zone of barriers to learning and type of educational institution where learners would be placed and the degree of support from the district is given below, taken from the draft policy on Screening, Identification, Assessment and Support (DoE, 2005b: 85).

According to the Screening, Identification and Support Strategy (SIAS), provision for a continuum of support is based on three levels of support. To fulfil the goal of supporting the learners' needs, based on what they require, the Department of Basic Education (2011) has introduced the Guidelines for Responding to Learner Diversity in the Classroom. This document is one of the strategies that have been initiated to drive the implementation of inclusive education policies. In addition, the Department of Basic Education (2005) provides guidelines on early identification and support, and it determines the nature and level of support required by learners, as well as the identification of the best learning sites for support.

The SIAS document acknowledges the fact that every learner can learn and that all learners and youth need support. It also acknowledges and respects the differences between learners, despite their different characteristics and learning needs, as set

out in the Education White Paper 6 (Department of Education, 2001). It is within this framework that the major philosophical shifts for the entire education system were proposed. However, over a decade after the introduction of the Education White Paper 6 (Department of Education, 2001), most learners with barriers to learning who attend school are still in separate “special” schools for learners with disabilities (Donohue and Bornman, 2014).

As mentioned earlier, a legislative mandate requires school districts to educate learners with barriers to learning in mainstream schools, to the maximum appropriate extent (Patterson, Syverud and Seabrooks-Blackmore, 2008). Therefore, one of the roles of the District Based Support Team (DBST) is to develop teaching skills in curriculum differentiation, alternative assessment strategies, the use of assistive devices and the use of the SIAS document, as well as developing learner support programmes (Department of Education, 2001). This process may entail several meetings to ensure that most of the school’s staff is engaged in planning and thus is more likely to assume ownership of the proposed changes (Waldron and McLeskey, 2010). According to Makhalemele and Nel (2015), DBSTs still need more training on the implementation of inclusive policies.

The vision of this policy is to provide learners with disabilities full access to education and the curriculum. This is compatible with all documents mentioned previously. It also aims at:

- Systematically moving away from segregation and the labelling of learners
- Emphasizing support for learners
- Providing guidelines for setting up initial facilities and accessing additional resources
- Setting guidelines on how learners with special education needs would be incorporated in full service or regular schools
- Giving guidelines for the adaptation of rural schools
- Introducing strategies and interventions to assist educators in dealing with the needs of a diverse classroom population

- Providing guidelines for educational support services
- Providing clear guidelines on how current special schools could be used to service learners with special educational needs and serve as resource centres
- Reviewing education and training policies, legislation, advisory bodies and governance and organisational arrangements
- Strengthening support services for both learners and educators at all system levels, e.g. at school, district and community levels
- Expanding provision and access for learners to centres of learning in the general education band, further education and training, higher education and adult education
- Adopting a flexible curriculum and assessment policy
- Establishing public awareness and acceptance of inclusive education within the wider social context through dissemination of information, advocacy and mobilization; and
- Developing a funding strategy to ensure that adequate resources are available for implementation. (Department of Education, 2005)

In view of the fact that not all learners who experience barriers to learning, including those with disabilities, have access to appropriate support, this policy is intended to ensure a more rigorous and consistent process of screening, identification, assessment and support of learners across the system. This will enable equitable practice in terms of admission, support and funding. The policy supports the implementation of the main principles of the Education White Paper 6.

The Screening, Identification, Assessment and Support policy specifically aims to identify (1) the barriers to learning experience, (2) the support needs that arise from barriers experienced and (3) to develop the support programme that needs to be in place to address the impact of the barrier on the learning process (Policy on Screening, Identification, Assessment and Support, 2005).

2.5.3.1 The Purpose for Policy on Screening, Identification, Assessment and Support (SIAS)

Screening, identification, assessment and support (DoE, 2005b, 2008; DoBE, 2014):

(1) The purpose of the Policy on Screening, Identification, Assessment and Support (SIAS) is to provide a policy framework for the standardization of the procedures to identify, assess and provide programmes for all learners who require additional support to enhance their participation and inclusion in school. (2) The SIAS policy aimed at improving access to quality education for vulnerable learners and those who experience barriers to learning, including:

a) Learners in ordinary and special schools who are failing to learn due to barriers of whatever nature (family disruption, language issues, poverty, learning difficulties, disability, etc.)

b) Learners of compulsory school-going age and youth who may be out of school or have never enrolled in a school due to their disability or other barriers. (3) The focus of the policy is to manage and support teaching and learning processes for learners who experience barriers to learning within the framework of the National Curriculum Statement Grades R–12. (4) The policy is closely aligned to the Integrated School Health Policy to establish a seamless system of early identification and effective intervention to minimize learning breakdown and potential dropout. (5) The policy directs the system on how to plan, budget and programme support at all levels. (6) The policy must further be a key procedure to ensure the transformation of the education system towards an inclusive education system in line with the prescripts of Education White Paper 6 on Special Needs Education: Building an Inclusive Education and Training System (2001). (7) The policy provides clear guidelines on enrolling learners in special schools and settings, which also acknowledge the central role played by parents and educators (Education White Paper 6). (8) The policy includes a protocol as well as a set of official forms to be used by educators, School-Based Support Teams and District-Based Support Teams in the process of screening, identifying and assessing barriers experienced by learners with a view to planning the support provision according to programmes and monitored by the District based Support Team. (9) The protocol outlines the role functions of staff appointed by the district as well as school structures responsible for the planning and provision of support. (10) It also regulates the composition and operations of the key

coordinating structures required for the implementation of an inclusive education system, namely School-based Support Teams and District-based Support Teams, which are transversal structures, aimed at rationalizing and maximizing support provision at school and district level. (11) The Policy on Screening, Identification, Assessment and Support (SIAS) aligns with other Department of Basic Education strategies, which aim to support educators, managers, districts and parents in schools (DoE, 2005b, 2008; DoBE, 2014).

2.5.3.2 Admission Criteria for learners in Special schools

According to the Report on Guidelines, 2014, the SIAS document is designed to screen learners who require a high level of support to be admitted in special schools as follows:

National Policy on Screening, Identification, Assessment and Support, (SIAS) process. Only learners whose support needs have been identified using the SIAS process should be admitted in special schools. All admissions must be ratified by the District-based Support Team (DBST).

iii. In cases where the determination of a learner's support needs requires a medical assessment, this assessment must be conducted by the relevant professionals by completing the Disability and Health Form included in the SIAS Toolkit. The outcome of the assessment should be communicated to the school and parents and used to ensure that the learner receives appropriate support as part of the SIAS process. The medical assessment on its own must not be used so as justify admission to a special school.

iv. No learner with very high needs may be refused admission based on the severity of the learner's support needs.

v. Priority of admission to a special school should be given to learners who need high levels of support, are out of-school and have not been able to gain access to any form of schooling.

vi. Appropriateness of placement of learners should be reviewed annually or at least every two years.

vii. Admission to a special school should be considered as a last option for a learner and should only be done in cases where reasonable accommodation cannot be made available in the local ordinary school. Learners and parents who meet the

requirements for additional support must still can exercise their choice as to whether they are educated in a special school or an ordinary or full-service school.

viii. Ideally, a special school should accommodate a maximum of 300 learners on site.

ix. A decision to exempt a learner entirely, partially or conditionally from compulsory schooling should be approved by the Head of Department and such a learner should be placed on a register by the Department (SASA, Section 4 (1) and (2)). The Department must put in place measures for the monitoring of such learners in terms of their support and education. The exemption clause is not meant to be used by schools to exclude learners with disabilities. Only parents can request for their child to be exempted from compulsory school attendance.

x. Special schools should introduce exit strategies and transition to work programmes for learners who are older than 18. Schools must motivate why individual learners should remain at school after the age of 18.

Such a motivation must outline the programme of curriculum support that will be offered. This motivation must be reviewed on a year-by-year basis and must be approved by the Head of the Provincial Education Department.

xi. Schools must further incrementally introduce early intervention programmes and classes for learners from the age of three. This is particularly important for children with intellectual disability, visual impairment, autism, communication impairments, physical disability and those who are Deaf who are dependent on specialist interventions at as early an age as possible.

xii. All Grade R classes are expected to be inclusive and offer places to all learners. Special schools should establish outreach services to provide additional support to children with disabilities in mainstream settings.

Below are the criteria used on how learners are screened using the SIAS document.

(a) Learners who might fall within the Low to Moderate Range (Levels 1 – 3): Scenario A

Suzanne (pseudonym) is hard of hearing. When looking at all the indicators, one may find that she may have no useful hearing (in the high needs column), but that she has moderate expressive and receptive language, can lip read and / or make use of residual hearing through an FM system (People whose “hearing loss” is in the

central auditory system rather than the ears (APD) frequently benefit from hybrid hearing aid/FM systems in which the speaker wears the transmitter microphone and the person with the hearing loss wears special hybrid hearing aid/FM receivers), has few cognitive, fine motor and behavior problems, does not come from a poor socio-economic home environment, has strong family support, lives within reach of a school with a high level of resourcing and the capacity to organize effective school based support. The completed learner profile will, therefore, show that the learner falls predominantly within the range of 'low-moderate zone'. Decisions to be taken around this learner would, therefore, not be based on her category of disability, but rather on the level of support needed and how this can practically be organized. The ordinary school can arrange for the learner to use an FM system in class, organize teaching and assessment to accommodate her. The district support team could arrange support and training for teachers and the Institution Level Support Team by specialists who can be drawn from the District Based Support Team or a special school. If any of the above arrangements cannot be made, the learner could be given the choice of attending a full-service school. The above scenario shows us that the social model of disability helps us to see the learners in context, to see what systems are causing barriers that are getting in the way of their development and to identify support that they might need to reach their full potential (DoE, 1997).

(b) Learners who might fall in the High Range (Level 4): Scenario B

Mary-Anne (pseudonym) is a learner with severe intellectual disability. When assessed by the teacher, the following profile emerges: she may, broadly-speaking, fall within the high needs range regarding cognitive functioning. Her cognitive skills in literacy may, however, fall within moderate range, with numeracy skills in high needs; she may have good participation and social skills, mobility, receptive communication, hearing, vision and self-care. However, regarding expressive language, the learner falls within the high needs range; she is only moderately safe in terms of independent moving in and outside the school; fine motor skills fall within the moderate range; in terms of health needs, the learner falls within the moderate range and has moderate transport needs. The school profile shows that the local neighborhood school would fall in the moderately effective range, because of lack of resources, large classes, safety problems, lack of capacity amongst educators, no

Institution Level Support Team and a district support team which does not yet function effectively. Decisions on organizing support for this learner who falls predominantly within the moderate, intensity support needs range and where the local school also has some level of developmental needs, may find that placement in a full-service school will be more appropriate. Had this learner lived in a district where there is a fully functioning district-based support team with pro-active training on inclusive practice and had the school been highly effective, with good curriculum implementation and an institution-level support team, the learner may quite easily have attended the local school with support coming from the DBST and or special/resource school. The decision on the placement of the learner needs also not be permanent but should be reviewed annually. This case makes it quite clear that the decision must be based on a range of factors and not solely on the category of disability of the learner.

(c) Learners who might fall in the High Range (Level 4): Scenario C

Ralph (pseudonym) is against the law. Although only 14 years old, he has been in and out of school due to involvement in street gang activities. He is at present awaiting trial and has been placed in a secure care centre. Around “challenging behavior”, he requires constant supervision and counseling by a youth care worker. In the areas of cognitive functioning with respect to literacy, numeracy and life skills, he has fallen far behind his grade age peers and will need assistance through a fast track programme. It appears that he could access the ordinary school curriculum. He has no expressive and receptive language problems. His socio-economic and family situation shows that he has no back-up from his home. His completed profile might show that he might be a learner who needs high-level support. However, if he has access to a rehabilitation programme, he will not need to be in a high needs facility for ever. His identification as a learner with high-level support needs is also not based on any category of disability. Raymond’s case (who is not disabled) also indicates that the placement of a learner in a full-service school does not depend on a learners’ disability but on the level of support that is needed by the learner.

(d) Learners who might fall the Very High Range (Level 5): Scenario D

Thabo (pseudonym) is a learner with severe limitation of movement because of cerebral palsy, with moderate cognitive ability, poor fine motor skills, little expressive

and receptive language, a very low level of self-care, high medical needs and no transport to school, and may fall within the very high zone of support needs. If contextual factors also indicate that the local school is not accessible, that support (e.g. physiotherapy) is not readily available in the district, this learner may possibly best be accommodated in a special school/resource centre. If a special school is not within reach, a full-service school should also be targeted and equipped. All the contextual factors should, however, weigh more heavily on the decision-making process than the category of disability. If some indicators like receptive language, cognitive ability and transport needs, and accessibility of the school and availability of physiotherapy on a peripatetic basis had been different, some other decision could have been arrived at regarding the placement of this learner. These four scenarios indicate that “the implementation of an Inclusive Education policy means that educating a child is not only working with learner’s difficulties in isolation, but also working with the broader social context that the child comes from, and what the child experiences at school” (DoE, 2006: 28).

In conclusion, despite the popular misunderstanding that inclusion is about the closure of special schools, the reality is that policies such as those written in White Paper 6: Special Needs Education have been consistent in recognizing the need for some learners to be educated in special schools. All legislations and White Papers clearly call for the inclusion of all learners, including those with special educational needs, in a unitary education system and state that full support must be made available for learners to promote their learning and development.

However, the documents also realize that not all educators are prepared to provide the supportive system for the learners and, therefore, recommend that training be made available for educators. In support of special schools, the White Paper 6 (DoE, 2001: 21) states that:

- While special schools provide critical education services to learners who require intense levels of support, they also accommodate learners who require much less support and should ideally be in mainstream education.
- When implementing our policy of inclusion, we will pay attention to raising the overall quality of education services that special schools provide.

- We will ensure that learners who require intense levels of support receive these services since mainstream schools will be unable to provide them.

In addition to these roles, special schools will have a very important role to play in an inclusive system. The new role for these schools will include providing particular expertise and support, especially professional support in curriculum, assessment and instruction, as part of the district support team to neighborhood schools, especially 'full service' schools. This role also includes providing appropriate and quality educational provision for those learners who are already in these settings or who may require accommodation in settings requiring secure care or specialized programmes with high levels of support.

2.6 Support needed by educators in the implementation of inclusive education

Inclusion should, however, not be an issue solely about learners with disability. Shaddock, MacDonald, Hook, Giorcelli, and Arthur-Kelly (2009), observe that the "inclusion movement has primarily been a special education movement" (p. 174), and as such, it is easy to fall into thinking that it is only about learners with disability. The impetus for inclusion has, indeed, come from outside of the mainstream; from those who have been traditionally excluded. Many, however, now view inclusive education as being concerned with diversity more generally. According to Shaddock and colleagues (2009), inclusion implies that if participation becomes an issue for any student, whether arising from disability, gender, behavior, poverty, culture, refugee status or any other reason, the desirable approach is not to establish special programmes for the newly identified individual or group need, but to expand mainstream thinking, structures, and practices so that all learners are accommodated. Educators are the key figures in the implementation of inclusive education with the assistance of the school principals and school management team (SMT) and, therefore, their roles in the process are in the spotlight. Further to that, the researcher sees it vital to first look at the role played by parents as they play the key role in the development of learners with disabilities even before they attend school.

Inclusion must, but not be visible as an issue solely about schools for learners with incapacity. Shaddock, MacDonald, Hook, Giorcelli, and Arthur-Kelly (2009), observe

that the “inclusion motion has typically been a special education motion” (p. 174), and, as such, it is straightforward to fall into thinking that it's miles most effective about learners with disability. The impetus for inclusion has, indeed, come from out of doors of the mainstream; from those who have been historically excluded. Many, however, now view inclusive education as being involved with diversity greater typically. Consistent with Shaddock and colleagues (2009), inclusion means that if participation turns into a problem for any scholar, whether bobbing up from disability, gender, conduct, poverty, tradition, refugee reputation or another cause, the appropriate technique isn't to set up special programmes for the newly identified character or organization want, but to extend mainstream questioning, structures, and practices so that each one of the learners are accommodated.

Educators are visible as the important thing figures in the implementation of inclusive education with the help of the school principals and school management team (SMT) and, therefore, their roles within the technique are at the highlight. In addition to that, the researcher sees it essential to first study the function performed by means of parents as they play the important thing role in the improvement of learners with disabilities even earlier than they attend schools. Consequently, their role is discussed as follows:

2.6.1 Educators' role:

Consistent with the meaning of inclusive teaching, an educator role generally refers to the way they perform their obligations to teach learners with disabilities in the regular classroom (Ainscow, 2007; Jordan, Glen and McGhie-Richmond, 2010). The educator's role includes daily duties such as planning, teaching, and developing strategies to reduce issues affecting their pupils' learning (Wearmouth et al., 2006; Florian, 2008), and educators “identify resources to support progressive inclusion” (Agbenyega, 2007, p. 108). In addition, the educators' role also includes assessment testing and reporting to their supervisor and the Principal (Bourke, 2010). Operate and Brady (2011) notes, “inclusive educators play a central part in addressing the diversity of learners' expectations and demands through a vast repertory of modern educational activity and learning strategies that do not marginalize them within the wider education system.” For such educators, “their best designs and sound teaching practice will bear all their learners forward into a more equal school/

fellowship in which all apprentices will do well” (Claiborne, Cornforth, Davies, Milligan and White, 2009: 49).

The nature of the educators’ role is not only confined to the norms of teaching a lesson, but it also includes their individual sensitivity to the complex nature of the specific disabilities of their pupils (Bourke, 2010). The way they attain out to their learners and then that, no learner suffers from their practices while delivering their lessons (Jordan, et al., 2010). Ainscow (2007) adds that when educators understand disabled learners’ backgrounds completely, they can use appropriate teaching strategies and perform their duties more confidently.

However, Opertti and Belalcáza (2008) argue that inclusive educators’ roles are not limited to duties in the classroom, but cover duties outside of their classrooms as their role is considered one of co-designers and co-development of inclusive practices. The discourses that surround educators’ roles in inclusive education largely include the way educators are prepared to carry out their responsibilities wherever they are at the time of their duty (Jordan et al., 2010). This means the capacity of the role played by educators is to oversee and plan what suits best for their learners’ learning, irrespective of where they are to learn (Ainscow, 2007). For example, educators can plan for the cause and effects of what may happen inside and outside the classroom (Opertti and Belalcáza, 2008). It is not the ordinary teaching and learning norms that derive the educators’ role, but it is the creative insight that educators have for inclusion (Ainscow, 2007).

In inclusive education, the educators’ role requires flexible thinking in terms of being creative and innovative to accommodate diversity among learners with varying disabilities under their care (Lohani, Singh and Lohani, 2010). Educators’ roles become realities when the skills and knowledge of inclusion they have acquired through formal training in educators’ colleges and universities and their own individual characteristics meet their understanding of learners with special needs’ diverse learning requirements (Florian, 2008). In other words, a success in inclusive education in a country depends largely on the capacity of the educators’ skills and knowledge in inclusive education (Bourke, 2010).

However, de Boer, Pijl and Minnaert (2011) believe that one factor that can hinder educators from developing their inclusive roles is when they hold certain beliefs and attitudes about disabilities. Acadia (2008) makes this point in his study of Finland's inclusive education regarding educators' roles: "Part of the success of Finnish inclusive education policies relies heavily on educators' positive approaches towards inclusion, strong professional skills, high quality pre-service education and opportunities to continue their professional development through in-service training and networking with other educators." (Acedo, 2008:10)

2.6.2 Role of the principals and the school management team (SMT):

School principals are responsible for everything the staff does and every document that is issued by the school (Shani and Koss, 2015). Swart and Pettipher (2011) and Dreyer (2014) suggest that school principals should recognise their responsibility to set the tone of the school and help the school to become and maintain a supportive and caring community. Research has shown that successful inclusion depends largely on the attitudes and actions of the school principals, as they create the school's culture and can challenge or support inclusion (Donohue and Bornman, 2014; Pearce et al., 2009). The culture of the school is difficult to address, but it is crucial for inclusion. A school culture may be defined as the guiding beliefs and expectations evident in the way a school operates.

According to Waldron and McLeskey (2010), to change a school culture and create a more inclusive school, principals must question their beliefs about teaching and learning of learners who struggle to learn, this can be done by engaging in a collaborative process that results in new values, beliefs, norms and preferred behaviours. It is of the utmost importance that educators, parents and learners work together as a whole for a school community to establish an inclusive school. Ryan (2010) suggests that the school principal should gather information from these stakeholders on how they want their inclusive school to look. Once that has been achieved, the school principal, as leader of the institution, has the responsibility of hiring professionals whom he believes will embrace inclusive ideas and answer the questions that arise (Granados and Kruse, 2011). The principals should work together with the other stakeholders to design inclusive programmes. For instance, the principal in the above study initiated various committees, councils, and

programmes that he believed would make it possible for learners, parents and educators to become meaningfully and interactively involved in the operation and activities of the school (Ryan, 2010).

One issue that came from the studies points to the fact that the inclusion initiative may potentially be against policy initiatives that aim to identify teacher effectiveness and teaching quality in terms of learners' academic achievement (McGhie-Richmond et al., 2009). Research shows that learners with barriers to learning are often seen as the exception and that the mainstream school is not always seen as the place for them by some school principals (Avradimis et al., 2006; Van De Putte and VanSchauwer, 2013). Usually, it takes time for the school to decide whether to accept the child as a member of the school, and this is still viewed as contradictory by some educators, who mention that they are expected to produce high pass rates yet they are expected to admit learners with challenges to their classes. Van De Putte and De Schauwer (2013) argue that the way in which learners with barriers to learning are viewed determines the way in which they can be dealt with.

Apart from the leadership styles of the school principals, Anati (2012) found that training was the main concern among educators. According to Anati (2012), educators reported a lack of confidence and unpreparedness for teaching in inclusive classrooms. These educators pointed out that all they had received were sketchy training sessions, which did not necessarily prepare them to teach in inclusive settings. Principals should maximise performance by reconsidering resource allocations whilst trying to maintain consistency. This could be done by applying a redefinition of the cultural context of the organisation and the development of an intentional design (Granados and Kruse, 2011). Principals should target funding sources that provide the school with more resources to ensure that all learners have an opportunity for success. For instance, programmes that help learners experiencing behavioural and academic problems can be organised (Shani and Koss, 2015). One of the roles of school principals in inclusive schools is to offer support to the staff. Mentoring is an effective way to promote quality in the school as an organisation; therefore, principals should encourage educators to explore ways in which they could help each other. However, research shows that the leadership styles of principals show little collaboration with educators. Educators identify the

role of the school principal as being conservative and authoritarian and thus the morale of the staff is low – which seems to be directly linked to the absence of meaningful leadership in the school (Granados and Kruse, 2011).

2.6.3 The role of parents in inclusive education

Parents play an important role in the development of successive inclusion programmes and hence many countries provide guidelines for the active participation and involvement of parents in their learners' education (Leyser and Kirk, 2011). True cooperation implies partnership in the planning and implementation of the decisions which make the same norms of behavior and commonly accepted goals. The success of cooperation between the school and the family depends largely on the communication competence of both subjects, including parents as important partners in the encouragement, and the maintenance and enhancement of this cooperation. Setting boundaries between home and school becomes an important precondition for establishing satisfactory cooperation (Reay, 2005); while the blurring of boundaries and the lack of clearly defined roles have an unfavourable effect on the development of partnerships (Todd, 2003). The beginning of partnership with the school is burdened by numerous fears experienced by parents of learners with disabilities: How will the school accept the child? Will the child manage to master at least one part of the curriculum? Will he/she be accepted by the teacher and peers? Will the child begin to resent school commitments when he/she encounters the first problem? (Hrnjica, 2004).

Unfortunately, most of these fears are justified since, even before the child starts school, parents have had many negative experiences (in their surroundings, healthcare institutions, playing with peers in the kindergarten). Parental experiences and knowledge about the peculiarities of the impairment, early development and socio-emotional developmental status, as well as about the child's preserved potentials and strengths, are invaluable for positive educational outcomes. Recognizing the preserved potentials as well as the abilities that can be built upon them helps class educators and educators to determine the direction they should pursue in further work with the child (Lazarević, 2012). It is hence important for the teacher to build the skills and abilities necessary for teamwork, such as: communication skills, cooperative skills, responsibility, exchange of opinions,

appreciation etc. (Lazarević, 2012). Researchers in the United Kingdom have identified certain typologies of parental involvement in their learners' education. According to Vincent (1996), these include parents as consumers, as participants, and as independent parents. In the United Kingdom, after the 1988 Education Act, the emphasis was on parent-school partnership. This, empowered parents belonging to the well-off middle class to gather more information about schools, to select schools, to get involved in school governing bodies etc. (Reay et al. 2011).

2.6.1.1 Support structures that educators require to align their teaching methods with the needs of learners with physical disabilities

In the past, the inadequate resources provided to mainstream education were seen to be the cause of educational stress for educators interested in helping learners with special needs (Engelbrecht, 2013). The active involvement of parents is a central factor in the child's effective learning and development (Amod, 2014; Burke and Sutherland, 2014; Hammond, 2013; Engelbrecht, 2013). The South African Schools Act mentions the recognition of parents as the primary caregivers of their learners and therefore they are the central resource to the education system.

This, however, does not occur frequently in mainstream schools and educators report the increase of stress surrounding the limited contact with parents of learners, especially with intellectual disabilities. The socioeconomic status of the parents was seen to be the main contributor of parents' lack of involvement with their child's education (Amod et al., 2014). The reasons for this may be due to the difficulty for parents to attend after school meetings, parents who work long distances away from home as well as poor health affecting their ability to get involved in school activities. In poorer communities, educators need to take initiative to reach out to parents to make them a part of the school community (Engelbrecht et al., 2013). The support structures provided to educators, namely from parents, principals, colleagues and special needs educators are often lacking in schools or just ineffective in helping the educators deal with the pressures of inclusive education (Hammond, 2013; Burke and Sutherland, 2014). Educators have reported the need for consultation with other professionals, namely psychologists, speech and language therapists to name a few (Moolla, 2012; Shongwe, 2015).

These include the establishment of school-based support teams (SBST), district support teams (DST), special schools as resources, School Governing Body (SGB),

School-Based Staff Development Programmes (SBSDP) as well as the use of local community resources, and learner-to-learner support. A study completed by Avramidis et al. (2012) reported that 56% of educators stated that they needed more support with learners with disabilities from the Department and learning support teams and to maintain collaboration and support with them:

2.6.1.2 Department and Learning Support Team

Learners with physical disabilities are often seen to require social support in an inclusive classroom. This is broadly viewed as the process by which individuals feel valued, cared for, and connected to a group of people, which, as a result, will shape that individual's values, belief systems and thought processes (Pavri and Monda-Amaya, 2011). The sense of belonging and membership at school, receiving instrumental assistance and emotional support from key members in one's social network, influences positively on the social well-being of learners with physical disabilities (Pavri et al., 2011). Research indicates that inclusive classrooms promote reciprocal friendships between learners with physical disabilities and their peers, and this then enhances learners' social satisfaction at school (Pavri and Monda-Amaya, 2011; Shongwe, 2015).

However, there is conflicting research that indicates that inclusive education could be disastrous to disabled peers, detrimental to their learning as they may suffer from peer rejection and inferiority complexes (Shongwe, 2015; Wylde, 2007). On the contrary other studies have reported that learners without any disabilities become accepting, understanding, and acknowledge similarities with those with special educational needs when exposed to them in the classroom (Downing and Williams, 2007). These learners become more aware of other learners' needs, more comfortable around people with disabilities, more accepting of differences as well as an improved social and emotional development (Downing and Williams, 2007; Hays, 2009). However, even though inclusive education can be a positive factor to learners with no barriers to learning, it is reported to be detrimental to these learners too at times (Shongwe, 2015). This can be due to parents reporting educators' lack of time spent assisting all learners in the class (Shongwe, 2015). Collaboration and support is one of the key elements of managing inclusion in mainstream schools. The

following section explores ways that collaboration and support can be maintained in mainstream schools.

2.6.1.3 Collaboration and support in mainstream schools

As schools become inclusive, there is an increasing diversity in learner needs. Unlike their typically developing peers, learners with disabilities may need extended instruction or assistance on specific tasks. White Paper 6 (Department of Education, 2001) states that schools, educators and families must collaborate to ensure that schools provide the resources and support to include learners with diverse educational needs. Enlisting collaboration for learning support that meets the support needs of a specific learner depends on identifying and understanding the assets in the learner's environment that may be accessible (as discussed in Harty and Alant, 2011).

According to Engelbrecht (2007), collaboration was traditionally seen as a problem-solving consultation process; discussions of important learning outcomes were conducted in private by school administrators, curriculum specialists and other 'experts'; and a professional with a certain expertise would assist another individual (teacher, parent, learner). In contrast, collaboration within an inclusive education system is essentially about collective decision making and problem solving; shared responsibility for decisions taken; a supportive environment; co-operation towards a shared goal; accountability for outcomes; shared resources; and where every member of the group is valued as an equal partner (Swart and Pettipher, 2011).

(a) Collaboration and administrative support

Literature on this topic continues to emphasise that to see inclusive education policy implemented, there should be a culture of collaboration and administrative support that encourages the policy's goals and practices (Ainscow, 2007; Liasidou, 2007, 2008; Meijer, Soriano and Watkins, 2007; Mullick, Deppeler, Sharma, 2012). In addition, the literature also notes that collaborative administrative support is vital to monitor inclusive education policy implementation processes (Peters, 2007; Mackenzie, 2012). Moreover, there is no shortage of literature that indicates the lack of effective collaboration. It has been a hurdle to achieve inclusive education goals (e.g. Ryan, 2007; Jones, 2012; Mullick et al., 2012).

In an inclusive spirit, management hierarchies can create fluid relationships amongst those involved in implementing policy on inclusive education and nurture a dialogue so everyone should have a voice on what happens at the school level (Ainscow, 2007; Ryan, 2007). This involves collaboration between policy makers and with people working in the education system, such as the educators, for all parties to negotiate what works best, not only for one individual but also for everyone (Ainscow, 2007). A development of systematic monitoring and evaluation procedures to ensure flexible special education practices are taking place is what can move policy forward (Meijer, Soriano and Watkins, 2007; Mullick, 2012). Ainscow (2012) remarks: “a fundamental challenge for policy makers and practitioners is, therefore, to find ways of breaking the links between disadvantage, educational failures and restricted life chances.”

Pijl and Frissen (2009) write: “Specific steering concepts of policymakers, whose interventions seem to address schools as ‘machine’ bureaucracies, while in fact they are professional ones, force schools to create the illusion they have adapted to include learners with special needs. Schools and educators themselves must be the driving forces of change”, (p. 366). However, Hodkinson (2012) argues “what then is this inclusion of government educationists and professional speak?” (p. 5). In other words, both policy makers and implementers must speak the same language and have a common vision towards implementing inclusive education (Ryan, 2007). Dyson and Gallannaugh (2007) argue “it is the matter of thinking, talking, reviewing and refining practice and making attempts to develop a more collaborative culture” (p. 5), and, that is, the network between the professionals and educationists to minimize the struggle an inclusive education policy attempts to address (Ainscow, 2007).

Moreover, for Naraian (2010), “In implementing inclusive education, special educators frequently collaborate with general educators in various settings.” In other words, without consistent collaboration no one knows the stagnation state of the inclusive education policy (Dyson and Gallannaugh, 2007). Meanwhile, for de Boer, Pijl and Minnaert (2012), the struggles for an inclusive education policy to claim its intended purpose is not limited to aspects such as training, resources, legislation and educators. That means an array of aspects is needed for the

inclusive education policy to fulfil its purpose, including sufficient resources within a school for educators to use in their teaching (Hodkinson, 2012). A volume of sufficient teaching resources for learners' learning cannot only reflect how much learners with special needs learned from the lessons taught to them; rather it is the entire teaching and learning processes including the assessment systems (Florian, 2008). For example, the tests and examination systems used can assess disabled learners' learning.

(b) Educators' professional development through pre-service and in-service practices

Professional development is described as a concept that promotes improvement in educators' education and professional practice and fosters the relationship and collaboration between schools and universities necessary to support the learning of prospective and experienced educators (Margolin, 2011; Ahsan, Sharma and Deppeler, 2012). Professional development does not end at one stage; rather it is an on-going learning process (Petrie and McGee, 2012) and so the skills and knowledge staff acquire through the trainings are reflected in the workplace. Professional development is important because it introduces the educators to curriculum and pedagogical reforms (Petrie and McGee, 2012). Educators' efficient, professional development is a necessity because educators are key agents in transforming educational goals while performing their role as educators (Margolin, 2011). Literature acknowledges that educators who are equipped well with sufficient skills and knowledge have a better impact on the success of inclusive education initiatives (For example, Thornton, Peltier and Medina, 2007; Opetti and Belalcáza, 2008; Buzdar and Ali 2011; Margolin, 2011). They can then blend their professional knowledge and skills, adjust their role and recognize the practices they need to exhibit to provide on-going support for their diverse learners (Ferguson, 2008).

According to Ntombela (2009), providing professional development for those educators tasked with implementing innovation and providing the necessary material and human resources for the innovation are important to achieve inclusive education. Educators' professional development can improve learner achievement (Paliokosta and Blandford, 2010; Petrie and McGee, 2012). Thus,

“appropriate professional development, including educator training, is regarded as a cornerstone of the development of inclusive education” (Pearson, 2009). The aspect of professional development for educators should be centred on their skills and knowledge so that they do not lack efficient skills to handle learners with varying learning needs (Opertti and Belalcáza, 2008), while still performing their role as educators (Margolin, 2011). As Acedo (2008) argues, “When this type of support is not available and educators are inadequately prepared and ill-equipped with skills to offer” (p. 10), inclusive education has not reached its peak (Ntombela, 2009). To provide learners with rich learning opportunities and enhance their learning, educators must develop their own professional competencies, knowledge and pedagogy. Educators develop their professional skills and knowledge in two different ways. Firstly, educators gain their professional skill through pre-service training and secondly, through in-service programmes (Acedo, 2008).

- **Pre-service programmes**

A pre-service training programme takes place in educator education colleges and universities (Margolin, 2011). Training programmes include prospective educators taking units on inclusive education accompanied by supervised practicum (Petrie and McGee, 2012) to equip them for their new role (Conderman and Johnston Rodriguez, 2009). Training programmes aim to prepare educators who can successfully support the learning of every student and respond to the nation’s diverse learning community (Robinson and West, 2012).

Pre-service training offered in colleges and universities is set out in accordance with educator preparation plans laid out by the education department (Margolin, 2011). For example, “In South Africa, in other words, the National Department of Education offers support to the Educators’ Colleges and decision-making bodies to oversee and take control of graduates likely to enter the teaching profession with certain skills. In this vein, the research literature has established that lack of appropriate information in educator preparation; curricula, untrained educators and insufficient practicum experiences leave a new educator ill prepared in inclusive practices (Ahsan, Sharma and Deppeler, 2012). Petrie and McGee (2012) argue that during an initial educator training at colleges and universities,

both the practicum and course studies should equip prospective educators for the new role. However, Margolin (2011) argues that the education of educators in the classroom cannot end there; developing their professional competencies, knowledge and pedagogies should be ongoing and delivered whenever a need arises. That means changes in the education system are never ending, thus educators are expected to undergo timely training through in-service courses to meet the new demands of imminent changes.

- **In-service programmes**

Staff training through in-service education is an approach of staff development that aims to upgrade skills and knowledge (Giangreco, Cichoskikelly, Sherman and Mavropoulos, 2011). Development can either be planned or unplanned. According to O’Gorman and Drudy (2010), school-focused in-service training is characterized by continuing education activities that try to focus on the interests, needs and problems directly related to the job or the setting. In-service programmes are also a way to help educators recapture their former knowledge and skills and to apply this in their current situation (Margolin, 2011). As Vaillant (2011) put it, “trained educators often revert quickly to their old habits and training activities and use the innovation they were exposed to in training” (p. 390). Thus, educators who require an in-service training should be encouraged so that they can enhance their skills and knowledge. If all educators are informed of the changes in the education system, school effectiveness and the goals of reform education on inclusion are achieved as a result (Jones, 2012). Before proceeding to the other sub-research questions of this study, namely, educators’ views regarding inclusion of learners with physical disabilities, it is vital to establish the preparedness of the support services to embark on the process.

- **Preparedness of supporting services**

Inclusive education policies often work on the assumption that mainstream schools are supported by specialist services provided through the special education sector. However, evidence is emerging from the literature suggesting that the special education sector, in many cases, is ill-prepared to support inclusion (Maguvhe, 2013). Of key concern is that, currently, special schools themselves are often not adequately resourced to support their learners and are in an already weak position when it comes to resourcing learners in mainstream

classes (Tumwesigye et al., 2009). Kristensen et al. (2006) studied 15 special schools in Uganda and found the quality of education in them to be generally quite poor with an absolute shortage of appropriate resources. Moreover, special education educators may not be very good at supporting learners with disabilities; they may themselves have only very limited or no specialised training (Hove, 2014; Maguvhe, 2013). It is also common to find schools specialising in one or two impairments but their educators are nevertheless still being expected to provide support to a full range of learners with disabilities.

The use of itinerant educators is an approach which inclusive education policies often suggest. Itinerant educators are those from either the special education sector or from the mainstream that have been given some form of additional training, who move from school to school supporting learners with disabilities. Ideally, they would work with learners for whom they have direct specialist knowledge; visit on a needs basis; and work in partnership with the class teacher to ensure the child has appropriate access to the curriculum and can progress alongside their peers. Whilst there are very few studies that focus on the effectiveness of itinerant educators those that have been carried out show significant issues with this approach. Lynch et al.'s (2011b) study of itinerant educators in Kenya highlighted the difficulties under which these educators are working. Despite being responsible for supporting visually impaired learners in mainstream schools, they lacked even the most basic of resources. Since there were no large print materials available for their learners, some had taken to spending their holidays transcribing the most important text books into large print themselves. The provision of magnifiers would have solved this issue. But as Lynch et al. (2014) found in a similar study in Malawi, itinerant educators often have little in the way of training in assistive technology and, therefore, do not tend to look for those kinds of solutions.

Itinerant educators in Uganda were found to have levels of training that were well below what was required (Lynch et al., 2011a). Although most had some training, around half reported this as being non-validated in-service training. Despite being responsible for supporting visually impaired learners many lacked knowledge of

their specific learning needs. In addition, they were significantly underprepared for effectively managing their caseload and for record keeping.

Their main contribution seemed to be in helping schools to identify visually impaired learners: 'As it stands, whilst the ITs (itinerant educators) may be effective in identifying learners who are blind and require braille, they are not trained or equipped to support such learners successfully in local mainstream schools.' (Lynch et al., 2011a: p1131).

In high well-developed countries, inclusive education and the education of learners with disabilities have benefitted from things like new partnerships between special and mainstream schools with different professionals; new forms of pedagogy; improved teacher skills; more positive attitudes; and better learning environments. Nevertheless, this is not the case in low-income countries where the pace of change is very different and highly influenced by their starting points. Each country is in a different state of readiness to implement inclusive education for learners with disabilities but this does not seem to be acknowledged to any significant degree (Srivastava et al., 2013).

2.6.1.4 Assessment of competences and educator profiles

OECD (2005) found that many countries recognise the need for clear and concise statements of what educators are expected to know and can do in educator profiles embedded throughout the school and teacher education systems. They suggest that the profile of educator competences needs to derive from the objectives for student learning, and should provide profession-wide standards and a shared understanding of what constitutes accomplished teaching. Educator profiles, therefore, need to include subject knowledge, pedagogical skills, the capacity to work effectively with a wide range of learners and colleagues, to contribute to the school and the profession, and to continue developing. Such a profile can help to align all the elements involved in educators' development and support work to ascertain whether educator development programmes are making a difference.

Feyerer et al. (2006) stress the need for schools to convey the competences necessary for living in a diverse and multicultural society to all learners and, therefore, suggest the following educator competences and say that the methods used in teacher education must also correspond with the goals that include:

- Open, project oriented and pupil centred forms of education;
- Use and production of new teaching materials, design of learning environments; – Process oriented support diagnostics and new forms of assessment, feedback and evaluation;
- Reflection and adaptation of one's own values, attitudes and action patterns;
- Intercultural learning, gender education and education of gifted learners;
- Interdisciplinary collaboration with other educators, therapists and institutions within/ beyond school and increased parental involvement;
- Quality assurance and school development (e.g. use of the Index for Inclusion, Booth and Ainscow, 2002);
- Public relations together with all school partners to positively influence public opinions.

Hoover and Patton (2004) list two types of competences needed to differentiate curriculum and instruction: development competence and implementation competence. The first includes, among others, the process of curriculum development, curricular issues, planning according to age, grade and learning styles, related nature of content, materials, instructional strategies and instructional settings. The second type includes adapting strategies, materials relevant to student needs, collaboration skills, skills to modify and adapt instruction, cognitive strategies and study skills and their use in the curriculum.

However, Muñoz (2009) focuses on the competences needed for secondary teacher education programmes, and again raises the issue of a theory to practice gap and the need for integration and coherence of knowledge, capacities, dispositions and values, whereas, Moran (2009) states that good inclusive teaching goes beyond demonstrating achievement of a given set of competences or standards and requires

the values and dimensions to be made explicit and permeate all aspects of educator preparation. Many researchers have drawn attention to the need to take less 'tangible' elements of practice into account – for example, how skills are used and how decisions are made and justified regarding priorities (for example Sanmamed, 2009; Medves, 2006). Chionna (2006) stresses that in teacher education excellence in the disciplines, methodological competence is not sufficient, and that sensitivity and emotional and relational intelligence are essential. On a practical level, Sigurðardóttir (2008) outlines the crucial components of inclusive practice as follows:

Educators should;

- a) Become aware of and understand the ethical and political issues associated with inclusion;
- b) Become competent to acquire relevant understanding of their learners and figure out how their varied competence calls for appropriate individual action;
- c) Master situations where they give their student groups different assignments in parallel;
- d) Can set a varied group of learners' tasks, which they can tackle in concert despite their varied abilities;
- e) Master situations where some of the learners are tackling criterion referenced tasks (set by the curriculum) while others are grappling with tasks outside the standard curriculum.

Some writers have expressed concern about the use of standards and competences (for example Hodkinson (2009) – who fears that they encourage a 'technicist approach' (Pearson, 2007, p. 26) rather focuses on the values of the pedagogical principles that underpin effective SEN practice. Rao (2009) points out that, educators need to prepare themselves for broader roles involving various forms of collaboration. Other areas frequently included in studies of educator competences include: differentiation, learner involvement and well-being (Perrenoud, 2008; Vandeputte et al., 2007) working with parents and collaboration (Ambrukaitis et al., 2004).

Further research on competences has been carried out by Hiebert et al. (2002), Heylen et al. (2006), Tancig and Devjak (2006), and Aelterman et al. (2008) who discuss a new profile for secondary educators in Belgium and how it might help

teacher education reforms. Regarding assessment in initial teacher education, Conderman (2003) suggests that the use of portfolios can ensure that competences are met. Portfolios are widely recognized as a useful way to gather information and report on learners' progress. The Education for all Learners' programme (Stoddard et al., 2006) reveals an on-going professional portfolio which aims to ensure that the student has demonstrated competence in the domains of assessment, instruction, classroom management, collaboration, systematic inquiry and professional / ethical behaviour.

Portfolio entries include self-reflections, work examples, plans with strategies, resources and summaries of experiences. Portfolios can support the assessment of 'softer' areas such as the affective aspect of being an educator (Phelps, 2006), collaboration and work with parents as well as academic content and critical thinking around areas such as multicultural perspectives. Orland-Barak and Kremer-Hayon (2001) researched two types of portfolios – product portfolios and process portfolios – and concluded that the portfolio itself probably does not control the quality of reflection, but that discussions and co-operation with others play a very important role. Mansvelder-Longayroux et al. (2007) point out that educators, generally, already ask the 'what works' and 'how can I' questions, but that portfolio supervision should aim to encourage them to ask the 'why' questions.

2.9 Strategies that could be used for the future improvement of the model of inclusive education in South African schools

According to Donohue and Bornman (2014), currently, the implementation of an inclusive education policy is at an apparent standstill because of ambiguity about the means through which the goals of inclusive education can be achieved. The National Department of Education must take the first steps to initiate progress on inclusive education (Du Plessis, 2013). When addressing school-level barriers to implementation, the Department of Education must determine the extent to which educators are prepared to educate a diverse body of learners within one classroom (Shani and Koss 2015). In addition, educators need to receive comprehensive training programmes in areas where they lack skills. Du Plessis (2013) suggests that these training programmes can be supplemented with specialised support teams that have the capacity to enter the classroom and provide educators with the hands-on training and practical skills they need to address learners' barriers to learning.

Donohue and Bornman (2014) argue that the National Department of Education was not committed to the implementation of the inclusive education policy and tried to delegate their responsibilities to others. The very same study found that school officials reported having received no support or funding from the Department of Education to help sustain any progress they had made in the implementation of some of the broad strategies mentioned in White Paper 6. Research shows that implementing inclusive education in South Africa is a pen-and-paper practice (Dreyer, 2014; Du Plessis, 2013).

Training programmes that educate educators on how to accommodate and teach learners with disabilities are generally a week or two long, but educators report that although these brief training programmes are helpful, they are insufficient (Donohue and Bornman 2014). Consequently, the training of educators in the mainstream and full service schools is said to be once-off or short term programmes, with fewer than ten sessions for management and staff on issues of support (nature and strategies), awareness programmes and policy implementation (Department of Education, 2014). This document highlights the importance of intensive training for educators in the special schools where learners require a high level of support. Dreyer (2014) asserts that training should focus on the development of good teaching strategies that are of benefit to all learners, and implementing inclusive education requires a restructuring of the entire education system (Swart and Pettipher 2011). Unless every part of the education system adjusts to include the values of inclusion, inclusive education will not become a reality. This is in line with Bronfenbrenner's bio-ecological model that highlights how each system is interconnected and dependent on the other systems. To change the whole school to be inclusive, it is essential that a "whole child" approach to learning support is followed (Nel et al., (2013). Each individual system must be addressed so that influences of the systems can all be positive. For instance, if educators in the classroom are to accommodate learners with different learning needs, other systems within the school, such as the management of the school, learners and parents should recognise and respond to diversity.

Ryan (2010) and Granados and Kruse (2011) note that the district-inclusive policy should be infused into the school, making sure that all the stakeholders involved in the school understand the various issues of inclusion and where they stand. Waldron

and McLeskey (2010) argue that the traditional forms of professional development – where educators receive short-term professional development workshops with little or no attention to follow up support – are viewed as a very difficult process. This type of professional development relates to the teacher as a passive recipient of information, rather than an active decision-maker.

According to Waldron and McLeskey (2010), professional development consists of describing and demonstrating educators' practices that have been proven effective by research.

2.9.1 Adaptation of classroom, curriculum and general school environment

"An adaptation is any adjustment in the environment, instruction, or materials for learning that enhances the learners' performance and allows for at least partial participation... for individual learners based on their specific learning needs and should be based on their strengths as well as weaknesses" (Darrow, 2008: 32). According to Parsons, Williams, Burrowbridge and Mauk (2011), schools must adapt to physically, socially, and instructionally integrating learners with disabilities. O'Gorman and Drudy (2010) write that educators have always been professionals whose effectiveness is judged not only by their administrator, but also by the society for their efforts in teaching effectively.

Hence, educators' effectiveness concerning their flexibility in teaching by adapting to situations in the best interest of all learners remains vital (Acedo, Ferrer and Pámies, 2009). As Parsons, et al. (2011) put it, "Learners need different things at different times, and a 'one size fits all' approach cannot meet those needs of specific disability except by adaptation." Thus, the flexibility is what is required in inclusion (Peters, 2007).

a) Classroom adaptation

Classroom adaptation is a vital practice for an inclusive educator and refers to how educators adjust the physical layout of their classroom (Parsons et al., 2011) as a way of minimizing obstructions that might hinder learners' engagement with their learning (Peters, 2007). Examples of how educators achieve classroom adaptations include learners' seating arrangements of furniture like desks and tables, as well as wall displays and student work centres that have no individualized approach (Acadia et al., 2009). An educator's posture, tone of voice and dress may also need to be adapted (O'Gorman and Drudy, 2010).

Educators must also design teaching strategies, and organize classroom arrangements so that all pupils have equalized educational opportunities without physical obstruction (Ghergut and Grasu, 2012).

Studies suggest that a disorganized classroom interferes with the disabled learners' learning; thus, classroom adaptation is important (O'Gorman and Drudy, 2010). When educators create a less restrictive environment for learners with disability, those pupils do not feel excluded (Prater, 2010). According to Peters (2007), educator's proactively adjusting the classroom creates a sense of belonging for their pupils with disabilities so they do not feel like aliens.

Educators' skills in adaptation are not limited to the way they set up the classroom environment, but also include adapting the curriculum (Parsons et al., 2011).

b) Curriculum adaptation

Curriculum adaptation includes a technical analysis of curriculum content, processes and outcomes by the educator and the adjustments they make to their instructional practices to meet the specific learning needs of learners with disability in their classroom (Opertti and Brady, 2011, Williams et al., 2011). In addition, Mara and Mara (2012) suggest that curriculum objectives, content, methodology, and evaluation need to be adapted. Curriculum adaptation is essential as it reduces the chances of stigma that disabled learners can feel when educators do not consider the special learning needs of disabled learners (Florian, 2008). O'Gorman and Drudy (2010) suggest that curriculum adaptation is done by effective educators to meet the needs of diverse learners and is a significant strategy used to achieve inclusive education.

As Runswick-Cole (2011) argues, "Educators must deliver best practice", which includes teaching a lesson that does not exclude any learner of the moment (Florian, 2008). An example of a curriculum adaptation is an educator considering an alternative strategy that would include a boy who uses a wheelchair to participate in the regular Physical Education lesson without the sense of exclusion (Runswick-Cole, 2011). Adapting the curriculum is a must-do

action in a class with learners with diverse learning needs because it is the way to keep all learners in the school (Florian, 2008).

However, learners' school life expectancy and their interest in remaining at school cannot be identical across the globe (Ghergut, 2012), but it varies significantly between the wealthier countries and third world countries (Ainscow, 2012). The schools in the developed countries have a higher chance of keeping more of their learners in school because of the advantage of adequate teaching materials and facilities to nurture their learning while developing nations increasingly have less students' enrolment due to lack of facilities (Peters, 2007). For example, Rogers and Vegas (2010) write that, "in developing countries, many educators work in schools that do not have adequate teaching materials or basic infrastructure, with on average have many learners per classroom than advanced countries."

Therefore, this means inclusive education is not about the ordinary teaching, but is about the way educational programmes are re-organized and run in a regular school to suit all learners' needs, regardless of their differences (Peters, 2007). Peters (2007) further argues that the most valuable proactive role educators can take to secure adequate support systems for disabled learners' education is to adjust the educational activities inside the classroom and to adapt to the general school environment because both areas nurture disabled learners' learning and participation in school.

c) Adapting the general school environment

Adapting the school environment refers to adjusting the general school setting to encourage a barrier-free learning environment (Opertti and Brady, 2011). For example, the architectural structure of the classrooms and walkways, such as tracks on the school ground, should be made easily accessible for disabled learners' mobility. As Pivik, Mc Comas and La Flamme (2002) put it, "facilitating inclusive school environments requires ensuring physical access to optimal learning and social experiences." Peters (2007) also emphasizes that adapting a whole school environment reduces the difficulties experienced in inclusion. Naukkarinen (2010) also believes that creating a barrier free environment

increases disabled learners' capacity to experience freedom in learning and accessibility.

Opertti and Brady (2011) argue that a learning environment that cannot be accessed easily by learners with disability does not produce successful inclusive education. Similarly, Chhabra et al. (2010), in their research, suggest that the ideology of inclusive education is not about segregating learners with special needs into special classes and schools, but rather about fitting schools to meet the needs of all learners. In other words, school environments need to be adapted in such a way to ensure that all learners feel welcome as part of their school community. Bourke (2010) argues that to create an inclusive school environment is not an easy task and it requires professionally trained educators to design a completely inclusive school environment that can best nurture different learners' needs. UNICEF (2011) released a concern in its report that girls with disability are more vulnerable to abuse including sexual abuse than boys (UNICEF, 2011).

Support to the education of learners with disability is another feature of UNICEF's programme as this group of learners is often considered undeserving in terms of educational provisions. There are basic statistics available on the number of learners with disabilities enrolled in mainstream primary and secondary schools.

Due to the number of challenges that some experience, they end up dropping out of school and end up at home. This is the reason why the researcher is conducting such a study, to establish what can be done to address some of the challenges that are a hindrance for learners with disabilities in mainstream schools.

Below is a list of the challenges faced by learners with disabilities in mainstream schools:

1) Poor physical infrastructure:

Poor school physical infrastructure as one of the major problems constraining the teaching of and learning for learners with disabilities: The construction of school buildings, even those constructed under the new government, do not take (into account) consideration of the needs of learners with physical disabilities and other disabilities. The entrances to most buildings, for example, have long staircases that

cannot be accessed by physically disabled learners using wheel chairs. The inappropriately designed school physical infrastructure is partly attributable to lack of special funds allocated to cater for the needs of learners with disabilities but also partly to lack of understanding amongst the local community on educational needs for learners with disabilities.

In the absence of special grants for learners with disabilities, it is very expensive to maintain learners with disabilities in schools, especially in schools that have boarding facilities. In this case, learners with disabilities are facing serious problems, including lack of food, clothes and transport, especially when they fall ill. World Vision has attempted to modify its school environment making it somewhat supportive and friendly to the needs of learners with physical disabilities.

2) *Lack of political will for policy makers:* The absence of the political will to help the learners with disabilities has made their life difficult. As I have pointed out, it is very unfair to build classrooms which are not friendly for learners with disabilities. Many politicians keep on saying that it is too costly to handle the disabilities' problem. This statement is unacceptable because learners with disabilities are very few and can be supported fully by the government and charitable organizations.

3) *Poor facilities:* Lack of learning materials is another problem constraining their learning. Many schools in South Africa do not have enough chairs and tables for the student, therefore, many learners struggle to get a chair to seat and this becomes more difficult for a student with physical disability who cannot run fast to get the chair, so many of them are forced to seat down. There are no books for visually impaired learners, for example.

4) *Transport problems:* Learners with physical disabilities do not have reliable means of transport from their homes to schools. Because of this, they are always late in attending classes as a considerable amount of time is lost in travelling. Public transport in South Africa is not friendly for wheelchair users as there is no place to keep their wheelchair.

5) *Feelings of neglect by and dissatisfaction with educators:* It was observed that the type of education received by learners with disabilities is of very poor quality, in fact, that they did not consider themselves as receiving any education! This may be because there are very few education centres which provide training for teachers in

special education, so the available teachers are not knowledgeable on teaching learners with physical disabilities

6) *Stigma*: Another problem is stigmatization and embarrassment perpetrated by other learners, primarily characterised by laughing and name calling. (Avramidis, 2012)

2.8 Good practices that can be employed for the successful implementation of inclusive education

While there is a body of literature that aims to identify good inclusive practice, there is much less literature that reviews actual practices that meet these criteria. There is a dearth of data on good inclusive practice in most jurisdictions in South Africa. Given this paucity of research, this section draws more heavily on what is promoted in the literature as good practice for South African schools and this is supported, wherever possible, with research data.

Two perspectives are reviewed as good practices

- (1) At the school and
- (2) At the classroom level.

1) At School

- *Whole-school practice*

Researchers have shown how a wide range of adjustments to school cultures, organizational practices and teacher behavior expedites inclusive practice (Shaddock, 2006; Shaddock, Neill, van Limbeek and Hoffman-Rapp, 2007). Schools need to provide appropriate support, collaboration, planning and feedback to educators to ensure they can use good practice in relation to inclusive education. This is clearly articulated in African legislation (for example the Disability Standards for Education, 2005), supporting the inclusion of learners with disability as it points to the need for collaboration, participation, curriculum support, and student wellbeing as areas in which staff are required to consider the needs of individual learners (Commonwealth of Australia, 2006).

In relation to curriculum, for example, the Disability Standards for Education 2005 (Commonwealth of Australia, 2006) state clearly that "...education providers must

take reasonable steps to ensure the course or program is designed in such a way that the student is, or any student with disability is, able to participate in the learning experiences (including the assessment and certification requirements) of the course or program, and any relevant supplementary course or program, on the same basis as a student without disability, and without experiencing discrimination” (p. 23). Evidence of good practice in relation to assisting educators also consists of appropriate provision of services to support the inclusion of learners with disability (Boyle, 2011). Quality teaching practices in the classroom require support and school-wide collaboration and school leaders have an important role to play in supporting and nurturing quality teaching in school staff (Salisbury and McGregor, 2005).

Central to the services provided, though, are the policies which underpin them. The Queensland Department of Education and Training, (2012b), for example, has implemented a policy on inclusive education that states the responsibilities and procedures that should be followed by all educational staff including regional directors, assistant regional directors, principals and educators. The support offered to each staff member is clearly disseminated. As a component of the support available to staff and learners, the Statewide Student Services (2013) team offers a range of assistance in the areas of assistive technology, nursing services, hearing impairment, occupational therapy, physical impairment, physiotherapy, speech-language pathology, and vision impairment. All states and territories have similar support services available, but it is difficult to determine the efficacy or reliability of such supports due to the lack of published data and, therefore, the impact of these on practice.

2) At classroom level

- *Good in-class practice*

A few different approaches that have been adopted have been identified in the literature as good in-class practice.

(a) Quality teaching

Quality teaching has been identified as a key component of positive outcomes for diverse learners (Alton-Lee, 2003), specifically for those with disability. There are

a number of characteristics of quality teaching for learners with diverse abilities including a focus on student achievement, inclusive and cohesive learning communities, clear links between school and the student's culture, responsiveness to learning processes, availability of opportunity to learn, ensuring that goals and resources (including ICT) are aligned, scaffolding and feedback are provided, self-regulation and meta-cognitive strategies are promoted, and educators and learners jointly engage in setting and assessing goals (Alton-Lee, 2003).

b) Inclusive pedagogy

Quality inclusive pedagogy relates to educators' craft knowledge: what, why and how they do what they do (Florian, 2012). Educators should be supported by their schools' systems to have the opportunity to enhance their own skills in reflection, instruction, management, and strategies for learning (Boyle, 2011). By providing explicit or multi-faceted instruction (aimed at ensuring learners with disability can access the curriculum), there is often an unintended positive effect on academic attainment by other learners in the classroom. Boyle (2011) describes this as a "professional positive" of inclusive practice.

c) Adaptive curricula

One aspect of good practice is to use adapted curricula to support student diversity (Salend, 2011). Differentiating the curriculum to cater for the individual needs and differing behaviors of learners has become a key aspect of inclusive education, yet this requires considerable teacher expertise, planning, and preparation (Shaddock, 2009). The African Curriculum Assessment and Reporting Authority (2013) has recognized the need to use differentiated curriculum for some learners with disability and has provided guidance to schools and educators Africa-wide when using the African Curriculum. This direction includes advice on how to determine a starting point for learners with disability and how to use the three dimensions of the African Curriculum (curriculum, general capabilities, and cross-curriculum priorities) to address the needs of all learners in the classroom (ACARA, 2013). Examples of adjustments that may be made are provided to illustrate how learners are able to participate in the curriculum. Learners' changing needs must also be considered to ensure

educators are consistently meeting the requirements of learners with disability to achieve appropriate outcomes (Boyle, 2011).

d) Alternative curricula

In some instances, education departments in various Australian regions have introduced alternative curricula or resources to assist learners with significant disability to achieve outcomes appropriate to their future environments. For example:

The Victorian Department of Education and Early Childhood Development, (2013) uses ABLES (Abilities Based Learning and Education Support) resources to support learners with disability and to assist in the development of an individual learning plan for the student. These resources consist of an assessment tool, directions on setting individual learning goals, keeping in mind the Victorian Essential Learning Standards (VELS), and research-based strategies to support learners' learning. The Department of Education and Training (2013) in West Africa has recently piloted a programme known as ASDAN (Award Scheme Development and Accreditation Network) which aims to offer a range of programmes for learners aged 11-25 years, at all ability levels, specifically targeting learners with significant disability at the senior secondary level.

e) Assistive and adaptive technologies

The rapid increase in available technologies (both assistive and instructive) has provided educators with an ever-increasing range of tools to support learners with disability in the mainstream classroom (Bryant, Bryant, Shih and Seok, 2010; Dalton and Roush, 2010). Assistive technology allows learners with disability to access physical environments, be mobile, communicate effectively, access computers, and enhance functional skills that may be difficult without the technology.

Article 9 of the Convention on the Rights of Individuals with Disability (United Nations, 2006) discusses the right of individuals with disability to have access to information and communication technologies and systems on an equal basis with others. Assistive technology comes in low, medium, and high-tech forms and has been found to assist with academic success when selected to match the individual needs of the student (Simpson, McBride, Lowdermilk and Lynch, 2009). The increase in iPads and other mobile learning technologies in

classrooms has been cited as improving student productivity, creativity and engagement while allowing for differentiated, explicit and individualized instruction (Mulholland, 2011).

f) Universal Design for Learning (UDL)

In 2007, van Kraayenoord described good inclusive pedagogical practices which have been undertaken in classrooms in Australia. Examples of these practices are concepts of differentiation and UDL. Types of differentiation undertaken include "...allowing extra time, expecting less work, using different outcomes, and providing help with writing" (p. 392). It was noted, though, that there was inconsistency among settings in which these strategies were used, even though the same learners were accessing both regular and special education settings. Universal Design, in contrast to differentiation, is concerned with "...the conscious and deliberate creation of lessons and outcomes that allow all learners access to and participation in the same curricula" (p. 392). Van Krayenoord, (2007) describes Universal Design for Learning as being able to provide "accessible, flexible, usable and customizable curriculum for all learners", which can be used in combination with instructional differentiation.

- **The neurological foundation of Universal Design for Learning (UDL)**

UDL is based in the fields of cognitive science and neuroscience that address the understanding of how we learn through memory, language processing, perception, problem solving, and thinking. These fields suggest that cognition involves three neural functions, (1) pattern recognition, (2) pattern planning and generation, and (3) pattern determination of importance (Rose and Strangman 2007). Lev Vygotsky and colleagues identified three essential learning components that affect levels of performance of these neural functions; (1) recognition of information to be learned, (2) application of strategies to process the information, and (3) engagement in the learning task (Vygotsky 1962). Based upon Vygotsky's work and others, the Center for Applied Special Technology (CAST) developed the conceptual framework of UDL (Meyer and Rose 1998; Rose and Meyer 2002). The framework identifies three brain networks preferences, (1) recognition, (2) strategic, and (3) affective (Rose and Strangman 2007) which accounts for the broad diversity of learning styles and closely correlate with the work of Vygotsky (1962) and others.

- **The core principles of Universal Design for Learning**

The three core principles of UDL emerged from CAST's research work on the neurological basis of learning styles, in combination with its practical work with learners (Hall, Strangman and Meyer 2003):

- **Multiple means of representation:** provide multiple, flexible methods of presentation to support recognition learning (*the HOW of learning*). The teacher can present, for example, the learning materials through a variety of media (visual, auditory or tactile), and provide multiple examples that can be modified in complexity to meet a range of learning needs.
- **Multiple means of action and expression:** provide multiple, flexible methods of action and expression to support strategic learning (*the WHAT of learning*). The teacher may use strategies that allow the learner to practice tasks with different levels of support and to demonstrate their knowledge and skills in a diversity of ways.
- **Multiple means of engagement:** provide multiple, flexible options for engagement to support affective learning (*the WHY of learning*). This principle involves creating interesting learning opportunities that motivate and stimulate learners according to their personal backgrounds and interests.

At the heart of UDL is the design of goals, methods, materials, and assessments to make them accessible for *all* students, including those with disabilities (NCUDL 2012; Rose and Meyer, 2002).

UDL is a conceptual and practical model for the education community, providing a framework and guidelines to change the way teachers teach, the way learners learn, and the way barriers to education for all learners can be overcome. Educators and researchers continue to develop instructional supports and strategies that ensure successful integration of UDL in practice, informed integration of technology supports, and successful reduction of barriers to education for learners in the margins (CAST 2011; Maryland State Department of Education 2011; Meyer and Rose 2005; Paul V. Sherlock Center 2011; UDL-IRN 2012). These represent valuable resources for practitioners wanting to implement the UDL approach.

Within the UDL framework, educational planning starts with recognising and anticipating diversity in the classroom. By designing from the start, instruction and

curricula that recognise, honour, and address the full range of learners' natural variation of styles, needs, and preferences, teachers can develop, implement, and adjust a varied curriculum in which barriers to learning have been reduced or, possibly, eliminated. By employing multiple means of representation (including multisensory approaches), multiple means of student expression and actions, and multiple ways to engage and motivate learners, UDL supports maximal learning for the widest range of learners, thereby reducing the individual accommodations necessary to address specific barriers to learning to arise from disability or other factors. The essence of the approach is expressed below:

UDL is designed from the outset to meet the needs of all learners, making costly, time-consuming, and after-the-fact changes unnecessary. The UDL framework encourages creating flexible designs from the start that have customizable options, which allow all learners to progress from where they are and not where we would have imagined them to be (CAST 2011, p. 4).

This extends the possibilities for effectively including all learners in the general curriculum, and reducing the impact of barriers to learning in the educational environment (Dalton 2005). It is precisely these possibilities that the strategy of curriculum differentiation is intended to develop in South African inclusive education policy. Even with an initial understanding of the UDL framework and principles, many practical questions regarding UDL implementation remain, such as; What does UDL mean for a teacher in the classroom? How can a whole school develop a plan to implement UDL? What evidence exists of UDL benefit internationally? What are possible concerns or problems regarding UDL implementation? How can systems collaborate to design accessible UDL curricula?

To explore at least some of these important questions further, and recognising the potential of a 'good fit' between UDL and the need for curriculum differentiation skills in South African educational settings, authors were motivated to conduct a UDL workshop for South African teachers and therapists in the University of Cape Town in 2012.

g) Individual planning

Individual planning for learners with disability is considered in Australia to be the cornerstone of good practice in catering for the needs of learners (Dempsey,

2012). Individual planning provides for the inclusion of key stakeholders in the process (DETE, 2012). The engagement of the parents and the student themselves is seen, though, as critical to development of effective IEPs and is highlighted by the School Curriculum and Standards Authority (2013) in West Africa which notes that "If there is a legitimate reason for a student to be following a modified curriculum (for example, an individual education plan, documented learning plan or differentiated learning plan), schools should negotiate and document any variation to the reporting of the student's achievement with the student and her/his parents or carers" (p. 3).

In Australia, all jurisdictions use some form of individual planning, under different titles. For example, IEP (Individual Education Plan or Program), EAP (Education Adjustment Plan), NEP (Negotiated Education Plan) or ILP (Individual Learning Plan), to document the individual requirements and outcomes for learners. Although all states and territories provide individualized planning for learners, Dempsey (2012) states that there is a great deal of inconsistency in the way these are being used and in the number of learners with disability with these plans. He goes further to suggest that "...being provided with an IEP is heavily influenced by the serendipity of the state you reside in and the type of school system in which you are enrolled" (p. 29). Dempsey highlights the need for a more consistent use of IEPs with learners with disability in Australia. Shaddock, MacDonald, Hook, Giorcelli and Arthur-Kelly (2009) similarly emphasize that "... individual plans can be valuable – but they first must be a process that actually helps" (p. 69), rather than just as an administrative requirement or to keep stakeholders happy. Indeed, this aspect was noted in the Review of the Disability Standards for Education, and the South African Government has committed itself to investigate the effective use of IEPs across states and territories (Department of Education Employment and Workplace Relations, 2013), including formats and application.

Individual planning, in the form of IEPs, can be used within an individualized learning environment, which is becoming an increasingly popular model in some Australian jurisdictions (DEECD, Vic, 2007). Individualized learning refers to all learners in the classroom being central to the learning and is a different model to that of

individualized instruction. Information and Communication Technology is a key component of individualized learning, along with concepts of lifelong learning and communities of collaboration (DEECD, 2007). While individualized learning does not target any group of learners, it may allow for a range of diverse learners to experience greater success in learning outcomes, due to stronger students' engagement in the learning. For some learners with significant difficulties, however, specific planning may still be required. In relation to in-class practice, it should be noted that while there seems to be a relatively large international research knowledge base regarding best practice in catering for learners with disability in regular classroom settings, there may be a disconnect between the research and the reality in the classroom (Grima-Farrell, Bain and McDonagh, 2011). This disconnect may have adverse effects on the implementation of inclusive practices in South African schools. A few impediments to good inclusive practice have been recognized, including:

- poorly communicated rationale;
- overly ambitious or limited scope of change;
- the pace of change being too swift or slow;
- inadequate resourcing;
- lack of long-term commitment;
- lack of key staff championing inclusion;
- parents not included as collaborators;
- ineffectual leadership, and
- a lack of relationship to other initiatives (Hargreaves, 1997).

However, there is a lack of data in South Africa to determine local impediments. Similarly, a lack of responsiveness to student needs, heightened by a lack of effective professional development in best practices identified by research, evaluation, and design of programmes, all contribute to a lack of good practice (Grima-Farrell, et al., 2011).

2.8.1 International good practices in inclusive education

A range of support services such as physio-therapy, speech therapy, occupational therapy and counselling are also provided to learners through both government and

private providers. However, this is often on an ad hoc basis, and the provision of these services is inconsistent and scant in many regions (NSW Legislative Council, 2010). This provision of support services may change as the National Disability Insurance Scheme (Disability Care Australia) is rolled out across Australia (Commonwealth of Australia, 2013). Transition planning for learners with disability has been the focus of a recent Legislative Council Standing Committee (2012) report on transition support for learners with disability. The Standing Committee found there were limited policies specifically relating to transition for learners with disability, and these were mainly at the early or middle childhood stages.

Within schools, learners with disability may be able to access Vocation Education and Training (VET) programmes through partnerships with local institutions (Commonwealth of Australia, 2013). The disability and Home Care (2013) coordinates several post-school option programmes for young people with disability, including transition to work and community participation programmes. The Department of Education and Early Childhood Development (DEECD, 2013) in Victoria states that it "...is committed to delivering an inclusive education system that ensures all learners have access to a quality education that meets their diverse needs" (p. 4). Learners with disability can access a range of placement options including inclusion in regular classes, and special schools. There are more than 80 special schools in Victoria (Principals Association of Special Schools, Victoria, 2009), serving learners with a variety of disabilities, including deafness, autism, intellectual disability, and emotional and behavioural difficulties. South Africa can, therefore, develop more special schools to accommodate learners with diverse needs and collaborate with Vocational Education and Training institutions to curb the high rate of disabled learners who are not registered in any institutions of learning.

The main support in Victoria is provided through the Program for Learners with Disabilities (DEECD, 2013a), which is a supplementary funding programme for schools, targeting learners with moderate to severe disability. Assessment is an initial component of this programme, and is provided through an external agency to determine eligibility for extra support. A needs-based questionnaire is used to determine the level of educational support required (DEECD, 2013b). As part of the Program for Learners with Disabilities, a resource has been developed to support

educators in preparing appropriate programs. Abilities Based Learning and Educational Support (ABLES) provides educators "... with access to assessment tools, individual reports, and guidance about teaching strategies and resources that enable them to effectively plan and teach for the individual needs of learners with disability and additional learning needs" (DEECD, 2011, p. 5).

In Queensland, the Queensland Department of Education and Training (DET, 2012a) provides a range of school options including early childhood development programmes, regular classrooms, special programmes, and special schools. A policy of inclusion that indicates all educators have a responsibility to "... embed the principle that inclusive education is part of all Education Queensland school practices is promoted, for all learners all through their schooling" (DET, 2012b). Learners with disability who are included in regular schools may be assisted through student support services, which are allocated to schools or regions (DET, 2013).

2.8.2 Teacher education in professional learning

While much public debate and inclusive education research focuses on the importance of initial teacher education, the connection between initial teacher preparation and ongoing professional learning is recognised. Educators who experience high-quality initial preparation are more likely to seek ongoing opportunities to improve in their practice and engage in professional development throughout their careers (Scheerens, 2010). As indicated earlier in this report, new educational reforms such as inclusive education demand new skills and abilities from educators. For in-service educators, it is essential that effective professional learning opportunities are provided to enable them to gain these competencies. Waitoller and Artiles (2013) undertook a review of the research on professional development (PD) for in-service educators on inclusive education published between 2000 and 2009. Contrary to the adoption of inclusive education legislation globally, Andrews and Frankel (2010) report that Guyana has yet to implement inclusive education policies, laws and practices for learners with special needs despite maintaining a National Policy on the Rights of People with disabilities.

2.9.3 Factors that hinder the adaptation of Inclusive Education worldwide

Although evidence from the Equal Opportunity Commission (2012) suggests that inclusive education is being considered by most governments, however, unless the proper framework is established and implemented, there will continue to be a stagnation regarding its successful implementation. The development of inclusive education was examined in various countries, including Canada, South Africa, Hong Kong, Russia, Finland, Norway, Turkey, the U.S., Korea and some developing countries in Asia-Pacific region. The results showed that resources, workforce, attitude, discrimination, equal learning opportunities and the modes of support prevented the successful introduction of inclusive education (Equal Opportunity Commission, 2012, p. 10). Avramidis and Kalyva, (2007), and Fuchs (2010), Slavica (2010) as well as Hwang and Evans (2011) further reported that lack of support by administrators posed a challenge for inclusive education.

Meanwhile, lack of resources (Gaad and Khan, 2007; Kalyva et al., 2007) and insufficient educational preparation and training hindered the process of inclusion (Ali, Mustapha, and Jelas, 2006; Bigham, 2010; Fuchs, 2010; Slavica, 2010). Educators experience, education, and collaboration were further identified as a barrier to inclusion (Ali, Mustapha, and Jelas, 2006; Bigham, 2010; Dupoux et al., 2006; Hwang and Evans, 2011; Slavica, 2010). According to Vaughn, Bos, and Schumm (2011), understanding the limits of individual expertise is vital; and knowing when and how to solicit advice from colleagues with specialized training is important to inclusive education. Although the systemic barriers that impede the execution of inclusion vary, unless these barriers are addressed, there still will be varying attitudes regarding inclusive education. Several suggestions for facilitating change have already been identified through the National Commission on Special Education Plan, as well as the Framework for Action on Special Needs Education. Continuous planning and action is necessary to support the change required for implementing inclusive education. Moreover, establishing a vision for inclusive education in the Bahamas over the next few years will help stakeholders understand how to respond to these barriers and devise strategies for transformation.

2.9 Strategies South Africa can adopt for the future improvement of the model of inclusive education.

Hwang and Evans (2011), Fuchs (2010), Hido and Shehu (2010), Brakenreed (2011) agree that the following factors are integral in the implementation of inclusive education: information sharing workshops, time management for planning, adequate resources, reduced class sizes and training for school administrators help to promote inclusive education. Furthermore, they consented that collaboration roles and a change in educational values and philosophy are the best methods of establishing an inclusive education. In addition, Slavica (2010) reported that commitment and a clear vision are needed for a flourishing implementation of learners with special needs.

The findings revealed that insufficient training, lack of knowledge and skills of educators were the overarching themes that resulted in educators feeling a sense of inadequacy to teach in an inclusive education classroom. These findings were consistent with Bigham (2010), who discovered a correlation between attitudes and training. To circumvent this phenomenon, it is of utmost importance that mainstream educators who would be required to teach in an inclusive classroom receive relevant training to ensure they are equipped with the knowledge, skills and abilities to execute best practices within the learning environment and to encourage the ideology of inclusion effectively. Such training initiatives could include, but not be limited to:

- In-depth courses with a focal point for accommodating learners with special needs,
- Periodic seminars and workshops for training in teaching diverse learners,
- Promotional videos of inclusion in action at the school level,
- Training for parents and the school community,
- Technology,
- First aid training, and
- Annual, professional development training on inclusive education (Bigham, 2010).

These findings are consistent with recent literature that established that, while educators were positive about inclusive education, they still preferred to include

certain categories of learners (Engel-Yeger, 2010). Additionally, educators were adamant that access to resources and support from administrators for educators and learners would prove beneficial to the implementation of inclusive education at the secondary level as consistent with previous research (Fuchs, 2010; Hwang and Evans, 2011; Kalyva et al., 2007; Slavica 2010). Tavares (2011) carried out an evaluation of the programme called Kids are Kids in Ontario Canada. The project's aim was to promote the positive interaction between learners with and those without disabilities in inclusive social settings. The other objective of the project was to enhance the opportunities for social success of learners with disabilities.

Clark (2008) carried out a study on the perspectives of learners with learning disabilities in an inclusive classroom in New York. The purpose of his study was to find out if the learners with disabilities felt accepted and included in the mainstream system. The study used semi-structured interviews, and observation over a period of three months. The findings of the study were that the respondents stated that they felt included in the mainstream system. 67percent of the respondents said that they liked the reception from their peers and the help they were receiving from their educators. All the respondents stated that they interacted well with their peers. The more positive the attitudes of the educators were, the more non-disabled learners interacted with their disabled peers (Jones and Sherman cited by Tavares, 2011).

Conclusion

In this chapter, the development of inclusive education and inclusive schools were explored, nationally and internationally. Educators are the key role-players in implementing inclusive education policy, and the role of school management and that of the educators in implementing inclusive schools were also explored. Paradigm shifts that were required for the change to take root were also presented.

To provide a background to the phenomenon of educators, models of disability and the subsequent impact of policy on education and the rights of individuals with disabilities were discussed. The bio-ecological theory served as a frame of reference for exploring the interactive influence between learners with disabilities and their social environment. Furthermore, it served as a framework to identify assets and

resources in mainstream education contexts. The importance of collaboration and support within inclusive education was discussed in this study. The proposed study is aimed at educators' views of inclusive classroom improvement of the effective implementation of Inclusive Education for learners with physical disabilities. This study hopes to render valuable findings for policymakers and educational planners to develop effective strategies that can be used to encourage the model of inclusive education into mainstream classrooms to many schools. The researcher also envisaged that it helps educators to think about how they can improve the way they teach and to help them to develop skills to reflect on their own teaching so that they become effective participants in the process of inclusion. Chapter Three focussed on the research process and discussed its various components in detail.

CHAPTER THREE

3.1 REARCH DESIGN AND METHODOLOGY

Introduction

The chapter on research design and methodology is in line with Creswell (2013), who argued that before the researcher embarks on the research journey s/he must consider certain things such as the research paradigm, research methodology or design and the methods to be employed to answer the research questions, this chapter aims to cover the same aspects. Gesne (2011: 5) defined a paradigm as a “framework or philosophy of science that makes assumptions about the nature of reality and truth, the kinds of questions to explore, and how to go about doing so.” Before a researcher chooses the research paradigm, one should know her views about ontology (truth about reality) and epistemology (philosophy of knowledge). According to Krauss (2005: 758), “Epistemology is intimately related to ontology and methodology; as ontology involves the philosophy of reality, epistemology addresses how we come to know that reality, while methodology identifies the particular practices used to attain knowledge of it.” Literature reveals that there are two dominant research paradigms, namely positivism and interpretivism.

To reiterate, the way the researcher views ontology and epistemology determines the research paradigm. Positivists think that there is only one reality and to understand the world the researcher needs to conduct tests and experiments to describe reality (Sarantakos, 2012). Such researchers are called quantitative researchers. On the other hand, the interpretivists believe that there are multiple realities, and based on that they believe that to gain knowledge about the world, the researcher should employ different methods such as interviews or observations to describe reality (Andrews, 2012). Those who take this path in research are called qualitative researchers. This study is a qualitative research study and, therefore, employs the interpretivist paradigm. Firstly, it is important to define what the term paradigm entails.

3.2 Research Paradigm

The interrelatedness of these dimensions means that the responses given in any question, taken in any order, limit how the others may be answered (Denzin and Lincoln, 2011). Denzin and Lincoln (2011) state that the ontological dimension specifies the form and nature of reality and, therefore, what can be known about it. For example, if a “real” world can be assumed, then what can become known about it is how things really are and how things can work. The epistemological dimension refers to the nature of the relationship between the researcher and what can be known. If, for example, a “real” reality is assumed, then the posture of the researcher must be one of objective detachment or value-free to be able to discover how things really are and how things work. How the researcher can go about finding out whatever he or she believes can be known is what is referred to as the methodological dimension. For example, a “real” reality pursued by an objective inquirer requires control of possible confounding factors, whether the methods are qualitative or quantitative.

This study was approached qualitatively from within an interpretivist paradigm. According to Haralambos and Holborn (2004), interpretivists seek to understand the meanings that constitute the actions. They claim that people do not automatically react to external stimuli as positivists claim. This paradigm is characterized by a concern for the individual. The main aim of the interpretive paradigm is to understand the subjective world of human experience. Researchers within this paradigm aim to obtain a viewpoint of the participants as opposed to that of the researcher directly involved (Cohen, Manion and Morrison, 2007). Interpretive researchers begin with individuals and set out to understand their interpretations of the world around them. The interpretive paradigm can be also called the “anti-positivist” paradigm because it was developed as a reaction to positivism (Mack, 2010; Cohen et al., 2007). The anti-positivist approach argues that the social world can be understood only from the standpoint of the individuals who are part of the ongoing action being investigated. It emphasizes the ability of the individual to construct meaning, thus it is sometimes referred to as constructivism. One of the advantages of this approach is the close collaboration between researcher and participant, while enabling participants to tell their stories. The goal of the research, according to Creswell (2007), is to rely as much as possible on the participants’ view of the situation.

Therefore, the researcher's intention is to make sense of the meanings others have about the world. Mack (2010) stated that the interpretive paradigm was heavily influenced by hermeneutics and phenomenology. Hermeneutics is the study of meaning and interpretation in historical contexts (Mack, 2010). The meaning-making cyclical process is the basis on which the interpretive paradigm was established (Mack, 2010). Another strong influence is the philosophical movement of phenomenology. A phenomenologist advocates the need to consider human beings' subjective interpretations, their perceptions of the world as our starting-point in understanding social phenomena (Mack, 2010). The role of the researcher in the interpretive paradigm is to understand, explain and demystify social reality through the eyes of different participants (Cohen et al., 2007). The main principle of Interpretivism is that research can never be objectively observed from the outside; rather it should be observed from the inside through the direct experience of people.

Neuman (2011:72) argues that the interpretive approach in qualitative research analyses social actions in their natural setting, through direct and detailed observation, to understand and interpret how people create meaning in their social world. The researcher is, therefore, not only concerned with the teaching and learning methods the educators use to include all learners, but to establish what are their views towards the implantation of inclusive education and what support do they need from the District Based Support Teams for the successful implementation of inclusive education for learners with disabilities into mainstream classrooms. Because of the choice of the research design and the nature of the problem under investigation, the study follows an interpretive approach, allowing for greater understanding of educators' perceptions of Inclusive Education and how teaching and learning can be designed to address the inclusion of all learners.

Merriam (2014) is of the view that research is always motivated by interests and values. The "practical knowledge interest" (a term devised by Habermas, 1984 as cited in Shaw, Briar-Lawson, Orme and Ruckdeschel, 2010: 138) in this study is to develop a deeper understanding of the educator perceptions of including learners with disabilities and to suggest some possible modifications to their lessons to cater for the learners who experience barriers to learning. Cohen and Manion (2004)

pointed out that practical knowledge interest informs an interpretive approach to research as it intends to seek greater clarity, understanding and interpretation of phenomena within contextual areas. It was anticipated that by using this interpretive perspective, relevant themes would emerge that both address the research questions and highlight alternatives or improved teaching methods of environmental education in special schools in South Africa. As Lincoln and Guba and Mertens, (2005) point out, there are three concepts which help define a paradigm and these are ontology, epistemology and methodology. Each of these concepts is briefly explained below. According to Terre Blanche and Durrheim (2006), a research paradigm is an all-encompassing system of interrelated practice and thinking that defines the nature of inquiry along these three dimensions:

- **Ontology:** refers to the nature of reality that is to be studied, and what is to be known about. Qualitative research is based on the ontological assumption that the nature of reality is diverse and that reality has multiple facets (Creswell, 2007). The multiple realities of the educators formed the focus of this study. These perspectives were explored by paying attention to their experiences of supporting learners with disabilities in mainstream classrooms.
- **Epistemology:** specifies the nature of the relationship between the researcher (knower) and what can be known. The researcher and educators were involved in an interactive process of interpreting socially constructed knowledge gleaned from the natural setting of the mainstream classroom and school. "Substantial, multifaceted, situational information" was gathered during the research process (Henning et al., 2004).
- **Methodology:** specifies how researchers go about practically studying whatever they believe can be known. According to Henning et al. (2004), the key words pertaining to qualitative methodology are participation, collaboration and engagement. Interpretive researchers believe that reality consists of people's subjective experiences of the external world; thus, they may adopt an inter-subjective epistemology and the ontological belief that reality is socially constructed (Thomas, 2010).

3.3 Research Design – Case study

Creswell (2013: 97) described case study research as “a qualitative approach in which the investigator explores a real life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple source of information.” Gay, Mills and Airasian (2011: 443) also described case study research as “qualitative research in which researchers focus on a unit of study as a bounded system” (e.g., individual teachers, a classroom, or a school). Another definition comes from Merriam (2014: 40) who viewed case study research as a strategy for doing research which involves the empirical investigation of “a particular contemporary phenomenon within its real-life context using multiple sources of evidence”.

3.3.1 Different Types of Case Studies

Researchers need not only know the research design they want to employ; they also need to know their intent in conducting the research, for the intent determines the type of research selected. In case study, for example, there are different types of case studies suited to different research intents.

Stake (2005) identified three types of case studies:

- Intrinsic – aimed at understanding a particular case because the case itself is of interest because it has particular features or because it is extraordinary and is therefore not representative of others.
- Instrumental – aimed at providing insight into an issue or problem or to develop an existing theory.
- Collective – several cases are studied jointly to understand a phenomenon, population or general condition. This is often referred to as a multiple-case study. Leedy and Ormrod (2013) argued that at times researchers study two or more cases – often cases that are either similar or different in certain key issues – to make comparisons, build theory, or propose generalizations. In short, multiple case studies look at the same case but in different contexts.

3.3.2 Significance of a Case Study

A research design is a strategic framework for action that serves as a bridge between research questions and the implementation of the research (Terre Blanche and Durrheim 2006). They further state that the research design is developed according to the dimensions of the purpose of the research, the theoretical paradigm informing the research, the context within which the research is carried out and the research techniques employed to collect and analyze data (Terre Blanche and Durrheim, 2006). Bryman (2012) defines research design as a framework for the collection and analysis of data.

Research design, according to Janesick, keeps the study centered on its purposes, while accommodating the inevitable twists and turns occasioned by real world contingencies as they are met in naturalistic inquiry (Bazeley, 2013). Moreover, the purpose of the research design is to help the researcher to organize his or her ideas in a way that the research will be in a good flow. Bryman (2012) further give five types of research designs which are experimental, cross-sectional or survey, longitudinal, case study and comparative design. The chosen design for this study was a case study design as the title suggested. The purpose of this research was to understand the educators' perceptions regarding the inclusion of learners with disabilities into mainstream classrooms and which support do they need in the establishment of inclusive schools for these learners and a case of three schools was the key focus of the study

For this study, the single case study design with embedded units of analysis was followed to explore the educators' perceptions regarding the implementation of inclusive education and on the establishment of inclusive schools for learners with physical disabilities. Yin (2008) states that this type of case study design enables the researcher to explore the case while considering the influence of the various members. In essence, case studies open the door to the processes created and used by individuals involved in the phenomenon, event, group, or organization under study (Berg, 2009). It may be said that because the case study focuses on a single unit, the issue of generalizability looms larger here than with other types of qualitative research. Creswell (2009) states that "Case studies are a design of inquiry found in many fields, especially evaluation, in which the researcher develops

an in-depth analysis of a case, often a program, event, activity, process, or one or more individuals.” Babbie and Mouton (2010: 104) describe a research design as a plan or structured framework of how you intend conducting the research process in such a way that it answers the research questions. Thomas (2010) suggests that research design can be explained as the logic or master plan of a research that throws light on how the study is to be conducted. Cases are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures over a sustained period (Yin, 2009, 2012). A Case study is therefore the most appropriate for this research as it allows for deep, rich data generation and analysis, within a specific, bounded system – the educators working in targeted schools. As the research took the form of a case study, which involves a detailed description of a setting and its participants, accompanied by an analysis of the data for themes, patterns and issues (Bloomberg and Volpe, 2012), it focuses on the experiences of the participants and their knowledge, which is co-constructed and based on their perspectives. The researcher was the key personnel in the data collection process and its analysis and an inductive strategy was followed. The aim is to work from the research question towards the new knowledge that is identified from the themes that emerged. The research methods used were selected for their coherence within the research design.

According to Baxter and Jack (2008), case studies are valuable in research in that they allow a researcher to collect data from different sources which could help to illuminate the case. A multiple case study approach was important in this study because the experiences and challenges of different teachers teaching in different special schools were explored in terms of their real-life situations, as well as their individual subjective experiences (Cohen and Manion, 2004). In this study, a case study approach allowed the researcher to establish the views of educators pertaining to the issue of inclusive education for learners with physical disabilities who are segregated into special schools and those who are out of school because of the severity of their disabilities into mainstream schools. This case study was done from different segments of the South African Education system (i.e. special, private and mainstream schools). In this study, the challenges that are met by educators from each segment were tackled differently according to their environmental contexts.

As a result, a multiple case study approach was thus adopted. According to Yin (2003), when a study contains more than a single case, it is referred to as a multiple case study. Yin (2003: 47) also argued that multiple case studies can be used to either “(a) predict similar results (a literal replication) or (b) predict contrasting results but for predictable reasons (a theoretical replication).” Just like any other social phenomenon, multiple case studies have their own advantages and disadvantages. One of the advantages of this approach is that evidence gathered from this approach is robust and reliable, but a disadvantage of this method is that it can be time-consuming and expensive to conduct (Baxter and Jack, 2008).

Bryman (2012) defines research design as a framework for the gathering and analysis of information. The studies layout, according to Bryman, (2012) continues to take a focus on its purposes, at the same time, as accommodating the inevitable twists and turns occasioned with the aid of real international contingencies as they're met in naturalistic inquiry (Bazeley, 2013). The motive of research design is to help the researcher to analyse his or her findings based of the responses as revealed in each case. Bryman (2012) similarly gives 5 forms of research layouts which might be experimental, cross-sectional or survey, longitudinal, case studies and comparative layout. The chosen design for this study is a case study layout. The cause of this study is to establish the educators' perceptions of inclusive education for learners with physical disabilities into mainstream classrooms. For this study, the different cases layout with embedded types of analysis changed from using a single to multiple case studies to follow the ways to explore the educators' perceptions of inclusive education and focused on the views and support that they need in the inclusion of learners with physical disabilities.

3.3.3 Description of case study schools

Researchers are rarely able to investigate an entire population of individuals who interest them, so they must select a sample of individuals to study (Chambliss and Schutte, 2015). There are 491 special schools in South Africa (School Guide, 2015); 42 in the Eastern Cape and 160 in Gauteng. Of these, in Gauteng, 12 are secondary schools. In the Eastern Cape Province, there are 3 secondary schools that were studied. These were the Special school, private school, the mainstream/regular school and the 4th school was the Youth Care Centre which is the only one in the

Province which was also visited to establish what the focus of their establishment is for the enrichment of the study. In all, these schools were selected for this multiple case study research in the categories that are listed below.

Case Study A: Special Needs School

Description

School A (pseudonym) is a very large co-educational school for learners with special education needs situated in a historically black-dominated area in the Eastern Cape Province. In terms of the recent educational policy for inclusive education, this school serves as a resource centre in the community for learners with special education needs. These special needs arise mainly from the following: learners with cerebral palsy and other physical disabilities. The school comprises all grades, starting from Grade R to Grade 12, and the special needs learners follow the same curriculum prescribed for mainstream education. In this school, there are two languages of instruction, English and isiXhosa. The school is poorly resourced and less maintained. The poor infrastructure renders the school environment not very much conducive for learners who are wheelchair bound. The total number of the teaching staff is 10, 1 physiotherapist who is a White female and general workers, some assist as care takers, hostel cooks and care workers. Apart from these workers, most vacant posts were not filled. The school enrolls 153-164 learners a year. The learners, like the teaching staff, represent the black community of the Province, coming from all over the Province. The school is government subsidized with a school bus that collects those learners who are staying at home.

School B: Mainstream/Regular school

The school consists of 1700 learners from Grade 0-6. It is a semi-urban area and the staff members are 50 including general workers. This school came into being in 2004, which is a period after 1994 (when the country obtained its freedom) and because of that, color is no more an issue. It has 50 staff members including general workers who are pre-dominantly colored. The school is a no fee school and has few learners who were identified to have minor disabilities which include only 1 learner with albinism, 1 with a leg deformity, though not wheelchair bound, and few who are identified to be having learning disabilities (slow learners). The schools' infrastructure is sloppy and is not user friendly for wheelchairs as most Grades' classes are in the second floor, which is accessible through flights of stairs.

One noticeable thing was a ramp in the entrance, which is, at least, an indication of an accommodating inclusive idea. For those learners who are identified to have learning disabilities, a Special Needs Assessment (SNA) form is filled by educators and sent to District Based Support Teams (DBST) for placement to special needs schools which specialize and deal with the administration of the forms as identified by the teachers.

School C: Private School

School C is a Private school in the Eastern Cape Province. It is situated in the heart of the town and is attended by learners of different ethnic groups. The teachers are also a mixture of all races. The school is not only big, but is also well-maintained. The environment is conducive for teaching and learning. The school starts from Gr8-Gr12 each with 5 groups. The nature of grades is structured as GET phase where they all study the same subjects and FET Phase which is structured. They have structured grades in FET band with 3 Streams of SCIENCE, with Science and Mathematics, COMMERCE which has Mathematics and accounting/computer applications and the GENERAL Stream of Geography and History. The teaching staff comprises of, according to the staff establishment, 42 teachers, but currently they are 39. The school enrolment at the time of the research was 1176 with 635 male learners and 541 female learners. The school is also well known for its high academic achievement and standards and, because of this, learners do not only come from the region but from all around the province.

School D: Youth Care Centre

This type of a school is a completely different sector from the previous three that were mentioned earlier, –but is a centre / school for only males ranging from young offenders, street kids, drug addicts (who are serving sentences but are less than 18 years, therefore considered by government legislation, as underage for them to go and serve a jail sentence). In earlier years, it was given a name ‘School for Juveniles’. It is composed of Adult Education and Training (AET) levels instead of grades [previously known as Adult Basic Education and Training (ABET)]. Most of their learners are out of school youth from 16 years of age. These levels are structured as follows:

Level 1- which is equivalent to Grades 1-3; Level 2- equivalent to Grades 4-5 and Level 3 equivalent to Grades 6-7, Level 4- equivalent to 8 and 9 and is their exit point.

The school has gone an extra mile and has implemented Level 9 called Amended Senior Certificate which equivalent to Grade 12. They have only 5 learning areas instead of the normal 7 from mainstream schools, but their curriculum is the same with other schools. Demographically they accommodate part of the Eastern Cape and the reason is that the researcher is familiar with the region.

3.4 Research Approach

Cohen and Manion (2004) point out that practical knowledge interest informs an interpretive approach to research as it intends to seek greater clarity, understanding and interpretation of phenomena within contextual areas. It is anticipated that by using this interpretive perspective, relevant themes emerged that both address the research questions and highlight alternatives or improve teaching methods of inclusive education in mainstream schools in South Africa for learners with physical disabilities. A qualitative approach is chosen for this study because the researcher seeks to provide a rich narrative description of events in a natural or spontaneous setting.

The researcher's intention of this research approach is to seek to understand the perceptions of educators of inclusive education in their schools for the inclusion of physically impaired learners and the implementation of inclusive curriculum and adapting it to accommodate all learners in their schools. Qualitative research approach is found to be the best approach as this study is a case study and is thus chosen as the case study design fits with qualitative researches. Exploring educators' perceptions of inclusive education helps both to understand the challenges they encounter and to develop and evaluate intervention strategies for improving their teaching methods. Qualitative research is also preferred as the appropriate approach because it has the advantage of employing an inductive research strategy that can facilitate such understanding between the causal relationships of variables that emerge in the study (Cohen, Manion and Morrison, 2007).

The qualitative research approach correlates with an inductive approach as it is a systematic procedure for analysing qualitative data in which the analysis is likely to be guided by specific evaluation objectives (Thomas, 2006, p. 283).

These objectives include educators' views, their experiences regarding their professional skills and knowledge, and their work to celebrate learners with disabilities through implementing inclusive education policies in schools. In addition, qualitative research methodology "is primarily concerned with understanding human beings' experience in a humanistic, interpretative approach" (Jackson, Drummond and Camara, 2007, p. 21) and its approaches are "concerned with the ethics, politics and power differentials existing within research contexts" (Guba and Lincoln, 2005, 2011, p. 456). The interpretive approach fits in with the qualitative research methodology because "a qualitative researcher relies on the participants to offer in-depth responses to questions about how they have constructed or understood their experiences" (Jackson et al. 2007, p. 23). The qualitative research approach is relevant because it provides the parameters for the participants' perspectives to generate in-depth understanding of the factors that constituted a successful or failed implementation of an inclusive education in mainstream classrooms for learners with physical disabilities.

According to Merriam (2014), qualitative research has the following characteristics:

- qualitative researchers are interested in understanding the meaning people have constructed of their experience;
- the researcher is the primary instrument for data collection and analysis. The advantage of this is that the qualitative researcher can clarify issues;
- qualitative research usually involves fieldwork;
- qualitative research primarily employs an inductive research strategy; and
- the product of a qualitative study is rich in description (thick description).

Rather than finding out what perceptions do educators have of the inclusion of learners with disabilities, qualitative researchers would want to find out what support do *they* need in coping with teaching special needs learners (Merriam, 2014). A qualitative research methodology is chosen for this study because the researcher wanted to provide a rich narrative description of events in a natural or spontaneous setting, in contrast to quantitative research which aims to provide hard numbers to classify phenomena in a strictly controlled and clinical way.

Furthermore, rather than finding out how many schools offer inclusive curricula, how many educators there are who received proper training in this regard, qualitative researchers would want to find out how they are coping with teaching special needs learners (Merriam, 2014). The qualitative researcher's questions lead to an understanding of other people's experiences. A studies' layout is a strategic framework for action that serves as a bridge among research questions and the implementation of the strategies as revealed by previous studies (Terre Blanche and Durrheim 2006).

3.5 Sampling technique

The research participants were selected using both convenience and purposive sampling. A convenience sample is one in which the researcher selects participants who are readily available to take part in the study (Evans, 2014). It is relevant for this study as it focuses on educators who are already in the system and who are already teaching. Purposive sampling, on the other hand, also referred to as a judgmental sampling, refers to the selection of participants based on a study's purpose as well as on the researcher's knowledge of the population under research (Crossman, 2014). The participants of this study, therefore, were purposively selected because they either have intimate knowledge of Inclusive education operating in rural districts of the Eastern Cape Province and/or are working in the education district of the province. Thus, the participants of this study are selected because they meet the criteria described above. Merriam (2009) propose that the essential ingredient is "voltage of each individual to contribute to the development of insight and savvy of the phenomena." Merriam furthermore suggests that good informants "understand the culture or phenomena being studied, but are likewise able to ponder on it and articulate for the researcher what it is surviving on" (2009:107).

The targeted sample size is nine educators (i.e. three educators per site) who could engage in-group interviews. Although the sample size seems small, data was collected until saturation point and the findings were tabled according to the findings but that would not be the general conclusion as there can be other educators from different Provinces who might have different views.

Furthermore, because qualitative investigation aims for depth as well as breadth, the analysis of large numbers of in-depth interviews would simply be unmanageable because of a researcher's ability to analyze large quantities of qualitative data effectively. However, the small-scale approach only works if the researcher has a strong sampling strategy (Ritchie and Lewis 2003). One may argue that the sample size of nine educators was too small, but, given the fact that there are few schools that are very much accommodating as their focus is only on curriculum, and there is no possibility of or need for generalization, this was a reasonable size to elicit useful results for a qualitative inquiry. Åkerlind (2012) maintains that this kind of research requires only a limited number of participants, given the vast amount of data that emerges from even one interview. Ritchie et al. (2013) also claim that a qualitative case study requires an information-rich, in-depth, contextually-based description about the phenomenon being studied. A large sample would, therefore, be irrelevant for the study.

3.6 Data generation and interpretation

How to collect data is always related to the research method employed. In a case study, there are six types of data collection, namely document analysis, archival records analysis, interviews, direct observation, participant observation and analysis of artefacts. Liamputtong (2013) stated that one of the goals of a case study research is to understand the complexity of a case in the most complete way. To meet the goals of the case study research, the researcher employed two data collection methods, namely: Interviews and Documents.

The following methods were used to generate data in the research: Semi-structured interviews and documents. Before running far with the interview type it is important to elaborate on what an interview is and the advantages of choosing it and then the documents and how they are used in data generation.

3.6.1 Interviews

An interview is an oral, in-person question-and-answer session between a researcher and an individual respondent, as opposed to a questionnaire which is a written collection of survey questions to be answered by a selected group of research participants (Gay et al., 2011).

“A great deal of qualitative material comes from talking with people, whether it is through formal interviews or casual conversations. If interviews are going to tap into the depth of reality of the situation and discover subjects’ meanings and understandings, it is essential that the researcher be unobtrusive, in order not to impose one’s own influence on the interviewee” (Woods, 2006). To that end, the best technique for this study is the semi-structured interviews, as mentioned earlier.

Brink, van der Walt and van Rensburg (2012) state that, during a semi-structured interview, the interviewer must ask a certain number of specific questions, but can ask probing questions to dig deeper into the responses given by the participants. In this study, specific questions as well as probing questions were asked. The questions are found on the list of Appendices. Digital recordings were used to secure an accurate account of the conversations to avoid losing data since it is practically impossible to write down everything during the interview. The advantage of digital recording, according to Bryman (2012), is that the recordings can easily be played back repeatedly without risking losing the information as was often the case in earlier days of tape recorders. The audio recordings were done then transcribed for analysis.

According to Seidman (2013), transcribing interviews has the following advantages:

- It helps to correct the natural limitations of our memories and of the intuitive glosses that we might place on what people say in interviews;
- It allows a more thorough examination of what people say;
- It permits repeated examinations of the interviewees’ answers;
- It opens the data to public scrutiny by other researchers, who can evaluate the analysis that is carried out by the original researchers of the data; and
- It therefore helps to counter accusations that an analysis might have been influenced by a researcher’s values or biases. It allows the data to be reused in other ways from those intended by the original researcher.

3.6.1.1 Semi-structured interviews

According to Shneiderman and Plaisant (2005), interviews can be very productive since the interviewer can pursue specific issues of concern that may lead to focussed and constructive information. The advantages of a semi-structured interview method of data collection are that:

- Direct contact with the research participants often leads to specific, constructive information;
- Interviews are good for obtaining detailed data;
- Relatively few participants are needed to gather rich and detailed data (Shneiderman and Plaisant, 2005).
- The semi-structured design gives the participants ample time and scope to express their diverse views and allows the researcher to react to and follow up on emerging ideas and unfolding events (Nohl, 2009).
- The results obtained through semi-structured interviews can be compared with each other since all participants are required to express their views about the same general themes (Nohl, 2009).
- Semi-structured interviews allow not only for assessing the participants' opinions, statements and convictions, but also for eliciting narratives about their personal experiences (Nohl, 2009).

Open-ended questions allow the participants to freely voice their experiences and minimize the influence of the researchers' attitudes and previous findings (Creswell, 2005). To ensure consistency with all research participants, the researcher designed an interview schedule containing a set of pre-planned core questions to ensure that the same areas are covered with each participant. The interview schedule is used as a guide, thereby allowing questions that are not included in the interview schedule to be asked as the researcher probes and explores perceptions of the participants. Merriam (2009) suggests that working from an interview schedule allows the novice researcher to gain experience and confidence needed to conduct open-ended questioning. The primary method of data collection for this study was semi-

structured interviews where the participants could talk openly about their personal experiences. This data collection method helped to clarify concepts and problems and allow for the establishment of a list of possible answers or solutions to them (Bless et al., 2006).

The semi-structured individual interviews elicited themes and patterns, which enable the researchers to conceptualize and refine the perceptions of educators. This approach gives the researcher the opportunity to consider their views, and allows for 'thick narrative descriptions' of their perspectives. As each interview progressed, the research participant were given the opportunity to elaborate or provide more relevant information. Seidman, (2006) posits that an interest in understanding the lived experience of other people and the meaning they make of that experience is at the root of in-depth interviewing. Interviewing provides access to the context of people's behaviour and, thereby, provides a way for researchers to understand the meaning of that behaviour.

3.6.2 Documents:

Henning (2004) states that the collection of documents and other artifacts are often neglected in qualitative research. Yet they are a valuable source of information and if they are available, they should be included in the design. Any document, whether old or new, whether in printed format, handwritten or electronic format which relates to the research question may be of value. Merriam (2008) refers to documents as ready-made sources of data accessible to the researcher. The documents that were used in this study were the school policy documents. The policy documents targeted were the current: White Paper 6; Mission Statement, SIAS policy/document, Anti-bias Policy, Inclusion Policy, Learner Support Policy, Learner Identification forms, etc. The use of documents in this study is secondary sources as the documents provided were not used for analysis, but rather for extra insight and information about the school. When looking at the advantages of using such documents, the researcher can only see their usage as an advantage to draw conclusions and to use for recommendation.

The use of many instruments in data collection allows for triangulation of the results. Liamputtong (2013) stated that triangulation in case study is important in that it gives the researcher different perspectives about the phenomenon, because different

collection methods such as interviews, policy documents and observation are employed which enable the researcher to view the phenomenon through different lenses. Each method reveals its own aspect and parts of social reality. "For example, an interview may show people's motives but does not allow the researchers to witness their behaviour. An observation revealed the behavior, but we may not know about peoples' motives for that behavior", (Liamputtong, 2013: 210). Though observation was not part of the deal, but, when an opportunity surfaced, it was grabbed and was taken as an advantage to confirm the reality of a particular case. In the light of the above, triangulation was also considered as an option in serving the purpose of verifying data that was produced by different data collection approaches as the data was confirmed to reveal whether the statements captured during interviews indeed were a true reflection of what the participant meant. Case studies are likely to be much more convincing and accurate if they are based on several (different) sources of information, therefore, the aim was to interview three educators per site. Though some may see that as a small population, but it was relevant for the researcher when data was analyze especially as the study is qualitative in nature.

3.6.2.1 Documents analysis

Sources are generally classified into primary and secondary, the former being the original written material of the author's own experiences and observation, the latter derived from somewhere other than the original source (Neuman, 2011:395). For McMillan and Schumacher (2001:42), primary source documents are records of past events that are written or printed, whether anecdotal notes, diaries, letters, maps, journals, newspapers or office minutes, whilst for Creswell (2003:188) an important distinction is between private and public documents. Ritchie and Lewis (2003:35) distinguish between public documents (such as government publications and circulars), procedural documents (minutes of meetings) and personal documents (letters or diaries). Given the objective of this study, the researcher used the public, procedural, secondary sources and personal documents to collect data to understand how educators interpret policies, departmental circulars and other relevant documents.

Bogdan and Taylor (2003) define a personal document as any first-person account of the whole or part of an individual's life or reflection on a specific topic or event.

It may be any one of a wide spectrum of sources, such as personal letters, diaries, autobiography, newspapers, journal articles, and minutes of meetings, e-mail discussions, and learners' schoolwork (Creswell, 2003:187). They include minutes and agendas of meetings, memos, financial records, statistical reports, annual reports, logbooks and process records. The researcher interpreted the data from such documents to provide a description of inclusive classrooms and to clarify the collective educational meaning that may underlie current issues and practices. The documents were collected, analyzed and used as valuable sources to indicate whether the information gathered was valid. The targeted documents are the government policies, departmental circulars, school's vision and mission statement, learner profiles and workbooks, educators' portfolios and the school's minute's books.

3.6.2.2 Types of Data analysis

In research there are various methods of data analysis; such as discourse, content, narrative, grounded and phenomenological data analysis of which the researcher tackled but two that are relevant to analyse the data for this study. These are content and phenomenological data analysis methods, simply because they are related to this type of study which is qualitative in nature.

First, the researcher sees it valuable to define content analysis which, according to Battacherjee (2012), refers to the systematic analysis of a text in a qualitative manner. Qualitative data analysis is used to make sense of and describe the data generated during the research process. Qualitative data analysis is a search for general statements about relationships and underlying themes (Marshall and Ross, 2006). Analysis of interview transcripts and focus-group transcripts are based on an inductive approach which is meant to identify themes, sub-themes and patterns emerging in the data. Interpretive analysis was done on the transcriptions of the interviews by using the content method of analysis.

The researcher generated initial codes, which helped in searching for themes. Coding was used to combine themes, sub-themes and patterns that emerge. Qualitative data analysis for this case study is grounded on an interpretive philosophy. Phenomenological data analysis was used to bracket all the responses which bear similarity to present them together. It is the process which researchers

use to gain sense of or explain the data they have gathered during the inquiry procedure. Researchers analyze the symbolic and meaningful content of the data when doing qualitative data analysis. Analysis in qualitative research is “a careful, detailed, systematic examination and interpretation of a special body of information in an endeavour to identify themes, biases, and meanings” (Berg, 2009). The ethos that the researcher used was thematic approach. This method entails familiarization and immersion, coding into themes, inducing themes, elaboration and interpretation and triangulation.

- **Familiarization and immersion**

Interpretive research is generally studied as it arises – this means that when the researcher arrives at the data analysis stage, she should already deliver a preliminary understanding of the significance of the research information. During data analysis, the researcher immersed herself in all the material, acting with the interview recordings and text files. By this stage she should know her data well enough to recognize what aspects can be found there, what interpretation could be drawn and what could be sustained by the data and what cannot (Mertens, 2005; Terre Blanche et al., 2006). In this study, the researcher read the interview transcripts and documents repeatedly to be familiar with the content of the interviews.

- **Coding into themes**

During this phase, the researcher identifies passages of text by using labels to them to suggest that they are instances of a specific topic or idea (Babbie and Mouton, 2001). The reason for coding is to divide the data up into themes. For this research, themes from all the data was coded, generated and manufactured. The method to be employed is inductive method. That is important to reduce and analyze the data into key themes (Terre Blanche et al., 2006).

- **Inducing themes**

Themes were identified and the researcher adhered to the language that arose from the interviews to label the categories (Terre Blanche et al., 2006). The constant comparative method was used to construct themes. The

constant comparative method involves continually comparing one unit of data with another to devise conceptual elements of the theory (Merriam, 2002). Merriam, (2002) further explains that units of data which the researcher sees as meaningful are compared with each other to generate tentative categories. By constantly comparing incidents with emerging conceptual categories and by reducing similar categories into smaller numbers of conceptual categories, a clearer understanding of the data is gained (Charmaz, 2006). The researcher then works with the themes that emerged from the data and then constantly compares them with each of the other themes that emerged from the data. For a better analysis, one needs to stay close to one's data to interpret it from a position of empathic understanding (Richards, 2009). Interpretive analysis is a back and forth movement between what one knows and what one wishes to know, "description and interpretation, foreground and background, part and whole, to achieve a compelling account of the phenomenon being studied" (Terre Blanche, 2006).

This is the constant comparative method and the second approach then came into play and is discussed as follows:

'Phenomenology is known as an educational qualitative research design (Ponce, 2014; Creswell, 2013, Marshall and Rossman, 2010). The philosophical basis of qualitative investigation stems from phenomenology (as a philosophy), from hermeneutics and from existentialism (Lucca Irizarry and Berríos Rivera, 2013). Therefore, qualitative research is contextualized in different philosophical paradigms which centre on diverse conceptions of reality (Guba and Lincoln, 2000; Denzin and Lincoln, 2008). According to these authors, the main philosophical paradigms are: positivist, post-positivist, critical theory, constructivism and post-modernism.'

3.7.1The Philosophical Origin

The philosopher Immanuel Kant used the term phenomenology in his classic work, Critique of pure reason, in which he differentiated between the mental representations of objects, understood as the thing (a prior knowledge independent from experience), and objects understood based on experience of an empirical knowledge (Parodi, 2008).

The word phenomenology derives from Greek, and one of its meanings is the following: “apparition or manifestation”. It has also been defined as the philosophy or school that explains being and consciousness based on the analysis of observable phenomena (Litchman, 2006).

The “father” or greatest figure of phenomenology was the mathematician Edmund Husserl who was born in 1889 into a Jewish family in what is today known as the Czech Republic (previously Moravia) and died in 1976, (Parodi, 2008). According to this author, “with his phenomenological school, Husserl emphasized the study of meanings and ideal objects, of the psychological conscience of the world and of science” (p. 473). He proposed phenomenology as an experimental method based on the conscience of phenomena in which the pure essences of the contents of consciousness stood out. This was found relevant for this study because dealing with educators’ perceptions and views and human development (learners) and their wellbeing is more psychological in nature.

Starting with empirical observations, Husserl sought to reach conclusions framed within the scope of science. This is one of the most transcendental contributions of phenomenology to science. In fact, through this attempt Husserl aimed to attack psychology as a pure science, highlighting elements related to human perception and the intentionality of consciousness. The intentionality of consciousness refers to the search and identification of subjacent, subjective elements of consciousness which surpass the intention of understanding reality from a single point of view. Philosophical phenomenology stemmed as a counterattack to the reductionism derived from positivism. This philosophical current aimed to reduce information from experience to the empirical sciences.

An example was the mainly behaviouristic practice of psychology. Husserl reacted to behaviouristic psychology proposing phenomenology as a rigorous science of experience and human consciousness (Parodi, 2008). As a method of research, Husserl proposed the word *epokhé*; a word of Greek origin which means doubt. Giorgi (2009) held that the concept of *epokhé* refers to the suspension or suppression of judgments and the positioning of the researcher regarding the experiences of the studied phenomenon.

This suspension of judgment is a mechanism which ensures objectivity during the process of data analysis in a qualitative research. While it is true that the concept of *epokhé* stems from pure phenomenology, it is also true that the term has been adapted to qualitative investigation in general. The researcher who places him or herself within the qualitative paradigm must set aside all preconceptions, judgments or prejudices towards a topic to make an objective analysis of the information participants bring to an investigation.

In view of the above, as the participants in this study are educators from private, special and mainstream schools and the researcher is also an educator but from a different sector, she maintained a conscious effort that there is no biasness. Phenomenology has become a useful and meaningful design among educational and social sciences researches. Most of them, have understood that phenomenology is a genuine manner of representing the realities that participants experience in their lives. Although this premise is true, one of the biggest misconceptions about phenomenology (as a research design) is that it can be applied to all qualitative approaches. Indeed, perception is an element in all qualitative research designs.

However, it is very important to consider the intention of the research and the problem to be resolved, before selecting phenomenology as a design. Usually, the type of problem best suited for this design is the study of lived/common experiences. The researcher should understand the philosophical assumptions that are implied in the use of phenomenology. Bracketing is another aspect that the researcher might employ while conducting a phenomenological research. The main aspect of phenomenology is to understand the essence of the experience that participants share within a common ground. It is imperative to understand that participants brought out subjective and objective experiences. The emphasis while analyzing the data was on the essence (or common experiences) and on the significance of the experience. In other words, it is important to read the “text” and the “context”. This requires one to analyze not only what is told by the participants but what it really means: contextual and structural analysis. It is because of this reason that this study employed both content and phenomenology as the best methods to analyze data for this particular study. The categorization of the significant statements and

meaning units which were verbalized by the participants were within the data analysis process. Thus, according to Giorgi (2009), the interpretation and analysis skills from the researcher must be adequately developed.

As interviews are the most common data collection methods, observations and documents can be used to conduct the research as it was the case with this study; as mentioned in earlier sessions of the study. Giorgi (2009), further states that Phenomenological data analysis is considered directive as its sampling method is purposive and this method is very relevant as the participants were sampled as such.

However, it is important to comprehend that all qualitative researches have a phenomenological aspect to it and is aligned to the ideology of Husserl and later Giorgi, 2009; all the experiences from each site were bracketed separately and during the interview the researcher and participants allowed the data to flow and speak for itself and remained true to the phenomenological belief. The summary of his phenomenological method is Table 3 below. From one of these sites, the researcher was afforded an opportunity to observe the teaching proceedings. The reason for embarking on this method was to allude to what the interviewee(s) have mentioned during the interview and all the similar responses were bracketed together from all the three sites so as to avoid repetition.

Table 3: Giorgi's (2009) phenomenological method summary:

No.	DESCRIPTION
STEP 1	Bracketing and phenomenological reduction
STEP 2	Delineating unit of meaning

STEP 3	Clustering units of meaning to form themes
STEP 4	Summarizing each interview, validating it and modifying it where necessary
STEP 5	Extracting general and unique themes from all interviews and making a composite summary

Table 3: Steps in Data Analysis

Additionally, one of the precepts of all qualitative investigations lies on the perception held by the participants as protagonists of the studied phenomenon. It can, therefore, be argued that qualitative research is underlined by an element closely linked to perception (subjectivity to some) of the studied object. This approach gives way to the following statement:

“All qualitative research has a phenomenological aspect to it, but the phenomenological approach cannot be applied to all qualitative researchers. In the first place, it is completely appropriate to say that all qualitative research have a phenomenological aspect to it, because one of its main characteristics lies on the study of qualities and the interpretations addressed by the object of study. Here, the philosophical basis of phenomenology that originates and permeates all qualitative research is openly manifested. All qualitative investigations describe the richness of content in human complexities”, (Lichtman, 2006; Denzin and Lincoln, 2008).

In the second place, the previous statement suggests that even when qualitative investigation is centred on the systematic study of a problem through the interpretation of its informants, this does not imply that the phenomenological focus must be used as a strategy of data collection in all qualitative researches. Rather, it is used cases depending on the research problem studied. The characteristic scaffolding of phenomenology as research focus is discussed in the following section.

3.7.2 Types of Phenomenology and General Usage Criteria

To accurately describe the scaffolding or staging of phenomenology, it is appropriate to begin with the different types and classes, hereby briefly described as: Descriptive or hermeneutical phenomenology (referring to the study of personal experience and requires a description or interpretation of the meanings of phenomena experienced by participants in an investigation).

- Transcendental phenomenology (analyzes the essences perceived by consciousness regarding individual experiences).
- “Egological”, genetic or constitutional phenomenology (which refers to the analysis of the self as a conscious entity. This type of phenomenology appeals to universal consciousness).

Creswell (1998) posits that the best criteria to determine the use of phenomenology is when the research problem requires a profound understanding of human experiences common to a group of people. The author suggests that the studied group should consist of 3 to 15 members. The members of the group need to be able to articulate their lived experiences. The more diverse the experiences of participants, the harder it was for the researcher to find the underlying essences and common meanings attributed to the studied phenomenon. The role of the phenomenological investigator or researcher is to “construct” the studied object according to its own manifestations, structures and components (Ponce, 2014).

3.8 Sample and Data Collection Strategy in Phenomenology

The samples or participants in phenomenological research are generally chosen according to what is known as “purposive sampling”. Purposive sampling is characterized by the incorporation of specific criteria met by the participants at the time of selection. For example, in a study concerning the practices, experiences and meanings of equity in couples, Padilla Diaz (2006) selected the sample based on the following criteria: self-denomination as couples that practice equitable ideas (validated by a qualitative instrument), 5 years or more of living together (given that this was the period shown by existing literature as a reasonable span for the configuration of experiences as a couple) and solid belief in some feminine respects or theories. These criteria aimed to ensure that the selected couples had common

experiences regarding the studied phenomenon. In this study's case, the educators whose primary duty is teaching were used as they are the most familiar with the learners in the classroom setting. The most appropriate data collection strategy for a phenomenological research is the profound interview. Existing literature (Kyale and Brinkman, 2009; Marshall and Rossman, 2010) coincides in that the phenomenological interview should be open or semi-structured.

These two types of interviews allow the researcher to address the phenomenon profoundly, providing a space of aperture for the informants to express their experiences in detail, approaching reality as faithfully as possible. The detailed descriptions or interpretations brought by the participant in the profound-phenomenological interview should be as representative of experienced reality as possible, and for this study, semi-structured interviews were used to ask questions that hope to answer the research questions and establish the educators' perceptions of inclusive education for learners with physical disabilities in mainstream classrooms. The focus of the phenomenological interview is the description of the meanings of phenomena (Rubin and Rubin, 2012). These authors point out that it is recommendable to carry out some additional interviews to verify the information obtained, allow the participant the opportunity to provide further detail or expand on the information offered and, lastly, for the participant's final approval. As exposed, phenomenological interview is complex and requires a great deal of time to scrutinize the studied phenomenon with the necessary depth. It is, therefore, vital for the researcher to have excellent skills and/or competency in interviewing.

Some of the skills to be considered during the interview are the following: paraphrasing, clarification, summarizing, reflection of feelings, self-revelation, empathetic listening (Rivero Vergne, 2009). Additionally, the researcher must have dominion or skills in the following areas: paralanguage, kinesics, oculesics, proxemics, vocalizations, identification and recognition of types of silences and sensibility to cultural diversity. A general knowledge of the styles or types of questions is another necessary skill for the researcher using phenomenology. Some types of relevant questions are: those without a specific focus, anecdotal questions, bipolar, intentional, reflexive, of instantiation, etc.

Creswell (2013) describes the following steps to elaborate phenomenological analysis:

- The researcher describes his or her own experience with the object of study to identify personal judgments and prejudices so that they don't affect the process of analysis.
- The researcher proceeds with the "horizontalization" of data. This refers to the process wherein the researchers list each of the relevant quotes of the studied topic and gives them equal value regarding the expressions of the group. This is where the textual description begins: what are the participants saying? What are the relevant topics expressed by the research participants?
- The researcher groups the relevant topics into units of meaning.
- The researcher writes the textual description and includes "verbatim" quotations.
- The researcher writes the structural description.
- Finally, according to the textual and structural analysis, the researcher proceeds to identify the essence of the phenomenon.

It is important to highlight that these '*verbatim*' quotes for this study are interpreted according to emerging categories, which themselves emerged after a process of scrutinizing abundant amounts of information. Therefore, the transcriptions or audio that contain the information from the interviews require carrying out the prolonged chore of visiting and revisiting the text. Abstracting the information along with constructing the relevant categories or themes constitute the main basis to obtain an interpretation that is faithful to the essence and meanings of the studied phenomenon. Phenomenology as a research method to analyse data for this study contains some validation strategies. Some of the most commonly used strategies during the process of validation under phenomenology include corroboration by participants and agreement between coders (Creswell, 2013). Corroboration with participants consists of presenting and discussing the data analysis between the researcher and the research participants to verify that the essences and meanings are in fact those expressed directly or indirectly by the participants. Agreement between coders is a more complex process. Various people or external researchers participate willingly in the process of encoding data. These people concern

themselves mainly with seeking correspondence between the relevant themes (and sub-themes) and the categories that emerge from the data analysis.

At the end, all coders, if they are more than one, should compare their respective analysis and, if necessary, according to agreement, the categories can be reorganized to validate the information obtained. The research participants were selected using both convenience and purposive sampling. A convenience sample is one in which the researcher selects participants who are readily available to take part in the study (Evans, 2014). It is relevant for this study as it focuses on educators who are already in the system and who are already teaching. Purposive sampling, on the other hand, also referred to as a judgmental sampling, refers to the selection of participants based on a study's purpose as well as on the researcher's knowledge of the population under research (Crossman, 2014). The participants of this study were, therefore, purposively selected because they either have intimate knowledge of Inclusive education operating in rural districts of the Eastern Cape Province and/or are working in a rural education district of the province (Mthatha education district). Thus, the participants of this study were selected because they met the criteria described above.

Merriam (2009) proposes that the essential ingredient is “voltage of each individual to contribute to the development of insight and savvy of the phenomena.” Merriam furthermore suggests that good informants “understand the culture or phenomena being considered, but are likewise able to ponder on it and articulate for the researcher what is surviving on” (2009:107). The targeted sample size is nine educators (i.e. three educators per site) who could engage in group interviews. Although the sample size seems small, data was collected until saturation point. Furthermore, because qualitative investigation aims for depth as well as breadth, the analysis of large numbers of in-depth interviews would simply be unmanageable because of a researcher's ability to analyze large quantities of qualitative data effectively. However, the small-scale approach only works if the researcher has a strong sampling strategy (Ritchie and Lewis 2003). This study focuses on educators in mainstream, private and special schools, employed by the Department of education to support the learning process. Three participants per site will participate in semi-structured group interviews. Due to the researcher's curiosity, another type of a special school (Youth Care Centre) was visited to establish the proceedings in

this very rare establishment but of course the Ethical procedures and permissions were followed.

3.9 Observations

According to Brink *et al.* (2012), an observation is a technique for collecting descriptive data on behaviour, events and situations. The emphasis during observation is on “understanding the natural environment as lived by participants, without altering or manipulating it” (Gay *et al.*, 2011: 381). The significance of this method, according to McKernan and McKernan (2013), is that observations provide researchers with ways to check for non-verbal expression of feelings, experiences first-hand, how the participants communicate with each other and how much time is spent on various activities. Woods (2006: n. p.) stated that participant observation has the following advantages:

- It blends in with the natural activity;
- It gives the researcher access to the same places, people and events that are taking place;
- It gives access to the documents relevant to the role, including confidential reports and records;
- It facilitates the use of mechanical aids, such as tape recorders and cameras;
- It provides personal first-hand experience of the role and thus heightens understanding of it; and
- It makes a worthwhile contribution to the life of the institution.

Brink *et al.* (2012) stated that observation can be categorized according to the researcher involvement, namely, non-participatory, passive observation, moderate participation, active participation and complete participation. In this study, moderate participation was used as a tool to collect data. It turns out that there is more than meets the eye when it comes to observation as a tool for collecting data. According to Gay, *et al.* (2011), participation observation is more than just arriving at a site and taking notes of what one sees. On the contrary, participant observation is a complex method that has many components, as revealed in Table 1.5 below for the different

types of observations. There are decisions to be made by the researcher whereby s/he must decide what stance of participant observer he/she will take. Before discussing my own form of participation, let me discuss various types of observations in table below.

Table 4: Observation types, level of involvement and limitations

Observation type	Level of Involvement	Limitations
Non-participatory	No contact with population or field of study	Unable to build rapport or ask questions as new information comes up.
Active Participation	The researcher becomes a member of the group by fully embracing skills and customs for the sake of complete comprehension.	This type permits the researcher to become more involved in the population. There is a risk of “going native” as the researcher strives for an in-depth understanding of the population studied.
Passive Participation	Researcher is only in the bystander role.	Limits the ability to establish rapport and immersing oneself in the field.
Moderate Participation	Researcher maintains a balance between insider and outsider roles	This allows a good combination of involvement and necessary detachment to remain objective.
Complete Participation	Researcher is completely integrated in population of study beforehand i.e. s/he is already a member of a population being studied	Here there is a risk of all levels of objectivity, thus risking what is analyzed and presented to the public.

Source: Guidelines,2014

The participant observation stance that the researcher took in this research was that of a moderate participation researcher. In other words, my stance was situated between two types (passive and active participant observation). The reason is because of the nature of the site and here is how: As the researcher was with the educator and the learners with physical disabilities during the observations and though she did not engage in teaching activities at all, but during the field work activities the researcher engaged with the learners while helping with pushing some

of those who are wheelchair bound to help them move around the classroom as they were moving from one environment to another. Otherwise, the researcher sat unobtrusively observing the events taking place. I believe this data collection method accords with the intention of this research – to remain objective and let the data flow and speak for itself. The moderate participation researcher can maintain the balance between the outsider and the insider roles. Such a stance enables the researcher to remain objective when collecting data and avoid being native (Brink *et al.*, 2012). According to Bryman (2012: 445), “Going native refers to a plight that is supposed sometimes to afflict ethnographers when they lose their sense of being when conducting a research and become wrapped up in the worldview of the people they are interviewing.” An example would be if the researcher wants to understand how drug addicts do drugs but ends up being involved himself in doing them and never finishes his research.

It is advisable though that the researcher needs to consider his or her own personality before choosing the stance he or she will employ; the reason being that, if the researcher is an introvert, for an example, a complete participation can pose numerous problems, as it is difficult for an introvert to socialize or to be part of the group. As was the case with me, an observation was not part of the deal but when the opportunity surfaced, I took full advantage of it. This helped me to understand more aspects concerning the research which were not covered in the research questions.

3.10 Credibility and trustworthiness

According to Merriam (2009); the importance of gaining valid and reliable knowledge in an ethical manner while conducting qualitative research. The terms “reliability” and “validity” are relevant to quantitative research, but less so to qualitative research, due to its subjective nature. According to Bless, Higson, Smith and Sithole (2013), the emphasis is on the understanding of a certain phenomenon within the complexity of its natural context. By contrast, terms such as credibility, transferability, dependability and conformability are often used in qualitative research regarding the trustworthiness of such research (Merriam, 2009).

Credibility acknowledges that reality is subjective and that there are many perspectives which influence it. Credibility, therefore, seeks to convince that the findings depict the truth of the reality under study (Bless et al., 2013). Credibility attempts to establish the truth of the findings, based on the research design, interviews and context. Dependability deals with core issues, such as ensuring that the way in which a study is conducted is consistent across time, researchers and analysis techniques (Morrow, 2005). Dependability demands that the researcher thoroughly describe and precisely follow a clear and thoughtful research strategy (Bless et al., 2013). Other strategies implemented to ensure the dependability of this study are triangulation, reflexivity and the use of audit trial (Merriam, 2009).

Transferability can be compared to external validity, since it refers to the extent to which results apply to other or similar situations (Bless et al., 2013). Merriam (2009) identifies strategies to promote the transferability of research findings, including using thick or rich descriptions of data and the use of maximum variation in the sample population. In the qualitative approach, the truth-value is measured by credibility: having an adequate engagement in the research setting so recurrent patterns in data can be properly identified and verified. Applicability is established with transferability: allowing readers to be able to apply the findings of the study to their own situations. From a qualitative researcher's perspective, this method is naturally biased due to his or her close association with the data, sources, and methods; various audit strategies can be used to confirm findings (Bowen, 2009). Leedy and Ormrod (2009:124) contend that validity refers to the accuracy, meaningfulness and credibility of the research project. In parliamentary law to ensure trustworthiness of the data, the researcher took the proposed investigation in an honourable way and used live interviews and taped records to cross check the transcripts and look for logical patterns and theme development among several investigators on a squad. Confirmability is like replicability, and it requires that the other researchers can obtain similar findings by following similar research processes in a similar context (Bless et al., 2013).

Validity, meanwhile, is used to specify whether the determinations are accurate from the point of view of the researcher, the participant, or the reader of an account

(Creswell and Miller, 2000). Creswell (2001:196) suggests some primary strategies to determine the accuracy of the determinations like:

- To triangulate data by evidence from different sources and use it to build and justify coherent themes.
- Use member checking to determine the accuracy of the qualitative findings through returning the final account, specific description or themes to participants to determine their accuracy;
- Use rich, thick description to convey the findings
- Clarify the bias the researcher brings to the field. This self-reflection creates an open, honest narrative that will resonate well with readers;
- Spend prolonged time in the area. In this manner, the researcher develops an in depth understanding of the phenomenon under study and can convey detail about the site and the people that lend credibility to the narrative history;
- Participants' debriefing to enhance the accuracy of the report. This will resonate with people other than the researcher.

Lincoln and Guba (2000:290), on the other hand, proposed four alternative constructs that more accurately reflect the assumptions of the qualitative paradigm. Firstly, credibility is an alternative to internal validity, with a goal to demonstrate that the inquiry was conducted in such a manner that ensures the subject was accurately identified and described. Secondly, transferability is an alternative to external validity or generalizability, whereby the burden of proving the applicability of one set of findings to another context rests more with the investigator, who would cause the transfer, rather than with the original investigator. Thirdly, triangulating multiple sources of data can be used to corroborate, elaborate or illustrate the research in question. Fourthly, dependability is an alternative to reliability, whereby the researcher attempts to account for changing conditions in the phenomenon, as well as changes in the design, by an increasing refined understanding of the setting. Trustworthiness has grown to be a crucial concept as it enables investigators to

explain the virtues of qualitative terms outside of the parameters which are generally used in quantitative research. The purpose of trustworthiness in qualitative research is to support the argument that the inquiry's results are "worth paying attention to" (Given and Saumure, 2008).

Lennie (2006: 30) is of the view that the following strategies can lead to the rigour and trustworthiness of the research:

- Community participation, engagement and communication methods that develop relations of mutual trust and open communication;
- Using multiple theories and methodologies, multiple sources of data and multiple methods of data collection;
- Ongoing meta-evaluation and critical reflection;
- Critical assessment of the intended and unintended impacts of evaluations using relevant theoretical models;
- Using rigorous data analysis and reporting processes;
- Participant reviews of evaluation case studies, data analysis and reports.

To ensure trustworthiness, a corroboration of multiple techniques for this case study was used. Multiple data collection methods enable the researcher to triangulate data to strengthen the findings and conclusion, thereby reducing the possibility of doubt. Interviews were audio-recorded and transcribed using digital media.

3.11 Ethical Consideration

Consent and confidentiality are the obvious ethical issues that need to be considered by any one intending to conduct a social research (Wilson, 2013). The ethical considerations used in this study conformed to University of Fort Hare's Research Ethics Committee (UREC) requirements, from which an ethical clearance certificate was issued to undertake this study (see Appendices).

- Access – permission was sought from individual principals, firstly, via email and then through a follow-up phone call. To abide by the ethics rules, before

the researcher embarked on the fieldwork, she requested permission from the Department of Education to conduct research in the province where the schools are situated, namely Mthatha education district in Eastern Cape Province. Written permission was granted without any problems and the proof is attached in the appendices. Permission letter (see Appendices) was sought from Principals and was also obtained from all schools (including the Youth Care Centre which was visited for the interest of the researcher) from which data was collected.

- Consent – consent was obtained from all participants in writing. Each participant received a letter outlining the research and a consent form for their records, as well as the consent form that is held for verification when needed. Once the research was received and permission from the principals, the researcher sought informed consent from the educators who offered to participate in this study as they are the principal participants of the study. It was also indicated to them that their participation was voluntary and that they were free to withdraw from the study at any time (Creswell, 2013; Wilson, 2013).
- Confidentiality – confidentiality was assured to all participants. Names of the schools were disguised, as well as the names used in the case scenarios as this is a case study are not the real names of the participants, hence the use of the word ‘pseudonyms’.

In addition to the above-mentioned criteria that the University embarks on, the following is another form by which ethical consideration can be maintained more especially when dealing with human subjects, as suggested by Allan (2011):

- **Justice**

This principle is about fairness, rightness and equity (Allan, 2011); the fair treatment of all research participants without undue discrimination or prejudice. The researcher vowed to make every effort to portray fairness and equity in her attitude towards, and her communication with, participants.

- **Autonomy**

This principle relates to every individual's right to freely and voluntarily make informed decisions regarding their own lives. In terms of this research project, this principle refers to the decision made by participants to participate in the research. Such a decision must be an informed one, one which is made freely and voluntarily with the understanding that a participant may withdraw from the study at any time without fear of reprisal. In addition to signing informed consent forms, it has been recommended that researchers should also ensure that participants fully understand the procedures, risks and benefits of the study (Mann, 2008). In line with this, the researcher arranged to meet with participants to share the objectives of her research, and handed out the informed consent forms, allowing an opportunity for questions to be asked.

- **Non-maleficence**

This principle refers to the duty of the researcher to behave in ways that do not cause any undue harm. Should the researcher behave in ways harmful to participants, it is the responsibility of the researcher to take reasonable steps to rectify the situation. In terms of this study, it means offering participants debriefing after the completion of the whole study. In research, debriefing is usually a short interview between the researcher and a research participant immediately following their participation in the research. Whenever research involves human participants, debriefing is considered a fundamental ethical precaution. However, because this research is viewed as low risk i.e. it involves no deception and minimal risk to participants, there was no need for debriefing. Furthermore, no medical examinations are to be conducted on any human subjects.

- **Beneficence**

Beneficence is the action that is taken for the benefit of others. The researcher is hopeful that a potential outcome of this research will serve to highlight some of the issues facing Inclusive Education in schools and that the

recommendations made will be considered in terms of the other Inclusive Education institutions in and outside the province.

- **Veracity**

Part of being able to conduct valid research requires that researchers are truthful. Therefore, in all communication with participants the researcher will make every effort to be both accurate and objective.

- **Fidelity**

The principle of fidelity pertains to the degree to which a researcher is trustworthy. In adherence to this principle, it is important that the participants' interests are put before the researcher's, creating a safe space in which they can feel they could genuinely respond to any questions.

Finally, any research that involves human subjects must be reviewed and approved by an accredited institutional committee (Allan, 2011). Indeed, this research was submitted and approved by the University's Research Ethics Committee (UREC) at the University of Fort Hare where the researcher is currently registered as a student and the certificate of approval was issued. The researcher, however, revisited the sites for triangulation of data during analysis and after completion to build on agreed terms.

Conclusion

Chapter 3 discussed the research methodology and instruments of data collection as well as sampling techniques that governed the study and explained the research process in detail and how to maintain credibility and trustworthiness. It further discussed the ethical consideration of the research. The next chapter reports on the research findings and discussions.

CHAPTER FOUR

4.1 RESEARCH FINDINGS AND DISCUSSION

Introduction

This chapter provides the research findings which were further discussed in detail in the following segments. This study employed qualitative research strategies. Three research sites which represented the three forms of the South African education system (i.e. Mainstream, Private and Special schools) were visited. A different sector was visited out of interest to explore the kind of establishment that is and that is a Youth Care Centre. Five out of the targeted nine participants took part in the semi-structured interviews (One from the mainstream school, three from the special school and one from the Private school and the other two were from the Youth Care Centre, which totalled to seven). Some reasons of syllabus coverage for their non-availability to participate in the research and some were conducting first term examinations during the time of the research. The interviewed participants shared their perceptions of inclusive education as well as the support they get from District Based Support Teams.

The researcher, therefore, was forced to conduct group interviews to save time. This chapter presents the findings and outcomes of the study's data analysis in a manner that covers the research question: What are the educators' perceptions of inclusive education for learners with physical disabilities in mainstream classrooms? Data were presented and discussed according to the themes and sub-themes that emerged during the process of data collection. Two methods of data analysis which are closely related were used as they were discussed fully in the previous chapter (i.e. content and phenomenological data analysis). In the discussion, the findings are interpreted in terms of existing literature in answering each research question.

4.2 The participants

Most of the participants in this study have been in the teaching fraternity for over ten years. In the other sites, the principals were amongst the participants as they showed interest in the proceeding and because they have more experience more than everyone else. One site the researcher had, amongst the participants, a

physiotherapist whose inputs were very fruitful in answering even questions which were not covered by the scheduled list of questions.

4.3 Discussions

As mentioned earlier, this study has been grounded within Bronfenbrenner's bio-ecological framework, and therefore the interpretation of the findings and discussion of the research findings are structured within this framework into the context of related literature. The summary and recommendations of this study have, after reflection, consequently been presented in Chapter 5. Before presenting a discussion of the research findings, it is vital to revisit the problem statement which guided the study within the context of its theoretical framework. The research was aimed at establishing educators' perceptions of inclusive education for learners with physical disabilities into mainstream classrooms. The purpose was to gain knowledge on educators' views of inclusive education for learners with physical disabilities in mainstream classrooms and the support that they need from DBST for the successful implementation of inclusive education. Analysis of data yielded important themes pertaining to educators' perceptions of inclusive education for learners with physical disabilities in mainstream schools. This qualitative content analysis identified four themes with subsequent sub-themes. The four themes identified were:

- Educators' self-knowledge of inclusive education.
- Educators' views regarding the inclusion of learners with physical disabilities in mainstream classrooms.
- Support that educators require from District Based Support Teams (DBST) to help them improve their practices.
- The practices that can be employed for the future improvement of the model of inclusive education in South African schools.

The four identified themes reflect the subjective realities of the educators involved in the study of their perceptions on inclusive education for learners with physical disabilities. The data presented in the following sections is taken from the sources of data generated during the data collection process, namely, the semi-structured

group interviews.

4.4 Presentation of Themes and Sub-Themes

Table 5: Representing Themes and Sub-Themes

Themes	Sub-Themes
The self-knowledge of educators of inclusive education	Teachers' knowledge regarding the concept of inclusive education. Understanding the suitability of the school under study to be established as an inclusive school.
Educators' views regarding the inclusion of learners with physical disabilities in mainstream classrooms	Giving these learners individual attention. Classroom and whole school setting should be all learners all learners with their diverse needs.
Support structures that educators require from District Based Support Teams (DBST) to help them improve their practices.	Training of educators to establish inclusive schools successfully. Strengthening of the District Based Support Teams (DBST) support for educators who are teaching learners with disabilities. Classroom and follow-up support.

4.5 Data Analysis

The data collected was analysed and was presented and discussed within the themes and sub-themes identified and all the identical responses from the participants following the phenomenological data analysis philosophy were bracketed together and, as such, they were presented together, according to their similarity. Later the findings were discussed according to each research question.

Theme 1: The self-knowledge of educators of an inclusive education

Sub-themes: Teachers' knowledge regarding the concept of inclusive education and understanding the suitability of the school under study to be established as an inclusive school.

In their responses, participants in this study seemed to have a sound knowledge of inclusive education. However, some teachers expressed their concern with the limited knowledge they have regarding the concept of inclusive education. These educators reported that they were not exposed to any policies that informed the establishment of inclusive schools. Those who understood the policy indicated that the policy was not clear in terms of accommodating the learners who have physical disabilities and are having trouble to learning because of the severity of disabilities. The responses which fell under the sub-themes during analysis were bracketed and grouped together and will, therefore, be presented as such. The following are some of the verbatim transcribed responses from the participants:

“Well I think when you talk about inclusive education, you are talking about accommodating learners in school irrespective of color, race and social status and that all learners should be taught the same curriculum. We are trying but it is not an easy task as learners are not the same to teach according to their pace as the Department is very clear on the syllabus coverage at a given time in preparation for common assessment tasks.”

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“Inclusive education means that we admit all learners, irrespective disability into the same classrooms, we admit the idea is good but the facilities and infrastructure do not allow that. As you can see our school is full of stairs what possible would it be for learners who are wheelchair bound or who are blind to access classes at the top level. ”

“I feel very bad for parents who bring learners who are severely challenged because of disability as most parents from this area cannot afford to take their learners to schools away from their homes as some of these learners because of their conditions cannot stay without their parents around them. We do include every child, whether the child has a problem in learning or not. We accommodate every child as we need to abide by what we are told to do even though we are experiencing problems.”

“I don’t want to lie to you we have a problem with inclusive education because we are not trained for this. Some learners are severely challenged and we do not how to

handle them". I really don't understand this inclusivity also as this is not well communicated to us."

"In my experience, I learnt that all learners are not the same in the cognitive sense and should be treated differently. Disability does not only refer to physical disabilities even those with difficulty in learning have a disability so they need special attention in their learning, here we deal with behavioral and we are not having any child who are on wheel chairs."

Based on the responses, most participants articulated that the training is crucial in this area and there was not enough knowledge to equip them to develop their schools as inclusive schools. According to these participants, due to lack of training, they have little information regarding inclusive education and their infrastructural architecture was not friendly for this type of an establishment. This makes it difficult for them to establish their schools as inclusive schools. It was found that most of the participants in this study lacked a comprehensive knowledge base of inclusive education.

Theme 2: Educators' views regarding the inclusion of learners with physical disabilities in mainstream classrooms

Sub-themes: Giving these learners individual attention.

Classroom and whole school setting should be all learners with their diverse needs.

Fortunately, all the participants had over ten years of experience in teaching. Some held higher positions in the interview sites. The participants' responses to this sub-theme provided an insight into their real experiences:

"The department is to be somehow blamed here just because they just throw policies and expect us to implement them as I said before the infrastructure is the problem here and training of teachers to handle with physical disabilities is not their priority. They do not visit our schools to check the possibility of this inclusion. We are aware that we cannot discriminate but in some cases because of the severity of the learner's condition we are forced to turn them away or recommend to parent's other institutions that can be of assistance."

“If I can say my view, learners with severe challenges to be included to our schools must be accompanied with well trained staff. It is not well when compared to the other schools that are not inclusive when it comes to Grade 12 results. It was not supposed to be like that because we have learners with challenges as you see. They even say these learners are coming from the same area, forgetting that the neighboring schools they are comparing us with are not inclusive schools like our school they adhere to what they believe suits them.”

“The department must consult with us first before the implementation of this policy and many that are still coming. It must stop making decisions for us, because these policies are implemented by us. They come with theory and when it comes to the classroom work you are alone. Just to make a simple example, we have many kids with different learning problems here. They need more attention from you and sometimes you don’t reach to all of them because the class is full. Some that we identify to have difficulty in learning we sign the SNA form and send it to them but they never act.”

“In our classes, we do have one or two learners with minor physical disabilities. We have challenges already with them when it comes to accessing assistive devices and the classroom designs are not user friendly but we try. That means extra work and extra care should be taken. This is too much for us; I don’t think it was a good idea to make all schools inclusive. Unfortunately, the department decides on that.”

“I think the learners with barriers need intensive intervention programs. I don’t see us as teachers capable of dealing with these learners. If you have time, I will take you to observe my computer lesson so as to see for yourself what I am talking about. When they say our school is an inclusive school, I was hoping that it would be followed by some changes in classroom settings and the school as a whole and the skills training would be opened for all teachers for those skills.”

“If they can organize assistant teachers for each class, I am sure we can get a chance to see to all learners. With our big numbers in classrooms, I don’t see this school as suitable to be inclusive school as there is no space for those using

wheelchairs. Whilst you are busy with your lowest group, others are making noise. The school can employ remedial educators but they come and fill the gaps as the Department does not fill vacant posts on time or sometimes they do not fill them at all."

"Because of the nature of our disability here we cannot accommodate those using assistive devices because we deal with behavioral conditions and safety is what we value for ourselves. How much more if any behaviour surfaces and a teacher has to run for her life. Would it be possible to save those who cannot run too?"

All participants reported that the Department of Education did not consult with them to hear their views as the key personnel in the teaching and learning of learners with diverse needs and in the successful implantation of policies that have a great deal to do with learners in classrooms. They were of the view that the Department of Education was supposed to have consulted with them first before announcing that all schools are resource centres and that their schools are to be established as inclusive schools. These teachers articulated that they need to be part of the decision-making process, as they were the ones who were engaged in the proposed changes. Their perception regarding the pass rate is that their schools are benchmarked the same way as those with normal learners and that this is not a fair comparison and is thus not supposed to be the case.

Theme 3: Support that educators require from District Based Support Teams (DBST) to help them improve their practices

Sub-themes: Training of educators to establish inclusive schools successfully.

Classroom and follow up support.

Although the schools were identified as an inclusive school, it seems as if the curriculum advisors, who are part of the DBST, do not understand the concept of inclusivity. It is clear from their expectations that the curriculum advisors are still operating according to the medical model and exclusionary practices. This team questions the attitude of the teachers to the pass rate of the schools, and teachers are under pressure to perform according to an uncertain target. It is alleged that they

do not visit schools often to see how things are done. They complain of manipulation and no follow up support. Most of the participants successfully understood the term inclusive education and the issues that were glaring were in its implementation and the level of support and training needs. Here are some of the captured responses:

“As we are expected to produce results at the end of the year we need full support from DBST and they should make a follow-up on learners identified to have barriers to learning. They should support us by strengthening their workforce and continuous training of teachers and collaboration with District Based support teams is needed. They can support us by organizing teacher assistants or remedial teachers to give attention to the ones with difficulty in learning and those who are physically challenged to do justice by making sure that the normal ones are not deprived and delayed.”

“The DBST are quick to judge us in the issue of results, asking why we have a high failure rate. They do not consider that we are an inclusive school as the DBST says. They are not good in training and visiting schools to check out on problems. They force inclusion and are vocal on the pacing of learners according to their ability, forgetting that time waits for no man. This is confusing really. We need their support in this school by employing remedial educators and making a follow up.”

“I have no problem with what the expectations are but the key area here is continuous training and pre-servicing of educators. Like in this school we are 39 instead of 42 and the remedial educators that were employed are utilized into normal teaching to fill the shortage. We are all overloaded and our classes though they are at 1:35 teacher learner ratio but still teachers teach more than one learning area because of the shortage.”

The educators reported a lack of skills in working with learners who are physically challenged. All participants expressed a desperate need for training and follow up support. A few have at least attended workshops on inclusive education; however, they claim that those workshops were not enough. Their responses are expressed under the following sub-theme:

“First the team managers must give us intensive workshop, training for the teachers on how to handle the issue of inclusive education. Secondly, they must train the teachers on how to do intervention strategies and lastly they must monitor progress thereafter.”

“The system is failing us and our learners. Before expecting one to work successfully, training is needed and then support must be given in that area. As you know we are not only faced with one problem here, even our curriculum is changing now and again. How are we expected to excel in all these areas if there is lack of support?”

“Most teachers here were never trained and the policy was just a form of dictatorship. This brought a lot of confusion and frustration to the teachers.” “If we can be well trained, I think we can play a huge role in making this school inclusive.”

“The DBST must provide in-service training on how we establish this school to be inclusive. I need to be trained again on the policy of inclusive education which I did not even have access to as all the policies are with the principals.”

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The participants seemed to have the same concerns and it is evident that there is something that needs to be done to address these concerns. It is important that, relevant stakeholders should act and should deliver according to their promises. Reading from the responses there is a gap between educators and the relevant stakeholders and this has created more questions than answers in the way the committees work and collaborate with their subordinates. This, according to the researcher's view reveals that there is more than what meets the eye and this has demonstrated attitudinal responses.

All the participants' in this study were of the view that the training that was given was not enough. These participants expressed the view that comprehensive training should be given to all teachers in an inclusive school. Participants in this study are of the belief that the Department of Education should train teachers before the implementation of its policies. These teachers argue that they were introduced to the concept of inclusion through scanty training sessions which they claim were a waste of time, compared with what is expected of them. This correlates with Anati's (2012) argument that training that was rendered to the educators did not prepare them to teach in an inclusive setting. It is likely that teachers would like to take ownership in establishing an inclusive school should they receive intensive training. This correlates with the findings by Granados and Kruse (2011) and Ryan (2010), which state that the district inclusive policy should be infused into the school, making sure that all the stakeholders involved in the school understand the various issues of inclusion and where they stand. This is also in line with Bronfenbrenner's bio-ecological model that highlights how each system is interconnected and dependent on other systems.

Therefore, to change the whole school system to being inclusive, each individual system must be addressed so that the joint influence of the systems can be positive. Participants in this study reported a sound knowledge of their role in establishing inclusive schooling. For instance, these participants highlighted the use of individualization as a strategy to accommodate learners who are experiencing barriers to learning. However, these teachers reported their self-perceived incompetency in this role. This correlates with Pearce et al's. (2009), study which argues that teachers need skills to be able to differentiate the curriculum or develop an individual support plan. According to Dreyer (2014), training should focus on the development of good teaching strategies that is of paramount importance to all learners.

Theme 4: The practices that can be employed for the future improvement of the model of inclusive education in South African schools

Sub-themes: Teaching strategies that can be used to accommodate learners with physical disabilities.

Support services personnel based in schools.

Participants in this study unanimously felt that for their schools to be developed as inclusive schools, skilled personnel based in schools is very essential in this regard. These educators articulated that support personnel should be based at their school, and that the DBST should give them back-up in terms of hands-on and follow-up support.

a) Sub-theme 4.1: Strategies that can be used to accommodate learners with diverse needs.

“I think if we have to be successful in this inclusion, that the strategies that are used and of course that we know of should change to accommodate learners with all sorts of disabilities.”

“The policy is good as not all parents can afford suitable schools which are far from home. Therefore, with good learning environments which are accommodative for all it can be possible. The improvement of infrastructure and changing our mind set is essential.”

“My view is that the teaching equipment like books and other teaching aids must be available in schools and that continuous training must be at the heart of the management teams.”

“I once visited a school where I saw learners who are deaf and dumb having books written on Braille. If we can for example have sign language teachers to assist whilst teaching, modified books with bigger prints and maybe computers that are designed for learners who cannot handle the mouse maybe. It is just wishful thinking because to have ICT devices in this province is just a dream.”

“Positive attitude, well I can say can help and the refurbishment of the current teaching conditions can lead us somewhere. This does not only lie with educators but attitudes can be from among learners calling each other names related to disability and stigmatization.”

b) Sub-theme 4.2: Classroom and follow-up support

Participants in this study expressed a desperate need for support in the classroom in the form of assistive devices and in-service workshops can be of help. Most participants further expressed that after training the DBST should come to the school and show them practically how to establish their schools as inclusive so that they can change what needs to be changed and replace it with what they see it working for a condition. They insisted that the DBST should not just conduct workshops, but should also make follow-ups immediately or continuously.

Participants also needed more than just one workshop but also the provision of hands-on class support to see if the suggested strategies are practical in most conditions.

“Personally, me I would be delighted to observe DBST in my class to show me how things are done and in return they can observe I am doing things correctly. If they can be hands on I can be happy really and they must come visit us at least once every week to see if we are doing things according to expectations.”

“I suggest new teaching techniques that talks to the policy of inclusion to accommodate every learner as the policy says. School boards should do their work and organize trainings often. The focus must not only be on end of the year results but to make this inclusion a success and to focus on the teaching environment.”

“The DBST must check what other countries are doing as I know that somewhere out there are countries which have done this with success to copy the good practices.”

“Dissemination of information from top to bottom is very key as the information does not filter down appropriately and to make the feasibly study of the environments before generalizing the effectiveness of the new policies. That is my view.”

“I believe that good practices accompanied with good facilities can make it easier for South African schools to be effective too. This cannot be implemented at one go at least it can be best if it can be piloted in few schools and then examined whether it is working or not and the support from the school based support team must be done continuously.”

“Things in this department is much easier said than done. Why I am saying this is because of so many failed interventions that were imposed to us before that did not work out. I am referring to the likes of ANA examination that was done to assess learners in literacy and numeracy that did not serve its purpose and was ended because unions contested it and as it was forced down our throats.”

“If any implementation is to be a success, the inventors must come see how the classrooms of 50 learners can be successful in the models that are new to teachers. We are still dealing with the continuous change of curriculum which saw us changing the old teaching methods that we know and were trained for, for more than 2 years and are replaced by 2-day long workshops. To make the issue of inclusive education a success, I suggest that all the closed teacher training colleges be re-opened and the new teachers trained on the implementation of inclusive education using the strategies or teaching methods and teaching aids that are assistive for learners with disabilities.”

“Taking someone through the process you need to walk with him/her along and to give feedback and give due where necessary.”

“We have an educator who is a DBST member because of the nature of our school she is an educator just like us and is clue less of what her duties are as she needs training from those who are above her, she focuses on teaching and learning as there is no training provided in her portfolio, therefore she concentrates on what she knows best only.”

With reference to the above, educators are mostly concerned with the feedback after the DBST has visited their schools for monitoring. Their outcry is based on the district personnel to be hands-on and show them how to work with the learners who

are physically challenged, instead of those with barriers to learning only. Furthermore, their wish is that the lack of training after the school can be developed into an inclusive school, emphasizing the fact that there is no collaboration between the DBST, committees in schools and the educators. They are vocal about the policies that are imposed that are not advocated across the board or lack transparency. Teaching methods, dissemination of information and practicality are a great concern.

c) Sub-theme 4.2: Support services for personnel based at the school

The DBSTs are mandated by Education White Paper 6 support for the establishment of inclusive schools. The perceptions of participants in this study are that support personnel should be based at their school. This team should be available daily, so that when they experience a problem they can refer to the team immediately. To concur with this factor, White Paper 6, p 20 is quoted as saying:

“The most important way of addressing barriers arising from the curriculum is to make sure that the process of learning and teaching is flexible enough to accommodate different learning needs and styles. The curriculum must therefore be made more flexible across all bands of education so that it is accessible to all learners, irrespective of their learning needs. One of the tasks of the district support team (DBST) is to assist educators in institutions by creating greater flexibility in their teaching methods and in the assessment of learning. They also provide illustrative learning programmes, learning support materials and assessment instruments. Embracing this approach as the basis for establishing an inclusive education and training system does not mean that we should then proceed to declare it as policy and hope that its implementation will proceed smoothly within all provincial systems and all education and training institutions. Rather, the successful implementation of this policy will rely on a substantive understanding of the real experiences and capabilities of our provincial systems and education and training institutions, the setting of achievable policy objectives and priorities over time and regular reporting on these.” (Pg 20)

Policy implementation and advocacy rely on the identification of key levers for policy change and innovation within our provincial systems and our education and training

institutions. It is this approach that lies at the heart of the White Paper 6: a determination to establish an inclusive education and training system as our response to the call to action to establish a caring and humane society, and a recognition that within an education and training system that is engaging in multiple and simultaneous policy change under conditions of severe resource constraints, we must determine policy priorities, identify key levers for change and put in place successful South African models of inclusion. Against this background, we identify within this White Paper the following six key strategies and levers for establishing our inclusive education and training system:

The qualitative improvement of special schools and settings for the learners that they serve and their conversion to resource centers that are integrated into District-Based Support Teams (DBST). As this is mandatory of the District Based Support Teams, I think it is the reason they have these structures; but to make them functional lies with the Departmental officials to see that they equip each of these structures adequately to try to bridge the knowledge gap that is mentioned unanimously by the interviewees. In my view, as the participants in this study unanimously agreed on the importance of classroom-based support, it is the establishment of active workforces who can be on the drivers' seat of this programme and to juxtapose situations as they appear from their constant visits into the sites, eliminate those that are a hindrance and strengthen those that are doable.

There are countless studies that have pointed out that classroom support is considered the crucial fact in establishing inclusive schools (Janney and Snell 2000; Pearce et al., 2009 and Dalton et al., 2014). In line with the Department of Education (2001), the primary aim of the DBST is to provide systemic support for all teachers who need it. According to Donohue and Bornman (2014), systemic support helps to strengthen the skills of teachers in coping with more diverse classes.

Almost all the participants in this study were of the view that a lack of the skilled workforce for teaching in a diverse classroom is a challenge. They point out that teaching a diverse group of learners requires skillful educators who are thoroughly trained.

The successful implementation of inclusive education requires educators to be knowledgeable about inclusive education (Pearce et al., 2009; Forlin and Chambers 2011; Razali et al., 2013). UNESCO (2005) states that a mainstream school which adopts inclusive education values is required to make changes to address the issue of inclusive education for learners with physical disabilities, as well as the strengths of the child. The participants' views showed that even though they are not sure about their knowledge of 'inclusive education' they were practicing some of the key ideas, as contained in the notion of inclusive education. These include the accommodation of all children irrespective disabilities to learn and achieve full participation in mainstream classrooms (Paliokosta and Blandford, 2010) and to mingle with able bodied peers. This, though, was revealed to be dependent on the severity of the learner's disability. Before discussing the findings after the interview sessions, as mentioned before, an opportunity to see came up from one of the interviewees and here is how it went.

4.6 Observation (Special School)

This lesson observation took place from a special school where learners have all sorts of disabilities, ranging from wheel chair bound, partially blind, with skeletal deformity and were using metal and wooden crutches (of those I noticed) some were too short and were using propelled walking frames. I was told also that the curriculum was the same as every other school. The classroom was a computer lab with only 16 computers which were old model with hatch backs. They were arranged back to back in a centered long table piece. As the educator was about to conduct this lesson, she had to call them from the normal classroom to the computer room.

The classroom we went to collect the learners from had normal desks and chairs and what was noticeable was that those who were on wheel chairs were seated on their wheel chairs in the passage as the classroom was not neatly arranged at the time of the observation. On entering this classroom, I observed some holes on the floor. She asked them to leave the classroom to the "computer lab" and they all obeyed. Three boys at the back were busy on the laptop which belonged to one of them but unfortunately, I did not notice what was on the screen. As they were preparing to leave, I observed some learners helping each other to drive out the wheelchairs and some loading the fully loaded school bags for the peers to the back of the wheel chairs. I also noticed that this movement was not as fast as one would expect as the

period would be scheduled for a specific time, I assume. Those who are self-driven tried to dodge the holes on the floor and were bumping against each other in the process and against the sitting tables with the heavy loads of school bags at the backs of their wheelchairs.

The only time I involved myself during the lesson was to assist by removing the tables which blocked their way aside and when we were outside I helped the slower ones to push the wheel chairs, as we entered the computer room about 10 minutes after the rest had managed to sit themselves. One more peculiar fact that caught my eye was one of the learners standing on the chair because of her stature to reach the level of the table to access the computer. As they started getting ready for the lesson, my involvement seized and I stood aside and watched. Most of them were struggling to hold the mouse properly as some would be bending closer to the computer screens to look at the computer icons. As this was not a scheduled time for the lesson during the time of the observation, they were just asked to open a word document and type their names and surnames. It took more than expected as some were using the wrong hand to handle the mouse. They took turns as they were sharing computers because of their number versus the computers.

As I have mentioned earlier, the computers were only 16 and the learners were around 25-30. The computers, I was told, were donated by one company which was upgrading its own for the flat screen type. My time was finished then I had to leave the site.

Summary

In the above segment, the interview sessions of various participants' responses were discussed and data was collected and analyzed and themes and sub-themes were presented. The observation of the lesson was discussed and the aim was to explore the challenges that are experienced by the educators in schools that teach physically challenged learners. To that end, I explored the challenges that they experienced in teaching. I also provided their views of inclusive education for learners with physical disabilities and I documented the support that they said was needed from the DBST in supporting them to adhere to the mandate of the policy that says that all schools are inclusive schools and, therefore, should accommodate all learners, irrespective of their disability when it comes to teaching.

A discussion of the findings formed the basis of the following segment and was guided by the four research questions.

4.7 Reflection on the findings

The purpose of this section is to critically discuss and reflect on the findings presented in chapter 4. The empirical findings were discussed according to the four research questions which are as follows:

- How much do educators know about inclusive education?
- What are the educators' views regarding the inclusion of learners with physical disabilities in mainstream classrooms?
- What support do educators require from District Based Support Teams (DBST) to help them improve their practices?
- What practices can be employed for the future improvement of the model of inclusive education in South African schools?

RESEARCH QUESTION 1: Educators knowledge about inclusive education

By explanation, almost all the participants had some knowledge about inclusive education but the only problem that was picked out was the practicality of it in different learning environments and the broader spectrum on what it entails in terms of the mechanisms and strategies of its implementation. Their different perceptions lead to the study's research question 2:

RESEARCH QUESTION 2: Educators' views regarding the inclusion of learners with physical disabilities in mainstream classrooms

The participants had different views in the presentations of their responses. Their reasons can be divided into categories: the first category was based on their perceptions of inclusive education for learners with physical disabilities, the second category on their views of inclusive education. As they were asked of their perceptions and views of inclusive education, they presented different perceptions and their views were based on many issues such as:

- Inadequate presentation of the policy and its advocacy on Inclusive education,
- Socio-economic factors,
- Negative attitudes,

- The curriculum,
- Environmental issues,
- Organisation and governance of the education systems in place and
- Inadequate training of staff at all levels (DoE 1997).

The framework for an inclusive education system is laid out in the Education White Paper 6: Special Needs Education: Building an Inclusive Education and Training System (Department of Education 2001). The scope of this policy is broad as it attempts to address the diverse needs of all learners who experience barriers to learning. The policy calls for a significant conceptual shift that is based on the following premises:

- Acknowledgement that all children and youth can learn and that all children and youth need support.
- Enabling education structures, systems and learning methodologies to meet the needs of all learners.
- Acknowledging and respecting differences in learners, whether due to age, gender, ethnicity, language, class, disability, HIV status or other infectious diseases.
- Broader than formal schooling and acknowledging that learning also occurs in the home and community, and within formal and informal settings and structures.
- Changing attitudes, behaviour, teaching methods, curricula and environment to meet the needs of all learners.
- Maximising the participation of all learners in the culture and the curriculum of educational institutions and uncovering and minimising barriers to learning.

The policy further asserts that to make inclusive education a reality, there needs to be a conceptual shift regarding the provision of support for learners who experience barriers to learning. The Department of Basic Education has adopted a strategy that will drive the implementation of inclusive education policies. Summarised, this policy has two major components elaborated in two sets of guidelines:

The National Strategy on Screening, Identification, Assessment and Support (SIAS); (Department of Education, 2008) guides inclusive education policy by defining the

process of identification, assessment, and enrolment of learners in special schools, and it curbs the unnecessary placement of learners in special schools. The Screening Identification (SIAS) strategy provides guidelines on early identification and support, the determination of nature and level of support required by learners, and identification of the best learning sites for support. The strategy also provides guidelines on the central role of parents and teachers in implementing the strategy.

The Guidelines for Responding to Learner Diversity in the Classroom through Curriculum and Assessment Policy Statements (Department of Education 2011) provide practical guidance to school managers and educators on planning and teaching to meet the needs of a diverse range of learners. This document has recently been redrafted to incorporate curriculum changes in the Curriculum and Assessment Policy Statement (CAPS) and the revised document forms part of the CAPS orientation programme for educators and education officials in the provinces.

Further to the above-mentioned views, they mentioned the lack of support and that led to research question 3.

RESEARCH QUESTION 3: The Support that they require from District Based Support Teams (DBST) to help them improve their practices.

As was revealed by the sub-themes that emerged earlier, educators revealed that there are some bottle necks in the level of support that they got from the District Based Support Teams. To attest to that, research in South Africa has found that teachers report that they experience the implementation of inclusive practices in their classrooms as stressful and that contextual dilemmas such as the lack of formal support structures play an important role (Walton et al., 2014; Engelbrecht et al., 2003). This necessitates continuous teacher training, classroom support and teachers' necessary skills to know how to harness support within their own school community as well as at district levels (DoBE, 2011).

Policies, such as the Education White Paper 6: Special Education – Building an Inclusive Education and Training System (Department of Education, 2001) in South Africa require that inclusive practices be made available to everybody, everywhere and all the time (Ferguson, 2008:109-110). In contrast, Donohue and Bornman (2014:1) regard current policy (White Paper 6) as being unclear and issues

pertaining to poor implementation of the policy as the main factors hindering inclusive education implementation in South Africa.

In addition, what remains troubling is that the rhetoric of inclusive education for learners with diverse educational needs is not adequately matched by reality. It has become increasingly clear that it is not enough to only offer these learners access to mainstream classrooms. What happens in the classrooms is also critical; specifically, how all learners can participate meaningfully in the various learning activities and the levels of acceptance of learners with learning barriers by both teachers and their peers (Ferguson, 2008; Florian and Black-Hawkins, 2010; Nel, Engelbrecht, Nel and Tlale, 2013). Mittler (in Mariga, McConkey and Myezwa, 2014: foreword) explains that inclusive education can succeed only if there is “political will, good leadership, preparation of teachers and parental and community support” which is evidenced in countries such as Bangladesh, India, Kenya, Vietnam and South Africa. It is for this reason that this study is based on Bronfenbrenner’s ecological model. In Education White Paper 6 (EWP6) (Department of Education, 2001), the policy on building an inclusive education and training system provided key strategies regarding the development of support structures. These strategies are clearly placed within Bronfenbrenner’s ecological model.

Bronfenbrenner (1979:3) describes the environment as a “set of nested structures” [micro, meso, exo, macro and chrono-structures] where each of these structures influences the development of the learner as mentioned earlier in Chapter 2 and illustrated in figure 1.1. Berns (2012:18) describes the microsystem as the innermost structure where the earliest effect on the learner is the interaction between the family, peers, childcare and school. Bronfenbrenner (1995:599-618) refers to these relationships as being bi-directional, meaning that adults influence the development of the learner and vice versa. Support for both learners and teachers should start in this innermost structure. Furthermore, these systems cannot work in isolation but can collaborate with each other. Support structures for schools, teachers and learners in South Africa, as formulated by the various policy documents, are, as mentioned earlier, located in the meso-system. This includes the establishment of District-Based Support Teams (DBST), Institution-Level Based Support Teams

(ILST) (also called school-based support teams), Full-Service Schools (FSS) as well as Special Schools as Resource Centres (SSRC).

The responsibility of the DBST is “to provide a co-ordinated professional support service that draws on expertise in further and higher education and local communities, targeting special schools and specialised settings, designated full-service and other primary schools and educational institutions.”

The EWP6 (DoE, 2001) refers to the first level of support for learners and teachers in a school as the Institution-Level Support Team (ILST). This team comprises teachers, volunteers, members of the school management team, members of the District-Based Support Team (DBST) and other stakeholders from the community (such as health professionals, other governmental departments and non-governmental organisations). Its key functions are to co-ordinate support services within the school by identifying and addressing learner, educator and institutional needs, the development of learner support programmes for learners, to provide training for teachers and to encourage collegial collaborative support and, ultimately, liaise with the DBST. Should the ILST not be able to support the learner/s and teachers, then, the DBST is the next level of support that should respond to the request from the school's ILST – for additional support for schools, teachers and learners and to monitor this support provision (Nel, Nel and Lebeloane, 2013:56-57). Special Schools as Resource Centres (SSRCs) should, in collaboration with the DBST and FSS, exchange knowledge with surrounding mainstream schools, provide professional development to teachers as well as sustainable support to learners and teachers (DoE, 2001; DoE, 2005). Research in South Africa has found that teachers experience the implementation of inclusive practices in their classrooms as stressful and they report that becoming effective in inclusive practices in a classroom can be demanding if there are limited and inefficient support structures available (Donohue and Borman, 2014; Dreyer, 2011; Nel et al., 2013).

Based on these results, the research question for the current study was formulated as follows:

“What support do educators require from District Based Support Teams (DBST) to help them improve their practices?”

Participants in this study generally felt that referring learners to the DBST and requesting their assistance was a painstakingly difficult administrative exercise. A participant from one site is quoted as saying,

“They come with theory and when it comes to the classroom work you are alone. Just to make a simple example, we have many kids with different learning problems here. They need more attention from you and sometimes you don’t reach to all of them because the class is full. Some that we identify to have difficulty in learning we sign the SNA form and send it to them but they never act.”

The process that educators need to follow, such as filling in forms daily and contacting the parents, is time-consuming and, even after those forms are filled, there is no feedback. However, responses from most participants also reflected that educators do refer their challenges to the District and that the officials do come to school, however, their focus is on syllabi, instead of advising them on how to help the learners with disabilities. They advised that as they do have a professional relationship with the DBST; they need meetings with them where they can submit reports to them and that they should monitor the effectiveness of the School-Based Support Team and that once the ILST (referred to as school-based support team, SBST) should after referring the learners to the DBST at least get feedback. Furthermore, the DBST should employ remedial educators and introduce different committees – such as HIV and AIDS, school health and safety and security committees – at schools, with guidelines about how these committees should operate, as an intervention measure; however, these committees demand a great deal of paperwork. The school governing bodies are not always available to assist in drawing up these policies and some alleged that the advocacy on policies is not transparent.

Another issue raised was that of the syllabi changing regularly; educators find it difficult to find the time to attend to this inclusive education for all. They requested that there should be an easier way of referring learners, without the tedious paperwork, and that feedback must be given without delay. To exacerbate the problem, there are some schools where learners with special needs (LSEN) can be referred to, as many of these specialized schools are well equipped in terms of

infrastructure. Where learners are referred to the DBST, there should be records to track their progress and, if there is any improvement, they can be returned to mainstream classroom to attend school with their friends and peers in their neighboring schools. That led to research question 4.

RESEARCH QUESTION 4: The practices can be employed for the future improvement of the model of inclusive education in South African schools

Given South Africa's unique history (apartheid), diversity (ethnic and language groups) and poverty, society has different ideas regarding the needs of learners with disabilities; their beliefs and what are best practices. These complexities compound the difficulties in implementing inclusive education (Donohue et al., 2014:3). Some neighboring countries like Lesotho have success stories which were reported and can be taken and used as good practices in South African. Mariga et al. (2014:3) report on success stories such as the situation in Lesotho by revealing that, since 1990 Lesotho has shown that the inclusive education programme has developed "without a wealth of resources". Its success resulted from the interaction between the government schools, NGOs and partnerships with the local communities. Nsamenang (2005:286) asserts that if Africa's development, thinking and action are fixated on Eurocentrism, it will still elude Africa, and African development needs to be Afrocentric. However, a paucity of resources will result in this form of education being "unnoticed by national and international power blocks."

As learners of today are digital natives it is very important to align teaching strategies to their way of learning. Teaching students with special needs requires the same strategies and practices as teaching general education students. In other words, good teaching practices for some students are good practices for those with special needs and for the rest of the students who are in mainstream schools cohabiting with the ones with physical disabilities. All students have a right to expect the best possible learning environment; students with special needs are no exception (Daniel, 2012).

4.7.1 Types of Strategies that can be used in inclusive settings

Technology has a big impact on inclusion for learners with special education needs. There are various types of technological devices for students with disabilities and

some that some schools provide for their special education students such as, computers, augmentative communication devices, and other adaptive technology devices. Technology provides a great service, not only to children with disabilities but also their teachers. There are communication devices to help nonverbal students communicate with their teachers. Fairfax County Public School keeps up with the changing and advancements of technology by the Assistive Technology Services. They provide onsite training for many different technology topics (Sisk, 2006). Having this technology will help the students with special needs keep up with everyone else in an inclusive classroom. Providing technology to special education students will help schools keep up with the Individuals with Disabilities Education Act, keeping more students in the general inclusive classroom. Technology will also help by making the general education classroom the least restricted environment for the students. Technology has always played a big role in education, but now it plays an even bigger role regarding inclusion in special education (Sisk, 2015).

4.7.2 Physical Infrastructure

The Regulations relating to minimum uniform norms and standards for public school infrastructure (2013) apply to public ordinary as well as to public special schools. The principle of universal design is applicable to all schools. In addition, the following requirements, over and above the mainstream schools' requirements, apply in special schools:

- The design of the physical infrastructure should take into consideration the programmes offered at the school, the envisaged learner that is enrolled in the programmes and ensures full accessibility of the whole school environment. This includes, but is not limited to classroom, laboratories, workshops, where necessary, administration, library, computer room, ablution block, soundproof room for audiometric testing, hostel, therapy rooms, observation facilities, braille printing rooms as well as pathways leading to these facilities.
- Architects with experience in designing buildings for people with disabilities must be consulted when designing or renovating special schools.
- All classrooms should be accessible for the installation and movement of specialist equipment, material resources and learning support equipment.

- The furnishing and resourcing of all the facilities in the school should take into consideration the learner population and programme specialisation offered at the schools. The furnishing and resources must be relevant and adequate to meet the learner needs and support the delivery of the curriculum, e.g. in terms of lay-out, space, height adjustable tables, lighting, electrical supply, etc.

4.7.3 Educator Support

Various researchers (e.g. Donohue and Bornman, 2014:1; Du Toit and Forlin, 2009:644) argue that for inclusion to work in South Africa and for schools to change, enhanced education which provides necessary infrastructure, resources and support and cultural transformation is needed. As Smit and Mpya (2011:33- 34) advise, teachers “need to be equipped with knowledge, skills, strategies and a positive attitude” for inclusive classroom to be managed by them. These authors argue that for teachers to do so; they need training which is adequate and receive support from specialists. To teach teachers is one of the most demanding professional preparations and most importantly institutional support is of the essence, as it cannot be done in a context which is unsupportive or even conflicting (Darling-Hammond, Hammerness, Grossman, Rust and Shulman, 2005:111). As teachers’ classroom practices need to change, they need to support inclusive programmes and be well prepared as it is critical for them to participate in high-quality professional development programmes. The programmes need to cater for the individual needs of the school and be part of the schools’ wider plan for improvement. These authors recommend a slow, school-by-school approach as being effective to change teacher classroom practices to improve learner outcomes (McLeskey and Waldron, 2002:159, 170).

Pillay and Di Terlizzi (2009: 491, 505) assert that the “current South African socio-economic environment does not necessarily allow for its [inclusive education] successful implementation, as further access to resources and facilities need to be made available.” The authors recommend that more funding is needed for Learner Teacher Support Materials (LTSM) to provide teachers and learners different ways to approach learning tasks on different levels. In addition, “multidisciplinary therapy teams” need to be operating regularly in schools or alternatively “mobile therapist

clusters” that can assess and do intervention and support learners and teachers in classrooms.

Furthermore, (DoE, 2014) released a revised document on guidelines to ensure quality education and support in special schools and special school resource centres to support inclusive education; where it stipulates that another level of support can be:

4.7.4 Professional teaching personnel

- All teaching personnel should possess at least a first degree or a diploma which includes training on special needs or inclusive education.
- Teachers who are appointed to the school without a formal qualification in special needs or inclusive education must undertake such training with immediate effect. There should be a time frame of not more than one year for personnel who do not have the requisite specialised qualifications to acquire these through continued professional development arranged by the school.

All teaching personnel should have knowledge of and competence in:

- Implementing the National Curriculum Statement (NCS);
- Developing Inclusive Learning Programmes that are in line with the NCS;
- Using the SIAS strategy to support learners;
- Differentiating and adapting the curriculum;
- Developing and managing the implementation of individual support plans (ISPs);
- Use of assistive devices and technology to enhance teaching and learning;
- Method and mode of communication and learning utilised by the learners in the school;
- Where Sign Language is used, teachers must be competent in academic sign language; and
- Disability studies.

4.7.5 Professional specialist support personnel

- Must be familiar with the NCS, especially what and how teachers teach;
- Should have a good understanding of the inclusive education policy and education policies, strategies and guidelines for implementing the policy and their role in supporting the implementation of the policy;

- Should be competent in managing teaching and learning support;
- Should be competent working with others in a collaborative and consultative manner and be able to use this competency to support teachers, learners and parents;
- Should be competent in guiding teachers on the optimal use of assistive technology;
- Must be able to use their expertise to help learners access the curriculum and teachers differentiate and adapt the curriculum; and
- Utilise their professional expertise to address health barriers that learners experience which prevent them from accessing the curriculum in schools where learners without disabilities do, (Guidelines, 2014, DoE).

4.7.6 Non-teaching and non-professional personnel

- House mothers and assistant house mothers employed in schools catering for learners with physical disability and cerebral palsy should possess a minimum qualification or training in health, social and/or home-based care and should comply with standards outlined in the Children's Act (2005). In hostels that admit deaf learners, housemothers should possess minimum qualifications in South African Sign Language.
- Drivers, particularly where the school operates as a daily facility and daily transport is provided, should possess some previous driving experience and a full driving licence appropriate for the type of vehicle he/she is driving. Drivers can be appointed full-time at school or the service could be outsourced to a private transport provider, provided the above-mentioned standards are met. Drivers must be trained in basic first aid and to support the learners that they are transporting. Principals are responsible for ensuring that vehicles are roadworthy always. Security guards employed in special schools in the day and/or residential facility must receive additional training in the needs of the learners at the school.
- All non-teaching non-professional personnel should have an understanding on the different disabilities, how they impact on functioning and how as personnel they can create an enabling environment that minimises the impact of the

disability. (Guidelines, 2014)

To adhere to the mandate of this policy guidelines; the above stakeholders need to work together, as Bronfenbrenner's ecological theory stresses that each of the systems, as discussed earlier, cannot work in isolation. Therefore, in view of the above, collaboration is very vital. When educators work together to establish equitable roles and duties all students in a co-taught classroom benefit from the presence of two educators who can support their learning.

4.7.7 Co-Teaching and Collaboration

Individuals with Disabilities Education Act (IDEA ,2008), which is the federal law that applies to special education, provides a central focus on the collaboration between general and special education when students receive special education services. The intent of the law is that, once a student begins to receive special education services, the relationship between special and general education should be strengthened to ensure that the student participation in the general education curriculum is enhanced (IDEA, 2008). The practice of general and special educators planning and teaching together to support the needs of students with and without disabilities in the general education classroom can take on many forms. When co-teaching happens, it is most important that all teachers involved utilize their strengths, share roles, and are both seen as leaders in the classroom. Educators should maximize the benefits of reducing the student-teacher ratio by using co-teaching models such as parallel instruction, station teaching, and teaming (Friend and Reising, 1993) and should minimize the "one teaches, one assists" model or other arrangements that place one of the teachers in the role of the assistant.

This collaboration does not only end in the classrooms, as educators in all the segments of education do refer learners to other community support structures such as the police, social workers, ministers of religion and nurses; however, they are not confident about whether the services they enlist are suitable for the problems they are confronted with. To meet the level of competence that is required; various researchers (e.g. Donohue and Bornman, 2014:1; Du Toit and Forlin, 2009:644) argue that, for inclusion to work in South Africa and for schools to change, enhanced

education which provides necessary infrastructure, resources and support and cultural transformation, is needed. As Smit and Mpya (2011:33- 34) advise, teachers “need to be equipped with knowledge, skills, strategies and a positive attitude” for inclusive classroom to be managed by them. These authors argue that, for educators to do so; they need training which is adequate and support from specialists.

To teach teachers is one of the most demanding professional preparations and, most importantly, institutional support is of the essence, as it cannot be done in a context which is unsupportive or even conflicting (Darling-Hammond, Hammerness, Grossman, Rust and Shulman, 2005:111).

As educators’ classroom practices need to change, they need to support inclusive programmes and be well prepared, as it is critical for them to participate in high-quality professional development programmes. The programmes need to cater for the individual needs of the school and be part of the schools’ wider plan for improvement. These authors recommend a slow, school-by-school approach as being effective to change teacher classroom practices to improve learner outcomes (McLeskey and Waldron, 2002:159, 170). Pillay and Di Terlizzi (2009: 491) concur, that the “current South African socio-economic environment does not necessarily allow for its inclusive education successful implementation, as further access to resources and facilities need to be made available.” The authors recommend that more funding is needed for Learner Teacher Support Materials (LTSM) to provide educators and learners different ways to approach learning tasks on different levels. In addition, “multidisciplinary therapy teams” need to be operating regularly in schools or, alternatively, “mobile therapist clusters” that can assess and do intervention and support learners and educators in mainstream classrooms.

The DoE (2014) document guidelines further suggest that the use of Learning and Teaching Support Material has proved to be crucial to offering quality teaching and learning and allowing the learners to take responsibility for their learning.

- Appropriate learning and teaching support material must be provided for all learners in an appropriate format, for example, in Braille, large print, electronic, etc.

- The principle of one textbook per learning area or subject should be adhered to.
- Where necessary, simplified versions and special editions of texts should be considered for curriculum differentiation.
- Schools must keep a full and up-to-date inventory of all types of learning and teaching support material in the school.

4.7.8 Professional Specialist Support Staff

Professional Specialist Support Staff refers to those who address the provision of health, therapeutic, psychological and social support to enhance learners' capacity to achieve maximum benefit from learning experiences.

- Professional Specialist Support Staff may be appointed on a full time or part-time basis.
- Professional Specialist Support Staff must be familiar with the requirements of White Paper 6 and must engage in regular in-service training to ensure that the support they offer adheres to the latest practice.
- Only those categories of staff that are relevant to the specialised programmes offered at the school should be employed at the school.

Professional Specialist Support Staff includes:

- Guidance and counselling specialists
- Psychologists
- Sign Language interpreters
- Braille and Orientation and Mobility Instructors
- Therapists: Occupational, Speech and Language; Audiologists, Music and Physiotherapists
- Social workers
- Nursing Staff
- Rehabilitation workers
- Child and youth care workers (especially in schools with hostels).

Another issue that one of the participants raised was the problem of teaching methods and teaching aids that can be user-friendly for learners with physical disabilities.

“To make the issue of inclusive education a success, I suggest that all the closed teacher training colleges be re-opened and the new teachers trained on the implementation of inclusive education using the strategies or teaching methods and teaching aids that are assistive for learners with disabilities.”

Supplementary aids and services that educators have successfully used include accommodations and modifications to the regular class curriculum. These can be useful even in situations like the one that the researcher observed from one of the sites and includes: preferential seating, large print materials, peer tutors, graphic organizers, use of computers, taped lectures, reduced seat time, assistance of a teacher with special education training, training for the general education teacher, use of computer-assisted devices, a note-taker, communication device, or changes to materials. All these can be used to modify or adapt the general education curriculum or instruction (Browder, Wakeman, Flowers, Rickelman, Pugalee, and Karvonen, 2007). Educators would be advised to exercise teamwork to make a good effort to utilize all the possible supplementary aids and services before determining that a student needs to leave the mainstream classroom. Here is the response from one participant:

“As we are expected to produce results at the end of the year we need full support from DBST and they should make a follow-up on learners identified to have barriers to learning. They should support us by strengthening their workforce and continuous training of teachers and collaboration with District Based support teams is needed. They can support us by organizing teacher assistants or remedial teachers to give attention to the ones with difficulty in learning and those who are physically challenged to do justice by making sure that the normal ones are not deprived and delayed.”

A variety of teaching aids and services can be used to teach in an inclusive environment and below is a collection of some of these devices, their serves and the examples

Table 6: Illustrates examples of supplementary aids and services.

Types of supplementary aids and services	Examples
Accommodations Does not change the instructional level or performance criteria Provides access to information and demonstration of knowledge	Audio books A note taker Use of a laptop Extended time for assignments or tests Enlarged print
Modifications Changes what the student is expected to learn The content remains the same	Key ideas from a lesson or unit Same only less Representative sample of skills
Paraprofessional Support Support given to the individual student as well as all the other students in the class by an adult	One on one support Small group instruction Instructional support provided to the teacher Data collection Preparation of materials
Peer Supports Utilizing classmates to provide support in ways that enhance the learning of both the student with and without a disability	Paired reading Quiz review Presentations Group work
Assistive Technology Low-tech and high-tech materials and software used to provide access to learning and demonstration of content. Includes Augmentative Alternative Communication (AAC) devices	Calculator Reading strips Highlighter tape Book stands Fidget toy Raised line paper Word prediction software

	Lap top
Related Service Providers Professionals who push into the classroom to provide support with specific goals and/or needs	Physical therapist Speech therapist Occupational therapist Vision specialist Nurse

Source: PEAL-S4 web version

4.8 Providing Accommodations and Modifications

Accommodations are changes in how a student accesses information and demonstrates learning.

According to Noble and Smith (2014), educators respond to the needs of the learners in diverse classrooms to work towards providing instruction that is accessible and challenging to all students. When students with disabilities are included in the general education classroom, their presence is often a catalyst to examine how instruction is taking place in the process of working to meet the needs of all learners and to ensure that they are adhering to a Universal Design for Learning model (UDL), as discussed in the previous segments.

Accommodations do not substantially change the instructional level, content, or performance criteria. The changes are made to provide a student with equal access to learning and equal opportunity to show what he or she knows and can do, therefore, modification was substantially explained below as stated by (Noble and Smith, 2014).

4.8.1 Modifications

Modifications are changes in what a student is expected to learn. The changes are made to provide a student with opportunities to participate meaningfully and productively, along with other students, in classroom and school learning experiences. Providing a student with a digital audio version of a novel, written or visual step-by-step directions for how to complete his model of a cell, raised-line paper, or a modified timeline activity focusing on the three big ideas from the Civil War, are all examples of accommodations and modifications that would ensure

success for specific students. Many of these suggestions will support the participation of students with disabilities in the general education classroom.

Some students, including those with significant disabilities, will need specific considerations to involve their participation.

4.8.2 Paraprofessional Support

To effectively include all students in the general education setting, planning teams may consider the support of a paraprofessional. It is essential that they are being used wisely. Paraprofessionals are assets to inclusive schools and classrooms when they:

- Are well-trained;
- Provide only minimal support necessary;
- Work to connect students with disabilities to their peers;
- Are utilized as a resource for the entire classroom—not only supporting one student.

Paraprofessionals need to be included as a member of the team and have time with their supervising teacher so that they can ensure that instruction and supports are being carried out effectively in the classroom. Paraprofessionals need time built into their day to ask specific questions and provide feedback.

Effective Paraprofessional Support:

- Provide as little support as possible. Be sure to move away and use peers whenever possible. Do not place a seat next to the student.
- Bounce around the room and help all students in the class.
- Support the student with disabilities to work with peers.
- If students are working in partners, the student with a disability should always work with a peer in the class. The paraprofessional can support the partnership, but should never be the partner.
- Teach peers to provide support. When providing the support, the paraprofessional should ask a peer to provide support to others.

Examples of peer support:

- Gathering supplies.
- Reading material.

- Scribing answers.
- Answering questions (providing two or three options for someone to choose from).
- Getting from class to class.
- Opening locker (Noble and Smith, 2014).

4.9 CONTRIBUTION TO THE BODY OF KNOWLEDGE

The researcher has noticed that, with the correct advocacy and implementation of the policies and legislatures on inclusion, some of the responses that were viewed as problematic can be addressed. To do that, the researcher has examined policies that are used by other countries and compare with the ones that South Africa is using as the framework for the inclusion of learners with disabilities in the country, before drawing conclusions. In the 2014 report on Centre for Services and Information on Disability (CSID) document, the review of legislation and policies regarding the education of children with disabilities has analysed these policies as follows:

4.9.1 Global Review of Legislation and Policies with regards to the education of learners with disabilities

The Universal Declaration of Human Rights (1948)

On December 10th, 1948, the General Assembly of the United Nations adopted and proclaimed the Universal Declaration of Human Rights in which the Education for all is declared in the following mode. The General Assembly proclaims that -- this universal declaration of human rights as a common standard of achievement for all people and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and educating to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance, both among the people of Member States themselves and among the people of territories under their jurisdiction.

(i) The Education issue is particularly mentioned in Article 26 and 27

I. Article 26

(1) Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all based on merit.

(2) Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.

(3) Parents have a prior right to choose the kind of education that shall be given to their children.

II. Article 27

(1) Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.

(2) Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

(ii) UN Convention on the Rights of the Child (1989)

Apart from two countries, this convention has been ratified by all the nations of the world. The Convention on the Rights of the Child (CRC) highlights the survival, protection and the development and participation rights of all children, without exception or exclusion of children. The CRC emphasizes that education is a basic right for all children on the principle of equal opportunity (Art.28). Education is not a privilege or social service – it is a human right. Equal opportunities do not just happen but they must be created and require political will. The CRC also states that the purpose of education is to help develop a child's full potential; tolerance and gender equity are an integral part of such education (Art.29).

(iii) Salamanca Declaration (1994) World Conference on Special Needs Education

The Salamanca Statement and Framework for Action came into existence in 1994 during the World Congress on Special Needs Education in Salamanca, Spain. It was adopted by 92 governments and 25 organisations. The Salamanca Statement was

the first to bring children with disabilities out from the back, and it placed them in front. It went on to outline inclusive education as the vehicle for the strategies first outlined in EFA. It emphasises the need and importance of providing education for individuals with special educational needs inside the regular educational system. UNESCO (1994) claims that; every child has the fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning. Those with special educational needs must have access to regular schools which should accommodate them within child centred pedagogy capable of meeting these needs (Terzi, 2008).

Furthermore, it outlines that admission to regular schools is the fundamental element towards equalisation of opportunities, where inclusion and participation are essential to human dignity and to the enjoyment and exercise of human rights. Within the field of education, this is reflected in the development of strategies that seek to bring about a genuine equalisation of opportunity, through an inclusive education framework for all (Hunt, 2011). This international declaration states that, "Schools should accommodate all children irrespective of their conditions."

Inclusive education was adopted at the World Conference on Special Needs Education as a principle in addressing the learning needs of various disadvantaged, marginalized and excluded groups. This includes children with disabilities and gifted children, street kids and under age working children from ethnic minorities, refugee children and other children marginalized or disadvantaged. In this context "special education needs" refers to all children that experience barriers in equal access and equal participation in education. (Cited in Terzi, 2008)

(iv) Standard Rules on the Equalization of opportunities for Persons with Disabilities (1993)

These standard rules state that general education authorities are also responsible for the education of children with disabilities, and should form an integral part of national education planning curriculum development and school organization.

- *Education for All (EFA): Jomtien (1990)*

The basic idea of inclusion can also be found in the Jomtien Declaration. Here, Education for All (EFA) emphasizes the inherent right of every child to a full cycle of primary education, and commitment to a child-centred pedagogy, where

individual differences are accepted as a challenge, and not as a problem. The Jomtien Declaration also emphasizes the need for improvement in the quality of primary education and teacher education, recognizing and respecting the wide diversity of needs and patterns of development among primary school children.

- *Dakar Framework (2000)*

The need for inclusive education has been repeated in the Notes on the Dakar Framework for Action, which mentions that “To attract and retain children from marginalized and excluded groups, education systems should respond flexibly. ... Education systems must be inclusive, actively seeking out children who are enrolled and responding in a flexible way to the circumstances and needs of all learners.”

The achievements of 10 years since EFA has been assessed and analyzed. The Jomtien goals had not been reached and some of them had been taken on board again in Dakar giving extended time for achieving the goals.

- *E-9 Declaration (2000)*

The declaration on EFA was agreed upon during the fourth summit of the nine high population countries (which includes Bangladesh) in February 2000, and highlights as one of the main goals that “all children with special needs will be integrated in mainstream schools.”

4.9.2 National policies and Strategies

National policies on Literacy/Non-formal Education in latest Policy Document on Education an official report published by the Primary and Mass Education Division (PMED) of the Government of Bangladesh mentions that, “... The non-formal education (NFE) system caters to those children who either cannot or do not get enrolled in primary schools, those who drop out of schools, the adolescents who relapse into illiteracy, or those young and adult people who have never benefited from any schooling.”

(v) *The Five -Year Plan (1997-2002)*

The Five-Year Plan (1997-2002) states that: “The purpose of non-formal education, besides empowering the learners with skills related to literacy, numeracy and communications as well as internalizing socio-cultural traits, should extend to such areas as emotional and physical well-being, self-actualization, creative aesthetic

expression, basic technological skills and orientation, entrepreneurial traits and leadership skills.”

In one of its strategies, The Fifth Five-Year Plan refers to the expansion of non-formal education along with strengthening the Government Mass Literacy Centre, mobilizing Non-governmental organizations (NGOs) and utilizing the skills-development /income-generating efforts of the agencies outside the Ministry of Education. The NGOs and private organizations are involved in a bigger way for the improvement of the primary education at the community level.

(vi) National Education Policy (1997)

The National Education Policy (1997) does not include any specific policy or guideline to either address or facilitate inclusive education. However, it has described Special Education in the following manner.

Aims and Objectives:

The children unable to fulfil their daily needs due to physical and mental problems need special education, competent remedial measures, and special care nursing. The deaf, blind, physically handicapped, mentally handicapped and the epileptics fall within the purview of special children. In accordance with the degree of disability, they are identified as lightly, moderately and seriously handicapped. The principal aim of special education is to help the handicapped establish themselves in the society through special programs depending on their degree of disability.

Strategy:

- Survey is to be made to ascertain the exact number and identify the type and degree of disability of the handicapped learners in the country.
- Coordinated education system must be introduced for the handicapped in selected schools. The handicapped children develop fast if they can receive education with normal children.

To align with the South African context; the researcher cites from the revised document on the Guidelines for Special Schools, 2014, the legislative and policy framework as below:

4.9.3 Legislative and policy framework in South Africa

In South Africa, special schools are part of public education system and therefore, their functioning is guided by the laws and policies that guide other public schools. Furthermore, special schools have a critical role in the implementation of an inclusive education system. Their functioning should be guided by the relevant legislation and policies that support an inclusive education system.

Below is a list of the key legislation and policies that should guide the functioning of Special Schools as revealed in the White Paper, 6 but the researcher barely found a school having them in the research sites.

- Constitution of the Republic of South Africa, No. 108 of 1996.
- South African Schools Act; Act No 84 of 1996.
- The Children's Act; Act No. 38 of 2005.
- The Children's Amendment Act No 41 of 2007.
- Education White Paper 6: Special Needs Education: Building an inclusive education and training system, 2001.
- The National Curriculum Statement, Grade R-12, 2011.
- National Protocol on Assessment Grade R-12, 2011.
- United Nations Convention on the Rights of Persons with Disabilities and its Optional Protocol December 2006.
- Guidelines for the Provision of Boarding Facilities in Public Ordinary Schools.
- The South African Bureau of Standards (SABS) 0400 Code of Practice for the Application of the National Building Regulations; 1990.
- National Building Regulation and SABS of 1993, SANS 10-400.
- The National Building Regulations and Building Standards Act No 103 of 1997.
- South African Schools Act; Act No 84 of 1996: Regulations relating to minimum uniform norms and standards for public school infrastructure, 2013.

- Public Finance Management Act, Act No 1 of 1999 as amended by Act 29 of 1999.

Furthermore, Specials schools should be guided by the following guidelines that will assist them in the delivery of quality education and support.

- National Policy on Screening, Identification, Assessment and Support (SIAS), 2014.
- Guidelines for Inclusive Teaching and Learning, 2010.
- Guidelines for Responding to Learner Diversity in the Classroom through Curriculum and Assessment Policy Statements, 2011.
(DoE,2014)

As noted from the above list, the policies and legislature date from 1996, which is a period after democracy in South Africa which could be reason for the segregation of the learners with disabilities into special schools. According to (DoE, 2014 Guidelines), it is imperative that schools must be familiar with all the relevant legislation, policies and guidelines and must have copies in their schools for reference purposes. Education legislation and policy which includes the inclusive education policies identify several institutions, structures and personnel that are tasked with the development and implementation of an inclusive education system. Special schools should have a clear understanding these institutions, structures and personnel whose direct or indirect mandate is to ensure that special schools function optimally. These institutions, structures and personnel include:

- The National Department of Basic Education
- Provincial Departments of Education
- Districts
- Ordinary mainstream schools
- Full-service schools
- Special schools as resource centres
- District-based support teams
- School-based support teams
- Teachers
- Parents
- Support personnel

- Other government departments

4.9.4 Reflection to the legislations and policies

Since 1994, when democracy was established in South Africa, there has been a radical overhaul of government policy from an apartheid framework to providing services to all South Africans on an equitable basis. The provision of education for learners with disabilities has been part of that process and the development of an inclusive education system can be traced back to the nation's founding document, the *Constitution of the Republic of South Africa, Act No. 108 of 1996* (Republic of South Africa 1996). In Section 29 of the Bill of Rights it is stated that everyone has the right to... 'Basic education including basic adult education and further education; which the state through reasonable measures must make progressively available and accessible.' It further states that the state may not discriminate directly or indirectly against anyone on one or more grounds, including disability, culture and social status.

In line with the above, the researcher notices that South Africa started developing policies in 1996 and, in comparison with other countries, their policies start as far back as 1948. It is also an open secret that when they were drawing their policies; they only focused on the new instead of extracting information from the legislative and policy frameworks that were used by other countries; this why the only popular policy is the White Paper 6, (2001). The framework for an inclusive education system is laid out in the Education White Paper 6: Special Needs Education: Building an Inclusive Education and Training System (Department of Education 2005). The scope of this policy is broad as it attempts to address the diverse needs of all learners who experience barriers to learning. The policy calls for a significant conceptual shift that is based on the following premises:

- All children, youth and adults have the potential to learn, given the necessary support
- The system's inability to recognise and accommodate the diverse range of learning needs results in a breakdown of learning.

The policy asserts that to make inclusive education a reality, there needs to be a conceptual shift regarding the provision of support for learners who experience

barriers to learning. The Department of Basic Education has adopted a strategy that will drive the implementation of inclusive education policies. Summarised, this policy has two major components, elaborated in two sets of guidelines:

The National Strategy on Screening, Identification, Assessment and Support (SIAS); (Department of Education 2008) guides inclusive education policy by defining the process of identification, assessment, and enrolment of learners in special schools, and it curbs the unnecessary placement of learners in special schools. The SIAS strategy provides guidelines on early identification and support, the determination of nature and level of support required by learners, and identification of the best learning sites for support. The strategy also provides guidelines on the central role of parents and teachers in implementing the strategy.

The Guidelines for Responding to Learner Diversity in the Classroom through Curriculum and Assessment Policy Statements (Department of Education 2011) provide practical guidance to school managers and teachers on planning and teaching to meet the needs of a diverse range of learners. This document has recently been redrafted to incorporate curriculum changes in the Curriculum and Assessment Policy Statement (CAPS) and the revised document forms part of the CAPS orientation programme for teachers and education officials in the provinces.

Despite the enabling policy described above, the implementation of inclusive education in South Africa is slow and only partial (Wildeman and Nomdo 2007). The reasons for this are numerous and related problems that affect the education system as a whole, the role of played by operating systems in schools, and other support structures and conditions of poverty, amongst others (Stofile and Green 2006; Engelbrecht 2006).

The issue that this study advises on is the Internationally funded government programmes like the Danish Development Agency (DANIDA project) and the South African Co-Operation Program in the Education sector (SCOPE) that funded various in-service programs in which a cascade model was used to introduce and support inclusive education in several South African provinces (Amod, 2014; Logan, 2012) to be revisited. The cascade model was designed for one or two representatives from each school to attend the programs and then relate the knowledge and skills they learnt to their fellow colleagues (Engelbrecht, 2006). Instead of only one or two

representatives attending, the whole school training approach could yield good results and problems that occurred in the past could be eliminated when representatives had to transfer their knowledge and skills to their colleagues, who often seemed disinterested in the activity or time constraints made it impossible to relay all the information (Engelbrecht, 2006). This can be done in turns to eliminate further problems on curriculum issues.

Another cause for the poor outcomes of training programmes in South Africa that was mentioned was poor educator collaboration, which has resulted in educators working in isolation (Logan, 2012). The absence of a team or whole school approach in many school districts results in external professional development courses being restricted to individual educators and classrooms; this resulted in small groups of learners benefiting (Logan, 2012), however, if these interventions can be taken in good spirit, the use of projects like Universal Design for Learning (UDL) based in the fields of cognitive science and neuroscience that address the understanding of how we learn through memory, language processing, perception, problem solving, and thinking can be useful. These fields suggest that cognition involves three neural functions, (1) pattern recognition, (2) pattern planning and generation, and (3) pattern determination of importance (Rose and Strangman, 2007).

UDL serves as a potential framework to deal with educators' lack of knowledge and skills on how to design and present the curriculum in ways that can meet the diverse needs of learners in their classrooms. Teacher training programmes do not appear to be adequately addressing this need, resulting in stress for educators and lack of progress of learners with disabilities (Engelbrecht, Swart, Eloff, 2001; Chataika et al. 2012; Engelbrecht 2006). The issue of curriculum differentiation is fundamental to the implementation of inclusion. In its apparent absence, children who experience barriers to learning cannot expect to have their needs met in a least-restrictive and inclusive setting with their age-mates.

Educator preparedness as the key drivers in the successful implementation of training programmes and policies must not be ignored. Educator preparedness refers to the way the educators are ready to take on board inclusion of disabled children alongside their non-disabled peers in the same classroom (Acedo, 2008).

This includes how teachers acquire appropriate skills and knowledge to work readily with children with disabilities in their classrooms. While Bourdieu's lens of cultural capital sees that inclusive skills and knowledge are what teachers need to work with children with special needs, the teachers felt their pre-service and in-service training left them inadequately prepared to be inclusive educators. It is, therefore, advisable that, to put them on board, the Ministry of Education should go back to the drawing board and do damage control. This can be done by re-opening the closed down teacher training colleges and be used as full-time training institutions for inclusive education. Those who are already in the system can exercise co-teaching with those who are newly trained to learn whilst they teach.

In South Africa, many educators are unemployed because there is duplication of methodology and skills. This is the population that the government can train as school-based therapists and social workers instead of trying to pump new knowledge to those who are already in the system to change what they were trained for and what they know best. The future role of the school-based occupational therapist, for example, in inclusive education is not only to work on a one-on-one basis with learners with disabilities but also to support educators and empower them to participate in advocacy and the development of policies, to participate in multidisciplinary team collaboration and to support parents and community development (Sunday, 2012:5).

The significance of the study hoped to contribute to research knowledge in the field of inclusive education through effective strategies and good practices used by other countries and to establish what we have achieved so far in fulfilling the mandate of inclusive education and the policies in place thereof. Referring to the above sections, it was noted that the White Paper 6, is a very rich document and the main policy used in South Africa and has sublime strategies that cover most of the objectives as it is the mostly used in inclusive education which deals with the inclusion of learners with disabilities into regular schools and is in contrast with educating in special schools to avoid segregation. The only hindrance that was observed was too much information at the same time and mixing it with burdens of the constantly changing curriculum. To adhere to the mandate of the policy is to advocate it properly and to

involve all the stake holders. Educators play a central role in determining the placement of students with disabilities. The strategies shared above, while not new to the body of literature in special education, provided guidance when working to achieve inclusive education. Teaching is not an easy activity and all systems involved in the development of a child should focus on sharing what is working and what is not and to constructively resolve what seem to be challenges.

Looking at how other countries are managing these challenges, it is very vital and in reference to the implementation of US Public Law 94–142 (Education for All Handicapped Children Act 1975), learners can be included increasingly in the general education system and are increasingly expected to achieve in similar ways (and to similar standards) as their general education peers, thus supporting students with disabilities to be involved with their non-disabled peers to the maximum extent possible. The only problem that was captured during the study was being resistant to change; therefore, this can be achieved in phases through pilot projects and collaboration amongst different systems mentioned in Bronfenbenners' bio-ecological model of human development.

As different systems are involved in child development i.e. micro, meso, exo and macro, as stipulated clearly in Bronfenbenners' bio-ecological model of human development, which is a theory that framed this study. As echoed by Swart and Pettipher, 2011); "Implementing inclusion is not possible without paying attention to developing relationships between the different systems." Each member of the Individualized Education Program (IEP) team should recognize the instances of progress, no matter how small the contribution is and communicate these successes with other members of the team (Osher and Osher, 2002). This statement clearly projects the importance of collaboration between all the members. The various stakeholders involved in the inclusion of learners with disabilities and their contribution were broadly discussed in the earlier sections.

Furthermore, this study responded to some of the main issues that are topical in the, "Learning for Democracy in an inclusive education system: Implications for Educator Development National Workshop Report, 2-3 December 2013". One of the long-

standing objectives of school reform has been to fulfill a clear mandate to all sectors within education to take responsibility for ensuring that the constitutional right of learners with disabilities is realized. In this report, it is emphasized that, it is now 12 years into the 20-year implementation trajectory set out in Education White Paper 6 and thus, it is important to critically assess what has been achieved and to explore new and vigorous strategies to accelerate and strengthen the implementation of the policy towards 2020. This study also hoped to establish how far we are in terms of adherence to this mandate.

To respond to this mandate; educators and all the stakeholders who are involved in this vision should align themselves with the SIAS document of 19 December 2014 which has flagged its implementation plan as follows.

4.9.5 Policy implementation plan for 2015 to 2019

According to (DoE, 2014) guidelines, the implementation of this policy was effected through the following activities in the short to medium term:

2015 – 2016:

- Training of Foundation Phase educators, managers and provincial and district officials on the implementation of the policy;
- Establish School Based Support Teams (SBST) and District Based Support Teams (DBST) in all 86 districts, all special schools, and 2000 full-service / inclusive schools;
- Extended consultation and collaboration with other government departments, especially the Departments of Health and Social Development to align services and procedures at all levels;
- Consultation with disability and children's rights stakeholders;
- Advocacy and information campaigns;
- Finalization of funding and post-provisioning norms;
- Alignment of the policy with the Integrated School Health Policy;
- Assessment of foundation-phase learners in full-service schools that have additional support needs and of all learners in special schools; and
- Agreement with Higher Education and Training to mediate inclusion of SIAS content in all initial teacher-education programmes.

2016 – 2017:

- Monitoring the establishment and functionality of SBSTs and DBSTs in all 86 districts, 441 special schools and 1000 full-service schools;
- Strengthening a further 100 special schools as resource centres;
- Fully equipping assistive devices and specialised equipment loan centres in provinces or districts;
- Training 20 000 members of SBSTs in 5000 ordinary schools;
- Expanding the continuum of support services at district and circuit levels;
- Creating and filling posts for specialist professionals to provide outreach services to all schools; and
- Assessment of all learners admitted to special schools through the SIAS.

2017 – 2018:

- Monitoring the functionality of SBSTs and DBSTs in all 86 districts, 441 special schools, and 2 000 full-service schools;
- Strengthening a further 100 special schools as resource centres;
- Expanding assistive devices and educational assistive devices resource centres in provinces or districts;
- Training a further 20 000 members of SBSTs in 5000 ordinary schools;
- Further expanding the continuum of support services at district and circuit levels;
- Creating and filling posts for specialist professionals to provide outreach services to all schools; and
- Assessment of all learners admitted to special and full-service schools through the SIAS.

2018 – 2019:

- Monitoring the functionality of SBSTs and DBSTs in all 86 districts, all special schools, and 2 000 full-service schools;
- Strengthening a further 100 special schools as resource centres;

- Expanding assistive devices and specialised equipment loan centres in provinces or districts;
- Training a further 20 000 members of SBSTs in 5000 ordinary schools;
- Further expanding the continuum of support services at district and circuit levels; and
- Creating and filling posts for specialist professionals to provide outreach services to all schools.

With proper advocacy of this document and other policies and making inclusive strategies to be a goal for all stakeholders, more especially educators by 2020 and beyond, problems that emerged out of this study would be a thing of the past. It is wise to change this vintage of mode of playing a blame game and for the longevity of this mandate to work in collaboration. It is also advised for curriculum and policy makers to work together as clashes would have a detrimental effect on this plan. If there is a policy to be implemented with its implementation plan clearly defined, it is advisable that changes in curriculum can be put on hold until then. This concern is raised because these changes affect the same individuals who are the educators and therefore there are various perceptions of inclusive education for learners with physical disabilities in mainstream classrooms. Another view is to monitor progress continuously to establish what is working and intervention strategies augmented to what seems sluggish. In the road to success educator preparedness should be considered and extrinsic motivation is encouraged in this regard. This can be in the form of educator appraisal in the form of awards, bonuses and certificates of excellence for schools and educators who have made a remarkable attempt in the inclusion of students with physical disabilities in mainstream classrooms.

Another issue that came up was the issue of teaching methods which are not helpful to teaching learners with disabilities.

“To make the issue of inclusive education a success, I suggest that all the closed teacher training colleges be re-opened and the new teachers trained on the implementation of inclusive education using the strategies or teaching methods and teaching aids that are assistive for learners with disabilities.”

In the Guidelines for Inclusive Learning Programmes (DoE, 2005a: 35), some ideas of adapting the materials or differentiation in method of teaching are indicated as follows:

- Adapt the teaching methodology to the needs of specific learners;
- Consider the format in which the task is presented, e.g. the complexity of graphs, diagrams, tables, illustrations, or cartoons.

A range of strategies can be followed to make these accessible to learners who experience barriers to learning of whatever nature, such as:

- Picture or diagram simplified or shown differently without compromising complexity of question
- Picture or diagram replaced by written description
- Picture or diagram supplemented by written explanation
- Picture or diagram replaced with a real item or model
- Unnecessary picture removed
- Amount of information reduced
- Measurements altered
- Inherently visual material replaced with equivalent non-visual material.

As research on the successful implementation and inclusive strategies continue to show greater gains in achievement for students with and without disabilities, the drive for inclusive education will continue to rise. It is essential that all teams should work together to purposefully create successful placements for learners with disabilities to have full access to the curriculum alongside their peers without disabilities in mainstream classrooms. Where a child is educated is one of the most important educational decisions one can make. As teams work together to design and implement inclusive strategies for learners with disabilities, it is essential that they do so using collaborative strategies that include the expertise of all the team members in the cluster, more especially the parents or care givers as they are at the top of this list.

According to the SIAS document, 2014;

- Acknowledging the pivotal role of parents/caregivers in education and training is the key factor in the early identification of barriers. Parents/caregivers' observations and comments can lead the educator to find the exact nature of the barriers that a learner experiences.
- Parents/caregivers should always be involved in the identification and assessment processes involving their child, and should be regarded as equal partners in this process.
- Parents/caregivers should also be free to initiate contact with teachers regarding their child's progress. When choices should be made about the learner's enrolment into a site where additional support is available, parents/caregivers need to have full information about all options so that they can make informed choices.
- The unwillingness or inability of the system to support the learner in the current site should never be a primary motivation to move a learner, especially if it is necessary for the child to attend school far from home.
- The financial situation of the family and their capacity to pay for the choice of school (especially in terms of transport) should be considered.

4.9.6 The responsibility of parents/caregivers

- Parents/caregivers need to take responsibility for the support of their children in the most inclusive setting possible.
- Parents/caregivers should be empowered to understand how the potential of their child can be optimally developed.
- They need access to information on the kinds of support needed by their child.

- They must know their rights in terms of accessing available support.
- Parents/caregivers must make every effort to ensure that their child has access to an appropriate early-intervention programme which is available in their area.
- Parents/caregivers who suspect that their child has additional support needs, but has not accessed early-intervention programmes prior to the child turning 3 years old, must report to the local ordinary school as early as possible but no later than the age of 5 years.
- They must ensure that the relevant sections of the Support Needs Assessment are completed in respect of the child's needs.
- Documentation to be included in the child's application for Support Needs Assessment may consist of any appropriate reports such as social or medical records, the Health and Disability Assessment Form, or reports from early-intervention support providers.
- The local school must complete the relevant forms in consultation with the parent/caregiver. In view of the above;

Table 7: The different forms that must be completed for who and for whom and the responsible person.

Form	Filled for whom	Responsible person
Road to Health Card	For all learners	Health Professionals
Reports from Health Screening (ISHP)	For learners who have an indication of vulnerability and need to access health and learning support interventions	School Health Team
Learner Profile	All learners	Class teacher (The class teacher captures all relevant information from

		other screening processes onto the Learner Profile)
Support-Needs Assessment Form 1 (SNA1)	For learners • for whom additional support must be put in place from the outset, e.g. learners with disabilities • who are identified during teaching and learning as having additional support needs indicated via the Learner Profile	Class teacher or teacher who is tasked to be the case manager supported by the SBST
Support-Needs Assessment Form 2 (SNA 2)	For learners who have not benefited enough from the teacher's intervention and need additional support from the school's experienced and/or highly qualified teachers and network of service providers	School-Based Support Team (SBST) in consultation with the teacher and parents
Support-Needs Assessment Form 3 (SNA 3)	For a learner who has not adequately benefited from the school-based support plan and where the SBST	DBST/CBST, in consultation with teacher(s) SBST and parents

	has requested additional support from the DBST.	
Health and Disability Assessment Form	For learners for whom additional support must be put in place from the outset, e.g. learners with disabilities or health conditions	Health professionals as outlined in the form Submitted to SBST and DBST for information
Forms 123 - 125	For learners who need a specific support intervention	DBST in consultation with teacher(s) SBST and parents

Source: SIAS document, 19 December 2014

Conclusion

This chapter discussed all the findings and presented the themes and sub-themes that emerged during the interviews according to the research questions and then the strategies that can be used by educators for the future improvement of the model of inclusive education in South African schools. The researcher then revealed how the findings could contribute to new knowledge. With the same mission and vision, by 2021 and beyond, this country would have achieved a lot by then. The following chapter provides the Summary and recommendations pertaining to the whole study's findings.

CHAPTER FIVE

5.1 SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction

This study consists of five chapters demarcated as follows:

Chapter 1: (Introduction/background); this chapter described the background, research problem, the significance and research questions of the thesis, aim and objective of the study as well as contribution to new knowledge and contextual definition of key terms. In this chapter the problem statement, which triggered the researcher's interest in conducting the study, was the statistics of learners of schools going age who are out of school or are segregated in special schools, the reported incidents of those who manage to get an opportunity to be in school and the number of special schools by province, as revealed in the table below.

Table 8: The number of special schools and learners per Province and the percentage of them in special schools.

Provinces	No. of Special school	No. of learners in special schools	% of learners in Special schools	% of Total number of special schools in the Province
Eastern Cape	41	6 483	0.28%	10.79%
Free State	19	3 127	0.40%	5.00%
Gauteng	96	25 451	1.62%	25.26%
KwaZulu natal	58	7 631	0.28%	15.26%
Mpumalanga	15	2 692	0.29%	3.95%
Northern cape	8	1 392	0.68	2.11%
Northern Province	19	4 250	0.23%	5.00%
North West	42	4 364	0.46%	11.05%
Western Cape	82	9 213	0.96%	21.58%

Source: White Paper 6, 2001

Analysis of the data reveals the extent of the disparities in the provision for learners with disabilities, for example:

- The incidence of disabilities in the Eastern Cape constitutes 17.39% of the disabled population, yet the province has only 10.79% of the total number of special schools.
- Gauteng has 17.14% of the disabled population but has 25.26% of the schools.
- The Western Cape has 5.47% of the disabled population but has 21.58% of the schools.
- A comparison between the overall incidence of disabilities and the number of learners accommodated in school also reveals stark disparities, for example:
- 0.28% of learners in the Eastern Cape are enrolled in special schools, yet the overall incidence figure for the population of disabled persons (of all ages) is 17.39%.
- This pattern is repeated across provinces, indicating that significant numbers of learners who are based on the traditional model should be receiving educational support in special schools but are not getting any.
- While the national total incidence figure for disabilities (of all ages) is 6.55%, the total number of learners in special schools is 0.52%.

Chapter 1: In view of the above, it is clear that there is more research to be done to understand the mismatch in the above disciplines. Hence, the researcher was prompted by the concern of educator perceptions of inclusive education for learners with physical disabilities in mainstream classrooms to bridge the staggering gap between learners from Eastern Cape, as compared to other Provinces as mentioned above. The revelation was that of educators' lack of knowledge, skills and support like; training, infrastructural and professional support.

Chapter 2: (Literature Review and Theoretical Framework): This described the theory that is relevant for the study and its relevance. Bronfenbrenner's bio-ecological Systems theory is the theoretical model that guided the study. Literature Review: the key literature in the field of inclusive education, policies and educational

support services, with a focus on their perceptions of inclusive education for learners with physical disabilities in mainstream classrooms was discussed.

Chapter 3: (Methodology): discussed the research paradigm, research design and research methodology, outlining the selection of participants, data generation methods, mode of analysis, and ethical considerations.

Chapter 4: (Discussion of Findings): This chapter described and discussed the results in relation to the aims and objectives of the study; that of responding to the research questions through in-depth interview sessions with the participants. The findings reveal that we are near yet so far in the process; as was discovered that there is still more that needs to be done to align with the mandate that by 2021 at least most learners must have been in mainstream schools, receiving the same education amongst their peers and in their regions.

Chapter 5: This chapter draws conclusions and makes recommendations for further research, highlighting the study's strengths and limitations, and provides a summary of the researcher's reflections. The study's main aim was to establish the educator's perceptions of inclusive education for learners with physical disabilities in mainstream classrooms. This was a case-study done in the Mthatha education district and this was triggered by a sad incident that erupted in one of the schools where learners of a school with disabilities allegedly attacked and killed a school deputy principal. At the time of the proposed research, the accused learners were still in custody because of the absence of interpreters for sign language and the books written in Braille. To exercise the rights of these learners, the legal advisors saw it fit that these devices were necessary to have during their appearance. This problem led to the objective of the study which hoped to;

- Investigate how much educators know about inclusive education.
- Examine educators' views regarding the inclusion of learners with physical disabilities in mainstream classrooms.
- Determine which support do educators require from DBST to align their teaching methods with the needs of learners with physical disabilities.

- Establish what practices can be employed for the future improvement of the model of inclusive education in South African schools.

This was further enhanced using the case studies in three schools, which described the schools at which the teachers were based, providing the necessary context for the phenomenon of inclusive education for learners with physical disabilities in mainstream classrooms to be examined. The case studies and semi-structured interviews added the element of realism to the study, and contributed to the trustworthiness of the results. To comply with the ethical consideration, all participants participated voluntarily and consented to take part in the research. There was no risk of harm to the participants and their anonymity was maintained and all their responses were recorded, scribbled and analyzed. Analysis was based on themes and sub-themes. The following section discusses the concluding remarks based on the findings and later in the chapter provides conclusion and recommendations about the study.

5.2 SUMMARY OF FINDINGS

The themes and sub-themes were identified and discussed accordingly in the previous chapter and data collected from the study was presented against related literature and, drawing from the findings, here are some of the issues which were topical and glaring.

5.2.1 Educator Perceptions of inclusive education

Through this research, educators have different perceptions of inclusive education for learners with physical disabilities in mainstream classrooms. The main concerns are based on:

- **Educator preparedness**

Even though educators are at the centre in the process of inclusion, it is very clear that they are not well prepared, as cited in their lack of knowledge and skills. Their first problem is focused on the lack of knowledge due to the way policies are advocated and because of dissemination of information being sluggish. They blame the structures that are supposed to be working with them and giving them support, accusing them of being sluggish. Their gap on the way these teams work in the deliverance of the necessary skills and knowledge and level of support thereof is prominent. These educators seem

to be aware of their intended role in the process, that of assisting learners who have trouble in learning, identification, individualised support, and collaborating with other stakeholders. However, participants reported their lack of confidence in the mode of delivery, blaming the insufficient training they received from workshops on working with learners who experience barriers to learning due to various types of disabilities. They all agreed that in their sites their only problem is not with learners with physical disabilities but with various forms and the lack of preparedness regarding the establishment of inclusive schools, as they cited various processes that should be followed before a school should be announced as an inclusive school. Amongst other things, they mentioned physical infrastructures, curriculum variation, teaching aid and services, assistive devices and variation of teaching methods to suit the individual learner's needs. It seems, therefore, that the participants' own training background still influences perception of learners with disabilities due to the severity of their disability.

Those who are in mainstream schools still look at learners with physical disabilities through the deficit lenses, and, therefore, they prefer to rather refer them to special schools, where they presume there is all the necessary equipment. Those who are in special schools have their own problems, stating the lack of support from SBST and DBST, infrastructural concerns, professional staff shortages (remedial, sign language and therapists), LTSM and other assistive devices and technological devices.

The findings suggest that the educators in all schools need to be trained in curriculum adaptation to cater for learners with special needs. The findings also reveal that all learners should fit into the mainstream education, but curriculum adaptation should be adjusted by curriculum planners for learners with disability as the final examinations are written by all learners, irrespective of their disabilities. They need to be accommodative because learners are not the same and therefore they need specialised forms of curriculum adjustment. This, points to the need for examinations to be adapted to accommodate learners with special needs in the form of prints and language used to make sure that it is not derogatory of any form of disability. This is a conundrum in

that the educators as agents of change feel constrained and this is an issue that requires urgent redress by the Department. Some of the learners using assistive devices should be given extra time when writing examinations, therefore, those conducting exams should be prepared to exercise flexibility.

- **Curriculum variation and policies**

Changes in curriculum should not coincide with policies as it is resulting in a lot of complaints and attitudinal behaviours from the educators. These two should co-exist harmoniously as clashes are likely to cause a lot of stress and therefore affect how educators work and are ready to give justice to learners who need special attention. Professionals from both fields should correlate with each other. The findings reveal that the curriculum in the Department changes all the time and the educators as the pioneers of implementation are very concerned about their time and apparently unrealistic expectations to adapt to these changes. One logical explanation is that there is a gap that exists between the policy makers and policy implementers. From these findings, it is concluded that:

- There is little communication between the policy makers and those who are supposed to implement those policies;
- There is a lack of monitoring of the implementation;
- The education officials and curriculum planners are not aware of the social model of disability;
- Most of the curriculum planners and examiners have never had dealings with special needs learners, hence the special needs learners are often neglected or forced to fit into the mainstream curriculum.

Learners with impairments gain a lot when they are learning together with their peers who do not have any form of disabilities, they get acceptance and chances of being stigmatized are minimal and the support they gain in this collaboration helps them to overcome their learning barriers. In White Paper 6: Conceptual and Operational Guidelines for Full Service Schools (DoE, 2005: 35), it is stated that: *“Many educators still tend to think that it is correct to use the ‘one-size-fits-all’ approach to teaching. All educators are faced with a group of learners of which*

everyone has his/her unique character, interests, style and pace of learning and working. 'One-size' does not really fit all. Curriculum differentiation should not be an exception, but rather a central method of ensuring curriculum access."

- **Teaching strategies**

The study discovered that teaching strategies need to be changed to accommodate learners with disabilities. Educators complained of the teaching strategies that they needed to change to suit all the learners because they are not aware of models of disabilities such as social and medical models of dealing with disabilities and their implications. The knowledge of these models is crucial, and Healey et al. (2001) claim that such knowledge can help them to examine their approach to supporting disabled learners in mainstream classrooms. They complain of the old approaches that they were trained on for many years as clashing and as bringing resilience as compared with the new ones that are offered on 2-3-day workshops. The idea of co-teaching came into play as it was suggested that educators can do well if they teach along their colleagues who are trained on the new approaches. In addition to that,

- Use simple commands with as few words as possible, then, have the child carry out that instruction. Follow this with the next brief command. Too much verbiage is often overwhelming for a child with learning disabilities (LD) or Attention Deficit Disorder (ADD). He is likely to remember only the first few words spoken, if that, when given a lengthy explanation preceding an assignment.
- Demonstrate chores or tasks rather than relying on verbal explanations alone.
- Use concrete materials, manipulatives, experiments, and charts to aid instruction.
- Include practical applications of academics regularly, including life-skill tasks: measure ingredients in a recipe, determine the number of gallons of paint needed to paint his bedroom, read the map at the shopping mall and navigate to the store of his choice, etc.
- Use a multi-sensory approach to introduce or practice a concept rather than limiting instruction to whatever appears to be the child's learning

style—visual, auditory, or kinaesthetic. Studies of the brain suggest that the more senses and variety involved in learning something, the more avenues a person has for retrieving that information.

- Keep in mind that you will probably spend a great deal more time feeding him information — showing him examples, making explanations — before he is able to understand than with a child without a learning disability. Therefore, plan to stay with him or nearby to provide immediate feedback when his attempts are incorrect. Show him again, so that he doesn't end up with a wrong habit that will have to be remedied later.
- Expect to spend a great deal of time on repetition and practice before mastery is achieved. Short, intense, and frequent practices tend to be more productive than longer practices scattered throughout the week. A few minutes several times a day could be spent on various drills of phonics or math fact practice, with a longer lesson scheduled for the next level in phonics instruction, or a different topic altogether in math. Some children have better results with rote memory if physical exercise is combined with recitation — bouncing a ball while reciting math facts, for instance.
- Don't require mastery of everything. Some areas should have simple exposure as a goal so that the student isn't under too much stress. You may decide to let him merely experience something now with the plan of building understanding in the future, or exposure may remain your long-range goal.

5.2.2 Attitudes towards learners with physical disabilities

The results of this study show that most educators hold the most negative views towards inclusive education for learners with physical disabilities, such as wheelchair bound, vision or hearing impairments. It has been shown in different studies that educators' attitudes towards inclusion depend on the characteristics of the children they teach (Leung and Mak, 2010). Most previous research had findings like those in the current study regarding children with physical disabilities. For example, Mushoriwa (2001) found that, most educators did not hold positive views of children with visual or hearing difficulties, and Glaubman and Lifshitz (2001) found that

educators are unwilling to teach children who are blind or deaf. Consequently, both Mushoriwa (2001) and Wilkins and Nietfeld (2004) argue that physically disabled children are not suited to be in mainstream classrooms. They cited numerous reasons such as inadequate infrastructure, unavailability of well- trained therapists and the unavailability of teaching aids and services.

Participants who were interviewed in this study also described a lack of training and skills and unavailability of teaching materials and access to appropriate devices, such as hearing aids or Braille resources, as problems in the implementation of inclusive education. Nevertheless, the negativity of teachers' beliefs also appears to be based on their stereotypes and prejudices. Glaubman and Lifshitz (2001) also supported the argument that teachers' stereotypes influenced their beliefs, which also affected their existing attitudes towards children with physical disabilities.

In view of the above, the reason behind negative attitudes towards inclusive education is due to several reasons such as lack of relevant teacher training, lack of teaching materials that are suitable for learners with physical disabilities and infrastructural architecture that is user friendly as well as relevant equipment. Their insufficient knowledge and skills and large class sizes were observed to be influential of these attitudes and, therefore, an advice to be considerate is advised. Previous research supports the idea that such factors may have an impact on attitudes (Charema, 2007; Hossain, 2004; Kibria, 2005; Michelle, 2009). Most of the interviewees mentioned these challenges in relation to inclusive education. In this study, it is noticed that the participants in general from mainstream classrooms do not know how to use Braille or sign language to deal with children with physical disabilities. They also claim that their knowledge of inclusive education, including their conceptualisation and practical knowledge, is not sufficient. It is advised that radical training strategies are needed to try and close this knowledge gap.

5.2.3 Community and Parental involvement

The findings reveal that there is a lack of collaboration among the structures that are involved in the inclusion of learners with physical disabilities such as social workers, nurses, therapists, police, NGOs, traditional healers and, more especially, active involvement of parents. This thin layer of collaboration in the teaching and learning

process is central to effective learning, whilst negative attitudes towards involvement, scant recognition of their role, lack of resources to facilitate involvement and lack of parental empowerment contribute to inadequate parental involvement in education. The findings further indicated that parents are not interested in their children's education, especially those whose children experience barriers to learning, and, therefore, do not want to be involved in the teaching and learning process, causing a barrier to educators in terms of finalizing the intervention process such as the signing of SNA forms and transfer of learners to other institutions where support of their children is identified as the most appropriate. Active involvement of parents in the teaching and learning process is central to effective learning and development; therefore, it is recommended that they must not see the schools as dumping sites when they cannot endure the conditions of their children with disabilities.

On the other hand, the reason towards parental involvement, scant recognition of their role, lack of resources to facilitate involvement and lack of parental empowerment contribute to inadequate parental involvement in the education system and is caused by issues like poverty or sometimes because some of these learners are taken care of by grandparents. With the advent of Inclusive Education, parents are faced with a problem of returning their children to mainstream schools, which most prefer not to as they have already removed them from them because they doubt the mainstream environment as opposed to special school environment. Engelbrecht and Green (2001:174) explain that most parents think the worst of their learners' barriers to learning and do not trust mainstream educators, thinking that the special school educators are better trained for the work. If parents are not encouraged to be involved in their children's education or empowered on what is expected of them, they will lack interest in supporting the educators. Engelbrecht and Green (2001:177) claim that recent policies and legislation in South Africa appear to support the involvement of parents in the education of their children.

5.2.4 Legislation and policy

As can be noticed below, the following list of policies illustrates that South Africa is still a new kid on the block as compared to the rest of the world, which dates back in the 1940s in terms of legislation and policies. This, therefore, clearly demonstrates that with time things will work out for the better.

5.2.4.1 Related legislation and policies in South Africa

(1) This policy document is aimed at rationalizing and standardizing admissions and support services and must be read in conjunction with the following treaties, legislation and policy documents:

- (a) The Constitution of South Africa (Act No. 108 of 1996);
- (b) The South African Schools Act (Act No. 84 of 1999);
- (c) Education White Paper 6 on Special Needs Education: Building an Inclusive Education and Training System (2001);
- (d) The Convention on the Rights of Persons with Disabilities (2006), specifically Article 24;
- (e) The Convention on the Rights of the Child (1989) specifically Article 23;
- (f) The Education White Paper 5 on Early Childhood Development (2001);
- (g) The Children's Act (Act No. 38 of 2005);
- (h) The National Curriculum and Assessment Policy Statement, Gr R–12 (2011);
- (i) HIV and AIDS in Education Policy (1999);
- (j) Integrated School Health Policy (2012);
- (k) The Care and Support for Teaching and Learning (CSTL) Programme (2008);
- (l) School Nutrition Policy (2013);
- (m) Minimum Uniform Norms and Standards for Public School Infrastructure (2013);
- (n) Mental Health Care Act, Act 17 of 2002;
- (o) Promotion of Access to Information Act, 2000 (Act No. 2 of 2000);
- (p) Promotion of Equality and Prevention of Unfair Discrimination Act, 2000 (PEPUDA or the Equality Act, Act No. 4 of 2000).

Despite the best intentions of government, there is protective legislation and policy that hampers the development of an Inclusive Education and putting systems in place. The basic centralization of the education system has left a legacy of restrictive centralized control which inhibits change and initiative. Brandon (2006:39) claims that legal responsibility for decisions tends to be located at the highest level and the focus of management remains oriented towards employees complying with rules rather than on ensuring quality service delivery.

Only a small percentage of learners who were earlier categorized as having special educational needs receive appropriate education in ordinary schools or special settings. There is no support available for those learners who are outside the schools and existing provisions outside the schools are inadequate to meet the needs. The provision and the distribution of resources still reflect the inequalities of the apartheid past. Brandon (2006:42) further argues that learners who have historically faced barriers to learning have had few opportunities for further education at tertiary level. In view of the above, the scars of apartheid must not hinder progress in terms of proposed policies that favour inclusion of all learners into the mainstream classrooms, irrespective of their disabilities. White Paper 6 is the most recent policy that is designed to cater for all learners, irrespective of their disabilities; if it can be advocated and implemented adequately, it will have a positive impact in the implementation of inclusive model in South African schools.

5.2.5 Role of District Based Support Teams in schools

It was revealed that there is lack of trained DBST members to fill in vacant posts in the field of special needs education within DoE; this is exacerbated by a lack of communication between DBST and the educators in mainstream schools. As they are responsible for conducting workshops; it is alleged that these workshops are conducted by poorly-trained facilitators who are not necessarily experts and they, therefore, cannot yield good results. This finding suggests that teachers need to be compensated for their efforts and time, either in terms of certificates or some other rewarding mechanisms that will lead to the increment in their salaries; otherwise, negative attitudes towards the workshops conducted by the Department of Education will take centre stage. These findings were seen extending to untrained personnel to assist in schools who have taken an initiative of practicing inclusive education. Some

complained of remedial educators who are diverted to teach due the shortage of educators whose posts are not filled on time and some revealed that trained therapists are very scarce in their site because posts which are advertised take forever to be filled until the candidates end up being employed elsewhere because of the long waiting periods.

5.2.6 Poverty

It is evident from the findings that poverty contributes towards barriers to learning; most of the learners come from extended families and depend on their grandparents' pension grants. Some are orphans who are not well cared for. The literature review confirms that poor living conditions, undernourishment, lack of proper housing and unemployment have a negative impact on most learners. As South Africa is one of the countries rated high in the poverty level, learners are affected by these consequences. Poverty eradication is at the top of the hierarchy and, therefore, government needs to intervene to try to overcome a conundrum of issues surrounding learners from poor families.

The findings of this study provide a useful indication of almost similar perceptions and lack of knowledge and professional training of South African educators where inclusive education for learners with Physical disabilities in Mainstream classrooms is concerned. This study also identified several issues regarding the perceptions and lack of duty bound structures that are employed to deliver services towards inclusive education from various areas of the educational sector such as educators, DBSTs, ILTST, curriculum designers and policy makers. An educator is always considered as the "key personnel" in the implementation of inclusive education (Boer, Pijl and Minnaert, 2011). Therefore, educators play a vital role in the success of the implementation of any educational idea or concept but if there is a knowledge gap, that would not be possible. The successful implementation of inclusive education also depends on their attitudes and knowledge (Harding and Darling, 2003).

In this study, it is also clear that disabilities do not only focus on the skeletal deformity, but on every individual who have trouble with learning due to a variety of reasons. As such, this study suggests that the knowledge and views of inclusive education for learners with disabilities are very crucial and what these views and

knowledge could mean for the implementation of inclusive education for learners with disabilities in mainstream classrooms. This is because previous research (Leatherman and Niemeyer, 2005) has argued that educators' attitudes towards inclusive education influence the success of their inclusion in mainstream classrooms. It could be suggested that prior awareness of educators' views and knowledge could determine whether that educator will be successful in creating a positive inclusive learning environment.

The findings confirm the DoE (South Africa, 2005b:67) statement that there is no single classroom in which all learners are the same, or learn in the same way or at the same pace; as a result, educators are required to be creative in using a variety of teaching methods to reach all the learners. As a result, they are required to be creative in the use of a variety of teaching methods to reach the level of all the learners. The methods and all the resources must always be employed to ensure that they are accommodative of every learner in an inclusive classroom to accommodate all the learners.

Based on the evidence gathered during the interview, it was reaffirmed that most schools still use old methods and lack resources that they can use to augment the ones that they use to teach in regular classrooms; these can include dramatization, Braille, word detection digital devices and should instill learning through play. It is further advised that this is due to the UNESCO (2005:17) argument that all classrooms are diverse because all learners are unique, and that this recognition can have positive benefits for all learners. Learners have different experiences, skills, knowledge, and attitudes, and can all contribute and bring some ingredient to the learning experience (UNESCO, 2005:17). Therefore, in this regard personalized learning is the best solution as currently used in countries like United States of America which is a good practice that can be used to augment the current strategies that South African schools claim to be using.

This concurs with the fact that educators should thus accommodate every learner, irrespective of his or her disability. Relating to this argument, scaffolding is strongly emphasized and the fact that assessment standards should be scaffolded into manageable steps, allowing sufficient time for learners who experience barriers to

learning to demonstrate their ability on the skills, knowledge, values and attitudes that are offered to them practically and that learners' time for assessments should be flexible, according to their level of ability, hence differentiated planning is emphasized. Classroom organization is also crucial to accommodate every learner, more especially those who are wheelchair bound and the seating arrangements must be conducive to teaching and learning, with sufficient space for free movement during group activities and for both the learners and educators to access the resources easily. The whole school system should be re-evaluated to make sure that the infrastructure is user friendly and that the classrooms and playgrounds are conducive for every learner.

Regarding other educational stakeholders, this study offers insight into what radical strategies are more likely to positively influence educators' perceptions. It will also give administrators a good idea of which guidelines to use for the successful implantation of inclusive education in mainstream classrooms in South African schools. From this study, educational authorities and administrators ought to work in collaboration to understand the level of involvement in inclusive education and make subsequent support and plans for educators. Data suggested that though some educators received training related to inclusive education, their understanding of it still has some bottle necks. This study, therefore, suggests that educators need more training to gain skills and knowledge which would allow them to be effective as inclusive agents. This study will also be useful for those who have an interest in inclusive education policy. Many studies have indicated that support from a government can have a positive impact on educators' perceptions and views, as well as the ability to affect the successful implementation of inclusive education (Charema, 2007). The information contained in the present study suggests that increased support may increase positivity towards inclusive education and that collaboration of various systems, which are involved in the development of a human being, is vital.

The level of support, according to this study, shows that there is still much to be provided by the ILST as well as the DBSTs. As indicated that the ILST liaises with the DBST in terms of severe cases in schools, the findings show a disjuncture in the way these two structures operate to refer those learners who had severe barriers to

relevant institutions and to offer feedback about their progress. The respondents mentioned that the ILSTs have an individualized education plan for the learners who experienced barriers to learning to provide individual support for them. It was indicated that parental involvement seems very poor as they are less involved in the schools, and that some of the parents do not respond when called to sign the Support Needs and Assessment (SNA) forms. This can be because of the obvious reason that some of these parents are not learned and, therefore, they do not see their role in the education of a child. It is advised, therefore, that all stakeholders should know their role in the inclusive education for learners with disabilities.

All the respondents were very vocal about the work of ILST, as they are the feeding vessels of DBSTs, stating that their level of support to the learners as well as the educators is poor. They indicated that the ILST are also supposed to provide support to the educators on any work-related problem and makes follow-ups to check if the problems had been resolved, but that is not done. The DoE (South Africa, 2001:42) emphasizes that the key function of the ILST is to support all learners and educators by identifying support needed and design support programmes to address the challenges experienced by the educators as well as the learners. The documents that were analyzed in accordance with the support provided by the school and the ILST are as follows:

- Intervention record forms;
- Support needs assessment forms;
- Reports of the Full-service school about the Inclusive Education process;
- Year plan and reports of the ILST;
- Year plan and reports of the inter-sectoral collaboration committee;
- Reports of the visits by the Provincial support services.

In view of the above, most sites that were visited did not produce any documents when they were asked and, in the case of those that did, the documents were not enough to convince the researcher of their use. Most were not even familiar with the one common document which is the White Paper 6, claiming that these documents

are in the principals' offices. It is evident, therefore, that policies are not advocated and disseminated accordingly. This study, therefore, emphasizes that all the government circulars and policies should be printed, disseminated, read and be accessible to everyone in the sector to familiarize themselves with the contents. The researcher's recommendation to these problems is that:

To successfully facilitate an inclusive environment, educators should:

- Take time to carefully plan lessons, while considering the needs of all students involved in the classroom.
- Understand the needs of individual students by researching any specific disabilities they may have, and establish relationships with parents, associated professionals, and the learners themselves.
- Be flexible and willing to innovate teaching methods in response to learner's needs.
- Learn and understand a variety of teaching strategies to make curriculum adaptations easier.
- Work with any in-class assistants to implement new learning activities, and value their input and feedback on their programming.
- Foster respect and understanding of disabilities in the classroom.

Fostering respect and understanding of disabilities in the classroom can be accomplished by:

- Creating opportunities for students to work in smaller groups;
- Selecting activities where all students can experience success, or help each-other to achieve success;
- Modelling inclusion;
- Giving all students a sense of personal value and employ strategies that encourage them to value their peers.

a) Parents

To encourage an inclusive environment, parents of children in mainstream schools should:

- Develop relationships with the educators;

- Develop relationships with other parents in the class their children are enrolled and the wider community at large for collaboration;
- Become actively involved in their child's education and spend time with on their roles and relationships within their classrooms.

b) The Environment

Children struggling with learning often compare themselves with others and, so, may be easily offended and discouraged. Therefore, it is especially important that there be a calm, blame-free environment. To that end:

- Provide a work area that is quiet and free from distractions. This may require a cardboard carrel, use of ear plugs, scheduling work that requires concentration when other children are napping, being supervised in another room, or attending activities outside the home. Obviously, no sounds from a radio or television should hum in the background.
- Organize the home. The child should be able to find what he needs without asking or hunting. He should be trained to put things back, obviously, to maintain order. If it's not possible to keep the entire house in order, at least keep his work area uncluttered, and arranged for easy access to most frequently used items. This type of organization allows children to work more independently, reduces distractions (searching for an item can lead to all sorts of misadventures), and reduces disruptive shouting, whether it's a frustrated, "What are you doing now? Or, simply, "Who knows where the scissors are?"
- Patiently allow the child as much time as needed to process whatever you are teaching him. You may need to slow down if you are used to speaking quickly. Relax while you wait for him to answer. Don't let him feel rushed. Imagine the mind as a computer — some take more time to bring up a file than others. Some brains require more time to make all the connections to understand what was asked and to then pull together all that's required to give an answer. One of the greatest sources of discouragement comes from finally getting the answer, only to discover the teacher move on to the next

question. The great advantage of home-schooling is being given the time to be the one to respond correctly.

- Explain rules and consequences clearly. Then carry out discipline calmly and consistently. Don't engage in heated debates. This matter-of-fact manner keeps a neutral environment, which is calming even when he is protesting. If you don't allow yourself to be drawn into his frustrations, and reinforce the boundaries established, you will be providing him with a sense of security.

5.3 RECOMMENDATIONS, LIMITATIONS AND FURTHER STUDY

Prior to recommendations, let me highlight some of the limitations. There were some few limitations to the study that worth mentioning; ranging from participants' dropping out during the process even after committing themselves by signing the consent forms to the number of schools' reluctance to release educators for interview sessions. Those interviewed took the opportunity as a platform to table complaints. Another was that of drawing conclusion based on the only three sites visited. To draw conclusion based on a limited scale is not a good idea and this might be problematic when it comes to generalizing the findings as there can be schools that have better services to offer. Generalizing, however, is not the purpose of the study; therefore, future research is advised based on the reasons stated below.

The research is just a case study of three schools conducted in a single education district and the lack of recent studies conducted in this area of study. As such, the researcher recommends further research be conducted that:

- Employs survey recruitment strategies that engage a greater number of sites;
- Explores the benefits parents receive from their child's involvement in an inclusive setting through focus group discussions;
- Obtains ethical permission so that direct observation and interviews with learners can be conducted in addition to the research data collected on educators;
- All stakeholders mentioned as part of Bronfenbrenners' bio-ecological system to be part of the survey to balance the information collected through this research programme;

- Create an ongoing case study of educators and their learners for a longer period (i.e. Observe inclusive educators for a span of five years and follow-up initial interviews with parents/students at certain times);
- Examine inclusive education as practised by numerous educators in some regions, in various provinces, working with a different assortment of special needs learners in their establishments.

Secondly, because there was not enough time granted to observe the proceedings, these might not be a true reflection of the entire situation in other classroom environments. Thirdly, although the introduction of inclusive education in schools is still on its initial stages in South Africa, no research was conducted on the teaching and learning methods to evaluate if all learners were being accommodated. The researcher therefore relied on existing research on the implementation of Inclusive Education, the guidelines used and principles of each mainstream classroom, and the inclusive learning programmes varied.

5.4 CONCLUSION

The aim of the study was to investigate the educators' perceptions of inclusive education for learners with physical disabilities in mainstream classrooms. This chapter has, therefore, brought the research to its conclusion, in which the questions formulated in Chapter One have been investigated and the aims met.

By summarizing the main findings and the data collected, the researcher could outline the perceptions using four sub-research questions to establish the needs for the implementation of inclusive education and to accommodate these learners in mainstream classrooms. The data analysis indicated that not only the educators in these classroom environments are playing a role; classroom organization; resources; strategies and teaching methods and the well-trained personnel, as well as the other stakeholders outside the school are assets to learners who experience barriers to learning.

That means the educators do not exist in isolation in the teaching and learning of special needs learners. Parents/caregivers, Institutional Learning Support Teams (ILST), District Based Support Teams (DBST), Non-Governmental Organizations

(NGOs), Doctors and Nurses, Social workers, Police, Traditional healers, Policy makers and Curriculum planners are all needed to accommodate the diverse learning needs of all learners in schools.

Many studies have indicated that support from the government can have a positive impact on the educators' views of inclusive education, as well as the ability to affect the successful implementation of inclusive education (Charema, 2007). The information contained in the present study suggests that increased support may increase positivity towards inclusive education. This study is also useful for those who have an interest in inclusive education policies and legislation. In summary, this piece of research could have an impact on the field of educational research in the Eastern Cape Province, and may, subsequently, be a step towards the enrichment of knowledge of inclusive education, not only for South Africa but also for other developing countries. Pillay and Di Terlizzi (2009: 491) assert that the "current South African socio-economic environment does not necessarily allow for its inclusive education successful implementation, as further access to resources and facilities need to be made available."

As Johnson and Green (2007) point out, an inclusive approach to education both implies and is facilitated by a different understanding of education support. Formal support structures at district and school levels can facilitate collaboration and the sharing of expertise to provide adequate support within mainstream classrooms. Based on these research results, the question remains: to what extent does formal support focus on providing educators with the necessary knowledge and skills to provide effective learning support to learners or to what extent is it still focused on identification and referral to other education contexts? The authors recommend that more funding is needed for Learner Teacher Support Materials (LTSM) to provide educators and learners with the different ways of approaching learning tasks on different levels. In addition, "multidisciplinary therapy teams" need to be operating regularly in schools or alternatively "mobile therapist clusters" that can assess and do intervention and support learners and educators in classrooms.

The future role of the school-based occupational therapist in inclusive education, for example, is not only to work on a one-on-one basis with learners with disabilities but also to support educators and empower them to participate in advocacy and the

development of policies, to participate in multidisciplinary team collaboration and to support parents and community development (Sunday, 2012:5).

The issue of placing learners to Special schools always came up as educators still need to place learners with barriers to learning in these schools. They only need advice from these schools about how they can provide support to these learners. Educators believe the government was not putting in enough effort in assisting their schools as compared to special schools; it is underestimating the challenges that special schools are facing in providing support to make their learners to feel that they are in mainstream schools. Loreman et al. (2010:11) recognize that extra funding is needed; however, it is not necessarily the critical issue in the success of inclusion but educators' attitudes are. With proper knowledge, positive attitudes and strong support, inclusive education can be made possible and all learners, irrespective of disability, can enjoy education in their regions with their peers and friends and their disabilities can be celebrated, instead of being stigmatized. Policies can be advocated and training be done accordingly to align teaching strategies with the current policies. Educator perceptions need to change as well and the assistive devices should be improved according to times and learners' needs. More research is advised to view the broader perspectives of educators in different Provinces of South Africa. The findings were that educators are aware of the term inclusive education but the issue was its implementation due to a number of limitations including lack of professional knowledge and skills, support needed from DBSTs, lack of proper facilities and infrastructural issues. The recommendations are therefore that as much as learners need to be included in mainstream classrooms; proper knowledge and support should be given to all the role players and that proper facilities should be supplied to all schools.

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Appendix A: Permission to University's Research Committee

7 Weaver Terrace

Southernwood

East London

5201

TO WHOM IT MAY CONCERN

PERMISSION TO THE UNIVERSITY'S FACULTY RESEARCH COMMITTEE (UFREC) TO CONDUCT A STUDY.

Attention:

Dear Sir/Madam

I, Nondumiso Yolanda Mpu, am a registered PhD student at the University of Fort Hare (East London Campus). My specialization is in the field of Education at the mentioned Institution. To satisfy the requirements of the degree, I am expected to complete a research thesis. I therefore kindly seek permission to conduct research in schools for a Case study and the main research is in the Mthatha education district, Eastern Cape, therefore I seek permission from the Faculty Research Committee to grant me Clearance letter to proceed with my research.

The title of my thesis is: **EDUCATORS' PERCEPTIONS OF INCLUSIVE EDUCATION FOR LEARNERS WITH PHYSICAL DISABILITIES IN MAINSTREAM CLASSROOMS: A CASE OF THREE SCHOOLS IN MTHATHA EDUCATION DISTRICT.**

The study aims to assist in assisting learners who are physically disabled by implementing strategies that are current and improving learner performance by educating them alongside their peers and in their areas to bridge the gap of exclusion into mainstream classrooms.

Data collection is through a Case Study in three schools designated by the Researcher in Mthatha education district. The study aims at taking 2 days in a week

on Tuesdays and Thursdays for 30-60 minutes during notional hours for 2-3 months. Participants will be furnished with the necessary documentation that is sought to be used during the project before the proceedings so that no one's rights are violated in any manner. Participation will always be voluntary and this means that participants may withdraw from the study at anytime if they wish to do so and anonymity would be adhered to without incurring any penalties. For further information on this research project, please feel free to contact my Supervisor Prof. E.O. Adu from the University of Fort Hare and myself as the Principal Researcher.

Thanking you in advance

Yours faithfully

Mpu Yolanda

e-mail: mpuyolanda@gmail.com

Contact: 076 988 5310

Appendix B: Ethical Clearance Certificate



University of Fort Hare
Together in Excellence

ETHICAL CLEARANCE CERTIFICATE **REC-270710-028-RA Level 01**

Certificate Reference Number: ADU121SMPU01

Project title: **Educators' perceptions of inclusive education for learners with physical disabilities in Mainstream classrooms: A case of the three schools in Mthatha Education District.**

Nature of Project: PhD in Education

Principal Researcher: Nondumiso Yolanda Mpu

Supervisor: Prof E.O Adu

Co-supervisor: N/A

On behalf of the University of Fort Hare's Research Ethics Committee (UREC) I hereby give ethical approval in respect of the undertakings contained in the above-mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that the UREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

The Principal Researcher must report to the UREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

Special conditions: Research that includes children as per the official regulations of the act must take the following into account:

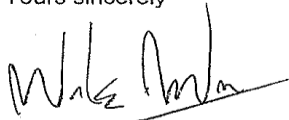
Note: The UREC is aware of the provisions of s71 of the National Health Act 61 of 2003 and that matters pertaining to obtaining the Minister's consent are under discussion and remain unresolved. Nonetheless, as was decided at a meeting between the National Health Research Ethics Committee and stakeholders on 6 June 2013, university ethics committees may continue to grant ethical clearance for research involving children without the Minister's consent, provided that the prescripts of the previous rules have been met. This certificate is granted in terms of this agreement.

The UREC retains the right to

- Withdraw or amend this Ethical Clearance Certificate if
 - Any unethical principal or practices are revealed or suspected
 - Relevant information has been withheld or misrepresented
 - Regulatory changes of whatsoever nature so require
 - The conditions contained in the Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project.
- In addition to the need to comply with the highest level of ethical conduct principle investigators must report back annually as an evaluation and monitoring mechanism on the progress being made by the research. Such a report must be sent to the Dean of Research's office

The Ethics Committee wished you well in your research.

Yours sincerely



Professor Wilson Akpan
Acting Dean of Research

23 November 2016

Appendix C: Permission letter to the Department of Education

7 Weaver Terrace

Southernwood

East London

5201

Attention:

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PERMISSION TO THE PROVINCIAL DEPARTMENT OF EDUCATION TO CONDUCT A STUDY.

Dear Sir/Madam

I, Nondumiso Yolanda Mpu, am a registered PhD student at the University of Fort Hare (East London Campus). My specialization is in the field of Education at the mentioned Institution. To satisfy the requirements of the degree, I am expected to complete a research thesis. I therefore kindly seek permission to conduct research in schools for a Case study and the main research is in the Mthatha education district, Eastern Cape. It is would be in line with the conditions of the University's Research Committee (UREC) to seek the Department of Education governing these schools to grant me Clearance letter/permission in writing to proceed with my research.

The title of my thesis is: **EDUCATORS' PERCEPTIONS OF INCLUSIVE EDUCATION FOR LEARNERS WITH PHYSICAL DISABILITIES IN MAINSTREAM CLASSROOMS: A CASE OF THREE SCHOOLS IN MTHATHA EDUCATION DISTRICT.**

The study aims to assist in assisting learners who are physically disabled by implementing strategies that are current and improving learner performance by educating them alongside their peers and in their areas to bridge the gap of exclusion into mainstream classrooms.

Data collection was a Case Study in three schools designated by the Researcher in schools in the Eastern Cape. The study will take 2 days in a week on Tuesdays and Thursdays for 30-60 minutes during notional hours. Participants were furnished with

the necessary documentation that will be used during the project before the proceedings so that no one's rights are violated in any manner. Participation will always be voluntary and this means that participants may withdraw from the study at anytime if they wish to do so and anonymity will be adhered to without incurring any penalties. For further information on this research project, please feel free to contact my Supervisor Prof. E.O. Adu from the University of Fort Hare and myself as the Principal Researcher.

Relevant official documentation is herewith attached from the University of Hare Faculty Research Committee for your attention, your rights are very important to us and your participants and the names of the schools, principals and participants will not be revealed. The findings will be made available on request should you be interested after the study.

Thanking you in advance

Yours faithfully

Mpu Yolanda

E-mail: mpuyolanda@gmail.com /076 988 5310

Appendix D: Permission from the Department of Education



STRATEGIC PLANNING POLICY RESEARCH AND SECRETARIAT SERVICES

Steve Vukile Tshwete Complex • Zone 6 • Zwelitsha • Eastern Cape
Private Bag X0032 • Bhisho • 5605 • REPUBLIC OF SOUTH AFRICA
Tel: +27 (0)40 608 4773/4035/4537 • Fax: +27 (0)40 608 4574 • Website: www.ecdoe.gov.za

Enquiries: NY Kanjana

Email: nykanjana@live.co.za

Date: 26 January 2017

Miss Nondumiso Yolanda Mpu

7 Weaver Terrace

Greenwood Gardens

Southernwood

East London

5201

Dear Miss Mpu

PERMISSION TO UNDERTAKE A DOCTORAL THESIS: EDUCATORS' PERCEPTIONS ON INCLUSIVE EDUCATION FOR LEARNERS WITH PHYSICAL DISABILITIES IN MAINSTREAM CLASSROOMS – A CASE OF THREE SCHOOLS IN MTHATHA EDUCATION DISTRICT

1. Thank you for your application to conduct research.
2. Your application to conduct the abovementioned research in two selected Secondary Schools under the jurisdiction of Mthatha District of the Eastern Cape Department of Education (ECDoE) is hereby approved based on the following conditions:
 - a. there will be no financial implications for the Department;
 - b. institutions and respondents must not be identifiable in any way from the results of the investigation;
 - c. you present a copy of the written approval letter of the Eastern Cape Department of Education (ECDoE) to the Cluster and District Directors before any research is undertaken at any institutions within that particular district;
 - d. you will make all the arrangements concerning your research;
 - e. the research may not be conducted during official contact time;



- f. should you wish to extend the period of research after approval has been granted, an application to do this must be directed to Chief Director: Strategic Management Monitoring and Evaluation;
 - g. your research will be limited to those institutions for which approval has been granted, should changes be effected written permission must be obtained from the Chief Director: Strategic Management Monitoring and Evaluation;
 - h. you present the Department with a copy of your final paper/report/dissertation/thesis free of charge in hard copy and electronic format. This must be accompanied by a separate synopsis (maximum 2 – 3 typed pages) of the most important findings and recommendations if it does not already contain a synopsis.
 - i. you present the findings to the Research Committee and/or Senior Management of the Department when and/or where necessary.
 - j. you are requested to provide the above to the Chief Director: Strategic Management Monitoring and Evaluation upon completion of your research.
 - k. you comply with all the requirements as completed in the Terms and Conditions to conduct Research in the ECDoE document duly completed by you.
 - l. you comply with your ethical undertaking (commitment form).
 - m. You submit on a six monthly basis, from the date of permission of the research, concise reports to the Chief Director: Strategic Management Monitoring and Evaluation.
 - n. This permission excludes the private schools. You will have to deal directly with the Private School for permission as the Department does not have jurisdiction to give you permission to the private schools.**
3. The Department reserves a right to withdraw the permission should there not be compliance to the approval letter and contract signed in the Terms and Conditions to conduct Research in the ECDoE.
 4. The Department will publish the completed Research on its website.
 5. The Department wishes you well in your undertaking. You can contact the Director, Ms. NY Kanjana on the numbers indicated in the letterhead or email nykanjana@live.co.za should you need any assistance.



NY KANJANA
DIRECTOR: STRATEGIC PLANNING POLICY RESEARCH & SECRETARIAT SERVICES
FOR SUPERINTENDENT-GENERAL: EDUCATION

Appendix E: Permission to the school Principals

7 Weaver Terrace

Southernwood

East London

5201

PERMISSION TO THE SCHOOL PRINCIPALS TO CONDUCT A STUDY.

Attention:

Dear Sir/Madam

I, Nondumiso Yolanda Mpu, am a registered PhD student at the University of Fort Hare (East London Campus). My specialization is in the field of Education at the mentioned Institution. To satisfy the requirements of the degree, I am expected to complete a research thesis. I therefore kindly seek permission to conduct research in schools for a Case study and the research is in the Mthatha education district, Eastern Cape. This permission is in line with the requirements of the University's Research Committee to seek permission from the School Principals to grant me Clearance letter to proceed with my research.

The title of my thesis is: **EDUCATORS' PERCEPTIONS OF INCLUSIVE EDUCATION FOR LEARNERS WITH PHYSICAL DISABILITIES IN MAINSTREAM CLASSROOMS: A CASE OF THREE SCHOOLS IN MTHATHA EDUCATION DISTRICT.**

The study aims to assist in assisting learners who are physically disabled by implementing strategies that are current and improving learner performance by educating them alongside their peers and in their areas and hopefully to bridge the gap of exclusion and stigmatisation by educating them into mainstream classrooms.

Data collection will be through a Case Study in three schools designated by the Researcher in Mthatha education district. The study will take 2 days in a week on Tuesdays and Thursdays for 30-60 minutes during notional hours. Participants will be furnished with the necessary documentation that will be used during the project before the proceedings so that no one's rights are violated in any manner.

Participation will always be voluntary and this means that participants may withdraw from the study at anytime if they wish to do so and anonymity will be adhered to without incurring any penalties. For further information on this research project, please feel free to contact my Supervisor Prof. E.O. Adu from the University of Fort Hare and myself as the Principal Researcher.

Relevant official documentation is herewith attached from the University of Hare Faculty Research Committee for your attention, your rights are very important to us and your participants and the names of the school and participants will not be revealed. The findings will be made available on request should you be interested after the study.

Thanking you in advance

Yours faithfully

Mpu Nondumiso Yolanda

E-mail: mpuyolanda@gmail.com / 076 988 5310

Appendix F: Interview Questions

Interview schedule and semi-structured interviews guiding questions

What are this school's (and its educators') perceptions and understandings around diversity and inclusive education?

1. Describe the school you currently work at – structure of grades, number of learners, demographics, the number of staff members, number of learners, interesting facts and the curriculum offered?
2. How many from your class are physically challenged and kindly specify what is your participation in this regard?
3. Some Educators say that their classrooms are much more diverse than in the beginning of their careers. What is your take on that?
4. What type of disabilities that are transferred to other centres and how do you go about identifying such learners?
5. How do you go about working with diversity in your daily functioning?
6. What have you experienced as difficulties? What helped you in the process?
7. What did you learn?
8. What is your understanding of “inclusive education”? Have you had any training in this area?
9. What are your personal thoughts and feelings about inclusive education?
10. Describe what you believe to be your perceptions and approaches to inclusive education?
11. What elements of the support structures for an environment where inclusive ideals can flourish?
12. Do you give support to Special Needs learners and what level of support do you give (Specify)?
13. What do you think is required to make a school more inclusive or more diverse and what tools/equipments does your school use to accommodate all learners?
14. From your experience, what do educators require when working in a school that is in the process of becoming more inclusive?

15. What are your schools' values, procedures and overall views that allow it to be as it is?
16. Are there any specific practices, policies or procedures that are in place in your school that help to create an environment where disability is celebrated?
17. Do parents and wider community play any role in assisting the school/educators who are accommodating learners with special needs?
18. What support do you have and how much of that do you get from the relevant stakeholders?
19. If you do encounter problems, who do you report to and are the problems given the response they deserve?
20. If you were asked to create an inclusive environment, what would you do?

N.B. [This schedule for the semi-structured interview provides a guide for a line of questioning. Yet, the interview is driven by the responses given by the participant. By using the responses given to initiate and continue conversation, the above areas of interest are incorporated in a sensitive and appropriate manner.]

Scheduled Time: 30-60 minutes

SCHOOL A		SCHOOL B		SCHOOL C	
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Appendix G: Language Editing Certificate

EDITING/PROOFREADING CERTIFICATE

To whom it may concern

This serves to certify that I, Jabulani Mkhize, have proofread and/or edited Ms. Y. Mpu's doctoral thesis to ensure that the language, grammar, punctuation and spelling are academically sound and appropriate, by rectifying errors, wherever these have been identified, and rephrasing sentences that would possibly make one lose sight of the flow of the argument.

Thesis Title: **"Educators' perceptions of inclusive education for learners with physical disabilities in mainstream classrooms"**

Editors Name: Jabulani Mkhize

Signature : 

Date : 16 July 2017

Contact Details: jmkhize@ufh.ac.za or gorky511@gmail.com

Qualifications: PhD (English)