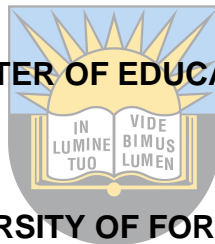




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GRADE ONE TEACHERS' APPROACHES IN SUPPORTING LEARNERS WITH  
AUTISM SPECTRUM DISORDER IN SELECTED SCHOOLS IN THE BUFFALO CITY  
EDUCATION DISTRICT.

A dissertation submitted in fulfilment of the requirements for the degree of:



**MASTER OF EDUCATION**

**UNIVERSITY OF FORT HARE**

University of Fort Hare  
*Together in Excellence*

**Nomonde Mlonyeni: (201100338)**

**Supervisor: Dr. S. Makeleni**

**2025**

## DECLARATION

I, Nomonde Mlonyeni, student number (201100338) solemnly declare that this dissertation titled “**Grade One Teachers Approaches in Supporting Learners with Autism Spectrum Disorders**” is my original work. All sources used or quoted in the study have been indicated and acknowledged by way of reference.

Nomonde Mlonyeni

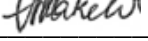
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## ABSTRACT

Autism spectrum disorders (ASD) are neuro-developmental in origin and characterised by impairments in communication and reciprocal social interactions. Although children with autism spectrum disorder (ASD) are increasingly being placed within mainstream classes, there appears to be limited research on teacher's approaches in supporting learners with ASD in their classrooms. Hence, this study explored teachers' approaches in supporting learners with Autism Spectrum Disorders. The study was designed as case study research in which a qualitative research approach was employed. The study adopted an interpretivist paradigm and 18 educators in the Buffalo City Metro who have experience in teaching children with ASD were interviewed. Semi-structured interviews and semi-structured interview schedule was used to elicit information from the six research sites. The data collected were analysed using a thematic approach where themes and sub-themes emerged from the research questions after transcribing, sorting and categorizing them. The findings of the study revealed that teachers faced several challenges including:- a lack of training, resources, knowledge of ASD and a curriculum for learners with ASD were the overarching themes that resulted in educators feeling a sense of inadequacy to teach these learners. The study will cover the challenges faced by teachers in teaching learners with ASD. Therefore, the study recommends that more resources are needed to enhance the education of learners with ASD. The study also revealed that more training and support are needed for effective teaching of learners with ASD. Furthermore, the DoE must employ more knowledgeable people to deal with special needs, specifically autism, to offer effective support. The study concluded that one of the fundamental issues to consider is the fact that there is a need for all teacher training centres and universities to add inclusive education to their curricular to avoid mainstream schools employing teachers who do not understand autism.

**Keywords:** approaches, mainstream, support, autism spectrum disorder.

## DEDICATION

This research is dedicated to God the Father, Son and the Holy Spirit.



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My sincere gratitude goes to my supervisor Dr. S Makeleni for his patience, perseverance, overseeing my research and offering useful and constructive criticism at various stages. You contributed immensely to the project's success. I couldn't have done it without you. You are truly an inspiration. "No labour of love will go unrewarded".

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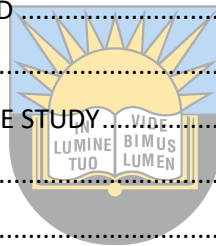
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My appreciation goes to my principal and all other principals of the schools used for field work in this research for allowing me to gain entry to your schools. I am also deeply grateful to the teachers who willingly gave me their precious time and freely shared their experiences with me. Their participation enabled me to complete a very meaningful study.

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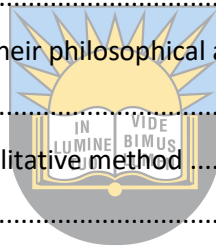
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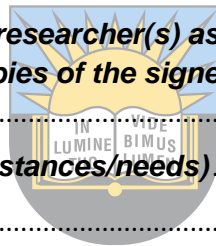
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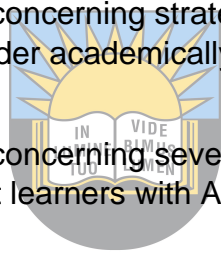
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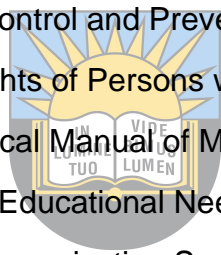
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## KEY ABBREVIATIONS AND ACRONYMS USED

ABA:	Applied Behaviour Analysis
ASD:	Autism Spectrum Disorder
ADHD:	Attention Deficit Hyperactivity Disorder
APA:	American Psychiatric Association
CDC:	Centres for Disease Control and Prevention
CRPD:	Convention on the Rights of Persons with Disabilities
DSM-V:	Diagnostic and Statistical Manual of Mental Disorders-5 <sup>th</sup> Edition
LSEN:	Learners with Special Educational Needs
PECS:	Picture Exchange Communication System
SLT:	Social Learning Theory
EIBI:	early Intensive Behavioural Interventions
TEACCH:	Treatment and Education of Autistic and Related Communication Disorders in Childhood



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## CHAPTER ONE

### INTRODUCTION AND BACKGROUND TO THE STUDY

#### 1. Introduction

The Bill of Rights serves as the cornerstone of the Republic of South Africa's Constitution. The rights within the Bill of Rights are based on democratic values, including: - human dignity, equality, promoting human rights and freedoms, non-racialism and non-sexism, and the Constitution and the rule of law's supremacy (Republic of South Africa, 1996). Teachers must align their teaching to the democratic values enshrined in the Constitution. Subba (2014) states that the pivotal concept when teaching democracy is based on the belief that every person is significant and has dignity and that education should aim to develop everyone's personality to the full. This statement implies that all learners despite their uniqueness should be treated equally. According to Education White Paper 6, all children can learn, and all children need support (Department of Education, 2001). Education White Paper 6 considers inclusive education and training as necessary to maximise the participation of all learners, and to develop their individual strengths to enable them to participate critically in the process of learning (Department of Education, 2001).

This study explored Grade One teachers' approaches in supporting learners with autism spectrum disorders in selected schools in the Buffalo City Education District. Cervantes and Konst, (2014). ASD is neuro-developmental in origin and characterised by impairments in communication and reciprocal social interactions (Akhter, et al., 2018; American Psychiatric Association, 2013; Lord, et al, 2018). This phenomenon has not been explicitly a public issue in South Africa. Grinker et al., (2017) assert that there is no doubt that there is a lack of knowledge about the Autism in the society, health sector

and the educational system, which implies that there may be challenges in supporting children with ASD, particularly in education.

## **1.1. BACKGROUND TO RESEARCH**

Autism is one of the most severe childhood disorders with devastating long-term effects on a person's functioning (Autism Speaks, 2017). However, if support is provided at an early age the long-term effects may not be as devastating as claimed. Hence, there is a need to investigate Grade One teachers' approaches to academically support learners with ASD, which is a global phenomenon.

### **Global perspective of Autism Spectrum Disorder**

The prevalence of ASD is increasing globally with Zeidan et al., (2019) reporting a 1% prevalence rate. In the United States of America (USA), Garcia (2019), highlighted that 1 in 68 children is diagnosed with ASD. Notably, these statistics are based on diagnosed children and there may be undiagnosed children who are not included in the statistics. Despite their diagnosis, these children are required to attend school and receive education. According to the United States (U.S) Department of Education data from the 2018-19 school year, more than 620,000 children aged 3 to 21 classified as having ASD, attend school (Garcia, 2019).

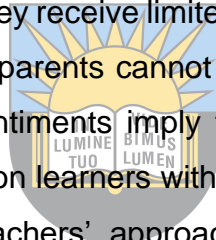
Zeidan et al., (2019) state that during the early years, parents and educational personnel collaborated to ensure that students achieved learning milestones. Learning is enhanced by making content more concrete by utilising visual or hands-on materials (Zeidan et al. 2019). In the United Kingdom, teachers adapt materials, and the class structure keep children interested and enable their understanding of the classroom routine. The literature indicates that approximately 52 million individuals have been reported to be on the spectrum globally (Baxter et al., 2015). However, there appears to be a dearth of research focused on teachers' academic support for learners with ASD in developed and developing countries. The focus thus far has been predominantly on parents with children diagnosed with ASD.

The first survey concerning ASD was initiated in England in the 1960s (Onaolapo & Onaolapo, 2017). Meaning that England had people diagnosed with ASD as early as the 1960s. Unfortunately, there is a lack of literature on academic support provided for learners diagnosed with ASD particularly, in the early grades. Evidence from Australia

and other countries indicates that there are increasing numbers of students with ASD enrolling in higher education studies (Fleischer, 2012; Van Bergeijk, Cavanagh, 2012 & Maenner et al., 2021). However, academic outcomes are often poor (Knott & Taylor, 2014; McLeod & Harrison, 2013; Pillay & Bhat, 2012)

### **African perspective**

In Egypt, caring for a child with ASD can be daunting for mothers, because the services available for children with disabilities in general, and ASD specifically, are limited. Children with ASD and their families face the likelihood of poor health, social care, mental health services, rehabilitation, lack of special education and equal access to opportunities (Gobrial, 2018; Omar, 2014). The majority of individuals with ASD in Egypt remain at home uneducated (Omar, 2014). They receive limited education because they either drop out of mainstream schools or their parents cannot afford scarce and expensive private schools (Gobrial, 2018). These sentiments imply that educating learners with ASD is problematic globally. The literature on learners with ASD focuses on medical support for children with ASD rather than teachers' approaches to support learners with ASD academically.



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### **South African perspective**

Murungi (2015) posits that the prevalence of ASD is also increasing in South Africa. However, the statistics upon which this assertion is based could have been measured against children already diagnosed while others with ASD have yet to be diagnosed. Despite the reported increase, literature reveals that there are few specialist' public schools for children with ASD and those that do exist are mainly located in urban areas (Stidham, 2015). These schools are overstretched and generally inaccessible to the majority of children who need them, and an estimated 135 000 children with ASD cannot access the specialised education that they require (Van Biljon, Kritzinger & Geertsema, 2015). **The reported situation implies that several children with ASD are placed in mainstream schools Stidham, (2015).** This could pose a challenge to teachers in mainstream schools who are not trained to support learners with ASD. Similarly, teachers employed in specialised schools educating learners with unique needs may also

encounter challenges with ASD, as there seems to be limited knowledge on how to teach learners with ASD.

## **1.2 PROBLEM STATEMENT**

Teachers are primary actors in shaping the learning environment and motivating students to learn which implies that teachers must perform their role effectively for learning to occur. In a country such as South Africa where the constitution promotes human rights and equality, teaching must align with the principles and values espoused in the constitution (Engelbrecht, Nel, Tlale, 2016). Notably, in the field of teaching, there are learners with unique needs who require teachers' support to achieve academically. The literature reveals that in African countries, diagnosis of ASD is often only made when children reach school going age if they are diagnosed at all (Chambers et al., 2017).

Learners with ASD are accommodated in special and mainstream schools. It is reported that there are only nine dedicated schools in South Africa for children with ASD, and an estimated 135 000 children with ASD do not receive the specialised education they require (Stidham, 2015). The literature reveals that including learners with ASD in mainstream schools is beneficial for learners and children with ASD and their peers in mainstream classrooms (Autism South Africa, 2015 & Chong, 2016). It should be noted that Grade One is an entrance grade in formal schooling which implies that this grade has long term effects on children's learning implication for poor management of ASD. Hence, this study explored approaches used by Grade One teachers in supporting learners with ASD. Early intervention increases the possibility of facilitating cognitive, physical, and psychosocial development in individuals with ASD.

## **1.3 RESEARCH QUESTIONS**

### **1.3.1 MAIN RESEARCH QUESTION**

What approaches do Grade One teachers employ to academically support learners with autism spectrum disorder in selected schools in the Buffalo City Education District?

### 1.3.2 SUB RESEARCH QUESTIONS

- How do teachers understand learners with autism spectrum disorder?
- What strategies do teachers use to support learners with autism spectrum disorder academically?
- What challenges do teachers experience in their efforts to support learners with autism spectrum disorder?
- What are the implications of autism spectrum disorder in inclusive education?

### 1.4 OBJECTIVES OF THE STUDY

- To examine how teachers understand learners with autism spectrum disorders.
- To investigate the strategies teachers, utilise to support learners with autism spectrum disorder academically.
- To explore the challenges teachers, experience in their efforts to support learners with autism spectrum disorder.
- To ascertain the implications of autism spectrum disorder in inclusive education.



### 1.5 PURPOSE OF THE STUDY

This study aimed to investigate Grade One teachers' approaches in supporting learners with autism spectrum disorder academically in selected schools in the Buffalo City Education District.

### 1.6 SIGNIFICANCE OF THE STUDY

This study supports the study conducted by Murungi (2015), which revealed that Africa needs to engage in studies on autism so that its people will understand and become aware of the condition because not much is currently known about autism in Africa. The value of the study might be of significance to policymakers, educational planners and the government in improving the current education system in South Africa. The study might also contribute to the available literature on autism in South Africa and generate suggestions and recommendations or teaching learners diagnosed with autism disorder. This research might encourage teachers to adapt an improved teaching and learning strategies that will accommodate learners with autism in South Africa's mainstream school. The study might also create sense of belonging to all learners with ASD and

assure them that they are not misfit to the society. Parents having children with ASD are assured that learning disability is not a barrier to acquiring quality education.

## 1.7 RATIONALE FOR THE STUDY

I have been working as an educator for more than 15 years. I am teaching in the foundation phase. In my experience as an educator, I have learned about inclusive education. However, the medical model was the only way I assess children with learning barriers. In recent years, the education sector has attempted to accommodate diversity instead of labelling learners as disabled. Diversity not only refers to identifiable “disabilities” but acknowledges all learners’ uniqueness.

As a teacher, I have observed new unique features emerging which were not common 15 years ago and were not widely known to the public. Conditions such as ASD and attention deficit hyperactivity disorder (ADHD) which might have been perceived as disruptive behaviour in the past have caught my attention. This led me to investigate how teachers’ approach supporting learners with ASD. The study revealed that an estimated 135 000 children with ASD do not receive the specialised education they require (Stidham, 2015). **This implies that children with ASD do not receive education that is individually developed to address a specific child’s needs. This discovery motivated me to pursue this research.**

## 1.8 DEFINITION OF KEY TERMS

This paper refers to specific terms and concepts which must be defined to ensure clarity. These terms are defined below.

- **Autism spectrum disorders (ASD):** is a neurodevelopmental disorder characterised by a various language impairment, such as nonverbal speech deficiency, language delays, echolalia, and poor speech comprehension (Autism Speaks, 2017).
- **Teachers:** “Means any person who teaches, educates or trains other persons or who provides professional educational services, including professional therapy and education psychological services, at any public school, further education and

training institution, departmental office or adult basic education centre” (Employment of Educators Act No.76 of 1998).

- **Learners with special education needs (LSEN):** for the purpose of this study, LSEN refers to learners who, for whatever reason, require additional help and support in their learning (Western Cape Education Department, 2008:2).
- **Echolalia:** refers to the vocalised repetition of words, phrases, intonation, or sounds of the speech of others.

## 1.9 CHAPTER DEMARCATION

**Chapter One:** Introduction and background to the study. This chapter explored international and national literature on teachers’ approaches in supporting learners with ASD. The introduction, background, problem statement, research questions, objectives, significance and scope were discussed.

**Chapter Two:** Theoretical framework and literature review. This chapter explains the theoretical framework that underpins this study, namely social learning theory. The researcher reviews existing literatures concerning the challenges teachers encounter in the classroom in teaching learners with ASD.

**Chapter Three:** Research methodology. This section describes the methods and procedures that were used to collect data. The researcher describes the research paradigm, approach, design, population and sample and the sampling techniques employed, as well as the data collection methods and data analysis procedures before discussing the ethical considerations.

**Chapter Four:** Data analysis, findings and discussion. This chapter analyses and presents the data collected concerning Grade One teachers’ approaches in supporting learners with ASD in selected schools in the Buffalo City Education District.

**Chapter Five:** Summary, conclusion and recommendations. This chapter summarises the entire study and draws conclusions from the study’s findings.

## 1.10 SUMMARY

Chapter One, served as a general introduction aimed at orientating the reader to the research by providing an outline of the subject matter. This chapter explained the motivation that led to the problem statement and objectives and described the study's setting, background and relevance, the problem statement, the rationale for the study, and the research questions. The study's theoretical background was provided. The chapter helped the reader to gain insight into why the research was conducted and its importance. The relevant terms were defined, and the chapter arrangement was presented.



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## CHAPTER TWO

### THEORETICAL FRAMEWORK AND LITERATURE REVIEW

#### 2.1 THEORETICAL FRAMEWORK

This chapter begins with theoretical framework and literature review will follow. A theoretical framework is a viewpoint or lens that is utilized to investigate a study topic. Its theories, concepts, and guiding principles aid in the explanation and forecasting of occurrences (Kivunja, 2018; Osanloo and Grant, 2016). The theoretical framework provides an understanding that learning is the result of learner's ability to interpret knowledge or information, interpret a model that is imitated, then process it cognitively and determine actions according to the desired goals (Goss et.al., 2017).



This study is underpinned by the social learning theory (SLT), which explains the role of observational learning in the modelling and development of various social behaviours. SLT is a cognitive and behavioural theory that explains human behaviour through the interaction of personal (cognitive), environmental, and behavioural factors in a social setting (Bandura, 1969). According to Goss et.al. (2017) the behaviourist approach is deterministic because it maintains that people lack free will and that all behaviour is governed by outside forces. This implies that human behaviour is predetermined by prior forces. Bandura (1986) developed social cognitive theory in the mid-1980s to explain how individuals' development and behaviour are interlinked with their self and environmental influences play. Social cognitive theory provides a framework for understanding, predicting and changing human behaviour (Bandura, 1997).

Social cognitive theory posits that an individual's behaviour is primarily learned through their observation of others and interaction with their environment. Miller and Dollard (1941) asserted that individuals would learn behaviour through observing others if they were motivated to learn this particular behaviour. This implies that, the behaviour they want to learn must be related to a favourable outcome. It makes the case that behaviour

that can be observed, quantified and documented alone should be considered scientific, supporting empiricism. Since complicated human behaviour is broken down into its most basic components, it also promotes reductionism. Additionally, as behaviourists hold that experience is the primary source of learning and that heredity has no role in education, environmentalism is another tenet of their methodology. Equally, the cognitive approach believes that mental process can be studied scientifically. It argues that mental processes can be regarded as information processing. This means that cognitive approach believes that the mind operates in a similar way to a computer and introspection can be classed as a valid scientific method of studying cognitive process.

SLT posits that one acquires new behaviour by seeing the behaviour modelled and receiving reinforcement (Bandura, 1977). This implies that people learn through observing, modelling and mimicking others' behaviours, attitudes and emotional reactions. Additionally, learning is acquired by watching and imitating others. Bandura (1977) asserts that SLT performs a significant role especially regarding aggressive behaviour. The theory explains how aggression emerges, the provocations linked to this type of behaviour, and the consequences of patterns of aggression. A recent study conducted by Amsari et al. (2024) among primary school pupils in Indonesia using the Albert Bandura's social learning theory, focused on primary school learning process of obtaining their own knowledge through observation (Observing models) and imitation in their environment. According to these researchers, they supported that firstly, learning takes place through imitation or modelling, secondly during the process of imitation the learners determines what to imitate and the level of the imitation he/she/ wants to acquire, thirdly imitation involve the learner going through a direct experience. fourthly to enhancer the development of imitation or modelling there should an involvement of indirect reinforcement to a certain behaviour, and finally the occurrence of Internal mediation is very important during the learning process, this is because, there are certain internal operations that affect the end result when behaviour is created and when sensory input is based on learning (Kuther, 2022; Amsari, 2024). The study shows that for teachers to facilitate cognitive development, they could assist ASD learners through designing observational learning activities in their classes. In another study Van Justitie & Aprilia

(2024) studied on the role of family, and the effect of autism spectrum disorder on speech development. The study used the Mand Model which was administered on a 6years old child having ASD. The finding revealed that Mand Model was very effective as it helped to improve verbal expressive language development through family-based early intervention which was evident on the participant acquisition of new vocabularies etc. This finding of the study shows that even though children with ASD usually encounter language impairment or barrier, non-negligence and a positive role of the family could assist in improving the wellness of children with ASD syndrome.

Observational learning refers to the cognitive and behavioural change that occurs because of observing others engaged in similar actions. Bandura (1986) explained the four distinct processes of observational learning, namely, attention, retention, motor production, and motivation as mechanisms that mediate and support observational learning (Bandura, 1986).



### **Attention**

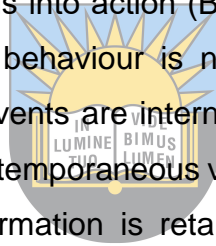
First, for the learning process to begin teachers must attend to and perceive accurately the significant features of the modelled behaviour' (Bandura, 1977:24). The degree of attention varies. Within a social group learners will not pay attention to the same behaviour to similar degrees. The features they choose to focus on depend on their experiences, situational requirements and other personal factors which then lead to different interpretations amongst the observers. With regards to the characteristics of models, those who have high status, competence and power are more effective in prompting others to behave similarly than are models of lower standing' (Bandura, 1977:88). The effect a model will have on an individual depends also on their own characteristics and the way they perceive themselves. It is argued that 'those who lack confidence and self-esteem, who are dependent, and who have been frequently rewarded for imitativeness are especially prone to adopt behaviour or successful models' (Bandura, 1977:89).

The children specifically children with ASD cannot learn if they do not focus on the task. A child's attention must be captured for them to imitate a behaviour. The initial act of vicarious acquisition that takes place when a person is paying attention to and correctly

interpreting a model or event is referred to as the attentional process. The attentional process necessitates taking in sensory stimuli and concentrating on a particular activity or event (Bandura, 1986).

### ***Retention***

At a second stage the information needs to be retained. To learn, people need to remember activities they observed and the information they received. The role of symbols at this stage is again necessary as in this way transitory modelling experiences can be maintained in permanent memory (Bandura, 1997a). Retention relies mainly upon two representational systems, imaginal and verbal. Modelled behaviours can be stored as retrievable images, or they can be coded verbally and later retrieved and mentally rehearsed. Once the information has been stored and mentally processed it is time to convert the symbolic representations into action (Bandura, 1977a). The learner's ability to conceptually process modelled behaviour is necessary for the retention process. Retention occurs when modelled events are internally encoded as useful symbols and then saved in memory. Through contemporaneous visual monitoring, cognitive rehearsal, and behavioural reproduction, information is retained effectively (Carroll & Bandura, 1986).



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### ***Motor production***

The motor production of the behaviour involves the enactment following the previous stages of attention and retention. Enactment may involve a series of trial-and-error attempts and through feedback actions and skills can be perfected. Actions are not necessarily a pure reproduction of the observed behaviour. Through cognitive process and based on everyone's level of skills and experience, the demonstration takes a unique form. Reinforcement can have a strong impact on future actions; however, people do not solely rely on this. They guide their actions by prior notions rather than relying on outcomes to tell them what they must do (Bandura, 1977). Reinforcement serves principally as an informative and motivational operation rather than as a mechanical response 'strengtheners' (Bandura, 1977). This idea of reinforcement from the environment, as mentioned earlier, on its own resembles the core of behaviourism; the difference is that in social cognitive theory reinforcement is only one aspect of the process

and that information is being processed and influenced by the environment and cognition in a reciprocal way as explained previously. Motivational factors or the anticipation of positive or negative reinforcement may augment or reduce the probability of observing responses, which is an essential aspect of imitative learning (Bandura & Walters, 1963).

According to Bandura (1986), when the learner accurately mimics and practices the modelled behaviour, the production process is said to have occurred. At this point, the symbolic representations are transformed into actions through the motor production process. Therefore, the individual's repertory must have the ability to accomplish the basic components of the work, which must subsequently be expanded. The learner might need to rely on model feedback during the process to make corrective adjustments.

### **Motivation**

Bandura asserts that, the likelihood that a person will adopt a modelled behaviour depends on how frequently that action is thought to produce the desired results. A behaviour is more likely to be adopted if it is perceived as being reinforced, whether externally (e.g., through social reinforcement, edibles), vicariously (e.g., by learning from others' success or failure), or via self-produced reinforcement (e.g., self-reward, self-punishment). Reinforcement can have a strong impact on future actions; however, people do not solely rely on this. They guide their actions by prior notions rather than relying on outcomes to tell them what they must do (Bandura, 1977). Reinforcement serves principally as an informative and motivational operation rather than as a mechanical response 'strengtheners' (Bandura, 1977).

Reinforcement can be defined as anything that follows a behaviour that increases the likelihood of that same behaviour occurring again in the future (Rumfola, 2017). This idea of reinforcement from the environment, as mentioned earlier, on its own resembles the core of behaviourism; the difference is that in social cognitive theory reinforcement is only one aspect of the process and that information is being processed and influenced by the environment and cognition in a reciprocal way as explained previously. Motivational factors or the anticipation of positive or negative reinforcement may augment or reduce

the probability of observing responses, which is an essential aspect of imitative learning (Bandura & Walters, 1963).

Lastly, in terms of motivation, children with autism display an affinity for excessive television and video viewing, which often results in significant parental stress in attempting to manage this predilection (Nally, Houlton, & Ralph, 2000). Video watching is typically associated with recreation and thus may be viewed with greater receptivity and enthusiasm. Several researchers posit that video modelling interventions by visual medium are inherently motivating and naturally reinforcing to individuals with autism (Corbett, 2003; Charlop-Christy et al., 2000; Wert & Neisworth, 2003; D'Ateno et al., 2003; Charlop-Christy & Daneshvar, 2002).

## **2.2 IMPORTANCE OF REINFORCEMENT TO LEARNERS WITH AUTISM**

Rumfola (2017) asserts that giving reinforcement to students in classroom is essential since by reinforcing learners with ASD, the teacher and learners will probably have a good relationship. In addition, through reinforcement, it can increase students' motivation to be better in learning. According to Rumfola (2017) teachers have a role as leaders which can influence and motivate students in the teaching learning process. Shahzada, Dawar and Fatima (2017) also explains that motivation is a hidden power in oneself and can motivate someone to do a specific behavior. Hence, giving reinforcement to students also resembles motivating them to be better in doing something, learning. Not only does giving reinforcement motivate students, but it also changes the students' behavior. Stephen and Singh (2017) assert that rewards could change someone's behavior and encourage cooperation without destructive negative consequences that come with punishment. Teachers can help students who have bad habits in the classroom to be better or even the teachers can change their bad behavior by positively reinforcing them and giving them more attention during the teaching and learning process.

Another way of promoting observational learning is through video modelling. Dorwick and Jesdale (1991) assert that video modelling is an efficient way to promote observational learning, and it generally involves the subject observing a videotape of a model engaging in a behaviour that is subsequently practised and imitated. Several scholars have speculated that features of autism, such as over-selective attention, a restricted field of

focus, preference for visual stimuli and avoidance of face-to-face attention may be capitalised on while using video modelling (Charlop-Christy & Daneshvar, 2002; Lovaas, Koegel & Schreibman, 1979; Garretson, Fein & Waterhouse, 1990; Buchsbaum, Siegel, Wu, Hazlett, Sicotte, Haier, Tanguay, Asarnow, Cadorette, Donoghue, Lagunas-Solar, Lott, Paek & Sabalesky, 1992). Video modelling offers a way to learn through social models without initial face-to face interactions (Lincoln, Courchesne, Kilman, Elmasian & Allen, 1988).

As previously noted, Bandura (1986) indicated the importance of attention, retention, production and motivation for observational learning. One hypothesises that video supports these processes in the following ways. Television and video monitor by design provide for a restricted field of focus. Thus, video modelling appears to improve the attention of individuals with autism by selectively focusing their attention on relevant stimuli (Dowrick & Jesdale, 1991; Shipley-Benamou, Lutzker & Taubman, 2002; Charlop-Christy, Le & Freeman, 2000; Charlop-Christy & Daneshvar, 2002). In the process, extraneous visual and auditory stimuli are removed, and the child can focus on the pertinent information presented on the screen. Retention is facilitated in the video modelling procedures through repetition of the target behaviour.

All video modelling interventions include presenting the subject with repeated exposures to the event that help to establish and maintain the behaviour in memory. Under some designs, the child is provided with the exact stimuli or situations as presented in the video. For example, to improve play-related comments, Taylor, Levine and Jasper (1999) presented the target child with the same toys as they observed in the video. This method may facilitate the association between the stimuli and the response and the transfer of behaviour from video to live modelling. Thus, video permits the repetition of the same model and precise procedures (Dowrick & Jesdale, 1991; Thelen et al., 1979) leading to the production of the behaviour as the next essential component of observational learning.

Video modelling techniques are generally active processes that allow to produce the observed behaviour through practice (Taylor, Levine & Jasper, 1999; Nikopoulos & Keenan, 2003). For example, Taylor et al., (1999) included behavioural practice as part

of the acquisition of play-related comments in two children with autism. After the subjects were provided with the same toys they observed in the video modelling scenes, they were required to engage in similar behaviour after viewing each scene. In the process, the children were rewarded for repeating scripted and unscripted play comments from the video. Behavioural practice is also a key element of many video modelling procedures and has been utilised in several video modelling interventions (Nikopoulos & Keenan, 2003; Kinney et al., 2003; Shipley-Benamou et al., 2002; Wert & Neisworth, 2003). Shipley-Benamou et al. (2002) determined that video modelling using first person perspective scenes resulted in the acquisition of functional living skills such as making orange juice, preparing a letter to mail and table setting in children with autism.

### **2.3 SIMILARITIES BETWEEN COGNITIVE AND BEHAVIOURAL APPROACH**

The techniques are comparable in that they emphasize objectivity, think that human behaviour can be examined scientifically, and conduct laboratory-based studies. Mental processes are also scientific (Bandura, 1997a; Maddux & Lewis, 1995; Schwarzer, 1992 in Bandura, 2001). Both strategies have the advantage of being scientific and enabling study replication and prediction (Ganz, 2007). Additionally, they have generated a significant quantity of psychology study and have had a unique influence on it. The information processing method, for instance, has consequences for eyewitness accounts, and the behaviourist approach has consequences for criminal activity. Behaviour's reaction to stimuli (Ganz, 2007).

Teachers may employ social learning theory in their classrooms by utilizing reward and punishment systems. Based on this theory, if a learner sees a classmate receive a positive consequence for an action, they may be more likely to perform the action themselves. This system may help teachers improve learner behaviour. Bandura's theory supports the idea that reinforcement is perhaps the most important element of observational learning. Children are more likely to learn and repeat behaviour based on factors such as being complimented or rewarded, or by motivated to continue exhibiting the learned behaviour (Bandura, 1986). Teachers should be aware that they can focus on reinforcement to shape behaviour, model appropriate behaviour, and build self-efficacy as part of their classroom model.

The highlight of this theory is that SLT is a cognitive and behavioural theory that explains human behaviour through the interaction of personal (cognitive), environmental, and behavioural factors in a social setting. SLT has a significant role in explaining aggressive behaviour. The basic principle of SLT is that learning can occur through observing, modelling and mimicking others' behaviours, attitudes and emotional reactions. It also highlights the use of reward and punishment as a form of negative and positive reinforcement. Teachers may employ social learning theory in their classrooms by utilizing reward and punishment systems. Based on this theory, if a learner sees a classmate receive a positive consequence for an action, they may be more likely to perform the action themselves. This system may help teachers improve learner behaviour. Bandura's theory supports the idea that reinforcement is perhaps the most important element of observational learning. Children are more likely to learn and repeat behaviour based on factors such as being complimented or rewarded, or by motivated to continue exhibiting the learned behaviour. Teachers should be aware that they can focus on reinforcement to shape behaviour, model appropriate behaviour, and build self-efficacy as part of their classroom model.

Next is the literature review.

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## 2.4 LITERATURE REVIEW

This study sought to explore Grade One teachers' approaches in supporting learners with ASD in the Buffalo City Education District. The purpose of reviewing the literature is to learn first-hand what has already been studied concerning the concept of interest and thereby increase one's understanding of the concept under investigation so that one can ask more relevant questions. Reviewing literature is an on-going process that assists in identifying the current gaps in the existing research.

In this section the relevant literature is analysed to explore the definition of inclusive education in the South African context and the concept of 'barriers to learning' as defined by the Education White Paper 6 (2001). It is against this backdrop that the section narrows its focus to learners with autism, providing an understanding of the nature of the disorder and exploring relevant research concerning educating such learners. The section discusses several conflicting opinions in the debate about mainstream versus special school placement for learners with special educational needs. Therefore, one will begin by giving background of inclusive education.



### 2.4.1 INCLUSIVE EDUCATION

Inclusive education in the South African context is defined as a learning environment that promotes all learners full personal, academic and professional development irrespective of race, class, gender, disability, religion, culture, sexual preference, learning styles and language (Du Plessis, 2013; Strohwalde 2021). Inclusive education is seen to be one approach to improve educational access for the children who have been marginalised or excluded from school because they face obstacles to learning. Early in the 1990s, policy documents such as the inclusion policy (Engelbrecht, Green, Naicker & Engelbrecht, 1999) came into being in South Africa. Shikwambana and Fourie (2023) highlight that inclusive education is concerned with removing all barriers to learning and promoting the participation of all students, including those vulnerable to exclusion and marginalisation. Furthermore, Murungi (2015) states that the term is mainly applied in the context of persons with disabilities to promote access to education in society. Although most countries seem to share the same ideology and commitment towards education for learners with special needs, the implementation of inclusive education has not been

successful (Mokaleng & Möwe 2020). For example, the Convention on the Rights of Persons with Disabilities (CRPD) gives specific guidelines to promote inclusive education, such as, using braille, alternative script, augmentative and alternative modes of teaching, but this has not been the reality, especially in rural schools in South Africa. Moreover, the high level of exclusion is a culmination of several factors, including, limitations in policy, no strategies of delivery and the erroneous assumption that inclusive education is expensive to implement (Gow, Mostert & Dreyer 2020).

Thus, Ssenyonjo (2017) reiterates that the non-domestication of regional and international treaties perpetuates the violation of rights on children with disabilities. In response, the Government of South Africa embedded the CRPD into the White Paper 6 which specifically addresses Special Needs Education within a policy framework (Walton & Engelbrecht, 2022). The White Paper 6 is the key framework for supporting an inclusive education system in South Africa. It is worth reinforcing that White Paper 6 is not a law but rather a policy document that helps the Government to account for specific deliverables on inclusive education. The policy provides a broader scope to address the diverse needs of learners who experience learning barriers.

They reflected a vision of an educational system that included all students and catered to the large diversity of the student body. The special needs education framework for action (UNESCO, 1994, p. 6) reflects this change in policy, stating that "schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic, or other conditions." This is consistent with inclusive education, which describes providing those with disabilities with the chance to fully engage in all educational activities. Compared to the previous generation of teachers, however, instructors today face greater pressure in inclusive classrooms because it is their responsibility to welcome diversity (Avramidis, Bayliss & Burden, 2000).

Since adopting the Education White Paper 6 on Special Needs Education (EWP6) (Department of Education 2001), inclusive education in South Africa has not made significant developments or seen significant implementation across the country (Department of Education 2016; Kalinnikova Magnusson & Walton 2021; Meiring et al. 2016). Even though South African laws and policies favor inclusive education, the reality

is that public, mainstream schools rarely show the will or have the capacity to provide equal educational opportunities to all learner citizens. Engelbrecht et al. (2016:523) state that mainstream schools particularly lack physical facilities, and that there is limited 'availability of appropriately educated teachers and effective and adequate teaching and learning resources. This lowers the chances of fostering inclusive education in South Africa in mainstream schools. Mainstream schools are the first level of three types of schools described in EWP6 (Department of Education 2001) for education provisioning in South Africa. They are intended to cater for the diversity of learners in their classrooms, including those with low to moderate support needs. However, without proper infrastructure and sufficient teaching skills, providing this support is challenging.

The second type of school, full-service schools, are schools that are equipped with additional human and material resources to cater for the needs of learners with impairments and those without impairments who are considered to have moderate to high support needs (Department of Education 2010a). Although the government intends to convert more mainstream schools into full-service schools, it is not only the responsibility of full-service schools to implement inclusive education. Special education schools are the third level of school placement in the education system for learners identified as having high-level support needs that cannot be accommodated in mainstream or full-service schools. However, despite this tiered schooling, there has been minimal progress in the implementation of inclusive education throughout the education system since the beginning of democracy in South Africa in 1994. Prompt action is necessary to introduce the changes pledged in legislation and policy (Engelbrecht, Smit & Deventer, 2016). Significantly, 2021 was the year in which, across the policy's 20-year plan, major strides towards inclusive education were supposed to have been made (Department of Education 2001). However, it is evident and undeniable that the quest for inclusive education has fallen far short of its mark, as evidenced by the most recent official report on this objective, which highlights 'persistent challenges that retard the progress that is being made in the development of an inclusive education and training system' (Department of Education 2016:6).



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The lack of implementation of inclusive education in South Africa is the result of a variety of factors. Studies (Du Plessis 2013; Engelbrecht et al. 2016) have shown that one of the reasons for the slow progress is that inclusive education policy differs markedly from the realities in schools. Donohue and Bornman (2015) point to the EWP6 as an idealistic framework that does not relate meaningfully to the South African context. Moreover, the lack of teacher training is another hindrance to the advancement of inclusion. The transformation of an education system is largely dependent on teachers' skills, as they are in a position of action where they can practically implement change.

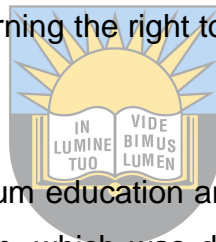
The Salamanca Statement (UNESCO, 1994) affirms that a prerequisite for inclusive teaching is suitable training in catering for the needs of learners with disabilities. Jansen (2001) explains that teachers prior to 1994 were controlled by a state-enforced, rigid curriculum and were unable to be creative and thorough in their approaches. Regrettably, 'pedagogies forged under the apartheid regime have not been fundamentally transformed' (Griffiths & Prozesky 2020:5). South Africa has therefore developed a policy without matching it with the practical aspect of teacher training, and this arguably renders the goal for inclusion unattainable, yet the EWP6 itself states that teachers are the prime stakeholders for the implementation of inclusive education. The national policy on inclusive education set an objective to reform teacher training and align it according to inclusive educational principles (Department of Education 2001), fulfilling the international recommendation for 'teacher education programs that 'address the provision of special needs education in inclusive schools' (UNESCO 1994:4). Donohue and Bornman (2014) rightly argue that inclusive education is not possible without appropriately trained and resourced teachers. This is crucial, as the neglect of teachers and the undermining of their role in enabling transformative education has, according to Makhalemele and Payne-van Staden (2018), arguably been the most significant reason for the stagnation of the implementation of inclusive education in South Africa.

#### **2.4.2 HISTORICAL OVERVIEW OF INCLUSIVE EDUCATION**

The political history of South Africa has radically transformed over the last 25 years, from a situation that denied the needs and rights of the majority, in favor of a minority, to a

democracy that enshrines equal rights to all. However, this equality is still not reflected in the educational landscape. This pertains especially to learners with disabilities who, during and after apartheid, have remained on the fringes of the education system (Naicker 2007; Ntombela 2011)

In the past, due to racial and political segregation in South Africa, students with special needs were taught in institutions separate from their homes and peers (Duke et al. 2016; Kisanji 1998; Mahlo 2017). Moral objections to segregated special education eventually posed a threat to the historical legacy of separate special schools in higher-income nations. Additionally, concerns were raised about the excessive representation of students from linguistically and culturally minority groups in certain special education settings. For example, in the USA, as well as the exclusion of girls from formal education in several countries (Kozleski, Artiles, & Waitoller, 2013). One of the most celebrated but contentious recent advances concerning the right to education is the conversation about inclusive education.



Black students were given a minimum education and few job-ready skills as part of this highly regulated educational system, which was designed to prepare them for inferior roles in the workplace (Akhurst, 1999 as cited in Webber, 2013). It was also determined by race how well-cared-for special-needs children were, with white sections of the population providing better care for those with exceptional learning requirements. According to Gwalla-Ogisi, Nkabinde, and Rodriguez, (1998) as cited in Webber, (2013), black children with severe disabilities either attended enormous special schools with inadequate resources or mainstream schools with minimal support which led them to drop out of school. As apartheid ended and a democratic society founded on human dignity, freedom, and equality was established, a desire for education for social justice and inclusion emerged (Engelbrecht, Green & Naicker, 1998; 2016). The drive in South Africa toward inclusive education was influenced by the broader notion of inclusion in society (Engelbrecht, Green & Naicker, 1998; 2016).

A more critical, multidisciplinary discourse based on the implementation discourse has recently emerged which questions how inclusion is practised in various contexts (Walton,

2016). In the White Paper 6, it is highly advised against excluding students from classes as it is callous and heartless. Lesotho's most recent educational reform, the new Curriculum and Assessment Policy (2009), marks a shift away from an examination-focused curriculum toward organised into learning areas (Raselimo & Mahao, 2015).

The difficulties schools face at the meso-level are mostly caused by two factors: a lack of resources and time. School- and classroom-related problems include the lack of time and resources. Class size is also an issue that particular teachers encounter. According to Mkandawire, Maphale, and Tseeke (2016), 80 to 100 children are the typical class size in many schools. According to Mitchell (2008), one of the many crucial roles of school leadership is to secure adequate resources because a lack of suitable resources is a significant impediment to the successful development of an environment for inclusion (Kgothule & Hay, 2013). Due to infrastructure challenges, South Africa's average class size ranges from 90 to 100 students (MPU, 2018). When class numbers are large, inclusive education strategies (including cooperative learning, curriculum differentiation, learning accommodations, and flexible answer options) are required to reach all the students. Unfortunately, there has been little meaningful progress, as the latest report on the government's progress on implementing EWP6 indicates that most learners with disabilities still attend special schools (Chambers et al. 2017; Department of Education 2016).

This demonstrates that the 'paradigm shift' in policies is not yet reflected in schools or in practice. According to Engelbrecht et al. (2016), the essential paradigm shift needed is one from the medical model to the social model of disability. The medical model views disability as an individual and deficit problem, necessitating placing learners with disabilities into separate, special education institutions as they are not considered to be educable alongside their peers (Naicker, 2005). Conversely, the social model explores how society itself creates and reinforces negative perceptions of physical and mental disability and advocates for inclusive educational institutions, where all children are taught together. It is evident that the South African educational landscape is still largely managed according to special education principles, given the placement of most disabled learners into special schools (Department of Education, 2016). However, arguably both models

are insufficient in fully conceptualizing disability and in developing practical strategies to assist impaired learners. The medical model's major shortfall is its narrowness in ascribing difficulties associated with disability to the individual, whilst the general social environment remains largely unchanged and marginalisation persists (Dixon & Verenikina, 2007). Although the social model primarily seeks to correct societal attitudes towards people with disabilities (Oliver 1996), it does not give enough attention to the scientific aspects of impairment, which, if understood, can lead to more informed ways of assisting people in line with the specific needs they have. There is also clearly a need to explore and develop an understanding of inclusive pedagogy, and the need to empower teachers to respond appropriately to a diverse range of learning needs, including those specific to impairments, if paradigm and practice shifts are to be supported (Walton & Bekker 2016).

The importance of teachers in the implementation of inclusive education cannot be ignored as 'classroom educators will be our primary resource for achieving our goal of an inclusive education and training system' (Department of Education 2001:18). South African teachers over decades have been mandated to follow policies and guidelines that were devised without their active involvement. For example, whilst the EWP6 development is said to have included the recommendations of teachers (Lomofsky & Lazarus 2001), subsequent policies were needed to give clearer classroom-based guidance. An attempt by government to meet this need was the introduction of the Guidelines for Inclusive Teaching and Learning (Department of Education 2010b) and the Guidelines for Full-Service Schools (Department of Education 2010a). These guidelines, however, remain generic and descriptive rather than providing practical strategies (Du Plessis 2013). Hence, we argue that it is necessary to explore the strategies and approaches used by teachers themselves, in diverse contexts, to support the inclusion of learners and specifically for this study, those with ASD, to understand how inclusive education may be better realised. Thus, in this study, ASD, a neurodevelopmental syndrome that mainly affects people's social interaction (Akhter et al. 2018), is the focus for exploring strategies and approaches used by teachers to support the specific learning needs of these learners.

## 2.5 CHALLENGES IN THE IMPLEMENTATION OF INCLUSIVE EDUCATION IN SOUTH AFRICA

When the Education White Paper 6 was first issued in 2001, South Africa appeared to be following the global trend towards inclusion, but subsequent policy implementation has made little progress over the past ten years, according to Donohue and Bornman (2014). Researchers found that educators were not given sufficient assistance in putting the policy into practice (Dreyer, 2017; Du Plessis, 2013). Due to uncertainty regarding how inclusive education may be achieved, Donohue and Bornman (2014:10) concluded that implementing inclusive education is seemingly at a standstill.

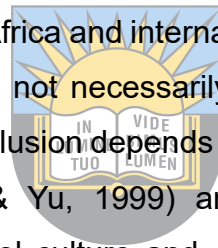
According to Donohue and Bornman (2014), the policy's vagueness is deliberate and related to a lack of financial resources. Such policies are symbolic as they are developed to comply with international standards rather than as a direct result of locally driven changes. Such policies lack local content, which is indicated by the absence of funding that accompanies them. There is a definite pattern in numerous publications that criticise policies by highlighting the role the international development community performs in supporting inclusive education as the only progressive strategy for educating students with disabilities. Donors have a significant impact on the promotion of practices that are based on socioeconomic conditions that differ from those in low-income countries (Kalyanpur, 2008, 2011, 2014; Le Fanu, 2014).

Despite this, more than ten years after the release of the Education White Paper 6 (Department of Education, 2001), most students who have learning obstacles still attend separate special schools for students with impairments (Donohue & Bornman, 2014). The lack of information and expertise in dealing with inclusive education, in the opinion of educators, is the reason for the implementation's failure. The discussions surrounding educators' roles in inclusive education frequently touch on how ready they are to carry out their duties wherever they may be at the time. In other words, educators' skills and knowledge in inclusive education determine much of the effectiveness thereof in a nation (Bourke, 2010). Challenges to implementation of inclusive education were caused by number of factors such as school level barriers, cultural-level barriers.

## 2.5.1 SCHOOL-LEVEL BARRIERS TO INCLUSION

Estimates suggest that in all of Africa, only 10% of children with disabilities attend school (UNESCO, 2007; 2020). In South Africa, specifically, up to 70% of children of school-going age with disabilities are out of school (Department of Education, 2001), although school attendance is compulsory for all children between 7 and 15 years of age. Of those who do attend, most are still in separate, “special” schools for learners with disabilities. Despite the push for the educational inclusion of learners with disabilities more than a decade ago by the South African policy document, Education White Paper 6 (Department of Education, 2001). This document aimed to establish a system where, with the assistance of appropriate support, learners with disabilities learn alongside peers of the same age (Pivik, McComas & Laflamme, 2002).

In recent years, the practice of inclusive education has been widely embraced as an ideal model for education, both in South Africa and internationally (Maher, 2009). However, this acceptance of ideal practices does not necessarily translate into what actually occurs within the classroom. Successful inclusion depends on the attitudes and actions of school principals (Zollers, Ramanathan & Yu, 1999) and the investment of other school personnel as they create the school culture and could challenge or support inclusion (Ainscow, 2002).



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Research has found that although teachers often report that they agree with the idea of inclusion, they believe that the needs of learners with disabilities are best met in separate classrooms (Campbell, Gilmore & Cuskelly, 2003), particularly those learners with greater special needs and more severe disabilities (Scruggs & Mastropieri, 1996). According to Bornman and Rose (2010:7), “a general lack of support and resources, as well as the prevailing negative attitudes toward disability, all contribute to the general bewilderment in South African schools towards inclusion”. Contemporary teacher education in South Africa trains teachers how to accommodate diverse learners in a single classroom (Oswald & Swart, 2011).

This is in line with the social model of disability that views disability centrally as a social construct created by an ability-oriented environment (Barnes, 2020). Disability, in this sense, sees the problem as located not in the individual, but in a societal, economic,

political (and educational) system and culture that fail to meet the needs of these individuals (McEwan & Butler, 2007, Goodley, 2017). The social model is rooted firmly in the human rights paradigm, arguing for inclusion and the removal of all barriers that hinder full participation of individuals with disability. Before this model of disability was widely accepted, however, teachers in South Africa were trained to teach either general education or special education, being by-products of the tenets of the medical model (Sherry, 2016). These practices have, in turn, produced many teachers without the necessary skills to teach learners with disabilities. They also created attitudes regarding the separate education of learners with disabilities that have become strongly embedded in the South African teaching culture (Ntombela, 2011, Sherry, 2016). What further complicates matters is the fact that a large proportion of the South African teacher workforce is over 50 years of age (Armstrong, 2009); hence, reorienting teachers to new ways of educating learners after many years in the profession remains a significant challenge to inclusive practices (Cole et al, 2016). The implications for this are that educators and society must change and accommodate autistic learners by making a paradigm shift from rigid curriculums, buildings, teaching methods and learning environments. The child must be at the core centre of the whole education system (Cole et al, 2016). New inclusive policies have demanded from teachers to challenge their existing schemas about best practices in the education of learners with disabilities, in some cases leading to cynicism, hopelessness, and a rejection of transformation policies” (Oswald & Swart, 2011:391).

Thus, ensuring that educators are not only supportive of inclusion policies but also willing to challenge outdated beliefs and practices continues to be a considerable barrier to inclusive education. Teachers’ attitudes toward inclusion might become more positive if, along with training, they were to receive the appropriate service support for their learners with disabilities. Support provisions depend on the learner’s impairment but may include special equipment, educational provisions and accommodation, for example, more time during test assessments; a teacher’s aid to help provide the learner with a more intensive disability; one-on-one instruction). Support is a necessary component of successful inclusive education practices as the needs of many learners with disabilities are beyond the basic services available in typical general education classes (Lomofsky & Lazarus,

2001). Yet, recent research involving school principals in Gauteng, the richest and most resourced province of South Africa, revealed that most learners with disabilities received specialised support services either “seldom” or “never” (Nel, Müller & Rheeders, 2011:49).

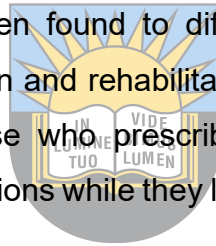
## **2.5.2 CULTURAL-LEVEL BARRIERS TO INCLUSION**

Polat (2011:57) suggests that resources and improved infrastructure are necessary but not sufficient for inclusion and that “changing attitudinal barriers among school professionals and in the wider community is one of the essential aspects of making inclusive education happen in low-income countries”. The meaningful participation of children and adults with disabilities in school and the community is affected by the cultural attitudes and values of its citizens. If a community expresses disregard and prejudice towards people with disabilities, then discriminatory practices will continue to be propagated. Cultural attitudes about the importance of educating children with disabilities can affect whether parents decide to send them to school. Groce, 2004; Chambers, et al., 2017, found that in various developing countries around the world children with disabilities often do not attend school because it is thought that they cannot learn or will be disruptive to other learners. Parents also consider the financial expenditures relating to education in South Africa. Since many schools charge tuition fees, it may not be economically feasible for parents to send their child with a disability to school, particularly if they have other developing children of school-going age whose prospects of bringing in some sort of income are much better than those of their disabled child.

It was found that ostracism of learners with disabilities was perceived as a barrier by all participant groups. Teachers blamed negative societal attitudes toward disability for the stigmatisation of learners with disabilities within ordinary schools and considered this a justification for maintaining separate schools. Parents and children in this same study stated that learners may be safer in special schools for children with disabilities due to the intolerant attitudes of other children and school staff. In another study, caregivers of children with disabilities who lived in the Western Cape province of South Africa expressed similar fears concerning the mistreatment of their children in ordinary schools (Masasa, Irwin-Carruthers & Faure, 2005; Majoko, 2017), with 72% of the participants stating that they believed their children with disabilities were better off in special schools.

Increasing attention has also been focused on the contrasting traditional and bio medical views of disability.

Traditional views of disability are beliefs that have been handed down through generations, whereas the biomedical perspective refers to the scientific, evidence-based practice of modern medicine (Maloni, Despres, Habbous, Primmer, Slatten, Gibson & Landry, 2010). In South Africa (Hosegood, Preston Whyte, Busza, Moitse & Timaeus, 2007) and neighbouring Zimbabwe (Jackson & Mupedziswa, 1988), the traditional perspective attributes disability to family sin, witchcraft and angered ancestors. These perspectives sometimes lead to the mothers of children with disabilities being shunned and blamed for their child's disability by their families and communities (Daudji, Eby, Foo, Ladak, Sinclair, Landry, Moody & Gibson, 2011; Department of Education, 1995), and to families hoping for their child with a disability to be "cured" (Masasa et al., 2005:43). These unique perspectives have also been found to differentially influence how caregivers approach the education, intervention and rehabilitation for their children with disabilities (Maloni et al., 2010). In fact, those who prescribe traditional beliefs at times delay accessing modern medical interventions while they look for folk cures (Maloni et al., 2010; Masasa et al., 2005).



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### **2.5.3 MATLAND'S TOP-DOWN APPROACH TO POLICY IMPLEMENTATION**

South Africa's inclusive education policy has been known as 'symbolic implementation' because of failure and non-implementation, such as the case of the White Paper 6 that was viewed an important intervention when published in 2001, but the implementation has yielded little success in the Eastern Cape Province (Adewumi, Mosito & Agosto 2019). In addition, Walton and Engelbrecht (2022) highlight that the poor implementation of inclusive education policy in South Africa is because of the lack of political will. Specifically, the Eastern Cape Department of Education has been characterised by politicisation of the allocation of resources (Kota, et al. 2018). For example, a study on the Eastern Cape found that it was the fastest South African province to reach a million coronavirus disease 2019 (COVID-19) vaccinations, but when it comes to issues related to education, the province is still plagued by the poor education infrastructure and the highest number of pit latrine toilets (Chirowamhangu 2023).

One argues that although there are many school-level and cultural barriers to inclusion, the major factor hindering the implementation of inclusive policy is the lack of clarity (ambiguity) in Education White Paper 6 (Department of Education, 2001) regarding the means through which schools can meet the goals of inclusive education. It is not clear whether this ambiguity is intentional, but it has undoubtedly led to inaction by the stakeholders involved. We take a primarily top-down theoretical approach to policy implementation (Matland, 1995) and argue that the primary means by which the divide between inclusive policy and practice ultimately will be closed is through the clarification of the means through which the relevant goals can be met and the enforcement of education policy by the South African national Department of Education.

Literature highlights the lack of clarity on the extent of inclusiveness in the White Paper 6 policy document (Hudson, Hunter & Peckham 2019). In support of this view, Makoelle and Burmistrova (2020) reveal that there remain many school-level and cultural barriers to inclusion. For instance, scholars show that with regard to cultural barriers children with disabilities are discriminated because disability is attributed to family sin, witchcraft and conflict with the ancestors (Ndlovu, 2023; Yaacob, et al. 2021). This makes it difficult to implement a bottom-up approach because of the diversity of cultural, social and religious views on disability. Another illustration is based on the economics of implementing the policy, as Dehnhardt, Grothmann and Wagner (2022) purport that the policy yields cost-effective benefits. But as challenged in recent studies, this seems unrealistic in South Africa considering the substantial increase in provincial funding (Walton & Engelbrecht 2022).

Top-down approaches stress the importance of policy clarity, as well as the control and direction by policymakers to systematically implement policy. Bottom-up approaches, on the other hand, highlight the importance of understanding the perspectives and experiences of target groups and service deliverers (Matland, 1995; Stofile, 2008). We prefer a top-down approach for inclusive policy implementation due to the many differing attitudes that create a context where there is little consensus about best education practices for children with disabilities. Hence, we believe that clear policy mandates,

together with enforcement of such mandates, will be the most effective means by which inclusive policy will be realised in South Africa.

Effective and clear legislation has been a primary means by which other countries (e.g. the United States) have established and supported inclusive practices (Frankel et al., 2010). Although one recognises that policy mandates are not the ultimate solution to make significant and lasting change in South Africa, we feel that reducing the ambiguity in the existing policies (i.e. stating goals more overtly as well as defining strategies on how to achieve them) and strengthening the enforcement of such policies promote the inclusion and participation of children with disabilities within the mainstream school system. Policy implementation challenges Education White Paper 6 includes six broad key strategies for establishing an inclusive education system: 1) the improvement of existing special schools and the conversion of some special schools to resource centres; 2) the mobilisation of nearly 300,000 children with disabilities who are of school-going age but not currently in school; 3) the conversion of some mainstream primary schools into full-service schools, which will be those schools that are inclusive; the orientation of the staff and administration in mainstream schools to the tenets and practices of inclusive education, as well as how to make early identifications of children who may have disabilities; the establishment of district-based support teams to help support educators with the process of implementing inclusive practices in their classrooms; and 6) the implementation of a national advocacy campaign to orient South Africans to the ideas of inclusive education, and the inclusion and participation of people with disabilities in society (Department of Education, 2001:20-23).

These six strategies highlight the fact that Education White Paper 6 itself is lacking in specificity and detail, as it only has broad strategies, which give little guidance on how to effectively implement this policy in practice. In addition to school- and cultural-level challenges to inclusion, difficulties associated with the implementation of inclusive policy appear to stem, in part, from the ambiguities within Education White Paper 6 (Department of Education, 2001). For example, the White Paper suggested the cost effectiveness of inclusion to be one of the benefits of inclusive policy (Department of Education, 2001).

Yet, it is difficult to envisage how significant transformations to the educational system in

South Africa (e.g. mobilisation of out-of-school children with disabilities; infrastructure changes to schools) can be made without providing provincial departments with substantial increases in their short-term funding to help take these necessary first steps (Stofile, 2008; Wildeman & Nomdo, 2007).

This ambiguity in financial means and departmental responsibilities may be intentional. Jansen (2001) suggests that some South African policies are enacted for their political symbolism rather than their practicality; thus, vague policies often get passed but no one is held accountable for their implementation. In fact, a chief complaint of education officials in the Eastern Cape province of South Africa was that they got the impression that the national Department of Education was not committed to the implementation of the inclusive policy and had tried to relegate their responsibilities to others (Stofile, 2008). 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 the White Paper. Without support and recognition, it is difficult for schools to make inclusion a reality. According to Matland's (1995) ambiguity-conflict model of policy implementation, ambiguity in policy is the result of a lack of clarity in a policy document regarding the goals or how such goals will be reached. When goals are not explicitly stated, there is uncertainty and misunderstanding about the purpose of policy. In studying the content of Education White Paper 6, the proposed implementation strategies lack specificity and detail, thereby increasing the policy's ambiguity (Department of Education, 2001).

Research found that education officials in South Africa were unsure regarding the goals of inclusive education, with some officials reporting they were unclear about how ordinary and special schools would be transformed into schools more suitable for inclusive education (Stofile, 2008). Other officials were confused about the parameters of barriers to learning and exactly how these barriers would be addressed within inclusive schools (Wildeman & Nomdo, 2007). For example, trying to eliminate barriers around learners' impairments such as physical or sensory impairment, is more straightforward than trying to address some of their extrinsic barriers to learning such as poverty or orphanhood. If the goals of inclusion include addressing extrinsic barriers to learning, then schools would

need more explicit guidelines from the Department of Education to help them accomplish this rather complicated task of implementing the inclusion policy. Even more ambiguous than goals, the means by which the policies within Education White Paper 6 (Department of Education, 2001) will be realised, are not explicitly stated.

Generally, when new policies have been implemented, sufficient funding and capacity to deliver these policies is assumed (Wildeman & Nomdo, 2007). The Department of Education appears to have deficits in funding to provide to schools, while schools currently lack the capacity to accommodate diverse learners in one classroom. Initial funding will be necessary while schools locate out-of-school learners, buy devices for learners who need them, make the needed infrastructure changes to accommodate a diverse body of learners, and hire specialists who will provide specialised systemic support to teachers and schools that need assistance (Wildeman & Nomdo, 2007). Added to a lack of funding, schools currently lack teachers who have the capacity and knowledge to instruct a diverse body of learners in a single classroom without considerably increasing their workload. Education White Paper 6 states that “new curriculum and assessment initiatives will be required to focus on the inclusion of the full range of diverse learning need since curricula create the most significant barrier to learning and exclusion for many learners” (Department of Education, 2001:31-32). How teachers are expected to accomplish the task of tailoring the curriculum to suit each learner’s particular needs and pace of learning is not thoroughly detailed.

The Department of Education envisaged that many teachers would be reoriented to new methods of teaching via comprehensive training programmes that they provided. Training programmes that educate teachers how to accommodate and teach learners with disabilities are generally a week or two long, but teachers report that although these brief training programmes are helpful, they are insufficient (Stofile, 2008). The programmes also tend to focus on developing a couple of skills, whereas teachers often need far more comprehensive training programmes. Thus, to confirm what we have discussed above, ambiguities within Education White Paper 6 hinder inclusive practices.

In addition, Matland’s (1995) ambiguity conflict model suggests that policy implementation is hindered by conflict stemming from differences in opinion between various stakeholders

about how the policy will be executed. According to Matland (1995:157), “virtually all policy theorists have emphasised the importance of delegating policy to a sympathetic agency. Placing a policy in an agency where it conflicts with existing policies and goals leads to few resources, little support, and almost certain failures. This may be a contributing factor to the lack of progress in inclusive policy. Within the Department of Education, there are various sectors that compete for limited resources.

The current educational drives are in the expansion of Grade R (equivalent to kindergarten) and basic adult education programmes, with significantly fewer resources being dedicated to inclusive education (Wildeman & Nomdo, 2007). South Africa’s inclusive education policy is therefore characterised by both high conflict and ambiguity. Matland (1995:160,168) terms high conflict, high ambiguity policies as “symbolic implementation” policies, which almost always are associated with non-implementation and failure. Symbolic policies tend to garner attention when they are first passed but ultimately do not come to light; this same pattern is observed in the implementation of inclusive policy. When 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. This may have something to do with the vagueness of the policy’s objectives as well as the strategic imperatives necessary to carry them out. Sayed and Jansen (2001:1) clarify that although South African educational initiatives have garnered international recognition for their “wow” factor, they are hardly implemented. Furthermore, the Republic of South Africa (2022) shows that the Department of Education in the Eastern Cape Province failed to implement initiatives aligned with White Paper 6 because it was underfunded. Thus, the top-down approach helps to streamline the objectives of the policy, actions needed, and delegation of duties to ensure children with disability have access to basic education.

Therefore, Matland’s top-down approach is instrumental in policy implementation because it provides clarity on the goals of the policy (Hudson et al. 2019). This means the government and policy makers articulate fundamental principles, guided by specific mandates, and establish a mechanism to account for achieving the policy. This calls for clear and effective legislative frameworks to support inclusive education in South Africa

(Ramango & Naicker 2022). In the process, this helps to eradicate negative attitudinal perspectives from legislators, educators and learners to foster inclusive participation of children with disabilities in the mainstream school system. In a similar case study on inclusive education in the Eastern Cape Province, the researchers concluded that there was lack of policy coherence and accountability between the provincial Department of Education and the National Department of Education (Bipath, Tebekana & Venketsamy 2021). However, Shukia (2020) argues that the approach fails to recognise the complex implementation structures, thus, giving policy makers exclusive control even when they lack proper understanding of the realities faced by persons with disabilities.

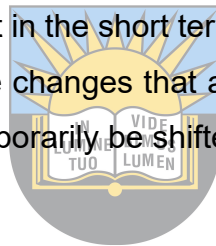
#### **2.5.4 A TOP-DOWN APPROACH TO POLICY IMPLEMENTATION**

The education of children with disabilities should not be a racial issue or a political topic. Rather, it should be a human rights concern (Hay & Beyers, 2011), a sentiment to which the South African government agreed when it became a signatory to the United Nations Convention on the Rights of a Child (Grobelaar-Du Plessis & Grobler, 2013), the United Nations Conventions on the Rights of People with Disabilities (UNESCO, 2007) and the Millennium Development Goals (UNESCO, 2000). The inclusive education of a diverse body of children including those who are diverse in terms of disability, race, gender, religion, language and socioeconomic status allows children who are different to become acquainted with one another and helps them to discover common ground. In fact, one of the first and foremost locations where attitudinal shifts toward people with disabilities can occur is in schools as this is one of the primary places where early attitudes are formed.

By learning these life lessons in childhood, children can develop into adults who are more accepting of a diverse society, which is important when living in a country as diverse as South Africa. Moreover, Engelbrecht (1999) suggests that inclusion is the primary step forward in obtaining a just and equal society. 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. Without funding and directives, provincial departments do not possess the ability to make any progress towards implementation. To make significant progress with it, the Department of

Education can no longer relegate the responsibility of implementing a policy of their own design to others such as school principals and teachers (Engelbrecht, 1999).

Research has found that without support, the burdens associated with implementation quickly become overwhelming to school officials and they swiftly revert to a special education model of education delivery (Wildeman & Nomdo, 2007). In order to initiate progress on inclusive education, the national Department of Education must take some first steps. When addressing school-level barriers to implementation, the Department must determine the extent to which teachers are prepared to educate a diverse body of learners within one classroom. Teachers then need to receive comprehensive training programmes in areas where they lack skills. **These training programmes can be supplemented with specialised support teams that have the capacity to enter classrooms and provide teachers with the hands-on training and practical skills that they need to address barriers to learning.** At least in the short term, funding must be increased so that schools can make the infrastructure changes that are needed. Perhaps the educational drives in South Africa can even temporarily be shifted from Grade R and adult education to inclusive education.



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## 2.6 DEFINING AUTISM

Autism is currently considered one of the most debilitating and serious of all developmental disorders (DePape & Lindsay, 2016). The disorder affects the course of a child's development and interferes with their ability to relate and communicate with others throughout their lifetime (Wilkinson, 2014). This implies that some children diagnosed with ASD can lead fairly independent lives, yet the quality of life for others is severely affected, leaving them dependent on services throughout adulthood. Autism spectrum disorder is the fastest-growing neurodevelopmental disorder worldwide (Akhter et al. 2018), and it is important that it is more fully understood, especially in the context of teaching and learning because with increased prevalence rates, teachers can expect to encounter more learners with ASD in their classrooms. According to Maenner, et al., (2020) autism spectrum disorder (ASD) is a complex neurodevelopmental disorder with an estimated

prevalence of one in 54. Although ASD can be diagnosed as early as 18 months of age (Hyman et al., 2020), the latest review indicated that, globally, the mean age at ASD diagnosis ranges between 38 and 120 months (Daniels & Mandell, 2014). Early detection of ASD can lead to early treatment (Rogers et al., 2014), which has been shown to improve later language and cognitive abilities and better the core symptoms (Clark et al., 2018; Dawson & Burner, 2011).

Furthermore, Autism Spectrum Disorder (ASD) is a neurological developmental disorder characterized by abnormalities in social relationships and repetitive or restricted behavioural patterns (APA, 2013). Numerous studies have been conducted on ASD, attributing the etiology of ASD to genetic, environmental, immunological, perinatal, neuroanatomical, and biochemical factors (Pennington, Cullinan, Southern, 2014). Autism Spectrum Disorder (ASD) is one of a range of neurodevelopmental conditions defined in the American Psychiatric Association (APA, 2020), Centers for Disease Control and Prevention (CDCP, 2020) and Royal College of Psychiatrist (RCP, 2020) as characterised with difficulties in reciprocal social relationships, communication with a history of restricted, repetitive or stereotyped behaviours. According to White (2020), the behaviours autistic people display came to attention in the 19th century as persistent deficits in social communication, social interaction and restricted and repetitive patterns.

The autism spectrum encompasses a range of disorders, including Autistic disorder, Rett disorder, Asperger syndrome, and pervasive developmental disorder (Taylor, Rosenqvist, Larsson, Gillberg, D'Onofrio, Lichtenstein, 2020; Bölte, Girdler, Marschik, 2019). Patients with ASD have deficits in social interactions, verbal and nonverbal social communication skills, as well as intelligence and motor functions. Lord, Elsabbagh, Baird, Veenstra-Vanderweele. (2018) assert that these patients also exhibit unusual interests, repetitive behaviours, and unusual responses to sensory experiences. Autism spectrum disorder is associated with high levels of anxiety, stress, and isolation in patients' families (Lord, Elsabbagh, Baird, Veenstra-Vanderweele, 2018).

This section now reviews relevant literature to address the research sub-questions and to understand learners with autism spectrum disorder (ASD), the challenges teachers

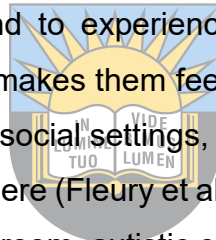
experience in supporting learners with autism spectrum disorder and the strategies they employ to support learners with ASD.

### **2.6.1 UNDERSTANDING LEARNERS WITH AUTISM SPECTRUM DISORDER**

Autism spectrum disorders (ASD) is neurodevelopmental and distinguished by communication and reciprocal social interaction deficits as well as the appearance of constrained, repetitive behaviours, interests, or hobbies (Cervantes & Konst, 2014). This implies that if support is provided at an early age the long-term effects may not be as devastating as claimed.

Koudstaal (2016) define ASD as a complex, variable developmental impairment, which stretches over the lifespan. ASD, according to the Diagnostic and Statistical Manual of Mental Disorders 5th ed.; (DSM-5), Centres for Disease Control and Prevention (CDC) (2014), is classified under the umbrella term of neurodevelopmental and neurocognitive disorders. Classes of Autism Spectrum disorders consist of “Autistic disorder, Asperger’s disorder, and Pervasive Developmental problems - no longer in any other case specified (PDD-NOS) (Gerdts & Bernier, 2011, p. 1). Every of these disorders has their personal set of characteristics, but they tend to overlap and are grouped into the ASD identify. Autistic disorders are characterized by means of social, communication, and behavior restrictions. Asperger’s disorder is a form of autism wherein youngsters show the characteristics of Autistic sickness but lack the cognitive and speech delays. Children categorized with PDD-NOS have Autistic characteristics, however they do not match underneath a particular labeling or disorder. Rett Syndrome and early life Disintegrative disease (CDD) can also be labeled beneath the ASD umbrella (Ryan et al., 2011). These disorders begin in childhood and are characterised by intellectual difficulties as well as difficulties in conceptual, social, and practical areas of living. Centres for Disease and Control Prevention (2015) explains that males are five times more likely to experience ASD than females, and it affects people from all racial, cultural, and socioeconomic backgrounds. Although the precise aetiology of autism is unknown, certain variables, such as having autistic relatives and children born to parents of older age, increase the occurrence of autism (Centres for Disease and Preventions, 2015).

According to Bolte, Marschik, Falck-Ytter, Charman, Roeyers, and Elsabbagh (2016), the term "autistic spectrum disorder" is now used to refer to both autism and pervasive developmental disorders. The identification of children with ASD can be aided by a variety of symptoms or traits. ASD is characterised by a variety of language impairments, such as nonverbal speech deficiency, language delays, echolalia, and poor speech comprehension (Centres for Disease Control and Prevention, 2015). Such communication difficulties range in severity, often reduce a child's ability to socialise, and may exacerbate problem behaviours (Beighley, Matson, Rieske, Konst, & Tureck, 2014). Ostmeyer and Scarpa (2012), explain that people with ASD frequently exhibit social awkwardness, which leads to their peers rejecting them and sometimes makes them the target of bullying. The afflicted child's emotional wellbeing is directly impacted by such situations. As a result of their social ineptitude, high-functioning children with ASD who have experienced such events tend to experience a continuing cycle of heightened anxiety and sadness, which in turn makes them feel even more anxious, and depressed (Fleury et al., 2014). As schools are social settings, it makes sense that socially awkward children will experience difficulties there (Fleury et al., 2014). Due to how their social skills impair their ability to study in a classroom, autistic children's poor academic performance is frequently noticed (Ostmeyer & Scarpa, 2012).

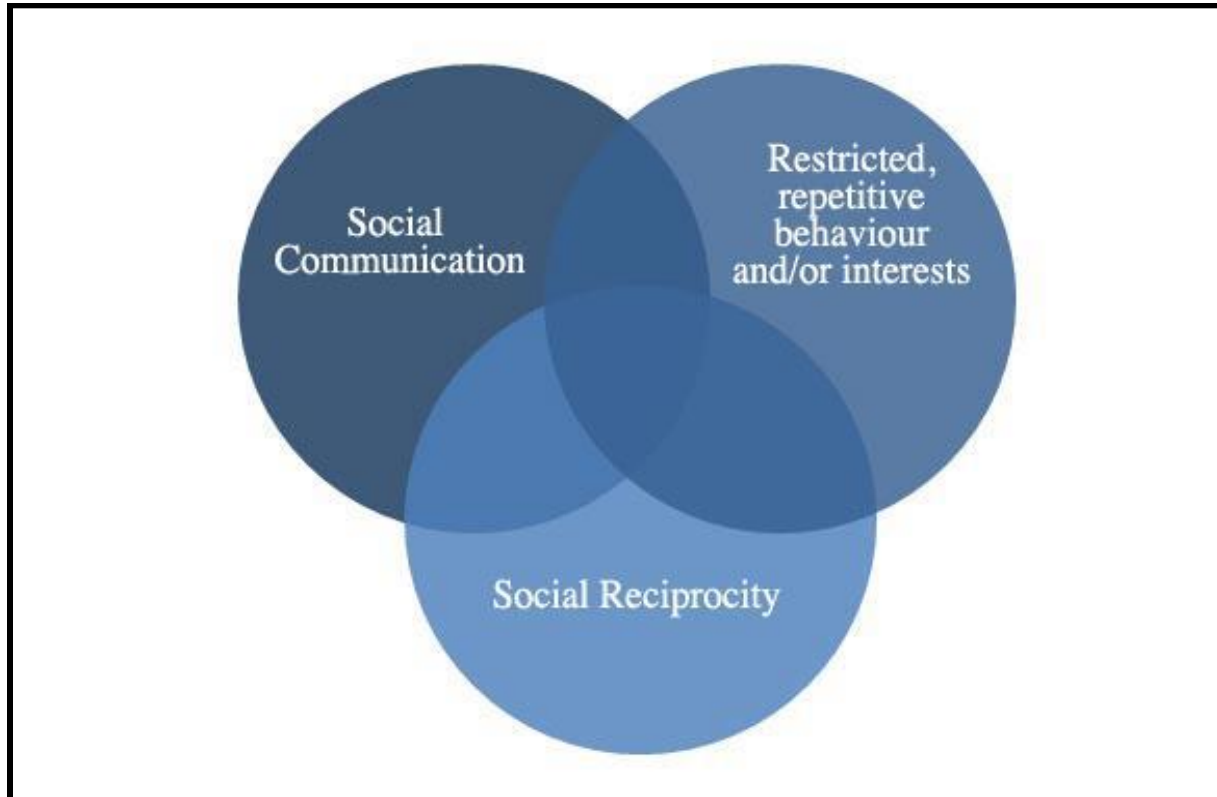


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The CDC (2015) postulates that, children with ASD may have limited, repetitive patterns of behaviour, interests or activities such as performing repetitive, rocking, spinning or hand flapping. The CDC (2015) also conceptualises ASD as a lifelong developmental disability characterised by qualitative impairment in three domains: social interaction, communication and repetitive, stereotyped behaviour.

Humphrey and Symes (2014) posit that learners with ASD require a structured, supportive environment in which to learn and develop without distraction and clutter. Regardless of the teaching context (mainstream or special needs education) teaching is a highly stressful profession with recent educational changes within the South African context placing an even higher demand on teachers. The intensity and severity of the characteristics may vary across the spectrums. However, the common set of characteristics includes lack of eye contact, difficulty interacting with others, language

delay, and sometimes random motor movements. While some people with ASD live relatively independent lives, others require lifelong support (Centres for Disease Control and Prevention, 2014).



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**Figure 2.1: Triad of ASD symptom clusters and impairments**

Symptoms of ASD are classified into three clusters; *Social Reciprocity* (difficulty in engaging in the back-and-forth flow of social interaction); *Social Communication* (difficulty in initiating and maintaining social relationships and engaging in a socially acceptable manner); and lastly, *Restricted, Repetitive Patterns of Behaviour, and Interests/Activities*. Restricted, repetitive patterns of behaviour may present as verbal echolalia (the repetition of words, phrases, intonation, or sounds of others' speech); stimming (self-stimulatory behaviour, the repetition of physical movements, sounds, or repetitive movement of objects); or any other behaviour or compulsions that the child may become fixated with as a pattern (Autism Speaks, 2017).

## 2.6.2 Manifestation of ASD in the Classroom

As the name suggests, ASD is a spectrum disorder, meaning that severity and symptoms will present on a spectrum. Therefore, each child with ASD would present with different combinations and magnitude of manifestations. Research indicates that because ASD manifests differently from one person to the next, it may be difficult to ascertain if a child has ASD or not, especially in the classroom (Rai, 2017). This information is provided for informational purposes only, to illustrate what ASD may look like within an educational setting. It is not meant to be a diagnosis, nor is it intended to be medical advice. Keeping in mind the triad of symptom clusters, children with ASD will be affected and challenged by these symptoms in their learning environment.

Impairments in social communication and social interaction can be seen in how a child with ASD interacts with their peers. One of the defining characteristics of children with ASD is that they fail to develop normative social relationships (Durand & Barlow, 2016; Wong & Kasari, 2012; Schietecatte, Roeyers, & Warreyn, 2012; Doyle, 2003; Carr, 2006). Initiating and maintaining friendships can be difficult and these children often prefer to limit their contact to adults, using them as tools, a means to achieve a task, or taking them by the hand to make a request (Durand & Barlow, 2016). Within a classroom, children who find social communication and interaction challenging, may be found absorbed in their world, rarely reaching out to their classmates and educators. They may find it difficult to maintain eye contact and can easily fixate on activities that are unrelated to the task at hand, thus making learning facilitation challenging for all role-players.

Wong and Kasari (2012) explains that in situations in which a learning facilitator is absent, in which the teacher's attention is directed elsewhere, or in which classmates seated nearby are occupied with their own tasks, children with ASD may be corporeally present, but mentally elsewhere. A learning facilitator can be one of the many learning aids to assist children with ASD in overcoming these challenges. Landsberg and Swart (2016), refers to these challenges in social interaction and relating as aloof, passive, social interactions. Children with ASD often lack an understanding of social rules and have difficulty predicting other individuals' behaviour and intentions (Landsberg & Swart, 2016; Ochs et al., 2001).

Deficits in non-verbal communication can manifest in a variety of ways. According to Durand and Barlow (2016), depending on the level of severity, non-verbal behaviour can include a lack of facial expression or tone of voice, also known as *prosody* (Elder, Kreider, Brasher & Ansell (2017), an inability to interpret others' emotions or non-verbal cues, having a different notion of personal space and boundaries (seen by standing too close to others).

Many children with ASD engage in echolalia, often echoing or repeating words or phrases possibly at a high volume. This can be disconcerting for educators as well as the other learners in the classroom. Approximately 25% of children with ASD struggle to develop sufficient speech proficiency to effectively communicate their needs (Anderson, Farrar, Golden-Kreutz, Emergy, Glaser, Crespin & Carson III, 2007; Carr, 2006).

### **2.6.3 CHALLENGES TEACHERS EXPERIENCE IN SUPPORTING LEARNERS WITH AUTISM SPECTRUM DISORDER**

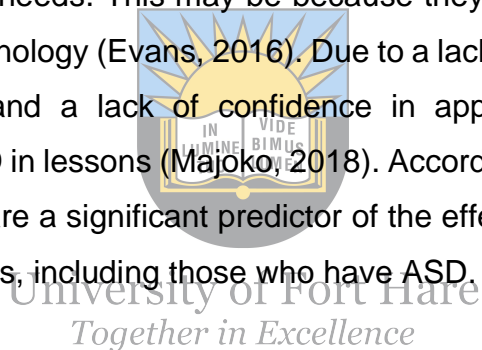
Lindsay et al. (2013) reported several challenges teachers experience in supporting learners with ASD including: understanding and managing behaviour; socio-structural barriers (i.e., school policy, lack of training and resources); and creating an inclusive environment (i.e., lack of understanding from other teachers, students and parents). This implies that additional resources, training and support are required to enhance the education and inclusion of children with autism.

Quality teaching tailored to meet this population's needs is a critical factor in students' academic achievements (Talib & Paulson, 2015). Teachers require relevant skills, knowledge and professional development through support and training to meet children's needs and overcome their professional challenges. A learner with ASD can have several learning and sensory difficulties, for example, dyslexia. This poses a significant challenge to teachers who need to address a combination of challenges that are often accompanied by behavioural problems. In addition to dealing with multiple challenges, teaching learners with ASD is emotionally challenging. Teachers experience emotional challenges in particular, when it is evident that their learners are not making progress or when they do not have the opportunity to attend residential workshops due to limited financial resources. Thus, teachers also struggle to come to terms with their feelings when learners

regress and eventually drop out of school without much of a future (Talib & Paulson, 2015).

It is evident that in addition to dealing with these challenges, teachers often need to provide support to parents who have learners with ASD (Lindsay et al. 2014). Parents' understanding of autism is often influenced by traditional beliefs. It is evident from the foregoing discussion that teaching learners with ASD can be a challenging and emotional task at times. Hence, teachers need to be knowledgeable about autism and have insight into how different cultures perceive learning challenges. Teachers inevitably require support in taking on such a challenging task (Lindsay et al. 2014).

The literature also reveals that teachers encounter difficulties in assisting children with disabilities because numerous general education teachers feel unprepared to address their learners' educational needs. This may be because they are unfamiliar with special education jargon and terminology (Evans, 2016). Due to a lack of training, teachers worry and experience tension and a lack of confidence in appropriately addressing and including children with ASD in lessons (Majoko, 2018). According to Lindsay et al. (2014), positive teacher attitudes are a significant predictor of the effectiveness of the education of children with impairments, including those who have ASD.



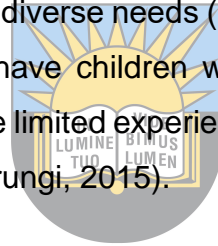
Lindsay and Edwards (2014) assert that the success of learners with ASD within an inclusive environment significantly depends on the teaching strategies employed. Numerous teachers lack adequate information about ASD, particularly concerning how to work with a child in the classroom and how to appropriately manage a child when a behavioural outburst occurs. Conversely, several researchers have explored the subject internationally (Humphrey & Symes, 2014).

Engelbrecht, (2016), state that there is lack of physical facilities in mainstream schools, and there are few adequately educated teachers and effective and adequate teaching and learning resources available. Because of this, it is less likely that South Africa's public schools will promote inclusive education. Education White Paper 6 (Department of Education 2001), describes three types of schools with mainstream schools as the first

type. The variety of students in their classrooms, including those with minimal to moderate support requirements, are catered for in these schools. Providing this support, however, is difficult in the absence of adequate infrastructure and instructional abilities.

The literature reveals that there are numerous challenges and hurdles to the effective inclusion of learners with special education needs in mainstream public schools (Murungi, 2015). It appears that the full range of learning needs has thus far not been implemented adequately in schools. Education structures in various education districts are not enabled and neither attitudes, teaching methods nor curricula reflect inclusive values (Strohwald, 2021).

The literature also revealed that teachers do not have the necessary skills, knowledge and training to respond to children's diverse needs (Evans, 2016, Murungi, 2015, Sambo, 2018). Thus, many teachers who have children with ASD in their mainstream school classrooms have been found to have limited experience and knowledge on how to include these children in their teaching (Murungi, 2015).



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#### **2.6.4 STRATEGIES TEACHERS USE IN AN EFFORT TO SUPPORT LEARNERS WITH ASD**

The ASD learner requires a structured, supportive environment in which to learn and develop an environment without distraction and clutter. Jang, Matson, Cevantes and Kronst (2014) provide key guidelines on which an educational programme specifically for learners with ASD should be based. Consistency is crucial, as autistic children quickly adopt fixed routines, and learners with ASD require and perform best with a scheduled routine. The learner with ASD must also be able to predict and exert some level of control to be predictable. As a result, learners with autism typically do best when they follow a defined daily programme with little to no variation. Since they learn visually, learners with ASD need visual tools to help them organise their days and study (Jang et.al, 2014).

Children with ASD need to be taught a balanced and comprehensive curriculum in an inclusive school (Decristofaro, 2016). Differentiated learning strategies are advantageous

for teachers to adopt to maintain ASD children's interested in learning experiences. Numerous studies and literature reviews have been produced to explain how individualized instruction and learning benefit children with ASD. Differentiated instruction and learning are crucial in maximising all children's capabilities and help to keep children with ASD engaged during lessons (Decristofaro, 2016).

The learning approaches to support children with ASD include: peer tutoring, pictography, applied behaviour analysis (ABA), picture exchange communication system (PECS) and the treatment and education of autistic and related communication disorders in childhood (TEACCH).

- **PEER TUTORING**

Peer tutoring is based on the social learning theory, which emphasises learning that occurs in social contexts, such as observational learning, imitation, and modelling (Bandura, 1977; Bene, Banda, & Brown, 2014; Bhat, Landa, & Galloway, 2011). Peer tutoring incorporates every element of the social learning paradigm. By observing their teacher complete examples of the material, they are studying, students engage in observational learning. Similarly, the tutor presents examples of how to participate in the activity, which the tutee subsequently copies to complete the assignment independently. Bene et al., (2014) assert that researchers have observed the advantages and drawbacks of peer tutoring.

Rusman (2011) identified the following benefits of peer tutoring. The activities and environments in which students conduct the peer tutoring are not high stakes situations, and students who fear a teacher's reprimand or action can be at ease when asking questions of their peer tutor. Peer tutors also use less technical language than is typically used by teachers, making it easier for students to understand Peer tutoring has also been associated with gains in elementary learners' performance, attitudes, and interest in academic subjects (Baiduri, 2017). Positive behavioural, social, cognitive, and academic outcomes are some of peer tutoring's benefits (Ginsburg, Block, Rohrbeck, & Fantuzzo, 2006; Scruggs, Mastropieri, & Marshak, 2012).

Worley and Naresh (2014) developed a peer tutoring programme and reported that tutor's and tutees' attitudes towards learning and participating in academic activities improved as a result of the programme. Serving as a tutor has a beneficial impact on a students' academic, social, and interpersonal relationships, according to the research. For instance, serving as a tutor can reorganise concepts in one's mind and present a greater cognitive challenge concerning simplifying, elaborating, and providing new examples; consequently, students typically learn more about the concepts they are teaching because they have to re-examine them from a different angle.

- **APPLIED BEHAVIOR ANALYSIS**

Lovaar developed ABA in 1965 for use with adults, and later children with ASD (Zager, Wehmeyer & Simpson, 2012). Lovaar based his approach on the work of a behaviourist named Skinner. ABA essentially involves rewarding adaptive behaviours and punishing maladaptive behaviours. ABA therapy is frequently used with children who have autism and other developmental disorders. ABA aims to help them develop skills in a variety of functional areas, including social and communication skills, academic and learning abilities, motor coordination, hygiene and grooming, and more. Several locations, including schools, homes, clinics, and other community settings, are used to deliver ABA, which is customised to meet individual requirements. The treatment aims to assist children with autism in functioning as successfully and independently as possible. Research indicates that regular ABA can considerably improve behaviours and skills while reducing the need for special assistance (Autism Speaks, 2016).

Yu, Li, Li and Liang (2020) found that children who received long-term, comprehensive ABA interventions to develop communication, language and daily living skills exhibited lifelong advantages in these areas. The analysis of these studies also indicated that ABA-based therapies led to superior language-related outcomes including higher IQ scores compared to non-verbal IQ scores. The programme encouraged intense weekly sessions of ABA therapy. According to Zager, Wehmeyer and Simpson (2012) this approach quickly became controversial. Today ABA and adaptations of this form of therapy remains widely used in treating individuals with ASD.

- **PICTURE EXCHANGE COMMUNICATION SYSTEM**

The picture exchange communication system (PECS) is a visual communication technique which encourages verbal interaction. Using PECS, both children and adults can interact with one another and develop communication skills including vocabulary, syntax and receptive and expressive language. The 11th International Conference on computer supported education (CSEDU) in 2019, highlighted the PECS approach which functions as a framework comprising multiple steps. Each step corresponds to a specific phase encompassing six stages ranging from teaching picture identification to combining them into simple phrases. In the advanced phases, individuals learn to employ modifiers and how to respond to criticisms and queries (PEC, 2011). The exchange picture approach is introduced as a means of communication between the child and their communicative partner. When a child shows a picture to a communicative partner, the partner responds by providing the objects or activities the child requests.

The strategy of distance and persistence is the second stage. This stage encourages children to be persistent communicators by providing images of the objects or activities across various distances, people, and/or surroundings. In the third stage, children learn to discriminate between various items in a group of photographs by picking their favourite. After that, students place the image in the PECS communication book, which is a ring binder with self-adhesive hook fastener strips that allows for the easy storage and removal of images for communication (Bondy and Frost, 2011). The fourth, fifth, and sixth phases all have to do with building sentences. These begin as simple phrases such as, I want and are expanded by the adding adjectives, verbs, and prepositions. Finally, people will be able to respond to inquiries and offer opinions.

The picture exchange communication technique is a communication system which teaches a learner to trade a picture for a desired object without the learner using verbal language (Ivy, Robins & Kerr, 2020). PECS was created to teach ASD children how to engage in social interactions (Randolph, 2015; Hume, Steinbrenner, Odom, Nowell, and Tomaszewski, 2021). The six steps in the PECS training programme which was developed using an applied behaviour analysis methodology are communication, picture

recognition, distance and persistence, forming phrases, answering questions, and commenting on various scenarios (Randolph, 2015; Hume, Steinbrenner, Odom, Nowell, and Tomaszewski, 2021). Two people assist the child with ASD in using the PECS as a physical prompter and a communication partner. The child with ASD replies by drawing a picture while the adult speaks to convey information. Each stage of the training must be completed successfully before moving on to the next. Children with ASD who receive all of the PECS instruction have reported being able to communicate well with other members of society (Ivy, Robbins & Kerr, 2020).

- **TREATMENT AND EDUCATION OF AUTISTIC AND RELATED COMMUNICATION HANDICAPPED CHILDREN (TEACCH)**

The Treatment and Education of Autistic and related Communication Handicapped Children (TEACCH) approach to ASD was developed in the early 1970's by Mesibov, Shea and Schopler (2004) from the University of North Carolina, Chapel Hill, and extended over a thirty year period of research and treatment of individuals with ASD (TEACCH Autism Program, 2013) is a method developed for children with autism spectrum disorder, or ASD. The method focuses on a structured form of visual learning and is, therefore, also known as Structured Teaching.

The TEACCH approach prescribes the use of individual and group schedules and visual sequences. The use of independent visual schedules allows for structure to the classroom routine and stimulates communication even for non-verbal learners (Mesibov, Shea & Schopler, 2004; Botha & Frost, 2020). Structure is the TEACCH form of behaviour management, where appropriate behaviours are taught and then generalised through visual systems. According to the TEACCH approach the classroom layout should represent the teaching approach, for example, the use of independent workstations, physically divided working areas and group table work (Mesibov, Shea & Schopler, 2004; Botha & Frost, 2020). Although the TEACCH approach was not developed to be implemented in the inclusion setting, it may be used as a tool from which the accommodation of learners with ASD in the mainstream classroom is made possible (Mesibov and Howley, 2003;). Due to communication being such a central difficulty in learners with ASD and concentered with the fact that learners with ASD favour visual over

verbal stimulation many professionals and families working with ASD incorporate hand gestures and even signs in their communication with individuals with ASD. Makaton was a bridge to communication developed by Margaret Walker in 1972 (Golding, n.d, retrieved from course work package Vera Intensive Training for Teaching Learners with Autism). According to Golding (n.d,) Makaton is a multi-modal communication program for individuals with severe communication and learning disabilities and is therefore a valuable tool for learners with ASD who lack communicative intent. Makaton is a flexible program that can be successfully implemented alongside other approaches to teaching learners with ASD such as TEACCH and ABA.

The method focuses on a structured form of visual learning and is, therefore, also known as Structured Teaching (Panerai, 2009). TEACCH is based on the idea that individuals with autism tend to learn best visually and was created expressly for children with autism, TEACCH may (and should) be utilised in a partnership between parents and experts. Although TEACCH originally targeted autistic children (Mesibov, Browder & Kirkland, 2004) assert that can, however, be applied to children with a variety of needs. With no outside distractions for the child and utilizing visual cues, and personalised evaluation, TEACCH emphasises the value of environmental organization (Bosa, 2006).

To create a structured teaching and learning environment, it is necessary to be physically organised with a designated area for the child to carry out each task, so that they are aware of the precise location of their workspace. TEACCH is an approach that focuses on creating schedules and work systems featuring visual timelines. These timelines indicate the order of the tasks, their completion deadlines and the quality to be accomplished. The approach includes activity model that visually illustrate each activity's step-by-step process (Bosa, 2006). The TEACCH method relies on the core principles of Structured Teaching. These principles are: the organization of the physical environment, a predictable sequence of activities, visual schedules, routines and flexibility, work/activity systems, and visually structured activities.

### **1. The organization of the physical environment/physical structure**

This principle looks at making the environment conducive for learning. It should be interesting and manageable for children with autism. The layout of the environment needs

to account for the student's learning styles and sensory differences. The layout involves the placement of furniture and the organization of learning aids around the classroom; a well-established environment decreases stimulation, limits distractions, and reduces anxiety, as well as promotes consistent and effective work. To make the environment effective, the age and learning needs of the child need to factor into the organization of that environment. Clear boundaries need to be in place to avoid the child from wandering. Explicit visual cues or written information (for verbal children on the spectrum) are critical (Ivy, Robbins & Kerr, 2020).

## **2. Predictable sequence of activities/scheduling**

When the activities and environment are predictable, this reduces anxiety, especially when it involves activities that follow after the other. Each sequence in the activities is explained to the child with ASD through the use of visual aids (American Psychiatric Association, 2013).



## **3. Visual schedules**

Visual communication is generally much easier to understand and much more accessible. Humphrey & Symes (2011) in his explanation, state that when a person on the spectrum follows a particular routine by looking at the schedule, the task becomes less confusing and therefore reduces the occurrence of unwanted behaviours. Another benefit of visual scheduling is that it builds independence and competence, especially when the person or child learns to adopt this themselves in their everyday routine. Examples of visual schedules include: to do lists, a schedule outline activity, step-by-step instructions to complete tasks (using pictures for example), or timetables (Kargas, López, Reddy & Morris, 2014).

## **4. Routines and flexibility**

Children with ASD invariably find comfort in following the same routine every day and can become quite inflexible regarding routines. If the routine is disrupted, the learner often becomes upset and may resort to self-stimulating behaviour to calm themselves (American Psychiatric Association, 2013; Humphrey & Symes, 2011; Duerden, Oatley, Mak-Fan, McGrath, Taylor, Szatmari & Roberts, 2012; Kargas, López, Reddy & Morris,

2014). Routines serve two purposes: firstly, they make the activity or everyday task predictable, which reduces confusion and anxiety; secondly, for parents, teachers, or therapists, they stop the child from developing his/her own routine which could otherwise not be favourable or adaptable socially (Humphrey & Symes, 2011).

Kargas, López, Reddy & Morris (2014) assert that with routine, there needs to be a balance with flexibility because our everyday life is not constant, each day has its own challenges that force us to adjust. So, because children with autism have difficulty understanding the world is not invariable, their routine should be challenged. For example, using slightly different materials when he/she works, walking different paths, introducing different games, or choosing different times than usual when going out for walks etc. The goal is for the routine to be predictable but also vary slightly so the focus is on the structure not the detail.

## **5. Structure work/activity systems**

This helps the child understand the task, stay focused and complete the task independently (Friedlander, 2009). It answers four key questions: first, what is the task or activity. Secondly, how much work is required for this task during this specific period. Thirdly, how will the child know when he/she is making progress and when the activity is completed and lastly, what happens after the task is completed. This implies that, for an autistic child who may struggle to understand language, these questions can be answered using pictures, symbols, colours, numbers, or objects. For example, when doing a matching activity, using items like Velcro to stick pictures where appropriate and ensuring the activity is visually clear on what the child needs to do i.e., matching colours or shapes. On the other hand, an autistic child who understands language would do well with written lists of tasks and labels (Ingersoll & Lalonde, 2010).

## **6. Visually structured activities**

Activities need to be visually clear and meaningful to the child. If the child can't touch, see or hold the activity, he/she will likely not engage in the activity nor find it engaging enough for him/her to give attention. Visual instructions tell the child what he/she needs to do, visual organization involves providing the required materials needed to complete the task, neatly organized and stable. Finally, visual clarity helps the child on the autism spectrum

know what he/she is doing because it is clear and it is not visually distracting, overwhelming, or confusing (Visual Schedules for use with Autism, 2009).

## **2.5 What are the benefits of the TEACCH method?**

Besides the fact that the TEACCH method was developed specifically for children with autism, its use of visual cues for teaching makes learning more accessible, especially for children who are non-verbal. Visual aids make learning a universal tool Ichikawa, Takahashi, Ando, Anme, Ishizaki, Yamaguchi and Nakayama, (2013). The main goal of the TEACCH method is for children on the autism spectrum to acquire social skills and to help change their perception of social settings in a positive way. NasoudiGharehBolagh, Zahednezhad and Vosoughillkhchi (2013) assert that research studies have shown the TEACCH method is effective; one study states that this method impacted autistic children's adaptive behaviours, plus social reciprocity, including the parents' stress levels and parent-child interactions. Similar research has shown this method is effective in reducing self-injurious behaviours (Mesibov & Shea, 2010).

## **2.6 Effects of Stigma To Learners With Autism**

Stigma can be seen as an overarching term for problems of knowledge (i.e., ignorance), problems of attitudes (i.e., prejudice), and problems of behaviors (i.e., discrimination) (Thornicroft, Rose, Kassam & Sartorius, 2007). Definitions of the interconnecting processes that contribute to or reflect stigma are varied, underlining the challenge of capturing this complex process. This review draws on Link and Phelan's seminal conceptualization of stigma (Link & Phelan, 2001). They argue that the development of stigma derives from the culturally driven detection and labeling of a difference (e.g., labeling people with a particular set of behavioral characteristics as autistic), which converges with other interrelated components to form stigma. Link and Phelan's (Link & Phelan, 2001) second component of stigma is the attribution of unfavorable stereotypes to the label (e.g., autistic people are unfriendly). From a social-cognitive perspective, this link between a label and its stereotypes is key to the development of stigma, as stereotypes can implicitly affect how an individual perceives other people.

Greenwald and Banaj (1995) assert that the next component is the use of the label to cause a separation between "them" and "us" (e.g., autistic people vs. everyone else).

The final component is loss of status and the experience of discrimination (e.g., not being hired or promoted because of being autistic). Status loss and discrimination can be perceived as behavioural outcomes of stigma; a consequence of being labeled being classified as other and being linked to undesirable characteristics. Experiencing status loss and discrimination lies at the heart of the inequality that a stigmatized person faces and contributes to negative treatment at both personal and structural levels (Thornicroft, Rose, Kassam & Sartorius, 2007; Link & Phelan, 2001). Limited knowledge and understanding has a critical role in the presence of stigmatized views, as an individual is more likely to rely on reductionist labels and stereotypes, dichotomize into them versus us, and ultimately behave in a discriminatory way.

Link and Phelan (2001) explains that attitudes and beliefs can be conceptualized as the deeply held cognitions that lead to the labeling, stereotyping, setting apart, and discriminating that contribute to stigma. Attitudes are often measured by directly asking people to state how much they endorse positive and negative attitudes toward autism. Alternatively, openness toward a fictional autistic adult or child can be explored, for example, by asking participants to rate whether they would feel afraid of the autistic person. According to Nevill and White, 2011; Harnum, Duffy & Ferguson, 2007) stigma is traditionally measured by using a measure of social distance, which is seen as a consequence of stigmatized views and conceptualized as the deliberate avoidance or exclusion of another person from social interactions (Gillespie-Lynch, Brooks, Someki, 2015; Gillespie-Lynch, Daou, Obeid, Reardon, Khan & Goldknopf, 2021) posit that stigma can be categorized into different types. Most commonly, the discussion of stigma refers to enacted or public stigma, which is the overt discrimination of stigmatized individuals (Gray, 2002). However, this review will also consider self-stigma, or felt stigma, which is when the stigmatized person turns the prejudice, they experience onto themselves (Corrigan & Watson, 2002).

This can include feeling shame in relation to stigmatized characteristic(s), and fear of enacted stigma (Corrigan & Watson, 2002; Jacoby, 1994). Affiliate, or courtesy, stigma will also be discussed, which is stigma experienced by people associated with the stigmatized person, e.g., family members (Goffman, 1963; Gray, 2002). Autistic people

can experience loneliness and fewer friendships compared with neurotypical peers, (Bauminger & Kasari, 2000; Ee, Hwang & Reppermund, 2019; Petrina, Carter & Stephenson, 2014) fewer friendships in adolescence compared with peers with other special educational needs, (Rowley, Chandler & Baird, 2012) have more difficulties with education and employment, Brede, Remington, Kenny, Warren, Pellicano, (2017) experience poor social integration, Billstedt, Gillberg & Gillberg, 2005; Howlin, Goode, Hutton & Rutter, 2004) and face high rates of bullying (Rowley, Chandler & Baird, 2012).

These factors are associated with a reduced quality of life (Tobin, Drager & Richardson, 2014). While these experiences have been attributed to autistic traits, more recent thinking has also considered the impact of negative societal responses to autistic people in contributing to these outcomes (Sasson, Faso, Nugent, Lovell, Kennedy & Grossman, 2017; Gillespie-Lynch, Kapp, Brooks, Picken, Schwartzman, 2017). Reflecting this, interviews with neurotypical people have found that autism is perceived by some as violating “accepted societal norms” (Huws & Jones, 2010).

Learners with autism encounter negative experiences in their everyday lives that are likely to reflect autism stigma. For example, neurotypical people are less likely to want to live in the same building as autistic people or to spend time together as friends, Nevill & White, 2011 and they are also less likely to want an intimate relationship with an autistic person (Jensen, Martens & Nikolajsen, 2016). At the extreme, autistic people can be dehumanized by neurotypical people (Cage, Monaco, & Newell, 2018). Autistic people describe autism stigma as destructive and at odds with their own conception of autism as a value-neutral category, such as handedness and eye colour (Botha, Dibb & Frost, 2020).

## **2.7 SUMMARY**

This chapter identified learning approaches to support learners with ASD. This chapter highlighted an important point that each child with ASD must be treated as a unique individual when considering their inclusion in a mainstream classroom. These children’s inclusion should be based on developing knowledge and understanding about how the autism spectrum affect everyone. Teachers’ knowledge and skills are also crucial factors to consider integrating children with ASD. We also mentioned benefits of inclusion as well

as the stigma learners with autism face in the learning environment. Learners with autism encounter negative experiences in their everyday lives that are likely to reflect autism stigma. For example, neurotypical people are less likely to want to live in the same building as autistic people or to spend time together as friends, and they are also less likely to want an intimate relationship with an autistic person. At the extreme, autistic people can be dehumanized by neurotypical people. Autistic people describe autism stigma as destructive and at odds with their own conception of autism as a value-neutral category, such as handedness and eye colour.



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## CHAPTER 3

### RESEARCH METHODS AND METHODOLOGY

#### 3 INTRODUCTION

This study explored Grade One teachers' approaches in supporting learners with autism spectrum disorder. This chapter provides an outline of the research method employed to gather and analyse data to meet the study's aim. The research method: research paradigm, design, data gathering instruments, sampling and sample size, negotiation for entry, data analysis and ethical issues are discussed. These features, which are applied in this study were perceived to have a significant role in facilitating an understanding of the subject under investigation.

#### 3.1 RESEARCH PARADIGM

A research paradigm is a perspective about research held by a community of researchers that is based on a set of shared assumptions, concepts, values, and practices (Johnson & Christensen, 2008:33). It is an approach to thinking about and doing research. A paradigm according to Kuhn (2009), is the prevailing framework of theories, concepts and principles that account for a universally accepted way of thinking and doing within the world view in which it exists. This is also referred to as a philosophy of living life.

Babbie (2001:42) defines paradigm as the fundamental model or frame of references used by researchers to recognize their observations and reasoning. Lichtman (2013:10) talks about traditional research paradigms as ways of seeing the world and making certain assumptions about the world. They assume that there is an objective reality that researchers should try to uncover as they conduct their research. Maree (2013:47-48) defines a paradigm as a set of assumptions or beliefs about fundamental aspects of reality which gives rise to a particular worldview.

The author further points out that a paradigm serves as lens or organizing principles by which reality is interpreted. Maree (2013:48) notes that paradigms represent what we think about the world (but cannot prove). Our actions in the world, including the actions we take as inquiries, cannot occur without reference to those paradigms: "as we think, so do we act".

However, this study employed the interpretivism paradigm to acquire a unique, in-depth, thick account of the participants' experiences and attitudes. In qualitative research, the interpretivist approach involves the interpretation of meaning. This approach involves explaining the process of interpreting data and analysing what the participants say to understand and describe their meanings. Merriam and Tisdell (2015) explains that interpretive approach in the humanities is guided by an interest in obtaining a possible consensus of understanding among actors within the frame of reference of self-understanding as mediated within the culture. The foregoing definition implies that this approach facilitates an understanding of people's knowledge and truth. The approach understands that actors within their particular cultures and social settings perceive their world differently from one another; the aim is therefore to provide an understanding of individual truths (Merriam & Tisdell, 2015).

Interpretivism has its roots in hermeneutics, which is the study of the theory and practice of interpretation (Maree, 2013:58). Schleiermacher and Dilthey, in Maree (2013:59) considered understanding to be a process of psychological reconstruction, whereby the reader reconstructs the original intention of the author. Maree (2013:59) says that the interpretivist perspective is based on the assumption that human life can only be understood from within. Interpretivism focuses on people's subjective experiences, on how people construct the social world by sharing meanings, and how they interact with, or relate to each other. Social life is a distinctively human product. By placing people in their social contexts, there is a greater opportunity to understand the perceptions they have of their own activities.

The uniqueness of a particular situation (the context) is important to understand and interpret the meanings constructed. The human mind is the purposive source or origin of meaning. Through uncovering how meanings are constructed, we can gain insights into the meanings imparted on our mind and improve our comprehension of the whole. Human behavior is affected by knowledge of the social world. As our knowledge and understanding of the social world and the realities being constructed increases, it enriches our theoretical and conceptual framework. The social world does not exist independently of human knowledge. As researchers, our own knowledge and understanding of

phenomena constantly influence us in terms of the types of questions we ask and in the way we conduct our research.

Lichtman (2013:24) defines interpretivism as a doctrine that emphasizes analyzing the meaning people confer on their own actions. Interpretivism has, as its greatest strength, the richness and depth of exploration and descriptions it yields through the qualitative approach to research. However, it is criticized for its subjectivity and failure to generalize its findings beyond the situation being studied (Maree, 2007:60). The research focused on the interpretive paradigm. According to Creswell (2014), an interpretive paradigm is based on the idea that people socially and symbolically construct their own organizational realities.

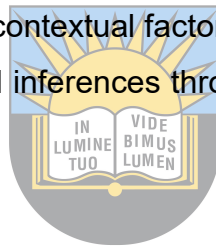
The researcher has chosen to use the interpretivist theoretical paradigm for her research. Interpretivism as a paradigmatic theory, sees social constructions such as language, consciousness and shared meanings as central to the paradigm (Myers, 2013). The issue here is that reality from an interpretivist view is socially constructed. This implies the need for interpretative analysis of data by the researcher, which can only gain meaning if the researcher understands the subject's language, along with all its attendant nuances (Taylor & Medina, 2013). This paradigm is suitable for this study because it is consistent with the assumption that the use of quality textbooks will enhance lesson planning and good delivery of subject matter in the classroom. The day-to-day experience of the teachers in exercising their teaching profession will be established (Litchman, 2013). Thus, paradigms are to do with knowledge claims. There are a number of paradigms or knowledge claims that have taken root in today's research; some of which are positivism, interpretivism, post-positivism, critical theory and pragmatism (Maree, 2013:47). However, one will discuss more about other paradigms mentioned above.

### **3.1.1. Positivism**

It was during the 19th century when the famous movement known as positivism started with Auguste Comte (Johnson & Christensen, 2008:391). Positivism is the idea that only what we can empirically observe is important, and that science is the only source of knowledge. Lichtman (2013:10) says that positivism deals only with observable entities

and objective reality; or traditional research paradigms (which are ways of seeing the world and making assumptions about it). According to Maree (2013:53), in positivism, only objective, observable facts can be the basis for science. He further explains the view of Comte, the Vienna Circle, and logical positivism, that theological (the supernatural) or metaphysical (the abstract) claims must yield to the positive – that which can be explained in scientific laws.

Gray (2004:18) refers to positivism as the belief that what reality consists of it is what is available to the senses. Within positivism, the knower and the known are independent (Tashakori & Teddlie, 2009:85). Ryan (2006) asserts that within positivism, the relationship between the self and the knowledge has been largely denied. For a statement to be true, it must be tested and proven. Furthermore, Kim (2003:8) contends that blind faith in the positivist approach can potentially jeopardize the soundness of research in the social sciences because influential contextual factors in organizations can be ignored by methods which seek to draw causal inferences through examining only the phenomena that are readily observed.



### 3.1.2 Post-Positivism

Post-positivism is a modification of positivism. According to Tashakori and Teddlie (2009:5), post-positivism is the intellectual heir to positivism, which came about as a reaction to widely discredited axioms of positivity. Lichtman (2013:292) says that a post-positivist view would accept that reality can only be reached in an imperfect manner, but nevertheless, would anticipate a researcher striving to reach it. Post-positivist approaches assume that reality is multiple, subjective and mentally constructed by individuals (Maree, 2013:65). Maree says, for the post-positivist researcher, reality is not a fixed entity, and it is to a certain degree accepted that reality is a creation of the individuals involved in the research.

Post-positivist thinkers focus on establishing and searching for evidence valid and reliable in terms of the existence of phenomena, rather than generalization. Critics of post-positivism direct their criticism towards the interactive and participatory nature of qualitative and quantitative methods used in research. They argue that post-positivists use methods that are merely an assemblage of anecdotes and personal impressions

which are highly suspicious in terms of research subjectivity and research bias (Maree, 2013:65). Each school of thought discussed above has its own strengths and weaknesses. Many of the criticisms made of one knowledge claim could equally be applied to the other. For practical research purposes, no paradigm is preferable to another. The choice depends in part on the purpose of the study and the research question.

### 3.1.3 Pragmatism

According to pragmatists, reality is external and multiple, constructed by humans in an ongoing process of action, not in a posited structure of relations (Romm, 2014). They hold that without action, any structure of relations between people is meaningless, but to perform changes in desired ways, action must be guided by purpose and knowledge. The world is thus changed through reason and action and there is an inseparable link between human knowing and human action (Goldkuhl, 2012). Pragmatists avoid arguing about metaphysical terms such as truth and reality. Instead, they argue that the value of evaluation is not based on whether they discover the truth, but on the demonstration that the results work with respect to the problem that is being studied (Mertens & Wilson, 2012). From this argument, it then follows that pragmatism is typically characterized by a positive attitude toward integrating practice and rejecting traditional dualisms.

It prefers empirical over idealistic or rationalistic approaches, as well as agreeing that knowledge and thinking should be seen as forms of activity, as experimental inquiry (Hall, 2013). In terms of their ontological stance, pragmatists believe in an external world independent of the mind, as well as what is lodged in the mind. They expect researchers to stop asking questions about reality and the laws of nature, and direct them towards multiple methods, different worldviews, different assumptions, as well as different forms of data collection and analysis (Greene, 2012, Mertens & Wilson, 2012). Literature notes that pragmatism emerged through the writings of Peirce, James, Dewey, and Mead, among others (Goldkuhl, 2012; Mertens & Wilson, 2012).

In etymological terms, pragmatism is identified as a practical (action-oriented) paradigm to finding solutions for existing problems and issues (Kalolo, 2015). Pragmatism signifies practicality, compromise, prudence and a clear goal orientation in dealing with problems.

From another perspective, pragmatism is believed to be a broad research paradigm covering many different areas which include knowledge, language and ethics (Goldkuhl, 2012).

These authors (Goldkuhl, 2012; Mertens & Wilson, 2012) note that pragmatism is associated with action, intervention and 78 constructive knowledge; drawing heavily on the inductive and deductive reasoning (Iluah & Eaton, 2013). As a paradigm, it is characterized by its ability to accept all well-constructed paradigms of scientific inquiry as valid, when they are appropriate (Kalolo, 2015). The paradigm therefore, provides for the use of both qualitative and quantitative research methodologies to collect information and make inquiry into complex phenomenon of social and natural contexts (Creswell, 2009; Teddlie & Tashakkori, 2010).

Pragmatists assert that what works is what is useful and should be used, regardless of any philosophical or paradigmatic assumptions (Zandvanian & Daryapoor, 2013) and can be described as a better process to answering “what”, “why” and “how” research questions (Saunders, Lewis & Thornhill, 2009). It is acknowledged that pragmatism offers an alternative worldview to that of positivism and interpretivism and focuses on the problem to be researched and the consequences of the research (Creswell & Plano-Clark, 2011). The authors go on to argue that pragmatism allows the researcher to be free of mental and practical constraints imposed by the “forced choice dichotomy between positivism and constructivism, and researchers do not have to be prisoners of a particular approach or technique” (p. 27). The pragmatic research philosophy provides for the adoption of mixed methods as the data collection method which opens the opportunity to be objective and subjective in analyzing the points of view of the participants (Creswell, 2009; Saunders et al., 2009).

It focuses on the problem and tries to find practical solutions through the use of mixed methods (Iluah & Eaton, 2013). By doing so, the pragmatic approach allows areas to be studied that are of interest, embracing methods that are appropriate and using findings in a positive manner in harmony with a recognized value system (Creswell, 2009). It therefore follows that pragmatic research is multi-purpose in nature, making it a good approach that allows questions to be addressed that do not fit comfortably within a wholly

quantitative or qualitative approach, research design and methodology (Ihuah & Eaton, 2013).

Pragmatic philosophy is concerned with choosing between one position (ontology, epistemology or axiology) and the other but is somewhat unrealistic in practice. Instead, it argues that the most important determinant of which position to adopt is the research questions (Creswell & Plano Clark, 2011). However, this paradigm has its own ontological, epistemological, axiological and methodological positions in research. The essence of pragmatist ontology is actions and changes, holding the argument that humans are acting in a world which is in a constant state of becoming (Goldkuhl, 2012).

### **Ontology**

The term *ontology*, refers to a branch of philosophy concerned with articulating the nature and structure of the world. It specifies the form and nature of reality and what can be known about it (Webster, 2022). Ontology is a person's unique, individual belief system which reflects an interpretation of reality. Everyone holds their own ontology based on their personal experiences, shaping their belief system. Webster (2022) describes ontology as a way of constructing reality, how things are and how things work (Webster, 2022).

Within the interpretivist paradigm, the ontology is that the world, and knowledge, are created by social and contextual understanding. The participants were allowed to express their ontology based on their everyday realities, providing a view from a practical, ground-level perspective, shaped by the teaching experiences in dealing with learners diagnosed with autism. Each teacher holds their belief system regarding inclusive education, the implementation thereof and how to assist a child with a barrier to learning. This study explored how these beliefs may shape the relationship and interactions between an educator and learners with ASD.

### **Epistemology**

Epistemology can be seen as the theory of knowledge, which Terre Blanche, Durrheim and Painter, (2014) summarise by asking the question, "What is the nature of knowledge

and relationship between the knower and the would-be-known?” Epistemology identifies the nature of the relationship between the researcher as the knower and what can be known. The researcher and participating educators were involved in an interactive process of interpreting socially constructed knowledge within the natural setting of the mainstream classroom that includes a child, or children, with ASD. The interpretive paradigm, as specified by Terre Blanche et al (2014) implies that the process must take place within the context or setting where the multiple realities under investigation exist and are accessible. These authors believe that as the interpretive researcher subscribes to the notion that reality consists of the external world’s subjective experiences, an interactional, epistemological stance towards the research should be adopted (Terre Blanche et al., 2014).

**Methodology**

Leedy and Ormrod (2016) assert that it is of particular importance to acknowledge the fact that data gathering, and methodology are inextricably interdependent. For that reason, the research methodology to be adopted for a particular problem must always recognise the nature of the data that will be amassed in resolving that problem. The methodology is merely an operational framework within which the facts are placed so that their meaning may be seen more clearly (Leedy & Ormrod, 2016). This study’s primary concern was to investigate teachers’ approaches in supporting learners with ASD. The participant’s lived reality was important as it provided context and a frame of reference for the phenomenon under scrutiny (Leedy & Ormrod., 2016).

**Table 3.2: Characteristics of interpretivism**

Feature	Description
Purpose of the research study	To investigate Grade One teachers approaches in supporting learners with autism spectrum disorder.

Ontology	<ul style="list-style-type: none"> <li>• Multiple realities exist due to the unique experiences, beliefs, perceptions, interpretations and knowledge people hold.</li> <li>• These realities can be explored and made meaningful through human interaction and discussion to discover how people make sense of their social worlds.</li> </ul>
Epistemology	<ul style="list-style-type: none"> <li>• Events are understood through the process of interaction with social contexts.</li> <li>• Those active in the research process socially construct meaning and knowledge by experience in the natural setting.</li> <li>• The researcher and participants form a symbiotic relationship based on conversation and listening to gain a deeper understanding of their lived experiences.</li> </ul>
Methodology	<ul style="list-style-type: none"> <li>• Process of data collection.</li> <li>• Research is a product of the researcher's values.</li> <li>• Semi-structured interviews and a focus group discussion.</li> </ul>

Below is a summary of the three major paradigms showing their respective ontological, epistemological, axiological, and methodological assumptions.

**Table 3.1: Major research paradigms and their philosophical assumptions**

Descriptive	Positivism	Post-Positivism	Interpretivism	Critical Theory	Pragmatism

<b>Synonym</b>	<b>Verify</b>	<b>Predict</b>	<b>Understand /interpret</b>	<b>Emancipate</b>	<b>Dialectic</b>
<b>Ontology What is real</b>	findings are the whole truth, which is realism	objectivist, findings are probably true, and there is transcendental realism	Local, relative, co-constructed realities. There is subjective, objectivity and realism	Historical/virtual realism shaped by outside forces, material subjectivity	Constructed based on the world we live in and explanations that produce the best desired outcomes.
<b>Epistemology What is true?</b>	The only knowledge is scientific knowledge which is truth, reality is apprehensible	Findings are based on values and local examples of truth	Co-created multiple realities and local truths	Findings are based on values and local examples of truth	Objective and subjective points of view
<b>Axiology What is the role of values?</b>	Value-free, propositional knowing about the world is an end in itself, is intrinsically valuable.	Propositional knowing about the world as an end in itself, is intrinsically valuable.	Value-laden, and biased. Propositional, Transactional knowing is instrumentally valuable	Propositional, transactional knowing is instrumentally valuable as a means to social emancipation,	Multiple stances, e.g. researchers include both biased and unbiased perspectives.

<b>Methodology How do I examine what is real?</b>	Quantitative -Primarily Experimental, Quasi-Experimental	Usually Quantitative- Experimental with threats to validity. Qual-a case study	Means to social emancipation . Often Qualitative and/or Quantitative	Which is an end in itself, is intrinsically valuable? Usually Qualitative, but also Quantitative	Quantitative & Qualitative Together (Mixed Methods Approach)
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**Source: (Aliyu, Muhammad, Rozilah& David, 2014: 80; Milman, 2012: 103)**

**3.2 RESEARCH APPROACH: QUALITATIVE**

This study employed a qualitative research approach. The researcher planned to conduct the study in the participants’ school area to address the research questions. The qualitative approach allowed the participants to explain their experiences and views concerning the best educational approach for learners with ASD. A research approach refers to the system of acquiring knowledge and the activity of considering, reflecting upon and justifying the best methods (Creswell, 2014). A qualitative study is concerned with non-statistical data and small samples, often purposively selected. Qualitative research seeks depth of experience and asks carefully selected participants to share their views and motivations. Merriam and Tisdell (2015) add that qualitative researchers seek to discover, understand, and gain insight and therefore must select a sample from which the most can be learned.

Creswell (2014) states that qualitative research seeks to interpret community members’ experiences and produce a better understanding of the social factors which play a role in their specific social environments. He also states that qualitative research methods produce descriptive data such as people’s spoken or written words or observable behaviours. Similarly, Merriam and Tisdell (2015) indicate that qualitative research is concerned with understanding the phenomenon of interest from the participants’

perspective rather than the researchers. Qualitative researchers are considered to be interested in understanding how people interpret their experience, how they construct their worlds, and what meaning they attribute to those experiences (Merriam et al., 2015). A qualitative study focuses on determining what **participants** think and feel about a particular phenomenon or issue; reality is interpreted from the **participant's** frame of reference. Using inductive reasoning, qualitative research studies seek to understand the phenomenon under investigation from the sample. Methodologies such as interviewing (as used in this study), document analysis and observations, which rely on the subjective relationship through interaction between the researcher and participants, lend themselves to be utilised in the interpretive constructivist paradigm (Martens, 2005; Terre Blanche et al., 2006).

### **3.2.1 Strengths and weaknesses of the qualitative method**

Qualitative research uses 'wide and deep angle lens method' when examining behavior as it occurs naturally, in all its detail (Johnson & Christensen, 2008:36). According to Johnson and Christensen (2008:442), the strengths of qualitative research method are:

1. Data is based on the participants' own categories of meaning.
2. It is useful for studying a limited number of cases in depth.
3. It provides individual case information.
4. It provides understanding and description of people's personal experiences of phenomena (that is, the emic or insider's viewpoint).
5. It can describe, in rich detail, phenomena as they are situated and embedded in local contexts.
6. Qualitative researchers are especially responsive to changes that occur during the conduct of a study and may shift the focus of their studies as a result.

In the same vein, the weaknesses of qualitative method are identified thus;

1. Knowledge produced might not generalize to other people or other settings (that is, findings might be unique to the relatively few people included in the research study).
2. It is difficult to make quantitative predictions.
3. It has lower credibility with some administrators and commissioners of programs.

4. It generally takes more time to collect the data when compared to quantitative research.
5. The results are more easily influenced by the researcher's biases and idiosyncrasies.

Qualitative approach was appropriate for this study as it provided the researcher with the responses to the questions in this study. The researcher sought to gain a clear understanding of approaches teachers use in supporting learners with ASD. Litchman, (2013) emphasizes that qualitative research is concerned with conditions or relationships that exist, beliefs and attitudes that are held, effects that are being felt and trends that are developed. The research approach requires the researcher to gain the trust of the subjects in order to avoid any personal biases, and in this way be able to gather data fundamental to the process of the study.

### 3.3 RESEARCH DESIGN: CASE STUDY

This study employed a case study approach to explore Grade One teachers' ways of supporting learners with ASD. Cresswell (2013: 97) & Yin (2018) describes a case study 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 sources of information". **As the data were collected from six different schools namely three special schools, two full-service schools and one mainstream school, this approach was deemed suitable because the cases differed from one another. A case study is defined as both the process and the consequence of an inquiry.**

A case study considers investigating both the context and multifaceted conditions concerning the case(s) under investigation, both of which are necessary to fully understand the case(s). Case study research goes beyond studying isolated variables. It favours collecting data in natural settings and emphasises studying the phenomenon within its real-world context. The benefit of a case study is that it produces a sound case report because of various data sources used as evidence, which was one of this study's aims (McCombes, 2022).

A case study is regarded as producing information beyond the exploratory functions (McCombes, 2022). A selected case study must be related to a regular or daily event: therefore, there must be an influential structure for the chosen case to ensure that the research contributes to current research literature. Because qualitative methods generally aim to understand the individual's experiences and attitudes these methods aim to answer questions about what, *how* or *why* of a phenomenon (McCombes, 2022).

### **3.4 SAMPLING TECHNIQUES AND SAMPLE**

The researcher utilised a purposive sampling technique to select primary schools situated in Buffalo City Education District to participate in the study. Purposive sampling is deemed appropriate for qualitative research because a qualitative study seeks depth of experience and asks carefully selected participants to share their views and motivations. Creswell, (2014) states that with purposive sampling, researchers employ judgement when selecting cases with a specific purpose in mind. Buffalo City Education District has fewer than five schools designed for learners with special educational needs. One of those schools is in a semi-urban area. This education district has two full-service schools, one is a former model C school and the other is in a semi-urban area. Three teachers were selected from each participating school. As the sample consisted of six schools, 18 teachers were interviewed. The data were collected and analysed using themes and sub-themes that emerged from the participants responses to questions to ascertain the main issues concerning teachers' approaches in supporting learners diagnosed with ASD.

### **3.5 DATA COLLECTION INSTRUMENTS**

The study utilised the method described hereunder to obtain data.

#### **3.5.1 SEMI STRUCTURED INTERVIEWS**

Semi-structured interviews allow the researcher to explore participants' thoughts, feelings and beliefs about a particular topic and into personal and sometimes sensitive issues. Babchuk (2019) indicate that interviewing is the most important mode of data or information collection in qualitative research. Due to COVID-19 face to face interaction was limited instead, WhatsApp, Microsoft Teams and Google Documents were used to collect data. This did not employ face-to-face interviews.

A semi-structured interview schedule was designed containing open-ended question allowing the researcher to probe. The semi-structured interviews allowed the educators to use their own words in an open-ended format and to describe any aspects that they felt were essential for the researcher to understand their experiences, perspectives, attitudes and thoughts regarding their experiences in supporting learners with ASD.

Semi-structured interviews are helpful in clarifying concepts and problems, allowing for the establishment of a list of possible answers to solutions. They facilitate the elimination of superfluous questions and the reformation of ambiguous ones. They also enable the discovery of new aspects of the problem by exploring in detail the explanations supplied by participants. The wealth and quality of the gathered data are strongly dependent on the skill of the interviewer and the confidence he or she inspires in participants" (Bless et al., 2013:197).

There are benefits and drawbacks to any data collection technique. One benefit listed by Bless et al. (2013) for self-reports is that they give a sense of how things bother the person in terms of their experience" (Bless et al., 2013:193). Not only is a person given the opportunity to express the negatives of their experiences, but so too can they communicate the positive aspects of their reality. Given this study's aim, the researcher was interested in the participant's unique experiences in interacting with in-class learning facilitators and collaborating to meet the ASD learners' needs.

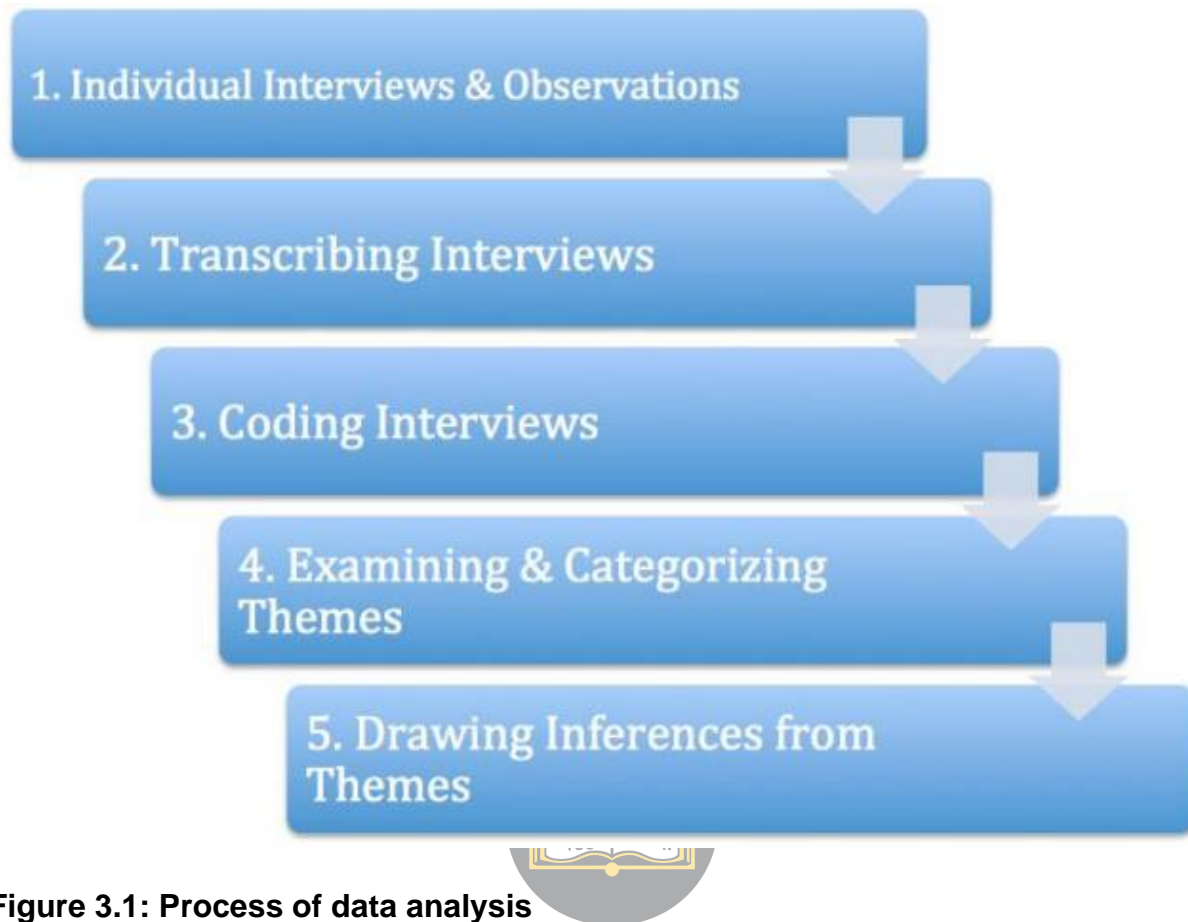
Each data gathering strategy has drawbacks therefore, it is necessary to be aware of any potential dangers. According to Bless et al. (2013), self-reporting has the following drawbacks: participants may feel compelled to embellish the truth to be perceived in a positive light and participants may anticipate the researchers' desired response (also known as the socially acceptable response) and respond with that instead of their truth. All of these issues fall into the response bias category.

**Table 3.2: Data collection techniques advantages and disadvantages**

Technique	Advantages	Disadvantages
Semi-structured interviews	<ul style="list-style-type: none"><li>• Provides themes to be discussed teachers' experiences and challenges and the strategies they employ to support learners with ASD.</li><li>• Can access what participants feel which is important.</li></ul>	<ul style="list-style-type: none"><li>• Time consuming and expensive</li><li>• May be difficult to standardise and analyse</li><li>• Bias due to social desirability</li></ul>

### 3.6 DATA ANALYSIS

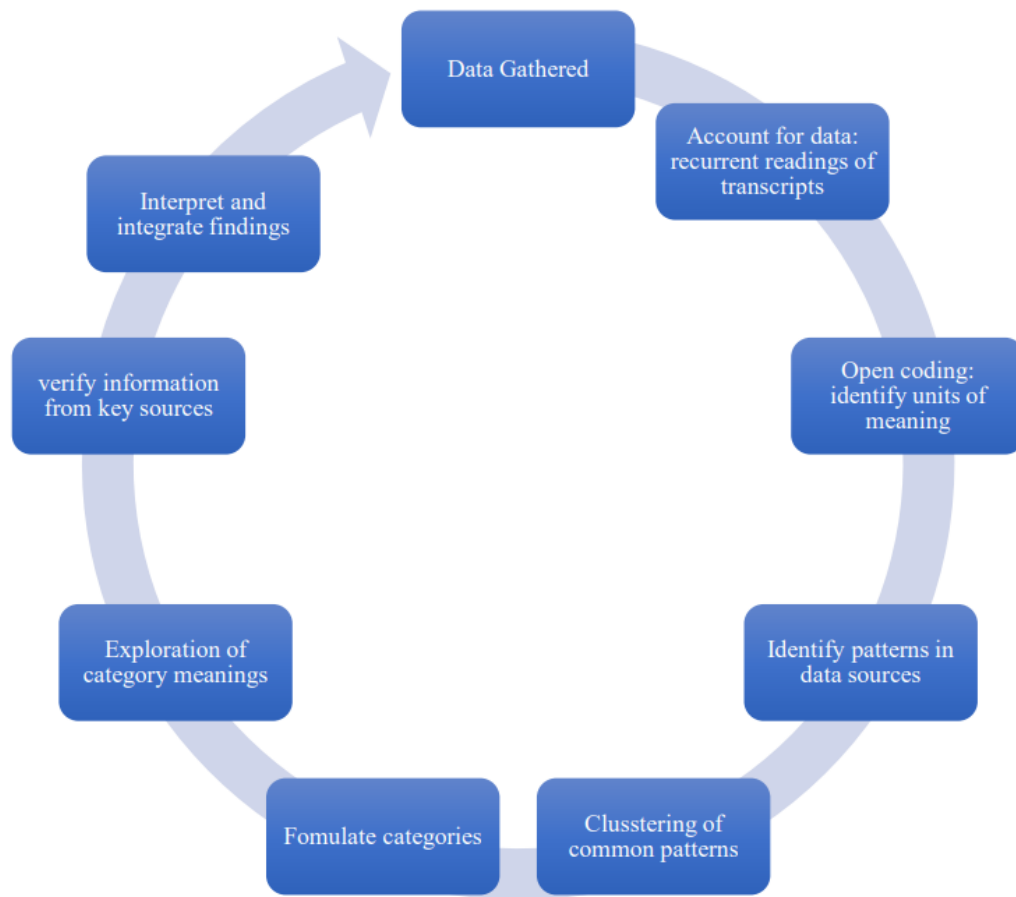
Qualitative data analysis is grounded in the interpretive philosophy. Although interviews are the most common data collection method, observations and documents can also be used to gather research data. In this study, data were categorised into large chunks to avoid fragmenting the responses and losing the essence thereof (Riggs & Mueller, 2001). Further data analysis involved breaking down the data into themes and sub-themes (thematic coding) to encapsulate all responses and develop a thorough understanding of the participants' lived experiences from their perspectives. The researcher must be aware that data collection and analysis should be a simultaneous process in qualitative research. This process involved transcribing the interviews, as well as sorting and arranging the field notes. The researcher read the transcripts repeatedly to obtain an overall impression of teachers' experiences of supporting learners with autism. Following the thematic approach, the researcher identified themes and sub-themes from the patterns that emerged from the data for analysis.



**Figure 3.1: Process of data analysis**

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Table 3.3 illustrates the data analysis, as process according to Creswell (2013). Firstly, through what Merriam (2009) refers to as horizontalisation, all the data should be laid out for examination. Furthermore, all data should be treated as having equal weight, that is, “all pieces of data have equal value at the initial data analysis stage” (Merriam, 2009:26). Data analysis requires the ability to think inductively, moving from specific raw data to abstract categories and concepts. The data were then analysed using the constant comparative method involving segmenting the data to determine similarities and differences, thus grouping those with similar dimensions.



**Figure 3.2: The process of data collection adapted from Cresswell (2008)**

The researcher generated initial codes which assisted in searching for themes. Coding involved combining the themes, sub-themes and patterns that emerged.

### **3.7 TRUSTWORTHINESS**

Maree (2013) describes trustworthiness as the most important element in qualitative research that ensure the findings and interpretations' accuracy, credibility and trustworthiness throughout the data collection and analysis. The researcher employed several strategies. These strategies helped to evaluate and enhance the study's legitimacy because no single method can guarantee entirely valid data. One of the strategies this study utilised was prolonged engagement where the study is conducted over a significant amount of time. This extended duration allows for comprehensive

representation of the participants' voices contributing to the study's reliability. Another strategy employed was quoting the participants verbatim to give substance to the findings. In their evaluation of trustworthiness, Bless et al. (2013) utilise four general standards. Credibility, transferability, dependability, and confirmability. This study took each of these elements into account, as well as other authors' perspectives when writing about trustworthiness.

- *Transferability*: refers to evidence supporting the generalisation of findings to other contexts across different participants, groups, situations, and so forth (Nieswiadomy, 2011).
- *Dependability*: is when qualitative researcher gathers evidence to support the claim that similar findings would be obtained if the study were repeated (Smith & Firth, 2011).
- *Confirmability*: refers to objectivity (neutrality) and the control of researcher bias. In qualitative research, bias is an ever-present concern. Confirmability is also enhanced by consistency with quantitative research findings reaching similar conclusions (Rule & John, 2011).
- *Credibility*: refers to the findings' believability and is enhanced by evidence such as the participants' validation of the conclusions, convergence of multiple sources of data, control over external influences and theoretical alignment (Baxter & Jack, 2008; Terre Blanche, 2014; Bless et al., 2013).
- *Validity*: refers to how accurately a method measures what it is intended to measure.

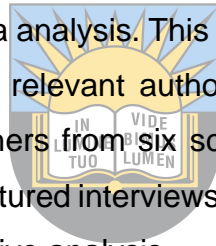
### **3.8 ETHICAL CONSIDERATIONS**

Ethical clearance to conduct the study was requested from the Inter-Faculty Ethics Committee (IFREC) of the University of Fort Hare. Permission was sought from the Department of Education in the Eastern Cape Province by ways of writing a letter explaining what the research aimed to achieve. Ethical clearance was obtained before beginning the interviews. Ethical issues must be taken into consideration in research, particularly when dealing with participants. The study adhered to all ethical considerations and the ethical clearance certificate MAK011SMLO01 was issued.

The researcher requested permission from the various school gatekeepers, school principals and the Department of Education to visit the schools and permission was granted. The participants were required to sign informed consent before the study commenced. Voluntary participation, liberty to withdraw at any time and anonymity were discussed with the participants. Pseudonyms were used in the final report in adherence to the ethical issues. Given the restrictions imposed by the South African Government because of the pandemic, all data gathering activities strictly observed COVID-19 protocols.

### **3.9 SUMMARY**

This chapter began by discussing the qualitative research method employed for this study. The key components of this research method were discussed regarding addressing the research questions. These components include the sampling procedure, data collection instruments, and data analysis. This chapter also discussed ethical issues and obtaining permission from the relevant authorities to conduct this research. The sample consisted of eighteen teachers from six schools i.e., three teachers from each school. The study utilised semi-structured interviews to produce qualitative data that could later be processed through interpretive analysis.



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### **3.9 CHAPTER OUTLINES**

Chapter One: Introduction and Background to the Study

Chapter Two: Theoretical Framework and Literature Review

Chapter Three: Research Methodology

Chapter Four: Data Presentation, Analysis and Discussion

Chapter Five: Summary of Findings, Conclusion and Recommendations

The ensuing chapter explains how the data were collected and analysed.

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION

#### 4. INTRODUCTION

In the previous chapter, the researcher discussed and justified the research methods and methodology employed in this study. The chapter also discussed the interpretive research paradigm, qualitative approach and phenomenological design utilised in the study. The data-gathering instruments for example, semi-structured interviews were discussed. The instruments' reliability and the data analysis method were highlighted. The chapter discussed various ethical considerations in research and those that applied to this study. Chapter Four analyses and presents data collected concerning Grade One teachers' approaches in supporting learners with ASD

Semi-structured interviews were selected as the data collection method. Semi-structured interviews allow the researcher to ask open-ended questions, to explore participant' thoughts, feelings and beliefs about a topic of interest and delve into personal and sometimes sensitive issues (Babchuk, 2019). Due to COVID-19 face-to-face interviews could not be conducted with participants. An interview schedule was designed containing the open-ended questions which allowed for probing. The sample consisted of six schools and three teachers from each school, meaning that 18 teachers were interviewed. The collected data were analysed. Various themes and sub-themes emerged from the responses.

Firstly, this chapter presents the participants' biographical information. Secondly, the chapter presents data, analysis as well as discussion of data collected. All the participants provided detailed information to the best of their knowledge having been informed that the research was purely for academic purposes.

#### 4.1 PROFILE OF THE RESEARCH SITES

Table 4.1 presents descriptions of the participating schools. Please note that this information was supplied by the foundation phase Departmental Head of each school and the researcher visited them during the field work.

<b>SCHOOLS</b>	<b>DESCRIPTION</b>	<b>YEARS IN EXISTENCE</b>	<b>GRADES</b>
School A	60 staff (both teaching and non-teaching). The medium of instruction is English. Have ten learners and one teacher's aid in class. Phase One have five and six-year-old learners.	16	Phases
School B	24 staff (both teaching and non-teaching). The medium of instruction is English. It has Autism unit with six classes and eight learners in each class with One teachers' aid.	5	Phases
School C	46 staff (both teaching and non-teaching). The medium of instruction is Isixhosa from Grade R to Grade Three and English from Grade Four to Grade Seven. They have three Grade One classes with 12 learners in each and a teachers' aid. The school has an autism unit with nine classes.	36	R-7
School D	33 staff (both teaching and non-teaching). The medium of instruction is English. The school has 13 learners in each class including LSEN.	33	R-7
School E	24 staff (both teaching and non-teaching). The medium of instruction are Isixhosa and English. The school	54	R-7

	has three Grade One classes with 46 learners in each class and no teachers' aid.		
School F	31 staff (both teaching and non-teaching). The medium of instruction is IsiXhosa for foundation phase and English for Intersen. The school has three Grade One classes with 50 learners in each class and no teachers' aid.	23	R-7

## 4.2 PERSONAL INFORMATION OF PARTICIPANTS

Table 4.2 shows the participating schools' demographic characteristics. These six schools are situated within East London in the Eastern Cape Province. The participating teachers' personal information is presented in table 4.1. the information is presented per school and coded TrA 1, 2 and 3 (Teachers in School A); TrB1, 2 and 3 (Teachers in School B); TrC1, 2 and 3 (Teachers in School C); TrD1,2 and 3 (Teachers in School D); TrE1,2 and 3 (Teachers in School E) and TrF1,2 and 3 (Teachers in School F).

### 4.2.1 PARTICIPANTS' DEMOGRAPHIC CHARACTERISTICS

Table 4.2 presents the distribution of participants according to age, marital status, qualification and teaching experience.

**Table 4.2: Participants' demographic characteristics**

Teacher	Age Range	Marital status	Gender	Teaching experience	Highest Qualification
A1	41-45	Married	Female	15 years	Advanced Certificate in Education (ACE)
A2	51-55	Widow	Female	25 years	Honors (B.Ed) in Education

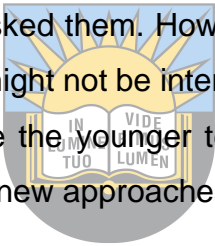
A3	51-55	Married	Female	25 years	M+4
B1	36-40	Married	Female	13 years	Advanced Certificate in Education (ACE)
B2	26-30	Married	Male	11 years	Bachelor of Education (B.Ed)
B3	20-25	Single	Female	5 years	Bachelor of Education (B.Ed)
C1	46-50	Single	Female	15 years	Bachelor of Education (B.Ed) Honors
C2	51-55	Single	Female	30 years	Bachelor of Education (B.Ed) Honors
C3	51-55	Married	Male	30 years	Bachelor of Education (B.Ed)
D1	51-55	Married	Male	30 years	Bachelor of Education (B.Ed)
D2	51-55	Married	Male	28 years	M+4
D3	41-45	Widow	Female	10 years	Bachelor of Education (B.Ed)
E1	51-55	Married	Female	30 years	Bachelor of Education (B.Ed) Honors
E2	41-45	Married	Female	13 years	Bachelor of Education (B.Ed)
E3	46-50	Divorced	Female	15 years	Bachelor of Education (B.Ed)
F1	46-50	Married	Female	15 years	Bachelor of Education (B.Ed) Honors
F2	51-55	Single	Female	30 years	Bachelor of Education (B.Ed) Honors



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F3	56-60	Single	Female	35 years	Master's degree in Education (M.Ed)
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The information contained within Table 4.2 indicates that the teachers' ages ranged between 25 and 58, the majority of the participants were females and more than half of them were married. Nine participants were over 50 years of age while the youngest was 25 years of age. Six participants had more than 30 years of teaching experience. Their marital status, age and tenure indicates that they were experienced adults, and their qualifications indicated that they are all professional qualified teachers. Enquiring about the participants' qualifications helped the researcher ascertain their knowledge in supporting learners with ASD. The participants could, with their qualifications, be expected to interact meaningfully with learners with ASD and engage appropriately with the questions that the researcher asked them. However, one could speculate that older teachers, those over the age of 55 might not be interested in learning new techniques for teaching learners with autism, while the younger teachers, those under the age of 25 might be more receptive to learning new approaches to supporting learners with autism.



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**4.3 GRADE ONE TEACHERS' APPROACHES IN SUPPORTING LEARNERS WITH AUTISM SPECTRUM DISORDER**

This study investigated the Grade One teachers' approaches to academically supporting learners with ASD. The research sub-questions listed hereunder were formulated serving as the main themes of analysis from which sub-themes emerged during the data analysis process.

- How do teachers understand learners with autism spectrum disorder?
- What strategies do teachers use to support learners with autism spectrum disorder academically?
- What challenges do teachers experience in their efforts to support learners with autism spectrum disorder?
- What are the implications of autism spectrum disorder in inclusive education?

- What are the implications of Autism Spectrum Disorder in Inclusive Education?

**Question 1: How do teachers understand learners with autism spectrum disorder?**

Table 4.3 presents the theme and sub-themes that emerged from the first research sub-question.

**Table 4.3: Themes and sub-themes concerning the teachers’ understanding of learners with autism spectrum disorder**

Theme	Sub-theme	Issues raised
Teachers’ understanding of learners with Autism Spectrum Disorder	Learners with ASD	The participants indicated that autism is a wide field, people on the spectrum have different traits normally leading to them being excluded from society
	Identification	The participants indicated that learners with autism avoid eye contact, experience delayed language skills and engage in repetitive behaviour

**4.3.1. Teachers’ understanding of learners with ASD**

The participants’ explanation of ASD included descriptions of particular symptoms such as problems in communicating, which aligns with similar descriptions in the literature concerning social interaction and communication challenges (Majoko, 2017). The participants indicated that autism is a wide field and people on the spectrum have various traits which often lead to them being excluded from society. They all understood ASD as a neurodevelopmental disorder affecting a child’s development. Two sub-themes emerged from this theme. These learners with autism and identification.

#### 4.3.1.1 Learners with ASD

In understanding learners with ASD, teachers explained that autism is a broad field, and that persons on the spectrum exhibit a variety of characteristics that typically lead to social exclusion. Several of the teachers' responses are presented below.

TrA1: *It is a field, people on the spectrum have different traits and these normally lead to them being excluded from society.*

TrA2: *It is a neurodevelopmental disorder that affects the development of a child in behaviour, social interaction, communication and sensory difficulties.*

TrA3: *It is a disorder that affects the functioning of the brain where there is a disconnection between body response and cognitive response.*

TrC1 corroborated the foregoing statements by saying that it is a disorder that delays the child's development mentally, socially and concerning their senses.

TrB1: *It is a disorder that affects the nervous system.*

TrB2: *It is a neurological disorder that affects children in different ways.*

A teacher in school E made the statement presented below.

TrE1: *It is a phenomenon where a learner becomes unruly, not manageable or controlled and monitored. These learners are restless and, in most cases, they lag behind or are not educable. They could be disruptive in class causing others not to learn effectively.*

The other participants from school F concurred by saying that autism is a disorder that can cause a learner to experience difficulties in learning.

#### 4.3.1.2 Identification

The participating teachers were asked how they would identify learners with ASD, their responses are presented below.

TrA1: *I monitor their social skills, eye contact and understanding of emotions. I check whether certain sounds, textures and smell trigger what seems to be a tantrum.*

Teacher from School A concurred with the response presented below.

TrA2: *They lack speech or have delayed language skills. They frequently lack motor motions and vocalization, and when they play, they prefer to use the same object in the same way every time. They also avoid making eye contact and don't always reflect their emotions on their faces. They are uninterested in others and have difficulty comprehending others' emotions.*

In contrast to what the foregoing teacher said TrB1 had this to say.

TrB1: *This would be done through a professional assessment.*

The other school B teachers' response is presented below.

TrB2 and 3: *in order to identify a child with autism, they would look for signs/ symptoms of ASD.*

School C's teachers' response is presented below.

TrC 1, 2 and 3: *They identify a child with ASD when they exhibit repetitive behaviour and cover their ears with fingers to avoid soft or loud noise, indicating sensory difficulties.*

Teachers from school E and F concurred by saying,

TrE and TrF: *When a child is unable to speak and engage with others, and throws tantrums as a result of his or her frustration at not being able to communicate, he or she has autism. They also play alone and in groups.*

**Question 2: What strategies do teachers use to support learners with autism spectrum disorder academically?**

The following are theme and sub-themes from the second sub-research question

**Table 4.4: Theme and sub-themes concerning strategies teachers use to support learners with autism spectrum disorder academically.**

Theme	Sub-theme	Issues raised

Strategies teachers use to support learners with ASD	Strategies	The participants indicated that each learner requires a different level of support. These measures can be visual, instructional cues and the exclusion of overwhelming sounds. They also stated that understanding each learner triggers can allow for a calmer classroom environment.
	Accommodation	The participants indicated that they accommodate learners with ASD by providing a visual structure. They also stated that visual schedules are provided for each learner which makes it easier for each learner to know the sequence of events. They reported that as they are visual rather than verbal, tasks need to be visually clear.

**4.5 Strategies**

When teachers were asked about the academic strategies they utilise to support learners with ASD, they mentioned several strategies including a strict routine, visual schedules, instructional cues, PECS or Makaton. For instance, the teachers from School A, reported utilising instructional and visual cues.

*TrA1: Each learner requires a different level of support. Some of the measures used would be visual, instructional cues and exclusion of overwhelming sounds. Understanding each learner triggers can allow for more calm class setting.*

The other participants from School A (TrA2 & TrA3) corroborated this by saying the words presented below.

*TrA2 and 3: Teachers use TEACCH approach to teach learners with ASD. Every instruction needs to be visual, as their learning modality is visual over verbal. Teachers also use PECS or Makaton to communicate with learners with ASD.*

Teachers in school B, C, D and F concurred by saying, visual aids, picture communication, visual schedules, routine, Makaton and teaching to abilities and interests are used.

Contrary to what other teachers said; School E reported utilising small groups and providing supervision, dramatisation, visual texts and routine.

TrE1: *Provide supervision seven hours per day. They require frequent/continuous monitoring. As a teacher I keep an eye on them because they constantly disrupt me and other learners.*

TrE2: *Teachers need to deal with a small group of learners so that they can support them individually. They also have to ensure that routine is followed when these learners are taught to increase stability and a sense of safety on the learners.*

TrE3: *Use of visual text, use of body expression, dramatisation can be used to teach learners with ASD.*

Two sub-themes emerged from the foregoing theme



#### **4.5.1 Experience**

When participants were asked to explain their experiences working with children with ASD, they made the statements presented below.

TrA1, 2 and 3: *Working with learners with ASD has taught me that no two autistic people are same. Visual learning takes precedence over verbal learning for them. When they exhibit behavioural issues, it is almost often because they want to say something. To make their lives easier, they must also stick to a routine.*

TrD2 corroborated this by saying that learners with ASD follow a routine.

TrD2: *The child with ASD needs high level of support. He/she wants to follow the same routine and does not accept changes.*

Similarly, teachers in School B said that working with children with autism has been both fascinating and difficult because the autism spectrum is broad, and no two ASD learners

are alike. One of the teachers used one of Temple Grandin's sayings: "If you know one child/person with autism, you know one child/person with autism".

TrC1: *Through observation and working with them, I have noted that their daily lives are routine based, thus they always follow a routine. Their behaviour is repetitive and they imitate what they have seen and repeat what they have heard. Some of them have high and low sensory issues. They could also melt downs.*

TrE1: *They behave in a manner that is more comfortable with routine, if routine becomes interrupted, they become very upset.*

TrE3: *Children with autism are comfortable with their routine, the time you change what they use to do, they become irritated.*

Contrary to the foregoing responses, Teacher 2 from School E perceived learners with ASD as disruptive. Seemingly, this teacher is not knowledgeable about autism spectrum disorder.

TrE2: *They are too disruptive not only to myself but to my work plan as well as other learners. I do not finish my work as per scheduled time if I deal with learners with autism. These learners are always/opt to be all alone/reserved and are easily provoked by the presence of others and tend not to play when others do play, hence bullying when forced.*

#### **4.5.2 Accommodation**

When the participating teachers were asked how they accommodate learners with ASD in their classrooms, they said they accommodate learners by providing visual structure

TrA1: *I form individual support plan. I also identify their areas of development and strengths and work on that.*

TrA2: *I accommodate learners with autism in my classroom by providing visual structure, meaning that the classroom must be visual explicit. Also, visual schedules are there for each learner and that makes them to know what happens after the other. Another thing is that, since they are visual over verbal, tasks need to be visually clear.*

TrA3: *I keep the noise level down, stick to clear instruction and have a visual timetable.*

TrB1: *My class is set up to support group work as well as one-on-one for those that need it.*

TrB3: *I keep routine as much as possible. I use an individual support plan as well as monitor the learners to see their needs and skills.*

The responses from teachers in School C are presented below.

TrC1: *I make sure that my classroom is conducive; by doing so I have pictures of certain icons which they use throughout the day. We also have assistive devices that enable learners with manipulative objects.*

TrC2: *I use toys to make sure that they play separately.*

TrC3: *I allow the learners to be comfortable by themselves at their working station without being disturbed.*

Teachers in School D made the following statements:

TrD1, 2 and 3: *In order to accommodate learners with ASD, they use class seating arrangements and special attention as a strategy to accommodate learners with autism.*

The responses from School E are presented below.

TrE1: *I mix them with other learners in respective groups. I monitor their progress/failure/shortfall and also change their sitting arrangement from time to time into separate groups. I give them tasks that are suitable for them in order to arouse their interest/span/thinking capacity. I also give them much time in doing activities so as to accumulate most marks. I foster among them a tendency to work with others in a team instead of being aloof/stay alone/ be reserved.*

TrE2: *Teachers have to understand the level of understanding of these children so that teaching and learning is geared towards their cognitive level.*

Teacher 3 in School E agreed with the foregoing statements by saying:

TrE3: *I identify the areas that need development and discover their strengths so that teaching and learning is geared towards their cognitive level.*

Contrary to what the other teachers said, teachers from School F said that at their school, autistic learners are high functioning and can cope with the CAPS curriculum.

Their approaches appeared to differ between full- service schools and special schools. Full -service and mainstream schools do not appear to be as well-resourced as special schools in that they only utilise seating arrangements and extra time, whereas special schools utilise visual schedules to assist learners.

**Question 3: What are some of the challenges teachers experience in their efforts to support learners with Autism Spectrum Disorder?**

The following are the theme and sub-themes from the third research sub-question.

**Table 4.6: Theme and sub-themes concerning several of the challenges teachers experience in their efforts to support learners with ASD**

Theme	Sub-theme	Issues raised
Challenges teachers experience in supporting learners with ASD	Challenges	The participants indicated that there is a lack of resources to support effective learning. They also stated that development officials are not clear about ASD and how to work with ASD learners. Additionally, they stated that no curriculum is designed specifically to accommodate ASD learners. Even therapists (OT & speech) do not know their duty concerning an ASD class, the teachers are expected to do everything.
	Specific areas	The participants indicated that behavioural management trainings should be provided. Curricula must be designed to accommodate ASD learners.

	Support system	The participants indicated that the support system for ASD learners is insufficient and that few training programmes and workshops are provided for teachers and no support at all for parents. They also indicated that even the curriculum does not fully suit ASD learners.
	Teacher support	The participants indicated that they support one another as colleagues and a few workshops are provided. They also indicated that parental support and lack of therapy is one of the challenges teachers experience.

**4.6. Challenges teachers experience in supporting learners with ASD**

The participants were asked about the challenges they face in supporting learners with ASD. The literature revealed that the participating teachers lamented the lack of resources to support effective learning. The resources required to facilitate effective learning are lacking. They claimed that there is a lack of understanding among development officials about ASD and how to engage with learners with ASD. They added that no curriculum had been created to specifically meet ASD students' needs. Teachers are expected to handle everything in an ASD class, while even the therapists (OT and speech) are unsure of their responsibilities.

*TrA1: Pointed out that, all stakeholders working with ASD learners should be trained on how to work with such children and clear curriculum should be in place for ASD learners. People who have a background in working with ASD learners should be employed as departmental officials so that they can support and capacitate teachers.*

*TrA2: Parental support and lack of therapy is one of the challenges teachers experience.*

Contrary to what the two teachers in School A said, one of their colleagues made the following comment.

TrA3: *Some of the challenges teachers experience is managing their behaviours.*

TrB1: *Many ASD learners are defiant, have speech and language issues as well as sensory issues which causes challenges in class.*

TrB2: *The curriculum provided does not fit all learners with ASD*

TrB3: *When a child throws tantrum, it is difficult to distinguish between bad behaviour and actual ASD challenges.*

Teachers in school C concurred by making the following comment.

TrC1, 2 and 3: *We do not have a speech therapist and enough resources and our infrastructure is not conducive for learners with ASD. Also, there is no clear curriculum instruction which caters for learners with ASD.*

School D made the following comments.

TrD1: *Some ASD learners need high level of support and teachers are not well-equipped to teach them.*

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TrD2: *Learners with ASD can be very disruptive in class making a teacher not to concentrate.*

TrD3: *Learners with ASD can be aggressive which makes it difficult for a teacher to support learners.*

TrE1 and 2 concurred that overcrowding in classrooms prevents individual attention, especially in the inclusive schools in formerly disadvantaged communities. The Department of Education by not improving conditions in the above-mentioned schools denies learners individual attention.

Contrary to what the foregoing two teachers said, the third participant from that school uttered the statement presented below.

TrE3: *Learners are not co-operative, causing boredom. Parents are not taking full responsibility of their children's actions/conduct and most often been defensive/suffer denial. Chaotic behaviour propels the teacher to forsake/abandon the learner so as to pay much attention to others.*

#### **4.6.1 Support system**

When the participating teachers were asked if there were any areas they felt particularly supported or where training is required to include learners with ASD, they made the comments presented hereunder.

TrA1: *Behavioural management training needs to be provided. Also, curriculum needs to accommodate ASD learners.*

TrA2: *Awareness needs to be done frequently, not in April only.*

TrA3: *Yes, behaviour modification needs to be provided.*

All three participating teachers from School B concurred that: -

TrB1, 2 and 3: *Training is required on how to deal with challenging behaviour and additional resources are required to support learners at various levels.*

The School C teachers' responses are presented below.

TrC1: *Yes, I feel that our focus should be more on practical work rather than theory because our learners are not coping when it comes to pen and paper.*

TrC2: *Yes, skills development can benefit educators.*

TrC3: *Yes, more workshops on special needs will assist teachers to deal with those barriers.*

The participants from School D all agree that skills development can benefit the educators.

The School E teachers' responses are presented below.

TrE1 and 2: *Yes, training is necessary to allow teachers to know more about these learners with the aim of assisting them effectively in their journey to reach proper adulthood or nearly attain such ultimate goal.*

TrE3: *Yes, the Department of Education once suggested that each school shall have between 1 and 2 remedial teachers pending to the school size in order to address low functioning learners and curb the ongoing trend of learners in South Africa, wherein learners can read, write and count compared to their counterparts in the SADC region and even the African continent as a whole.*

#### **4.4.8 Teacher support**

The teachers were asked if they received support from their schools assisting learners with ASD in their classrooms. Their responses are presented below.

TrA1, 2 and 3: *We support each other as colleagues and some few workshops are provided. We have therapists for sensory profiling as well as aides that always help in the classroom.*



School B's participating teachers' responses are presented below.

TrB1, 2 and 3: *We have very supportive staff and therapist team that are always willing to jump in when needed.*



School C's participating teachers' responses are presented below.

TrC1, 2 and 3: *We have teacher aides who assists us in the classroom. We also refer learners to psychologist if need arises. We also refer them to social worker. Our school also has a care team where interventions are made before a learner can be referred.*

Teachers from School D and E concurred by saying that full-service and mainstream schools do not receive any assistance from the Department of Education (DoE). The DoE tends to assist by redirecting the learners to special schools. Teachers reported that they rely solely on their experience in dealing with such children and accessing material found on various websites.

The participating teachers' responses to the questions indicate a general lack of knowledge about autism because those from full-service and mainstream schools perceive learners with ASD as disruptive. This lack of understanding could deprive ASD children of an education. This foregoing statement is evidenced when the participants from full-service schools stated that chaotic behaviour compels the teacher to abandon the ASD learner to pay more attention to other children in the classroom.

The participants mentioned that although a limited number of workshops are provided, teachers face numerous challenges in their efforts to support learners with ASD.

#### **4.5 DISCUSSION**

The study explored teachers' experiences in supporting learners with ASD, providing valuable insights into the challenges they encounter and the strategies they employ. The first theme highlighted characteristics typical of autism. The participants' explanation of ASD included descriptions of particular symptoms such as problems communicating, which aligns with similar descriptions in the literature of social interaction and communication challenges (Majoko, 2017). The participants indicated that Autism is a broad subject, and people on the spectrum exhibit a variety of characteristics that often lead to social exclusion. However, they said that learners with autism typically avoid eye contact, show delayed language skills, and engage in repetitive behaviours. They also stated that no two people with autism are alike. This implies that children with autism have diverse characteristics and that these characteristics differ from one child to the next. This is in accordance with Subba's (2014) notion that, the autism spectrum's diversity highlights the reason why one should focus on each child as a unique individual.

Additionally, from the human rights and social justice perspectives, inclusive education is the best way of educating children with disabilities because it is based on the rights to education and social participation. In addition to being required to have specific knowledge of autism, teachers are also expected to implement effective and appropriate teaching approaches. Education is a fundamental human right. It is the key to sustainable development, peace and stability within and among countries, and thus an indispensable means for effective participation in the societies and economies of the twenty-first century (DoE, 2019). The foregoing statement implies that it is important for teachers to effectively

include all learners despite their unique needs. Teachers' understanding of the complexities that characterise ASD is an important step towards implementing appropriate teaching strategies that will support learning for children with autism. The findings reveal that teachers understand autism in various ways.

Theme two reflected several strategies teachers employ in assisting learners with autism. According to the participants, each learner requires a distinct level of help; the measures utilised include visual aids, instructional cues, and the avoidance of excessive sounds. They also noted that knowing each learner's triggers can help to create a more relaxed classroom environment. Many of the participants claimed to provide visual structure for learners with ASD.

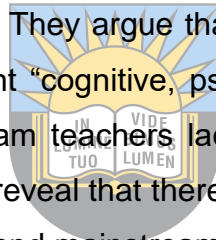
According to participants, they provide visual schedules for each ASD learner, making it easy for them to understand the sequence of events. Tasks must be explained, preferably using visual communication because ASD learners prefer visual to verbal communication. The participants also stated that the support system for ASD students is inadequate, with an insufficient number of training/workshops for instructors and no support for parents. They also stated that the current curricula are ineffective in meeting the needs of learners with ASD. This is in line with Law (2017) assertion that supporting a child with ASD means developing and modelling enhanced communication, improving their social interaction and development and providing positive behaviour plans, organisational skills encouragement and accommodating and supporting their sensory needs (Law, 2017).

Landsberg et al., (2016) assert that support for children with ASD needs to encompass the full range of the child's diverse needs. One way to address the child's development is through education. Education plays a pivotal role in meeting ASD learners' diverse needs (Landsberg et al., 2016). The findings indicate that educators use various strategies to assist learners with autism. Full-service and mainstream schools do not have the same resources as special schools in that they only use seating arrangements and extra time whereas special schools use visual schedules to assist learners with ASD.

Theme three highlighted the challenges teachers encounter in supporting learners with autism. According to the participants, there are insufficient resources to enable efficient

learning. They also said that development officials lack an understanding of ASD and how to interact with students with ASD. Another challenge is that current curricula do not accommodate all students. In an ASD classroom, teachers are expected to handle everything themselves and OT and speech therapists are unaware of their responsibilities. The participants reported that they require training in behaviour control and curricula should be modified to accommodate students with ASD. According to the participants, behavioural management trainings ought to be made available. ASD students must be accommodated in the curriculum. According to the participants, an insufficient number of workshops is offered, but they do assist one another as colleagues.

Lindsay and Edwards (2014) found that, historically the majority of teachers in South Africa have been trained according to the old system of special and regular education, this system is based on the medical model, where the barriers to learning are blamed on the child. is placed within the child. They argue that teachers have not been trained to accommodate children with different “cognitive, psychological, emotional and physical development”. Therefore, mainstream teachers lack adequate information about ASD (Lindsay et al., 2014). The findings reveal that there is a lack of knowledge about autism because teachers from full-service and mainstream schools perceive learners with ASD as disruptive which deprives them of equal access to education.



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Similarly, evidence from the studies conducted by Greenstein (2014) identified that many mainstream teachers have difficulty working with one child without additional support. However, Mintz et al., (2020) argue that teachers in mainstream schools face significant demands such as large class sizes and pressure to achieve ever increasing academic outcomes while also meeting the needs of children with widely diverse backgrounds and abilities.

#### **4.6 IMPLICATION FOR AUTISM SPECTRUM DISORDER IN INCLUSIVE EDUCATION**

For children with autism, inclusion in a regular classroom is an advantage. The debate surrounding inclusion has been hot and frequently contested, but if schools are prepared, learners with autism should be able to participate in inclusive environments. Because they have the right to instruction in an inclusive classroom, the majority of students on the

autism spectrum are included in regular classrooms (Andre, Louvet, Despois & Velez, 2019). Every child, including classmates in the classroom, can benefit from inclusion. The stigma associated with autism can be reduced by integrating students with autism into regular school settings and children will learn how to communicate effectively with one another.

In inclusive school environments, children learn to interact and develop of relationships with all peers. According to Phasha, Mahlo, and Dei (2017), there is a need for a broader understanding of inclusive education needs in Africa as. Historically, the concept was limited to special education or the education of learners with physical disabilities. However, this view does not align with the diverse ways in which learners in South Africa engage with education. Education should be seen as encompassing the varied ways, options and strategies through which learners come to know their world and effect social and personal change. Donohue and Bornman (2015) rightly argue that achieving inclusive education requires appropriately trained and resourced teachers.

#### **4.7 SUMMARY**

This chapter focused on the presenting and analysing the data by highlighting the participating teachers' views and approaches in supporting learners with ASD in six selected primary schools in the East London Education District. This study explored how the participantss support learners with ASD in their classrooms and the challenges they encounter were discussed. Themes and subthemes emerged and were discussed appropriately.

The ensuing chapter summarises the findings and presents the study's conclusions and recommendations.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

#### 5. INTRODUCTION

The previous chapter presented the data and analysed and interpreted the data utilising various themes and sub-themes that emerged during the data analysis. This chapter focuses on summarising the findings and advancing recommendations and suggestions for further studies. Conclusions drawn from the findings are presented. The chapter begins by restating the research objectives and questions.

##### 5.1 Restating the research sub-questions

The main research question guiding this study was: What are Grade One teachers' approaches to supporting learners with autism spectrum disorder academically in selected schools in the Buffalo City Education District? The study was also guided by the following list of sub-questions:

1. How do teachers understand learners with autism spectrum disorder?
2. What strategies do teachers use to support learners with autism spectrum disorder academically?
3. What challenges do teachers experience in their efforts to support learners with autism spectrum disorder?



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#### 5.2 Summary of findings

##### 5.2.1 Teachers' understanding of learners with ASD

The participants indicated that autism is a broad subject, and people on the spectrum exhibit a variety of characteristics that often lead to social exclusion. However, they said that learners with autism typically avoid eye contact, show delayed language skills, and engage in repetitive behaviours. They also stated that no two people with autism are alike. This implies that children with autism have diverse characteristics and that these characteristics differ from one child to the next. This aligns with Subba's (2014) notion that autism spectrum's diversity across population of individuals with autism highlights the reason why one should focus on each child as a unique individual. This aligns with

Bandura's notion that Individuals' development and behaviour are interlinked with their selves and the environmental influences on which they are exposed (Bandura, 1997). This implies that a child learns most of their behaviour from interacting with their environment and from observing and absorbing other individuals' behaviour. Bandura's social learning theory posits that an individual's behaviour is influenced by their surroundings and innate personality traits. A person's environment is also influenced by that person's presence and interactions.

Human rights and social justice emerged as fundamental aspects of educating children with disabilities because they have the right to education and social participation. In addition to having specific knowledge of autism, teachers are also expected to implement effective and appropriate teaching approaches (Lindsay et.al, 2014). As a fundamental human right education serves as the cornerstone for sustainable development, peace and stability within and among countries. Therefore, it is indispensable for effective participation in the societies and economies of the twenty-first century" (DoE, 2019). This highlights the significance of teachers inclusively accommodating all learners regardless of their unique needs.



### 5.2.2 Strategies teachers use to support learners with ASD academically

According to the participants, each learner requires a distinct level of help, the measures employed include visual aids, instructional cues, and the avoidance of excessive sounds. They also noted that knowing each learner's triggers can help to create a more relaxed classroom environment. Several of the participants stated that they provide visual structure for learners with ASD. Visual schedules are also offered for each learner so that they understand the sequence of events in the classroom. Bandura states that "observational learning entails symbolic coding and central organisation of modelling stimuli, their representation in memory, in verbal and imaginal codes, and their subsequent transformation from symbolic forms to motor equivalents". This helps demonstrate that cognitive and behavioural mechanisms of modelling behaviour occur as a result of observation (Bandura, 1971).

The participating teachers stated that ASD learners need tasks to be explained preferably through visual means because they prefer visual to verbal communication. This is in line

with social learning theory that believes observation, imitation and modelling are central components of the learning process, and that behaviourism alone cannot account for every type of learning (Bandura, 1971). Thus, his theory is a blend of behavioural theory which posits that behaviours are the result of conditioning and cognitive theory which gives weight to psychological features such as attention and memory (Bandura, 1971).

Furthermore, the **participants** stated that the support system for ASD students is inadequate, with too few training/workshops for instructors and no support for parents. They also stated that the current curricula are ineffective in meeting the needs of learners with ASD. This is in line with Law's (2017) assertion that supporting a child with ASD means developing and modelling enhanced communication, improving their social interaction and development, providing positive behaviour plans, encouraging organisational skills and accommodating their sensory needs (Law, 2017).

Landsberg et al., (2016) assert that support for children with ASD needs to encompass the full range of the child's diverse needs. One way to address a child's development is through education. Education plays a pivotal role in meeting ASD learners' diverse needs (Landsberg et al., 2016). Bandura argues that by observing a model of the desired behaviour, an individual forms an idea of how response components must be combined and temporally sequenced to produce new behavioural configurations. This can be seen in the way observers react after analysing a model and how this can lead to adopting new behavioural strategies (Bandura, 1971).

### **5.2.3 Challenges teachers experience in their efforts to support learners with ASD**

The participants mentioned that despite several workshops, they face numerous challenges in their efforts to support learners with ASD. According to the participating teachers, there are insufficient resources to enable effective learning. They also said that development officials lacked an understanding of ASD and how to interact with students with ASD. They claimed that there is no curriculum to meet all students' needs. In an ASD classroom, the teachers are expected to handle everything themselves and the OT and speech therapists are unaware of their responsibilities. The **participants** said that they require training in behaviour control and that a curriculum must be developed to

accommodate students with ASD. According to the participants, although insufficient workshops are offered, teachers assist one another as colleagues.

Lindsay and Edwards (2014) found that, historically, the majority of teachers in South Africa have been trained according to the old systems of special and regular education, based on the medical model, where barriers to learning are blamed on the child. They argue that teachers have therefore not been trained to accommodate children with different “cognitive, psychological, emotional and physical development”. Therefore, mainstream teachers lack adequate information about ASD (Lindsay et al, 2014).

Similarly, Greenstein (2014) studies found that numerous mainstream teachers have difficulty working with one child without additional support. However, Mintz et al., (2020) argue that teachers in mainstream schools face significant demands that include large class sizes and pressure to achieve ever-increasing academic outcomes while also meeting the needs of children with widely diverse backgrounds and abilities.

### 5.3 Recommendations

Based on this study’s findings, the following recommendations are advanced. Given the importance of the inclusion of learners in schools, there is a need for workshops that will bring all teachers together and equip them with strategies they can utilise in their classrooms. Additionally, the DoE must employ more knowledgeable people to deal with special needs, specifically autism, to offer effective support. The findings also revealed that insufficient support is provided to full-service and mainstream schools regarding autism. This study recommends that DoE officials develop structured programmes for all LSEN schools with well-defined outcomes. Frequent trainings are necessary for teachers to educate learners with autism. There is also a need for all teacher training centres and universities to offer content that addresses education for learners with specific disabilities.

### 5.4. Limitations of the study

Due to covid-19 related issues, responses from participants were collected online which presents a variety of limitations. For example, interviews were conducted after school, therefore, data only include reported use. This implies that we are unable to draw conclusions about actual practise in classroom. Observational data on actual approaches used by teachers in supporting learners with Autism Spectrum Disorder was not gathered

due to Covid. This poses a need for future research to allow for examination of the quality of implementation and could also be compared with reported use, which is particularly important given research on discrepancies between reported and actual practice (Bruns & Mogharreban, 2007; Chan, 2016; Meadan et al., 2018).

## 5.5 Conclusion

This chapter focused on summarising findings, limitations of the study, advancing recommendations and presenting a conclusion. The chapter explored the findings that emerged from the participating teachers' responses to questions about how they support learners with ASD in their classrooms. The study revealed several challenges teachers encounter in educating learners with ASD. The participants reported a lack of knowledge in dealing with learners with ASD. The study identified various strategies teachers employ in accommodating learners with ASD. The study concludes that more training should be offered to equip educators to deal with learners with ASD effectively.

Human rights and social justice emerged as fundamental aspects of educating children with disabilities because they have the right to education and social participation. In addition to having specific knowledge of autism, teachers are also expected to implement effective and appropriate teaching approaches. As a fundamental human right education serves as the cornerstone for sustainable development, peace and stability within and among countries. Therefore, it is indispensable for effective participation in the societies and economies of the twenty-first century". This highlights the significance of teachers inclusively accommodating all learners regardless of their unique needs.

Regarding strategies used by teachers in supporting learners with ASD, participants highlighted that, each learner requires a distinct level of help, the measures employed include visual aids, instructional cues, and the avoidance of excessive sounds. They also noted that knowing each learner's triggers can help to create a more relaxed classroom environment. Several of the participants stated that they provide visual structure for learners with ASD. Visual schedules are also offered for each learner so that they understand the sequence of events in the classroom. Bandura states that "observational learning entails symbolic coding and central organisation of modelling stimuli, their representation in memory, in verbal and imaginal codes, and their subsequent

transformation from symbolic forms to motor equivalents”. This helps demonstrate that cognitive and behavioural mechanisms of modelling behaviour occur as a result of observation.

The participating teachers stated that ASD learners need tasks to be explained preferably through visual means because they prefer visual to verbal communication. This is in line with social learning theory that believes observation, imitation and modelling are central components of the learning process, and that behaviourism alone cannot account for every type of learning. Thus, his theory is a blend of behavioural theory which posits that behaviours are the result of conditioning and cognitive theory which gives weight to psychological features such as attention and memory.

Furthermore, the **participants** stated that the support system for ASD students is inadequate, with too few training/workshops for instructors and no support for parents. They also stated that the current curricula are ineffective in meeting the needs of learners with ASD.



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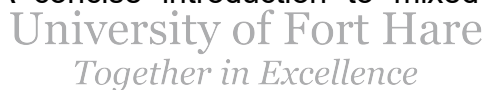
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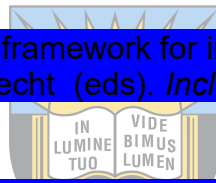
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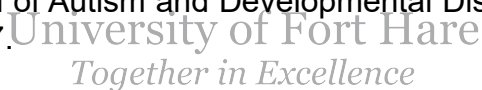
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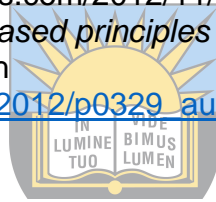
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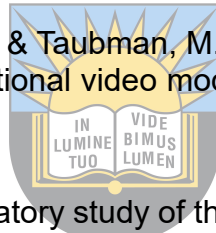
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## APPENDIX A: ETHICAL CLEARANCE CERTIFICATE



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## ETHICS CLEARANCE REC-270710-028-RA Level 01

Project Number: MAK011SMLO01

Project title: **Grade one teachers' approaches in supporting learners with Autism Spectrum Disorders in selected schools in Buffalo City Education District.**

Qualification: Master of Education

Student name: Nomonde Mlonyeni

Registration number: 201100338

Supervisor: Dr S Makeleni

Department: Education

Co-supervisor: N/A

On behalf of the University of Fort Hare's Research Ethics Committee (UREC) I hereby grant ethics approval for MAK011SMLO01. This approval is valid for 12 months from the date of approval. Renewal of approval must be applied for BEFORE termination of this approval period. Renewal is subject to receipt of a satisfactory progress report. The approval covers the undertakings contained in the above-mentioned project and research instrument(s). The research may commence as from the 08/02/22, using the reference number indicated above.

Note that should any other instruments be required or amendments become necessary, these require separate authorisation. Please note that UREC must be informed immediately of

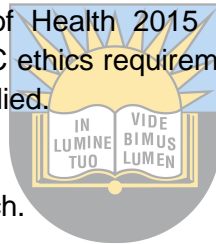
- Any material changes in the conditions or undertakings mentioned in the document;
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research.

The student must report to the UREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

UREC retains the right to

- Withdraw or amend this approval 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.

Your compliance with Department of Health 2015 guidelines and any other applicable regulatory instruments and with UREC ethics requirements as contained in UREC policies and standard operating procedures, is implied.



UREC wishes you well in your research.

Yours sincerely

  
**Dr N Taole-Mjimba**

University of Fort Hare  
*Together in Excellence*

**Chairperson: University Research Ethics Committee**

08 February 2022

## APPENDIX B: LETTER OF PERMISSION TO SCHOOLS



### Request for Permission to Conduct Research<sup>1</sup>

Arcadia Primary School  
Kimberley Road  
East London

Dear Principal

My name is Nomonde Mlonyeni, a Masters student at the University of Fort Hare. The research I wish to conduct for my Masters dissertation involves Grade One teachers' approaches in supporting learners with Autism Spectrum Disorder. I am hereby seeking your consent to conduct research. I have provided you with a copy of my proposal which includes copies of the data collection tools and consent and/or assent forms to be used in the research process.

If you require any further information, please do not hesitate to contact me 071 666 7371, fax: 043 764 9399 and email address: mlonyeninomonde@gmail.com]. Thank you for your time and consideration in this matter.

Yours sincerely,



Nomonde Mlonyeni

University of Fort Hare



University of Fort Hare  
*Together in Excellence*

### **Request for Permission to Conduct Research<sup>2</sup>**

College Street

CNR College Street & Beaconsfield Road

East London

Dear Principal

My name is Nomonde Mlonyeni, a Masters student at the University of Fort Hare. The research I wish to conduct for my Masters dissertation involves Grade One teachers' approaches in supporting learners with Autism Spectrum Disorder. I am hereby seeking your consent to conduct research. I have provided you with a copy of my proposal which includes copies of the data collection tools and consent and/or assent forms to be used in the research process.

If you require any further information, please do not hesitate to contact me [contact number: 071 666 7371, fax: 043 764 9399 and email address: mlonyeninomonde@gmail.com]. Thank you for your time and consideration in this matter.

Yours sincerely,

Nomonde Mlonyeni  
University of Fort Hare

---

Approved by UREC (13 November 2019)



University of Fort Hare  
*Together in Excellence*

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**Request for Permission to Conduct Research<sup>3</sup>**

---

Ebhotwe Primary School

Site no 4391 NU 2

Mdantsane

5219

Dear Principal

My name is Nomonde Mlonyeni, a Masters student at the University of Fort Hare. The research I wish to conduct for my Masters dissertation involves Grade One teachers' approaches in supporting learners with Autism Spectrum Disorder. I am hereby seeking your consent to conduct research. I have provided you with a copy of my proposal which includes copies of the data collection tools and consent and/or assent forms to be used in the research process.

If you require any further information, please do not hesitate to contact me on 071 666 7371/ 043 764 9399 or mlonyeninomonde@gmail.com. Thank you for your time and consideration in this matter.

Yours sincerely,

Nomonde Mlonyeni

University of Fort Hare



University of Fort Hare  
*Together in Excellence*

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**Request for Permission to Conduct Research<sup>4</sup>**

---

Embekweni Primary School

1755 Potsdam South

Mdantsane

5219

Dear Principal

My name is Nomonde Mlonyeni, a Masters student at the University of Fort Hare. The research I wish to conduct for my Masters dissertation involves Grade One teachers' approaches in supporting learners with Autism Spectrum Disorder. I am hereby seeking your consent to conduct research. I have provided you with a copy of my proposal which includes copies of the data collection tools and consent and/or assent forms to be used in the research process.

If you require any further information, please do not hesitate to contact me on 071 666 7371/ 043 764 9399 or mlonyeninomonde@gmail.com. Thank you for your time and consideration in this matter.

Yours sincerely,

Nomonde Mlonyeni

University of Fort Hare

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University of Fort Hare  
*Together in Excellence*

---

**Request for Permission to Conduct Research<sup>5</sup>**

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Parkland Special School

3 Coat Road

Beacon Bay

Dear Principal

My name is Nomonde Mlonyeni, a Masters student at the University of Fort Hare. The research I wish to conduct for my Masters dissertation involves Grade One teachers' approaches in supporting learners with Autism Spectrum Disorder. I am hereby seeking your consent to conduct research. I have provided you with a copy of my proposal which includes copies of the data collection tools and consent and/or assent forms to be used in the research process.

If you require any further information, please do not hesitate to contact me on 071 666 7371/ 043 764 9399 or [mlonyeninomonde@gmail.com](mailto:mlonyeninomonde@gmail.com). Thank you for your time and consideration in this matter.

Yours sincerely,

Nomonde Mlonyeni

University of Fort Hare



University of Fort Hare  
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---

**Request for Permission to Conduct Research<sup>6</sup>**

---

Khayaletu Primary School  
Jacob Nanni Place  
North End  
East London  
5200

Dear Principal

My name is Nomonde Mlonyeni, a Masters student at the University of Fort Hare. The research I wish to conduct for my Masters dissertation involves Grade One teachers' approaches in supporting learners with Autism Spectrum Disorder. I am hereby seeking your consent to conduct research. I have provided you with a copy of my proposal which includes copies of the data collection tools and consent and/or assent forms to be used in the research process.

If you require any further information, please do not hesitate to contact me on 071 666 7371/ 043 764 9399 or mlonyeninomonde@gmail.com. Thank you for your time and consideration in this matter.

Yours sincerely,

Nomonde Mlonyeni

University of Fort Hare

## APPENDIX C: APPROVAL LETTER FROM THE DEPARTMENT



University of Fort Hare  
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**CORPORATE PLANNING, MONITORING, POLICY AND RESEARCH COORDINATION**

Steve Vukile Tshwete Complex, Zone 6 Zwelitsha, 5608, Private Bag X0032, Bhisho, 5605 REPUBLIC OF SOUTH AFRICA:

Enquiries: Ms. F. Pakade Tel: 040 608 7170/4001 . Fax :040 608 4372. Email: [fundiswa.pakade@ecdoe.gov.za](mailto:fundiswa.pakade@ecdoe.gov.za)

Website: [www.ecdoe.gov.za](http://www.ecdoe.gov.za)

Date: 11 April 2022

---

Ms. Nomonde Mlonyeni

7213 Unit P

Mdantsane

**East London**

5219

Dear Ms. Mlonyeni

**PERMISSION TO UNDERTAKE A MASTERS RESEARCH: GRADE ONE TEACHERS' APPROACHES IN SUPPORTING LEARNERS WITH AUTISM SPECTRUM DISORDERS IN SELECTED SCHOOLS IN BUFFALO CITY EDUCATION DISTRICT**

1. Your application to conduct the above-mentioned research involving six (06) primary schools: two mainstream schools from rural areas, two special schools from semi-urban area and two full-service schools in an urban area in the Buffalo City district under the jurisdiction 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. no minors will participate without the consent from the parent/guardian;
  - d. it is not going to interrupt educators' time and task;
  - e. the research may not be conducted during official contact time;
  - f. no physical contact with educators and learners, only virtual means of communication should be used and that should be arranged and agreed upon in writing with the Principal and the affected teacher/s;
  - g. 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;
  - h. you will make all the arrangements concerning your research;





- i. 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: Corporate Strategy Management;
  - j. 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;
  - k. you present the findings to the Research Committee and/or Senior Management of the Department when and/or where necessary;
  - l. you are requested to provide the above to the Chief Director: Corporate Strategy Management upon completion of your research;
  - m. you comply with all the requirements as completed in the Terms and Conditions to conduct Research in the ECDoE document duly completed by you;
  - n. you comply with your ethical undertaking (commitment form);
  - o. You submit on a six-monthly basis, from the date of permission of the research, concise reports to the Chief Director: Corporate Strategy Management.
2. The Department reserves a right to withdraw the permission should there be non-compliance to the approval letter and contract signed in the Terms and Conditions to conduct Research in the ECDoE and/or legal requirements to do so.
  3. The Department will publish the completed Research on its website.
  4. The Department wishes you well in your undertaking. You can contact the Mrs. Fundiswa Pakade on the numbers indicated in the letterhead or email [fundiswa.pakade@ecdoe.gov.za](mailto:fundiswa.pakade@ecdoe.gov.za) should you need any assistance.

**T. MASOEU**  
**CHIEF DIRECTOR: CORPORATE STRATEGY MANAGEMENT**  
**FOR SUPERINTENDENT-GENERAL: EDUCATION**



## APPENDIX D: CONSENT FORM



University of Fort Hare  
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### INDIVIDUAL INFORMATION SHEET AND INFORMED CONSENT FORM<sup>7</sup>

(AGES 18 YEARS AND ABOVE)

***Please note:***

***This form is to be completed by the researcher(s) as well as by the interviewee before the commencement of the research. Copies of the signed form must be filed and kept on record***

***(To be adapted for individual circumstances/needs)***

University of Fort Hare  
*Together in Excellence*

**Title of Study: Grade One teachers approaches in supporting learners with Autism Spectrum Disorder**

Dear participant,

My name is Nomonde Mlonyeni and I am studying at the University of Fort Hare.

I am conducting research on Grade One teachers approaches in supporting learners with Autism Spectrum Disorder.

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<sup>7</sup> Approved by UREC (13 November 2019)

**(Purpose of Study:** To investigate Grade one teachers' approaches in supporting learners with Autism Spectrum Disorder.

We would like you to allow us to conduct a brief (1 hr) interview with you about

**(Study Procedure** *(Explain all procedures using layperson's .*

Some questions may be of a personal and/or sensitive nature. I will be asking some questions that you may not have thought about before. We know that you cannot be absolutely certain about the answers to these questions, but we ask that you try to think about these questions. When it comes to answering questions there are no right and wrong answers.

Please understand that **your participation is voluntary** and you are not being forced to take part in this study. The choice of whether to participate or not, is yours. However, we would really appreciate it if you do share your thoughts with us. If you choose not to take part, you will not be affected in any way whatsoever. If you agree to participate, you may stop me at any time and tell me that you don't want to go on with the interview. If you do this there will also be no penalties and you will NOT be prejudiced in ANY way.

The information will remain confidential. This means that your name and address will not be linked in any way to the answers you give. We study and report on the answers given by all the people we interview and not on an individual basis. The research data will be anonymous – with all personal participants information removed and will be archived at the University.

At the present time, we do not see any risks in your participation. The risks associated with participation in this study are no greater than those encountered in daily life.

There are no immediate benefits to you from participating in this study. However, this study will be helpful in finding out how teachers accommodate learners with autism in the classrooms.

**Risk-Benefit Ratio: None**

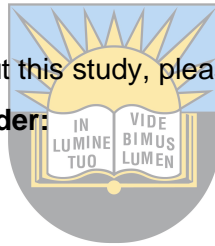
**Who to contact if you have been harmed or have any concerns**

This research has been approved by the Inter-Faculties Research Ethics Committee (IFREC) as per delegated authority of the University Research Ethics Committee (UREC). If you have any complaints about ethical aspects of the research or feel that you have been harmed in any way by participating in this study, please call the IFREC Administrator, [insert name, contact number and email here]

### Reporting and Complaints

If you have questions at any time about this study, or if you have concerns/questions you may contact the researcher/project leader whose contact information is provided on the first page. If you have questions regarding your rights as a research participant, or if problems arise which you do not feel you can discuss with the researcher/project leader, please contact the IFREC Chairperson, Prof. Pumla Gqola on [insert contact number and email address] or the UREC Chairperson, Prof. Renuka Vithal on [insert contact number and email address].

If you have concerns or questions about this study, please feel free to contact the project coordinators: **Researcher/Project Leader:**



**Name:** .....

University of Fort Hare

**Department:** .....

*Together in Excellence*

**Address:** .....

**Phone:** .....

**Email:** .....

## INFORMED CONSENT FORM

I (*name of participant*) .....  
have been informed about the study by (*provide name of researcher/ project leader/ fieldworker*)  
.....

I understand the purpose, procedures, and risk-benefit ratio of the study.

I have been given opportunity to ask questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any procedurals that I would usually be entitled to.

I have been informed about any available compensation or medical treatment if injury occurs to me as result of study-related procedures

I understand that I will be given a copy of this informed consent.

I understand that if I have any questions or complaints about my rights as a study participant, or if I may have concerns about any aspect of the study or the researcher/s then I may contact the Chairperson of the Inter-Faculty Research Ethics Committee, Prof. Pumla Gqola or Chairperson of University Research Ethics Committee, Prof Renuka Vithal (details available from the Researcher or by contacting the University of Fort Hare or Website [www.ufh.ac.za](http://www.ufh.ac.za))

**Participant signature:** .....

**Date:**.....

## APPENDIX E: INTERVIEW QUESTIONS

### Interview Protocol

Thank you for participating in this interview. Your experience as a teacher who works with learners with ASD might bring valuable insight into my research. The aim of this research is to learn about approaches used in supporting learners with ASD who spend most of their school day in classrooms. I will ask you a series of questions, please answer as honest as possible. I want to remind you of your right to choose not to answer any question should you feel uncomfortable answering a particular question. Please let me know at any time during the interview.

### Background information

Name of school-----Gender -----

Highest qualification: ----- Marital status: -----

-



### SECTION B: UNDERSTANDING LEARNERS WITH AUTISM SPECTRUM DISORDER

- How do teachers understand learners with Autism Spectrum Disorder?
- Please explain your understanding of Autism Spectrum Disorder?
- How would you identify a child with Autism Spectrum Disorder?
- Please explain your experiences working with children with ASD

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### SECTION C: STRATEGIES TEACHERS USE IN SUPPORTING LEARNERS WITH AUTISM SPECTRUM DISORDER

- What strategies do teachers use to academically support learners with Autism Spectrum Disorder?
- How do you accommodate learners with ASD in your classroom?
- What support systems are available to support learners with Autism Spectrum Disorder?
- In your experience, what are some of the challenges teachers experience in their efforts to support learners with ASD?
- How do you think those challenges can be met?

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### SECTION D: CHALLENGES TEACHERS EXPERIENCE IN THEIR EFFORTS TO SUPPORTING LEARNERS WITH ASD

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- Are there any specific areas that you feel more support or training is needed regarding inclusion of learners with ASD?
- What support do you receive in order to support learners with ASD in your classroom?

#### SECTION E: IMPLICATIONS OF ASD IN INCLUSIVE EDUCATION

- What are the implications of Autism Spectrum Disorder in Inclusive Education?



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## APPENDIX F: PROOFREADING CERTIFICATE



### *Proofreading Certificate*

It is hereby certified that this dissertation has been proofread and edited for spelling, grammar and punctuation by a professional English language editor from [www.OneStopSolution.co.za](http://www.OneStopSolution.co.za)

Client

Nomonde Mlonyeni

Grade One Teachers Approaches in Supporting Learners with autism spectrum disorders in Selected Schools in Buffalo City Education District

Editor

Michele van Niekerk

Name

Signature

07 October 2023

Date

I cannot guarantee that the changes that I have suggested have been implemented nor do I take responsibility for any other changes or additions that may have been made subsequently. The track changes of the language editing will be available for inspection upon enquiry, for a period of one year.

Contact

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