

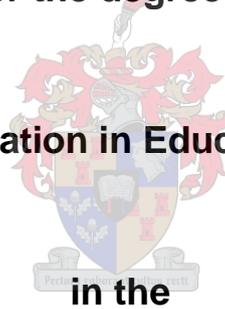
**Teachers' Experiences of the Social Competencies
of a Primary School Learner with
Autism Spectrum Disorder**

By

Antel Van Deventer

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for the degree of**

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Supervisor: Ms L Collair

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Declaration of Originality

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by the University of Stellenbosch will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Date: March 2016

Antel van Deventer

Date:

Abstract

The purpose of this study was to explore teachers' experiences of the social competencies of a primary school learner with Autism Spectrum Disorder.

The teachers of the learner willingly participated in this research study. The aim of this study was to explore their different experiences and the challenges they dealt with in successfully facilitating the development of the learner's social competencies. This study also focused on the strategies they used to teach social competencies.

A literature review was conducted to gain an understanding of the research done in the field, and I fulfilled the role of the researcher. The interpretive paradigm was chosen as the framework for this study due to the fact that it reflects on the interpretations of the different teachers in the study. The data collection took place by means of semi-structured interviews as well as document analysis of the learner's cumulative report card.

This research report describes a variety of experiences that teachers underwent and the repercussions of those experiences. Suggestions are made as to how improvements with regard to teacher training can be made in order to achieve a more learner-specific approach.

Opsomming

Hierdie studie is onderneem om die belewenisse van onderwysers van die sosiale vaardighede van 'n laerskool leerder op die Outisme spectrum te ondersoek.

Die onderwysers van die leerder het vrywilliglik deelgeneem aan 'n navorsingsprojek. Die doel van die projek was om die verskillende ervarings van die onderwysers te ondersoek, sowel as die uitdagings wat hulle ondervind het gedurende die fasilitering van die ontwikkeling van die leerder se sosiale vaardighede. Die studie fokus ook op die strategieë wat hul gebruik het om sosiale vaardighede aan te leer.

'n Literatuurstudie is onderneem om inligting oor bestaande navorsing in te win. Ek het tydens die projek die rol van navorser vervul. Die interpretiewe navorsingsparadigma raamwerk is bespreek as 'n sinvolle opvoedkundige raamwerk vir die studie, omdat dit reflekteer op die interpretasies van die verskillende onderwysers in die studie. Die belewenisse is ingesamel deur middel van semi-gestruktureerde onderhoude sowel as document analise van die leerder se kumulatiewe verslag kaart.

Hierdie navorsingsprojek beskryf 'n verskeidenheid van die moontlike belewenisse van die onderwysers en die nagevolge daarvan. Voorstelle oor moontlike aanpassings in verband met onderwysersopleiding is gemaak om sodoende 'n leerdergesentreerde benadering te volg.

Dedication

I dedicate this thesis to my mother and fiancée who encouraged me to follow my passion and embark on my research journey.

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I would like to express my sincere gratitude and appreciation to the following people:

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Chapter 1: Background and Contextualisation of the Study

1.1 Introduction

The aim of this chapter is to provide a background to the study, and to the context and framework of the study. The first section gives the background and motivation, together with a brief discussion on the most relevant literature. The literature discusses the social competencies of learners with ASD as well as teacher experiences regarding these competencies. In the second section the research problem, the aim of the study and the research question and sub-questions are presented. This section establishes the overall approach to the study. In the third section the research paradigm, design and methodology are briefly discussed.

1.2 Background to and Motivation for the Study

While some learners with ASD are fully capable of achieving academic success in a mainstream school, many do not have the social competencies necessary to help them understand and maintain healthy social relationships in the context of a mainstream class (Jones & Frederickson, 2010; Humphrey & Parkinson, 2006). Furthermore, the fact that they display mainly behavioural and social difficulties makes it challenging for them to successfully adapt in a mainstream school (Lindsay et al., 2014; Sansosti & Sansosti, 2012; Osborne & Reed, 2011; Ashburner, Ziviani & Rodger, 2010; Rogers, 2000).

There has been an increase in the attendance of learners with autism spectrum disorders (ASD) in mainstream primary schools (Emam & Farrell, 2009; Humphrey & Symes, 2012; Jones & Frederickson, 2010). One of the reasons for this is that parents hope that it will be beneficial for the development of their child's social competencies and will allow the learner to be socially included (Bossaert et al., 2013).

They seem to disregard the fact that their choice of placement will not necessarily ensure the sought after improvement in their child's social competencies. The reason for this is that teachers feel that they do not have the skills to educate and facilitate ASD learners in the mainstream classroom (Emam & Farrell, 2009). Moreover, many teachers have no specialist training, or very limited specialist training, that would equip them to understand the extent of the social competencies of learners with ASD,

or how to facilitate the development of the social competencies required to adapt in a mainstream environment (Soto-Chodiman et al., 2012; Unianu, 2012; Humphrey & Symes, 2011; Lindsay et al., 2014).

The differences in teachers, and the variations in teacher training and in-service development, can lead to teachers having a range of different experiences regarding the social competencies of learners with ASD. The aim of this study was to explore the experiences of different teachers regarding the social competencies of a primary school learner with ASD, in order to determine their successes and challenges in teaching the learner, and to ascertain the nature of their relationship with the learner. It also includes their thoughts on which social competencies are underdeveloped and need improvement.

1.3 Research Problem

As previously mentioned, a lot of research has shown that teachers are not always equipped with the correct skills and knowledge to facilitate and support learners with ASD in a mainstream school (Lindsay et al., 2013; Osborne & Reed, 2011; Ashburner, Ziviani & Rodger, 2010). Consequently, the further development of these learners' social competencies cannot take place due to the lack of confidence the teachers display. Most research focuses on the interventions of social skills training, but few focus on the teachers' experiences regarding the social competencies of learners with ASD (Flynn & Healy, 2012; Licciardello et al., 2008; Mazurik-charles & Stefanou, 2007). This study explores the phenomenon of teachers' experiences of the social competencies of ASD learners and how to facilitate them.

1.4 Aim and Purpose

This study is aimed at gaining a deep understanding of teachers' experiences of the social competencies of learners with ASD in a mainstream school. The purpose of the research was to identify gaps in current teacher training, and to see how future training can fill those gaps.

1.5 Research Question

The main research question is:

How do teachers experience the social competencies of a primary school learner with ASD?

The secondary questions are:

1. What is the nature of the learner's social competencies?
2. How does the teacher facilitate the social behaviour in the class?
3. Which social skills teaching strategies are experienced as effective?
4. What are the challenges that teachers experience?

1.6 Research Paradigm

According to Mertens (2010, p. 469) research paradigms serve as theoretical frameworks that guide researchers to structure their views and beliefs with regard to ethics, reality, knowledge and methodology.

This study was conducted from within the interpretive paradigm. In the interpretive paradigm the researcher forms an interpretation of what is being observed, even though it cannot be separated from their own context and background (Krauss, 2005). This paradigm is empathetic and interactional, which creates an impeccable framework in which the researcher can determine the teachers' experiences regarding the social competencies of a primary school learner with ASD (Krauss, 2005).

Furthermore, descriptive data, which provide the researcher with a deeper understanding, such as people's own written or spoken words, can be best produced by a qualitative inquiry (Silverman, 2007). It is important for the researcher to be willing to conduct research in order to understand the meaning that different people have constructed of their lives and professional practices and how they interpret their experiences (Merriam, 2009). Therefore the researcher made use of a qualitative inquiry, exploring the different experiences of teachers of the social competencies of a primary school learner with ASD.

1.7 Research Design and Methodology

1.7.1 Design

The research design that was used for this study is a qualitative, retrospective case study. This is a research approach that views a case within its context, making use of different data sources and sampling methods (Baxter & Jack, 2008; Merriam, 2009). According to Baxter and Jack (2008, p. 544):

This ensures that the issue is not explored through one lens, but rather a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood.

This allows the researcher to view the teachers' experiences of the primary school learner with ASD within a certain context, gathering data by various different methods.

1.7.2 Research participants

A number of seven teachers who had taught the learner with ASD at primary school were purposively selected as participants of the study. Another participant, who was not necessarily a direct part of the research, but who the research was built around, was the learner diagnosed with ASD. This learner is 13 years old and lives with his parents of whom his father (57 years old) is a nursery manager and his mother (44 years old) is a part time teacher. He was in a mainstream nursery school and this was where the teacher first informed his parents of the learner's social difficulties. He was diagnosed with Asperger Syndrome at age 4 by a neuropsychologist.

The participants were purposively selected because they were considered to be rich sources of information. According to Palys (2008) purposive sampling is virtually synonymous with qualitative research and therefore relevant to this study.

1.7.3 Context

For this research the setting was a primary school situated 50 km from Cape Town in a semi-rural environment.

1.7.4 Data collection methods

Data were collected by means of semi-structured interviews with participants in the primary school, and from analysis of the learner's cumulative school report from his current school.

1.7.4.1 Semi-structured interviews

Interviewing the participants involved in-depth, semi-structured interviews with mostly open-ended questions. Interviews were held with the people who form the microsystem surrounding the learner with ASD. This included some of the learner's primary school teachers.

The data obtained during the interviews were recorded on a voice recorder. During all the interviews the same questions were asked and the duration of the interviews was between 30 and 45 minutes.

1.7.4.2 Drawing data from documents

These documents are the cumulative profile/report, available from the current high school, of the learner with ASD and include important information about his social, emotional and academic development.

1.7.4.3 Ethical considerations

The researcher sought ethical clearance from Stellenbosch University's Ethics Committee for Human Studies which ensured that the required ethical protocols were observed. Permission to conduct the research was obtained from the Education Department as well as the school. According to the AERA Code of Ethics (2011), when education researchers undertake research that involves children, the informed consent of their parents or legal guardians should be obtained. Therefore consent was sought from the parents to access the cumulative report of the learner as well as to interview the teachers regarding their child. Assent was obtained from the child to access his school report and to interview his teachers about his time in their classes. Consent was sought from the teachers who participated in the study. All data were securely and anonymously stored in a securely protected file on the researcher's computer.

1.7.4.4 Data analysis

During data analysis in a case study it is necessary to organise all the data collected and to bring everything together into one database (Merriam, 2009, p. 203). In addition, data were analysed by means of thematic analysis, highlighting important themes that emerged from the data while going through the transcriptions of interviews and the cumulative records. According to Merriam (2009, p. 205) thematic content analysis involves the "coding of raw data and the construction of categories that capture relevant characteristics of the document's content." This is further discussed and elaborated in chapter 3.

1.8 Definition of Terms

1.8.1 Social competencies

Social competencies can be defined and measured in terms of the ability of a learner to build meaningful interpersonal relationships. These competencies include the ability to co-operate during social interactions, the assertiveness to make a statement in any social situation, the responsibility to realise how to act and respond to certain social cues and the self-control to know whether to withdraw or continue taking part in a conversation or social situation (Macintosh & Dissanayake, 2006; Ma, 2012).

1.8.2 Autism Spectrum Disorder

According to *The Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM-5; American Psychiatric Association, 2013):

Individuals with a well-established DSM-IV diagnosis of autistic disorder, Asperger's disorder, or pervasive developmental disorder not otherwise specified should be given the diagnosis of autism spectrum disorder.

Furthermore, Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterised by the following features: Deficits in social interaction, which can sometimes be coherent with behavioural and emotional difficulties, as well as restrictive, repetitive mannerisms and interests, for example a preference for strict routine and fixed special interests. Learners with ASD also display sensory sensitivities; they are either hyper- or hypoactive to sensory input.

1.8.2.1 ASD which is on a severity level 1

Severity level 1 refers to individuals who are able to develop sufficient linguistic and intellectual abilities and require very little support. They are usually able to function in a mainstream school, but still require the support of a facilitator or teacher to assist them in developing adequate social communication skills and in understanding social cues (Humphrey & Parkinson, 2006). Even though they prefer to have conversations about their interests, displaying a broad vocabulary regarding these interests, they are able to successfully engage in conversation with other people (Sansosti & Sansosti, 2012; Ghaziuddin & Mountain-Kimchi, 2004; Saulnier & Klin, 2007).

1.8.3 Mainstream school

According to Alborz et al. (2009, p.6) mainstream schools (non-special schools) are defined as "schools that cater for the education of children of compulsory school age within their locality. Studies of schools that serve a wide range of children in their

locality (as defined in that national context) are included.”

1.9 Chapter Outlines

Chapter 1: Background and Contextualisation of the Study

Chapter 1 gives a brief description of the topic together with an overview of the study. In this chapter key terminology is defined and the reasons for conducting the specific research are explained.

Chapter 2: Literature Review

The literature review looks at previous literature and research done on the current topic, or research related to the topic. This helped the researcher to understand how other literature contributes to the research question.

Chapter 3: Research Design and Methodology

This chapter presents a detailed discussion of the methods used while conducting the research.

Chapter 4: Discussion and Presentation of Findings

Chapter 4 presents the findings together with a discussion on the findings of the study.

Chapter 5: Conclusion and Recommendations

In this chapter final comments and recommendations are made. The limitations of the study are also discussed.

Chapter 2: Literature Review

2.1. Introduction

In Chapter 1 the researcher introduced this study on teachers' experiences of the social competencies of a primary school learner with ASD. This chapter presents a review of most recent literature on the research topic. It also provides a detailed summary, exploring the information drawn from the literature with a view to identifying gaps in current research. The main focus of this chapter is on the social competencies of learners with ASD and how teachers in a mainstream school experience the prominent deficits which the learners display regarding effective social interaction and behaviour. In the first section the term 'Autism Spectrum Disorder' and the different severity levels of ASD are discussed, with the main focus on severity level 1. The second section explores literature on the social competencies of learners with ASD, focusing on a variety of social deficits including anxiety and tension, joint attention, flexibility and transition and sensory processing skills. The third section looks at the teachers' experiences regarding the prominent deficits in the social competencies of learners with ASD. Literature regarding teacher anxiety, as well as strategies used to facilitate the development of efficient social skills is reviewed.

2.2. Autism Spectrum Disorder

2.2.1 Introduction to Autism Spectrum Disorder

It is important to realise that ASD is a neurodevelopmental disorder and it is unlikely to be able to diagnose or identify a person with ASD by looking at the appearance and physical features. Usually a person with ASD will look like any other person, but will have clear difficulties in social-emotional reciprocity (5th ed.; DSM-5; American Psychiatric Association, 2013).

2.2.2 Core features of Autism Spectrum Disorder

Learners with ASD have impairments in social interactions, communication and behaviour and find it difficult to understand body language in others. It is difficult for a learner with ASD to initiate conversation or adequately respond to social interactions. Their inability to exchange feelings or emotions and their lack of eye contact and other facial expressions can lead to a failure in peer relationships (American

Psychiatric Association, 2013). Accordingly they tend to avoid social interaction, because they do not find it enjoyable. (Cotugno, 2009; Lindsay et al., 2014; Ashburner et al., 2010; Anderson et al., 2009).

Furthermore, learners with ASD often have specific interests and they display great imagination regarding these interests. They find it difficult to be flexible with regard to different topics of conversation and avoid conversations about anything other than their own particular interest. A good example is a learner who has a fixated interest in space ships or a learner who does mathematical problems over and over again (American Psychiatric Association, 2013). This creates problems when taking part in normal social interactions and causes them to avoid social contact with peers (Ghaziuddin & Mountain-Kimchi, 2004; Stichter et al., 2012).

Another feature of ASD is repetitiveness of movements, speech, and the use of objects. When someone has spoken a word, a learner with ASD will most likely echo the word and sometimes even say it over and over again. Repetitive movements occur when a learner is anxious about something, for example a change in routine. They will then use these self-stimulating movements to calm themselves, like spinning around while they sit on the ground. It is also common in some cases that objects, like toys, are lined up to form a rigid and continuously identical pattern every day, or the learner will for example, spin a ball for hours at a time (5th ed.; DSM-5; American Psychiatric Association, 2013; Rotherham-Fuller & MacMullen, 2011).

Most learners with ASD find it comfortable to follow the same routine every day and are quite inflexible regarding these routines. Should a distraction interfere with their routine, the learners would get upset and display self-stimulating behaviour to calm themselves (5th ed.; DSM-5; American Psychiatric Association, 2013; Humphrey & Symes, 2010; Duerden et al., 2012; Kargas et al., 2014).

According to Humphrey and Symes (2010) learners with ASD prefer an environment which provides them with a low sensory experience. The reason for this is that they are sensory sensitive to different things like sound, touch and sight. This differs, however, from learner to learner, depending on the level of sensitivity to sensory processes, whether hyper- or hypo-sensitive (Marco et al., 2011; Lindsay et al., 2014).

Studies have found, however, that learners with ASD, who are on a severity level 1, can successfully function in a mainstream school. Even though they meet some of the diagnostic criteria for ASD, they have a broad vocabulary and understanding with regard to their own specific interests and, if given the right tools, are able to interact socially and have ordinary conversations with their peers (Cotugno, 2009; American Psychiatric Association, 2013).

Although these are the core features of ASD, each learner's diagnosis is unique. Some will display all of the above features and others will display only a few of these them. According to the DSM-5 (American Psychiatric Association, 2013, p.53) "Severity may vary by context and fluctuate over time".

In the next section the learners diagnosed with a less severe type of ASD, named 'ASD which is on a severity level 1', will be discussed.

2.2.3 Autism Spectrum Disorder which is on a severity level 1

According to *The Diagnostic and Statistical Manual of Mental Disorders (DSM-V)* (American Psychiatric Association, 2013) ASD has three different severity levels, ranging from learners requiring very substantial support to learners who need support only with their social and behavioural deficits. Learners, who have ASD which is on a severity level 1, require very little support, but without support their poor social communication skills will not develop or improve. Furthermore, due to the broad vocabulary some of these learners display, they are able to speak in full sentences and engage in conversation with others (Sansosti & Sansosti, 2012; Ghaziuddin & Mountain-Kimchi, 2004; Saulnier & Klin, 2007). These conversations usually revolve around the specific interests of the learner with ASD, due to the fact that the learners feel content conversing about something that they have broad knowledge of (Slocombe et al., 2013).

Although they are able to communicate and do not show prominent language deficits, they find it difficult to have conversations with another person where they should ask and respond to questions (Colle et al., 2008; Ghaziuddin & Mountain-Kimchi, 2004; Laugeson et al., 2012). In other words according to the *DSM-5* (American Psychiatric Association, 2013, p.52) their "to-and-fro conversations with others fail". Making friends is also quite difficult for them and they appear unsociable due to their displays of sometimes awkward behaviour (McMahon et al., 2013).

Additionally, children with ASD severity level 1 usually have an average to above-average level of cognitive ability, resulting in them being mistaken for being more capable of socially adapting in mainstream schools than actually is the case (Stichter et al., 2012). The lack of adequate social competencies leads to exclusion and results in bullying taking place (Sansosti & Sansosti, 2012; Saulnier & Klin, 2007).

To better understand ASD severity level 1, the following is a brief description of severity levels 2 and 3. According to DSM-5; (American Psychiatric Association, 2013, p. 52) learners with ASD severity level 2 have marked deficits in social communication competencies, inflexibility of behaviour, difficulty coping with change and restrictive, repetitive behaviour that can interfere with their functioning. On the other hand, learners with ASD severity level 3 display severe deficits in social communication competencies, inflexibility of behaviour, difficulty coping with change and restrictive, repetitive behaviour that can interfere with their functioning. They also experience great anxiety when there are changes in their normal routine.

2.3. Social Competencies

2.3.1 Defining social competencies

Social competencies can be defined as the interpersonal behaviours of a person who creates the ability to build meaningful interpersonal relationships and to adapt in different environments and circumstances. The interaction which takes place between two people includes both verbal and non-verbal behaviours (Dobbins et al., 2009; Ma, 2012). Furthermore, it is the learner's ability to develop good self-esteem and self-confidence which will ultimately allow him or her to understand different identities, including personal identity, group identity and social identity (Ma, 2012; Stichter et al., 2012).

According to Dobbins et al. (2009) if acceptable social competencies are demonstrated in the classroom or community it will allow personal relationships to develop and foster academic improvement. If a learner has social deficits, however, it will have a negative effect on personal relationships and schoolwork and can result in aggression and anxiety (Laugeson et al., 2012). Subsequently these feelings of aggression and anxiety lead to the avoidance of social situations, creating a further negative impact on the learner's social deficits (Fisher et al., 2004). Dobbins et al.

(2009, p.359) state that adequate social skills should be “taught, learned, and performed for a person to be considered socially competent.”

The teacher plays an integral role in the development of social competencies and needs to focus on a range of strategies. These strategies assist in improving the ASD learner’s relationships with peers, with their self-control, their adaptability to the environment, ability to work in a group, coping with aggressive behaviour and stress, devising plans and problem solving (Omeroglu et al., 2015, p. 982).

2.3.2 Social competencies of learners with ASD

As previously mentioned, learners with ASD have restricted social competencies that need further development. The impaired social competencies of learners with ASD include social anxiety and sometimes social aggression, inability to recognise emotions, to take part in appropriate play, or to be flexible during social interactions. It also includes deficits in co-operation, assertiveness, responsibility, self-control and attention (Cotugno, 2009; Mackintosh & Dissanayake, 2006; Bellini, 2004; Wong et al., 2012). The fact that these learners do not have the skills to assist them in forming meaningful friendships and relationships can ultimately result in exclusion, isolation, poor social support, and cause anxiety and depression (Laugeson et al., 2012; Stichter et al., 2012).

The social adjustment of learners with ASD can be improved by making sure that the social competencies of these learners are developed and facilitated. If learners with ASD are taught the correct social skills to help with building friendships, it can have a positive long-term effect in terms of social interaction (Laugeson et al., 2012). In order for social competencies to be successfully developed it is important to realise that each learner with ASD is distinct in their own unique and individual way and can under no circumstances be taught the same content. Therefore the learner’s teachers are required to observe and document their experience of the learner’s social competencies and point out any deficiencies that could be rectified during future development.

There are some areas where the lack of necessary social competencies can cause problems in terms of successful social adaptation (Cotugno, 2009). These areas include anxiety and tension, joint attention, flexibility and transitions, sensory processing skills and social play skills.

2.3.3 Anxiety and tension

Learners with ASD find it difficult to display the social skills required to function normally in a mainstream school. Their lack of the requisite social skills causes them to have problems managing stress and anxiety during social interactions, especially in groups (Laugeson et al., 2012). Teachers and peers find their lack of social competence and odd behaviour difficult to understand and this causes them to feel rejected and excluded. According to Bellini (2004) this may be the reason for social anxiety, tension and ultimately depression developing in these individuals.

Studies have shown that learners with ASD which is on a severity level 1 are more susceptible to developing anxiety, social stress and problems with building relationships than learners who are less cognitively able (Niditch et al., 2012; Sutton et al., 2005; Hallet et al., 2013). These learners seem to find any social situation discouraging, because of all the requirements that are attached to social interactions. Consequently this causes stress and may lead to anxiety and aggression (Reynolds et al., 2011; Anderson et al., 2009). It is common among learners with ASD to deal with anxiety by engaging in repetitive behaviours to calm themselves, for example rocking backward and forward, flapping their hands and many more different forms of repetition (Rodgers et al., 2012). Although they have ways to calm themselves, their anxiety and feelings of isolation may worsen as these learners become adolescents, due to the increase in social awareness and social pressure induced by their peers (White et al., 2009).

However, if their inadequate social competencies are nurtured and developed from a young age, by making use of facilitation in the classroom, their anxiety levels will ultimately decrease, because it will help them to feel more comfortable in social situations (Flynn & Healy, 2012; Laugeson et al., 2012).

2.3.4 Joint attention

Learners with ASD have difficulties with joint attention, which means that while it is a challenge for others to get their attention through communicating about a certain object or event, they also find it difficult to stay interested during social interaction (Cotugno, 2009; Adamson et al., 2001; Lindsay et al., 2013; Whitaker, 2004). They tend to feel comfortable only when initiating conversations regarding their own

interests, but have problems in continuing with the conversation, especially if they did not initiate it themselves (Paisley & Smith, 2013; Schietecatte et al., 2012).

The lack of social competencies which these learners display makes it challenging for them to keep focused on a specific topic, especially during classroom discussions or conversations with their teacher (Wong & Kasari, 2012; Leekam & Ramsden, 2006). If for example, a teacher tells a story to the learners and expects everyone to listen, she can only make eye contact or use different voice tones to get all the learners' attention, but this will not have the desired effect on a learner with ASD who finds it difficult to make eye contact or understand emotions (Delfos, 2010; Ingersoll & Schreibman, 2006).

According to Schietecatte et al. (2012) although there have been few studies done on the development of joint attention, the incapacity of learners with ASD to understand social cues like emotions, eye contact, feelings and goal directed intentions can be linked to deficits in joint attention.

2.3.5 Flexibility and transitions

Learners with ASD are comfortable within the boundaries of restricted patterns and strict routine, therefore they have difficulty with flexibility and transitions. This means that they have trouble in adjusting to change and in shifting their attention between different tasks (Cotugno, 2009). Although a majority of teachers create a routine to make transitions easier and more flexible, these learners still find unexpected changes in the class routine disruptive. This then causes them to get anxious and can ultimately result in meltdowns, whether severe or moderate. To prevent this, the teacher can have a conversation with the learner about his or her interest before asking him to perform a transition task. This will allow the learner to feel comfortable and can consequently make the process of transition much easier. (Weinstock, 2012).

2.3.6 Sensory processing skills

An area that aggravates the lack of adequate social competencies in a learner with ASD is their sensory processing skills. Whenever someone wants to initiate conversation with these learners, they find it difficult to participate due to their irresponsiveness to certain sounds, such as the sound of their name or any other meaningful verbal communication (Iarocci & McDonald, 2006; Marco et al., 2011;

Ashburner et al., 2008). Furthermore, learners with ASD often display hypo- or hypersensitivity to different sensory experiences like sounds and lights, which can lead to anxiety and self-stimulating behaviours such as rocking backwards and forwards (Ashburner et al., 2008; Kargas et al., 2014). This can cause their peers and even teachers to reject and exclude them, because they do not understand their behaviour and find it strange (Iarocci & Macdonald, 2006; Paisley & Smith, 2013; Cotugno, 2009).

According to Paisley and Smith (2013), since a learner with ASD finds it difficult to understand social cues, it takes longer for them to process certain social situations which involve facial expressions and feelings such as jealousy or happiness. This can make them seem distant and emotionless when taking part in social interaction (Wong et al., 2012; Adamson et al., 2010). Furthermore, they have the ability to be incredibly honest or have 'no filter' when communicating with their peers. They will, for example, tell someone that their drawing is ugly just because they do not like the colour brown. This could make it difficult for them to adapt socially in a mainstream school environment, because they would come across as being rude and naughty (Ravet, 2011; Iarocci & MacDonald, 2006).

2.3.7 Social play skills

One of the most important tools in the developmental years of learners with ASD is social interaction initiated through play. However, they find it difficult to display the necessary skills required for them to play effectively with their peers. The reason for this is their deficits in play skills and their non-stereotypical behaviour (Jung & Sainato, 2013). Their deficits in social skills like joint attention and imitation, cause a significant delay in the development of their social play skills (Bass & Mulick, 2007).

According to Bass and Mulick (2007) learners with ASD experience difficulties with the three phases involved in typical social play. The first phase is orientation, which is the awareness of other learners and their play materials, but not getting involved. Following this phase is parallel play, which means that the learner is playing next to another learner, with the same type of materials and possibly the same game, but not interacting with the other learner. The last phase is common focus, where learners engage in activities involving one or more learners. This form of play involves activities such as taking turns, sharing materials, and asking other peers to join in the play. Learners with ASD find it difficult to actively take part in these phases and

therefore require substantial support in order for them to develop their social play skills.

2.4. Learners with ASD in Mainstream Schools

Research has shown that the number of learners with ASD attending mainstream schools is increasing every day (Lindsay et al., 2013; Syriopoulou-Delli et al., 2012). As stated in Chapter 1, the reason for this is that the parents hope that it will be beneficial for the development of their child's social competencies and their participation in community life in general (Bossaert et al., 2013). However, due to their lack of effective social skills, these learners experience different challenges when being placed in a mainstream school.

2.4.1 Challenges experienced by learners with ASD

According to Humphrey and Symes (2011) learners with ASD are more likely to be bullied and rejected than any other learner in a mainstream school. As previously mentioned, this is due to the fact that they have emotional and social difficulties and find it difficult to display socially acceptable behaviour (Hebron & Humphrey, 2013; Chan et al., 2009). Research has shown that these socially unacceptable behavioural difficulties are linked to the inadequate social competencies displayed by learners with ASD (Licciardello et al., 2008; Cervantes & Matson, 2015). These learners will, for example, laugh inappropriately during certain situations and not know how to resolve conflict, should it arise. While their other typically developed peers find it easier to resolve conflicts, learners with ASD find it difficult to understand other people's perspectives and emotional experiences, which are essential skills that are needed to find a solution in conflict situations (Hochhauser et al., 2015).

Their sometimes aggressive and violent behaviour towards other people can make it extremely difficult for their teachers and peers to calm them down (Ashburner et al., 2010). As previously stated, whenever they get anxious and aggravated by sensory overload they tend to calm themselves by isolating themselves, making loud noises or using self-stimulating behaviour like flapping their hands or rocking from side to side (Bellini, 2004; Turygin, N., 2013; Rodgers et al., 2012). They also follow a strict routine, and they will feel safe and comfortable when they are given an environment where sameness is maintained (Rodgers et al., 2012; Hallet et al., 2013). The disruptive behaviours displayed make it difficult for teachers to educate and develop

adequate social competencies in learners with ASD. Consequently this causes an increase in the deficits of their social interaction (Cervantes & Matson, 2015; Licciardello et al., 2008).

All these behaviours make them seem more vulnerable, lonely and weak, which makes them perfect targets for bullying. This develops into a vicious cycle of isolation and exclusion which ultimately can lead to depression and anxiety (Hochhauser et al., 2015; Flynn & Healy, 2012). It is, however, the responsibility of the teacher to facilitate and build a trusting relationship with these learners in order to assist them in developing the social competencies needed to become more resilient in difficult social situations (Lindsay et al., 2014; Emam & Farrell, 2009).

2.5. Teachers' Experiences

2.5.1 Teacher-learner relationships

The relationship between a teacher and a learner with ASD is extremely important to ensure the successful development of the efficient social competencies of these learners. According to Robertson (2003) a positive teacher-pupil relationship allows the learner to be socially accepted in the classroom. A well-established relationship between teachers and learners with ASD has benefits for the learners in terms of their adjustment and overall interpersonal relationships with their peers and teacher (Robertson, 2003; Emam & Farrel, 2009). Through a positive teacher-peer relationship, learners with ASD will also learn strategies and ways to build resilience when trying to cope with the negative effects of bullying and exclusion (Humphrey & Symes, 2010; Hebron & Humphrey, 2013).

However, the behavioural difficulties and deficits in efficient social competencies make it difficult for the teacher to build a positive relationship with these learners. There are many instances where teachers are involved in the process of excluding learners with ASD, due to the fact that they do not understand them and find their behaviour frustrating (Humphrey & Symes, 2010). They seem to think that because a learner with ASD, severity level 1 can function normally on an academic level that they will not have social, emotional and behavioural difficulties. It is due to this misconception that these learners get excluded and consequently experience a decrease in all areas of functioning, including academic performance (Stichter et al.,

2012). Therefore it is important that teachers remain lifelong learners and learn more about ASD from paraprofessionals or online sources (Syriopoulou-Delli et al., 2012).

2.5.2 Teacher anxiety and challenges

According to Emam and Farrel (2009) teachers find it difficult to facilitate and build relationships with learners with ASD, due to the wide range of social-emotional deficits that they display. These difficulties cause teachers to develop higher levels of anxiety and tension, because they are not informed on how to approach the education of ASD learners and they feel unable to meet their needs (Humphrey & Symes, 2011; Unianu, 2012; Lindsay et al., 2013). Moreover, teachers experience a heavier workload which reduces the amount of attention that they can give to the rest of the peers (Soto-Chodiman, 2012).

According to the literature the only way that teachers will regain confidence in facilitating and educating learners with ASD is through teacher training. This training can be combined with necessary teaching resources, facilities and services which can ultimately create a positive and comfortable learning environment for both the teacher and the learners (Soto-Chodiman, 2012). This can then reduce teachers' anxiety levels and have an overall positive effect on the education process.

The assistance of and relationship between paraprofessionals and teachers is of immense importance in ensuring the adequate facilitation of learners with ASD. Research showed that paraprofessionals should develop a cooperative relationship with the teacher in order to assist and give advice on possible strategies to use in the classroom (Weinstock, 2012; Licciardello, et al., 2008; Ashburner et al., 2010). According to Rispoli et al. (2011) paraprofessionals include teaching assistants and facilitators.

2.5.3 Strategies used in the classroom

It is extremely important for teachers to create a functional environment in which learners feel comfortable enough to share their thoughts and to ensure the optimal development of each learner. Therefore it is the teacher's responsibility to make other learners aware and to guide them on how to interact with a learner diagnosed with ASD. According to Robertson (2003) the social development of a learner with ASD is dependent on the type of relationship the learner has with his or her teacher. In other words the teacher's attitude and approach to the learner can play a very

important role in the development of social competencies in the school environment. Even though the teacher plays the main role in ensuring the development of the learner's social competencies in a mainstream environment, there are quite a few strategies that can be used to improve the progress.

2.5.4 Social stories

According to the literature social stories is a wonderful strategy used to help learners with ASD to better understand social cues, interaction and certain social situations. This strategy also demonstrates the type of behaviour acceptable in a mainstream environment. The teacher can read the strategy out loud or tell the story by using pictures. This strategy is not only effective for developing social competencies, but also assists in calming the learner when he or she has a change in routine, for example a new classroom (Weinstock, 2012; Reynhout & Carter, 2006; Humphrey & Parkinson). Another area where social stories can play an important role is in dealing with exclusion. There are many occasions when learners with ASD do not recognise that they are being bullied. Through social stories they can be taught how to recognise situations where they are being victimised and how to deal with these types of situations (Humphrey & Symes, 2011; Rogers, 2000).

Teachers can adapt the social story according to each learner's specific needs. There are many computer programmes that can be used, if teachers prefer not to verbally tell or act out the story. Presentations can be designed in PowerPoint and used to make a learner comfortable with a change in routine (Weinstock, 2012). This strategy is highly effective and can be used and applied throughout the learner's school career (Heyvaert et al., 2015).

2.5.5 Peer-mediated intervention

According to Chan et al. (2009) peer-mediated intervention is a strategy where peers assist and facilitate the behaviour and social development of learners with ASD. They serve as tutors in implementing different instructional programmes necessary to ensure the optimal social development of learners with ASD (Cotugno, 2009; Whitaker, 2004; Morrison et al., 2001). It is important, however, to implement this strategy at an appropriate age, where the peer mediators are old enough to understand how to effectively facilitate and assist a learner (Flynn & Healy, 2012).

In order for peermediation to be successful, the peers serving as mediators must first be trained on how to effectively facilitate learners with ASD. This is due to the lack of natural motivation to approach and take part in social interaction with learners diagnosed with ASD (Stichter et al., 2007). According to Rogers (2000) the peers seem to learn and adapt to the interventions at a rapid pace, which is of benefit to learners with ASD. Furthermore, the peer who has received training has a significant influence on other peers that are not trained. They influence other peers to develop empathy, kindness and also cause them to increase their social interaction and communication towards learners with ASD (Trembath et al., 2009).

Peermediation has many social and emotional benefits for learners with ASD, including the improvement of social play skills. The reason for this is that it is unpretentious and informal, placing no pressure on either of the parties involved (Bass & Mulick, 2007; Yang et al., 2003).

2.5.6 Paraprofessionals

Emam and Farrel (2009) stated that a classroom strategy which can also be very successful in managing the social and behavioural needs of a learner with ASD is the presence of teaching assistants, or in this context, paraprofessionals. As previously mentioned, most teachers find it challenging to facilitate learners with ASD in their classroom, and that causes tension and anxiety (Humphrey & Symes, 2011). It is one of the responsibilities of paraprofessionals to help relieve these tensions by facilitating learners with ASD and implementing strategies to develop adequate social competencies. They can also provide the preferred consistency and routine to a learner with ASD, especially when they have to move classes in the intermediate phase (Humphrey & Symes, 2011; Russel et al., 2015; Mazurik-charles & Stefanou, 2007).

According to the literature it is very important to ensure that paraprofessionals receive the training necessary to successfully support learners with ASD. Most paraprofessionals do not have the necessary experience or training in facilitating learners with ASD (Humphrey & Symes, 2011; Rispoli et al., 2011; Giangreco & Suter, 2010). The reason for the lack of experience and underqualified paraprofessionals is due to the disrespect they receive at schools as well as low salaries and limited opportunities to advance in the educational institute (Giangreco & Suter, 2010).

The literature indicated that intervention is needed for paraprofessionals who are not sufficiently trained to facilitate learners in developing their social competencies. Intervention should provide for thorough and effective training of paraprofessionals so that ultimately it can result in significant benefits for the learner with ASD (Causton-Theoharis & Malmgren, 2005; Russel et al., 2015).

2.5.7 Classroom organisation

As previously indicated, learners with ASD prefer following a strict routine and they sometimes portray certain sensory sensitivities, e.g. sound, touch, smell, especially when they are younger (Marco et al., 2011; Lindsay et al., 2014; Humphrey & Symes, 2010; Duerden et al., 2012; Kargas et al., 2014). It is important, therefore, for mainstream teachers to organise their classroom in order to accommodate both learners with ASD and their peers. According to Humphrey and Parkinson (2006) teachers are required to organise the classroom, the day and the activities for the learner with ASD. This will assist in preventing many behavioural challenges and make the learner feel comfortable interacting socially within the learning environment.

According to Deris & Di Carlo (2013) the following are a few examples of classroom modifications that can be implemented to successfully develop and facilitate the social competencies of learners with ASD.

Rules. First of all most learners with ASD are very honest and therefore live up to the expectations of classroom rules. The classroom rules are visually displayed and discussed by the teachers and learners on a regular basis (Deris & Di Carlo, 2013).

Quiet area. Another strategy to modify a classroom is to create a quiet area where learners with ASD can take a break if they need to escape certain situations or calm themselves from external stimuli which possibly triggered their sensory sensitivities. This quiet area is accessible at any time during the day and furnished with comfortable chairs and tools for self-calming including headphones and games (Koenig et al., 2009; Deris & Di Carlo, 2013).

Positive environment. It is also the teacher's responsibility to remove or limit sensory stimuli that may be distracting or aggravating to learners with ASD. The reason for this is to prevent negative behaviour and anxiety. An example is a noisy classroom by having a positive discipline system in place or by using non-fluorescent lights,

depending on which sensory sensitivities the learner portrays (Koenig et al., 2009; Deris & Di Carlo, 2013).

Even though there are many ways in which teachers can modify the classroom to facilitate learners with ASD, they are expected to create inclusive classrooms, but they have limited guidelines to assist them in doing so. In this respect there is a gap in the literature, and an opportunity for future research (Lindsay et al., 2013; Humphrey & Parkinson, 2006).

Chapter 3: Research Design and Methodology

3.1 Introduction

As discussed in Chapter 1 this study was aimed at viewing the experiences of teachers regarding the social competencies of a primary school learner with ASD. The focus of this chapter is to explain and understand the research process and how it was structured. The methodology introduced in Chapter 1 will be elaborated on and explained in detail.

Some teachers who teach at mainstream schools find it challenging to facilitate and accommodate learners with ASD in their classrooms and this can cause anxiety and tension in both the teacher and the learner (Emam & Farrel, 2009; Humphrey & Symes, 2011). As discussed in Chapter 1, this study is aimed at reviewing the experiences of teachers regarding the social competencies of a primary school learner with ASD. This chapter focuses on the research process and how it was structured and the methodology explained in Chapter 1 is further expanded and explained.

3.2 Research Questions

Before the research design and methodology can be explained, it is required to first view the research questions as formulated in Chapter 1.

The main research question is:

How do teachers experience the social competencies of a primary school learner with ASD?

The secondary questions are:

- What is the nature of the learner's social competencies in class?
- How does the teacher facilitate the social behaviour in the class?
- Which social skills teaching strategies are experienced as effective?
- What are the challenges that teachers experience?

3.3 Research Paradigm

According to Nieuwenhuis (2010) the function of a paradigm is to place different realities into a structure in order to better understand and interpret these realities. It represents the way we think about things and how we act on those thoughts (Creswell, 2009). A paradigm can also be viewed as a frame of reference in which our observations and interpretations can be organised (Babbie, 2010). In this study the researcher made use of the interpretive paradigm to theoretically frame the research (Mertens, 2010) to better understand the experiences of the teachers regarding the social competencies of the learner with ASD. It was suitable for this particular study as it viewed how different teachers experienced and made meaning of the phenomenon involving the learner (Nieuwenhuis, 2010; Merriam, 2009). The research was qualitative in nature.

The qualitative researcher who works within the interpretive paradigm views the world as a place containing individuals, each having their own experiences and interpretation of these experiences. The researcher makes use of interviews to record and transcribe the views and phenomena experienced by different individuals (Nieuwenhuis, 2010). In this study the attitudes and assumptions of the teachers interviewed played a key role in the way they answered and expanded on the questions asked. Each participant formed their own subjective meaning of their experiences. This prevented the researcher from taking only a few ideas and narrowing them down to particular categories (Creswell, 2007). In this study the views and experiences of eight different teachers were recorded. Although a great deal of information overlapped regarding their observations of the social competencies of the learner with ASD, different views and experiences also surfaced. To see how these different experiences and views can be structured they will be viewed through the three lenses of a research paradigm, namely ontology, epistemology and methodology.

3.3.1 Ontology

Ontology can be viewed as the understanding of multiple social realities. Every human being has their own individual understanding of their social surroundings (Creswell, 2013; Nieuwenhuis, 2010; Given, 2008; Denzin & Lincoln, 2011). Moreover, when researching within the interpretive paradigm, it is important to refer to a relativist ontology. This means that the knowledge we obtain, including our

experiences, viewpoints and morals are connected to a certain language, culture and specific social practices (Denzin & Lincoln, 2011; Given, 2008).

During the interviews each teacher gave a different perspective of the learner with ASD. Their different views could stem from their varying years of experience and especially the amount of exposure they previously had in teaching learners with ASD. However, all of them, having more or less the same language and social and cultural practices, had the same morals and inclusive relationships towards the learner in the case study.

Keeping their perspectives in mind, it is important to mention that there are external and internal factors which influence the way in which each individual views their reality. There are the external factors surrounding the teachers, for example the facilitation of the learner with ASD. This includes his behaviour, social competence and emotional behaviour, all of which have an influence on the teachers' understanding of, and how they experience, the social competencies of the learner. The internal factors are created by the mind within individual consciousness. This can be explained by the way an individual experiences the social reality surrounding them. Each participant had their own perception of the learner with ASD and their own way of dealing with some of the challenges that surfaced. Consequently, both of these factors assisted in forming the participants' interpretation of the case study in which they played a prominent role (Creswell, 2013; Gavin, 2008).

3.3.2 Epistemology

Epistemology represents the way an individual's knowledge is viewed or how they know the world. It also represents the relationship between the participant and what is already known. Transactional epistemology, referred to when conducting research within the interpretive paradigm, states that it is difficult to separate an individual from what they know (Creswell, 2013; Denzin & Lincoln, 2011; Nieuwenhuis, 2010; Gavin, 2008). In this study the researcher, after researching the most relevant literature to complete the literature review, had a basic knowledge of the experiences of teachers regarding the social competencies of learners with ASD. By interviewing each participant and studying the cumulative report of the learner, the researcher was able to link her own knowledge to the knowledge obtained through these interviews and readings. Consequently the researcher continued to remain objective and actively

participated in the research process. This suggests that the research was done within the interpretive paradigm.

3.3.3 Methodology

As previously mentioned, the research took place within the interpretive paradigm, which can best be supported by qualitative research methodologies. In this study, qualitative research was used to make meaning of teachers' experiences of the social competencies of a primary school learner with ASD. It is clear that the main focus of qualitative research is on interpreting different individuals' realities and how they view or experience certain phenomena. According to Flick (2007) the best way to collect data to better explain and portray these different realities is through analysing interviews of individual experiences and field notes documented by observing a subject and analysing documents including, reports or diaries (Neuman, 2011; Merriam, 2009). In this study the data collection took place by conducting interviews with the learner's teachers as well as accessing his cumulative report for further information on his social competencies. However, no observation took place during this study.

Mertens and McLaughlin (2004) state that qualitative research is a research approach that uses different methodologies to assist in developing an information rich picture of an educational or social occurrence, within a certain context. Therefore the qualitative researcher studies people in their natural contexts, to make sure that each participant delivers a meaningful interpretation of the phenomena being studied (Creswell, 2013; Cohen, Manion & Morrison, 2011; Flick, 2007). This study was constructed in a school setting, where all the participants are teachers. This created a stress-free environment in which the individual interviews could take place, while making each participant feel comfortable.

In order to successfully construct qualitative research the researcher had to maintain an objective position throughout the research process. According to Cohen, Manion and Morrison (2011) a subjectivist interprets social reality through an idealistic lens, which states that the world consists of different individuals who each view the world in a different way. The researcher in this study did the study from a subjectivist's point of reference by representing the participants' realities in order to compare them in the data analysis. Effort was made to get inside the mind of each participant in

order to better understand how they experience ASD and what exactly their realities consist of. The researcher also analysed the language and meaning of each participant's experience regarding the social competencies of the learner with ASD.

Qualitative research is inductive, which can be explained in terms of planned research processes constantly changing as new meanings are formed. It is ongoing and interactive instead of linear and fixed and allows themes to emerge out of the transcriptions (Maxwell, 2012; Babbie, 2010; Neuman, 2011; Merriam, 2009). During this study the researcher observed the participants during their interviews. These interviews were transcribed and the researcher discovered patterns as well as themes during the data analysis. She also used the learner's cumulative report and transcribed the information relevant to the study. According to Babbie (2010, p. 22): "Inductive reasoning moves from a set of specific observations to the discovery of a pattern that represents some degree of order among given events".

3.4 Research Design

The research design determines which research methods the researcher will use to conduct the research. In this study the researcher decided to make use of a retrospective case study as the research design. According to Yin (2009, p.18) a case study can be defined as:

An empirical inquiry that investigates a contemporary phenomenon in depth and within its real life context, especially when the boundaries between phenomenon and context are not clearly evident.

A case study can be viewed as a unit within different systems e.g. microsystems, mesosystems, exosystems and even macrosystems. Even though this seems like a lot of systems influencing each other and following certain processes, it is ultimately the goal of a case study to be seen as a bounded system (Merriam, 2002; Yin, 2009; Simons, 2009). The case or bounded system in this study was constructed around the primary school learner with ASD and included his primary school teachers' experiences of his social competencies. The learner and his parents were consulted for consent and were aware of the nature of the study, but they were not participants in the data collection.

Since the learner is currently in grade 8 and attending high school, the teachers had to think back to their earlier experiences with the learner, and the study is thus

considered retrospective. His cumulative report from primary school was accessible to the researcher. Therefore, the focus of the case study fell on the teachers' experiences, but without the learner as the object within the bounded system a valid case study could not have been formulated. It is particularly important that one understands the case being studied and how its findings relate to other similar academic discussions and bodies of knowledge in the field (Yin, 2009; Merriam, 2002).

When viewing the type of case study it could be stated that this case study is intrinsic in nature, which means that the whole case with its participants and originality is of interest. A very important feature of an intrinsic case study, seeing that this particular study is focused on a single case, is that it is not necessary to generalise and build theories to conclude the study (Silverman, 2013).

There are critics who raise concerns about this type of study questioning whether one can generalise from it, contributing to a field beyond this particular case (Flick, 2009). However, these concerns have proved to be common misunderstandings when looking at intrinsic case studies. Flyvberg (2006) states that it is important that researchers should sometimes develop a deeper understanding regarding individual cases. It should be remembered that intrinsic cases might not necessarily prove anything, but that they aim to teach the researcher and fellow field experts something on which they can build new knowledge (Silverman, 2013). Stake (1995) furthermore states that the real goal of a case study is particularisation instead of generalisation. The researcher in this study selected a particular case and came to an in-depth understanding of the case, for example what it entails and what it does, but not comparing it to other cases or studies.

3.5 Research Methods

The methods used in this study were all qualitative and included purposive sampling, and two methods of data collection: semi-structured interviews and document analysis. Furthermore, the data were analysed by making use of thematic analysis.

3.5.1 Context

The context in which the research took place regarding the experiences of the primary school teachers was a primary school in a town near Cape Town. The school is a mainstream primary school with approximately 800 learners. Each classroom

accommodates a maximum of 30 learners. There are also specialists working at the school, including a play and speech therapist, two occupational therapists, a learning support teacher and two assistants per grade in the foundation phase.

3.5.2 Participants/sampling

The participants in this study were eight primary school teachers of a learner with ASD who was previously in their classes. These teachers taught him from grade 1 up until grade 7. According to Merriam (2002) the overall goal of qualitative research is to gain insight into the perspectives of different participants regarding a certain case. Therefore the researcher made use of purposive sampling by selecting a sample of participants who were most information rich and from whom the researcher could learn the most (Simons, 2009). By making use of purposive sampling it suggested that the researcher choose a setting that could provide the best possible view regarding the research topic (Silverman, 2010). In this case study the aim was to understand the social competencies of a learner with ASD and gain insight into the experiences of his teachers in this regard.

Although data were not collected from the learner, data were collected about him from the participants and he was considered central to the study. According to his psychiatric reports, he was four years old when he was first diagnosed with ASD by a psychiatrist. To confirm this diagnosis, the psychiatrist observed the learner at school, and consulted with the boy's teacher afterwards. The teacher also completed a Strengths and Difficulties Questionnaire. Additional consultations with a neuropsychologist and occupational therapist took place.

In this study the participants chosen were all very different with regard to their years of experience, qualifications and personal differences. The reason for sampling teachers from grade 1 through to grade 7 was also to monitor the development of the social competencies of the learner with ASD while he was growing up and to see how each teacher experienced it.

3.5.3 The researcher

The qualitative researcher plays a central role in the data collection process and can be seen as an instrument in data collection and analysis (Given, 2008). It is the responsibility of the researcher to ensure the quality of the study by applying certain important characteristics while conducting the research. The researcher in this study made sure that the research was done within the frame of a qualitative case study. This included certain assumptions that had to be taken into consideration throughout the data collection process. An example of such assumptions is the researcher remaining objective and focusing on the participants' different experiences (Creswell, 2013).

3.5.4 Methods of data collection

The research was carefully planned at every stage before data collection commenced. A thorough study of the literature took place, the data collection instruments were constructed, ethical clearance was sought and arrangements made for the data collection. This allowed the researcher to be prepared and ask relevant questions to assist in ultimately answering the main research question.

The sources of data collection used for this study were semi-structured interviews and documents. Both of these were used with the aim of effectively answering the research question, which is: 'What are the experiences of the teachers regarding the social competencies of a primary school learner with ASD?' The semi-structured interviews that were conducted with the learner's teachers were the primary method of data collection. It is important that the researcher plan ahead before the data collection process can begin (Merriam, 2002). An interview guide was piloted on a primary school teacher at another primary school and refined by eliminating any irrelevant questions and adding more suitable questions. A final interview guide was then compiled which consisted of different themes which served as a framework to guide the researcher when interviewing the participants (Appendix F). All of these participants were primary school teachers of the learner in the case study. To support this method, the researcher made use of documents as the secondary source of data collection, which in this case was the cumulative report of the learner (Merriam, 2002).

3.5.4.1 Individual semi-structured interviews with teachers

According to Merriam (2002) semi-structured interviews include a combination of structured questions and less structured questions. The researcher compiled an interview guide, focusing on subsequently answering the main research question and sub-questions. The literature reviewed was also taken into account when formulating the questions. The researcher then probed for further information if necessary.

At the start of each individual interview the researcher allowed each participant to feel comfortable and the ethical issues were discussed. Other issues were also discussed for ethical consideration, including the fact that the data collected in each interview would remain confidential and that participants would not receive any form of payment, as they had volunteered to take part in the study.

3.5.4.2 Documents/written reports

The documents used in this study were the written cumulative report of the learner with ASD. These records contained academic progress reports, learning support records, health records, behaviour, and social and emotional development records as well as reflections written by teachers from grade 1 through grade 7. In this study the researcher focused only on the social development of the learner with ASD. According to Merriam (2002) documents are a very reliable source of data, taking into consideration that they were not influenced by the presence of the researcher. The document in this study recorded the learner's social development at the end of each year.

3.5.5 Data analysis

According to Merriam (2002) data analysis is an inductive strategy. This means that different units of data are being highlighted and compared. This allows the researcher to identify shared patterns and similarities across the data. A name gets allocated to each pattern and as the process of analysis continues the researcher refines these codes (Patton, 2002). An example of this of how the data analysis took place can be seen in Appendix G and Appendix I.

In this study the researcher made use of qualitative content analysis. According to Given (2008) this form of analysis allows the researcher to derive meaning from data by reducing them. This may include a variety of texts, for example interview transcripts and documents. As previously mentioned, the researcher made use of

semi-structured interviews as well as the cumulative report of the learner with ASD. She subsequently derived data from these methods of data collection, by reducing the data in the interview transcripts as well as the field notes made while studying the learner's cumulative report. Both the interview transcripts and notes on the learner's report were typed and pasted into a table which allowed the researcher to identify units of meaning. These units of meaning were then highlighted and typed in a column next to the column containing the transcriptions.

When the researcher decided on using qualitative content analysis, she understood that it is important to remain objective in order to interpret the written data. She also kept in mind that each participant allocated different meanings to their experiences regarding the learner with ASD. Ultimately, it is the goal of content analysis to contribute to an academic discourse in the relevant field of research (Given, 2008; Patton, 2002).

During the analysis process data were reduced to relevant themes that emerged from the units of meaning drawn from the interview transcripts and notes on the learner's report. In this study the researcher could identify themes such as: the learner with ASD and how it manifested in the inclusive class, social interaction, factors that facilitated the social interaction of the learner with ASD, teacher challenges, the role of parents, and academic progress. Some of the themes were formulated prior to the interviews by referring to the literature review and other themes emerged during the analysis process (Patton, 2002).

3.6 Data Verification

According to Given (2008) most qualitative researchers use data verification to prove the precision of their research. In order to ensure trustworthiness the researcher used the following four criteria: credibility, transferability, dependability and conformability (Given, 2008, p. 913).

3.6.1 Credibility

Credibility refers to the researcher's interpretation of the data collected during interviews. Interpretations can be influenced by the researcher's own perceptions and assumptions, but are largely influenced by the statements of the participants (Maxwell, 2012; Yin, 2009). By studying the literature on ASD the researcher formed her own perceptions and gained more knowledge regarding ASD. As described in

Chapter 2, this literature focused in particular on the social competencies of learners with ASD.

According to Mertens and McLaughlin (2004) there are different methods through which the researcher can ensure and prove that the data collected are credible. These methods include substantial engagement, persistent observation, peer debriefing, triangulation, progressive subjectivity, member checks and negative case analysis (Mertens & McLaughlin, 2004, p. 16-18). The researcher in this study made use of the following methods.

- The researcher made use of more than one data source, which can be referred to as triangulation. According to Cohen et al. (2011) triangulation refers to the use of more than one method of data collection. The analysis of these multiple sources provided the researcher with an in-depth view of the retrospective case study.
- Throughout the research process the researcher made use of progressive subjectivity and continuously monitored her views and constructions. Some of the literature discussed in Chapter 2, especially those on teachers' experiences of learners with ASD, suggested that the teachers were anxious and uncomfortable when realising that they would have to facilitate the learner. This made the researcher biased towards the attitudes of teachers. However, after conducting the interviews and referring to the findings, the researcher realised that the majority of teachers in this single case study were well prepared and interested in facilitating the learner.
- Peer debriefing was also a method used by the researcher to share her experiences in remaining objective and ensuring that suitable data were collected. She discussed her views and findings with a friend who also studied in the same field, but had a different research topic. During these discussions the researcher came to terms with some questionable areas in her research and reviewed these areas by referring to the recommendations made by her peer.
- Lastly, the researcher made use of member checks by consulting the participants, allowing them to view the data drawn from their individual interviews. Through this process the participants could include additional information and, together with the researcher, check for any mistakes and misunderstandings.

3.6.2 Transferability

Transferability maybe explained as the theory which the participants or researcher connects to the findings. It can furthermore be viewed as the level of generalisation which can be allocated to the findings (Maxwell, 2012; Mertens & McLaughlin, 2004; Yin, 2009). As previously discussed, researchers find it challenging to generalise from a single case study (Flick, 2009). However, in qualitative research the aim is to gain a deeper and more complex understanding of a specific phenomenon. It can be likened to a crystal, which can change shape and expand, but is not entirely shapeless. The outcome of qualitative research should not be a fixed point which can be triangulated, but rather be a great variety of dimensions and angles of approach, following the concept of crystallisation or particularisation (Nieuwenhuis, 2010, p. 81).

In this study the researcher was not able to generalise, due to the fact that it was a retrospective case study. However, the interview guide allowed the researcher to gather rich data from the participants. Moreover, the information gathered from the cumulative report provided the researcher with more data, validating the research and allowing the researcher to gain a deeper and more complex understanding of this retrospective case study.

3.6.3 Dependability

According to Mertens and McLaughlin (2004) dependability is the equivalent of reliability in quantitative research. The researcher in this study compiled a dependability audit while consulting the findings. She found that the focus of her research, teachers' experiences of the social competencies of a primary school learner with ASD, remained the same throughout the research process. By keeping an audit trail, the researcher ensured the dependability of the study, keeping in mind the underlying theoretical framework as well as the research questions. In this study the researcher made notes throughout the research process, especially during the process of data analysis. As previously discussed in this chapter, the data went through a process of refinement. During the process of data analysis the researcher documented a first draft of the possible themes and sub-themes. This draft, however, changed after peer debriefing took place with another individual in the same academic field. Notes were taken and changes were made to make the themes more relevant to the study. These notes and method of peer debriefing ensured that the

researcher kept a dependable audit trail throughout the research (Rodger et al., 2008).

3.6.4 Conformability

Conformability refers to the extent that the researcher remained objective while interviewing the different participants. The main goal of interpretive research is to allow each individual participant to express their opinions and form their own interpretations during the course of the interview. To prevent her own perceptions from interfering with the perceptions of the participants, the researcher did a pilot interview to practice and ensure that the research questions was always kept in mind while asking the questions. After the pilot interview she recorded the precise words and actions of each participant during the individual interviews and then accurately transcribed it into words (Maxwell, 2012; Mertens & McLaughlin, 2004).

3.7 Ethical Considerations

Before the research for this study could be conducted, a number of ethical issues were addressed in order to protect the interests of those involved. A list of documents was completed and compiled to allow the Stellenbosch University ethics committee to decide on whether or not to grant permission for the study. In the research title there were two prevalent issues that caused the ethical process to take longer than usual. These two issues were Autism Spectrum Disorder (ASD) and primary school learner. Both are very sensitive subjects and the researcher had to make quite a few changes before the ethics committee agreed to grant permission.

Permission to conduct research was given by the Western Cape Education Department, the principals of the primary school and the high school which the learner attended. The primary school was approached to interview teachers who taught the learner with ASD and the high school was approached to gain access to the learner's cumulative report, as the learner was then in grade 8. Consent was sought from the participants. Issues of anonymity and data protection were addressed (Flick, 2009; Silverman, 2013). According to Flick (2009) there are a few issues which should be considered when conducting research within the rules of ethical theory. These issues are discussed below.

During the process of data collection the researcher should respect each participant's values and decisions. This can be brought into conjunction with anonymity and confidentiality. Each participant has the right to remain anonymous and to have their own perceptions and interpretations. The researcher should under no circumstances interfere with the participant's decisions nor influence their perceptions. The researcher therefore had to remain cautious not to guide the participants into answering what she wanted them to answer (Flick, 2009; Silverman, 2013).

According to Silverman (2013, p.162) the participants involved in the study should be fully informed about their involvement in the study, the purpose, methods and future usage of the research. All the participants involved in this study, whether direct or indirect, were fully informed and had to complete consent forms, before the research could be conducted.

3.8 Summary

To conclude this chapter, it is important to view the areas of discussion that took place. The researcher discussed the research paradigm, design and methodology that framed the research study. This theoretical framework assisted in guiding the researcher to successfully gather the relevant data and follow the correct procedures when analysing the data. Furthermore, the validity and the ethical considerations of the study were discussed in detail. The next chapter presents the findings, together with a discussion on the findings.

Chapter 4: Discussion and Presentation of Findings

4.1 Introduction

The purpose of this study was to gain an understanding of teachers' experiences of the social competencies of a primary school learner with ASD. In this chapter the researcher discusses the research outcomes and identifies the needs of the teachers regarding the social facilitation of primary school learners with ASD.

4.2 Participants, Setting and Procedure

Table 4.1 below provides the demographic details of all the teachers who participated in the study. As discussed in section 3.5.1 of Chapter 3, purposive sampling was used to select the participants for the study. These participants included all the primary school teachers whose classes the learner attended. There were both male and female participants of different ages and years of experience, which created diversity and depth in the research. To ensure the reliability of the study, the learner who was chosen for the case study had been diagnosed, by a clinical psychologist, with Asperger's disorder, otherwise known as high functioning autism or, according to the DSM-5, level 1 ASD (5th ed.; DSM-5; American Psychiatric Association, 2013).

Most of the data collection took place in the mainstream primary school which the learner attended. The rest of the data collection, gaining access to the learner's cumulative report, took place in a nearby mainstream high school where he was then in grade 8. All the research participants work at the primary school, which made it a very rich source for data collection. During the process of transcribing each interview, the researcher replaced each participant's name with a 'P' and a number in order to protect the participant's identity. To ensure the learner's anonymity, his name was replaced with the pseudonym Ben*.

In the following table, each participant's biographical details and years of experience are presented.

Table 4.1: Participants' biographical details and years of experience

Method of data collection	Participant code	Home Language	Male/ Female	Age	Years of teaching experience	Grade taught
Individual interview and Cumulative report	P1	Afrikaans	Female	40	17 years	Gr. 1
Individual interview and Cumulative report	P2	Afrikaans	Female	49	24 years	Gr. 3
Individual interview and Cumulative report	P3	Afrikaans	Female	58	34 years	Gr. 4
Individual interview and Cumulative report	P4	Afrikaans	Male	27	4 ½ years	Gr. 5
Individual interview and Cumulative report	P5	Afrikaans	Male	31	7 years	Gr. 6
Individual interview and Cumulative report	P6	Afrikaans	Female	52	27 years	Gr. 7
Individual interview and Cumulative report	P7	Afrikaans	Male	27	4 years	Gr. 7

4.3 Presentation and Discussion of Themes

As discussed in section 3.5.4 of Chapter 3 the data were analysed by making use of thematic content analysis. The researcher constructed themes by examining the transcriptions and identifying the emerging themes. These themes represent the data derived from the two data sources, supplying the researcher with rich information for the research. Furthermore, the main research question and four sub-questions were kept in mind while constructing the themes. This ensured that the researcher thought carefully about using the data that would be most relevant in answering the research questions.

Table 4.2: Themes and categories

Themes	Categories	Sub-categories
4.4 The learner with ASD and how it manifested in the inclusive class	4.4.1 Behaviours 4.4.2 Routine 4.4.3 Specific interests	
4.5 Social interaction	4.5.1 Peers 4.5.2 Group activities 4.5.3 Adults 4.5.4 Teacher strategies that develop social competencies	4.5.1.1 Inclusion in group activities 4.5.1.2 Peers reactions to atypical behaviours 4.5.1.3 Learner with ASD's interaction with peers
4.6 Factors that facilitated the social interaction of the learner with ASD	4.6.1 Teacher knowledge of ASD or the inclusion of learners with ASD.	4.6.1.1 Prior knowledge 4.6.1.2 Acquired knowledge
4.7 Teacher challenges		
4.8 Role of the parents		
4.9 Academic progress	4.9.1 Academic achievement	
	4.9.2 Support for learning	4.9.2.1 Attention difficulties 4.9.2.1.1 Medication 4.9.2.2 Facilitator 4.9.2.2.1 Strategies 4.9.2.3 Learning support 4.9.2.4 Occupational therapy

The above themes are discussed in the following section. In order to support the study, the most relevant quotations from the transcriptions are used to support each finding.

4.4 The Learner with ASD and how it Manifested in the Inclusive Class

During the process of data analysis the researcher found that the learner in this study displayed a certain number of core features which are well known for learners with ASD. The literature often states that these features include social impairment, specific interests, repetitive behaviour and a preference for routine or a low sensory environment. They also display strange behaviours, which can be linked to their inability to understand socially acceptable behaviour (5th ed.; DSM-5; American Psychiatric Association, 2013; Lindsay et al., 2014; Cotugno, 2009; Ashburner et al., 2010; Anderson et al., 2009; Ghaziuddin & Mountain-Kimchi, 2004; Stichter et al., 2012; Rotherham-Fuller & MacMullen, 2011; Humphrey & Symes, 2010; Duerden et al., 2012; Kargas et al., 2014; Marco et al., 2011). The main characteristics of the learner in this study, and the teachers' experiences regarding these characteristics are discussed below.

4.4.1 Behaviours

One of the core features of ASD is a repetition of phrases and movements. People with ASD will, for example say the same words over and over again, in some cases these words are related to their specific interests (5th ed.; DSM-5; American Psychiatric Association, 2013; Rotherham-Fuller & MacMullen, 2011). The learner in this study presented with unusual behaviours and would repeat English phrases out of Star Wars movies. Furthermore, he had strange mannerisms including weird facial expressions and acting like a clown.

“En dan het hy sy gesig ook so snaaks getrek. So partykeer was hy bietjie anders.. Ek wil bietjie sê hy was bietjie anderste as die ander kinders in die klas...”/

“And then he pulled his face in a weird way. So sometimes he was a bit different. I want to say he was a bit different from the other learners in the class.” (P1)

“Jy weet want hy kan nogal snaakse goedjies doen in die klas wat deel van sy normale patroon is.”/

“You know, because he can do strange things in the class that was part of his normal routine.” (P3)

None of these behaviours were disruptive to the rest of the class, but it sometimes caused his peers to laugh at him, because they found them strange. P5 stated that the learner with ASD did not seem to be negatively affected by his peers laughing at him:

“Hy’t nie verstaan waaroor dit gaan nie, hy’t nie verstaan dat hulle hom snaaks vind en dat hulle lag vir hom nie.”/

“He didn’t understand what it was about. He didn’t understand that they found him to be funny and that they were laughing at him.” (P5)

However, the learner in this study displayed behavioural problems when he got upset by loud noises, a sudden change in routine, or by something that happened during break, possibly between him and his peers. The participants’ experiences with regard to this are presented below:

“Ek onthou die ore wat hy toegedruk het en partykeer as die kinders na pouse ingestap het en hulle gaan sit en skarrel so, dan het hy ook so gesit en geskree,

“Haaaaaaaaaaaaahhh.” Dan het hy sulke geluide gemaak, want dit was te raserig vir hom... dan maak hulle mos so (stamp met voete) met hulle voete. Dit het hom heeltemal uitgefreak.”/

“I remember he placed his hands on his ears when the learners came in after break and when they squirmed around. Then he would sit and scream, ‘Haaaaaaaaaahh’. And he made strange noises. It was too loud for him. Then in the hall, when the kids stomped their feet, he would totally freak out.” (P1)

“Die gedragsprobleme het net gekom as hy kwaad was. Dan het hy tantrums gegooi. Hy het byvoorbeeld sy hande op sy ore gesit en ugh huh gesit en maak in die klas. Hy kon, hy is baie geraas sensitief.”/

“The behavioural problems happened when he was mad. Then he would throw tantrums. He would, for example place his hands on his ears and make noises of frustration. He was extremely sensitive to noise.” (P3)

“...so ek kon baie keer sien hy raak verbouereerd as hier te veel kinders praat en dan was dit vir hom too much...Hy sal net op sy arms so gaan le of sy ore toedruk...”/

“...there was a lot of times that I could see he got bewildered when too many learners talked, and then it was too much for him. He would just lay on his arms or placed his hands on his ears.” (P4)

All of the above participants experienced the learner placing his hands on his ears when he got upset and this behaviour was usually triggered by loud noises or whenever he felt helpless. P1, P2 and P3 stated that the learner would make noises of frustration, also mostly caused by his sensitivity to loud noises. According to Humphrey and Symes (2010) most learners with ASD function better in an environment which can provide them with a pleasant sensory experience. The learner in this study displayed sensory sensitivity to sound. This explains why he tried to block out the noise by placing his hands on his ears and making his own sounds of frustration (Marco et al., 2011; Lindsay et al., 2014).

Some of the participants claimed that the learner showed clear signs of anxiety and tension which caused him to react accordingly. Studies have shown that learners with ASD severity level 1 tend to experience more problems with anxiety than other learners who are less cognitively able (Niditch et al., 2012; Sutton et al., 2005; Hallet et al., 2013). The anxiety which the learner in this study experienced was due to

disturbances in his routine, his difficulty with socially acceptable behaviour and tension was caused by tests and other school tasks which he did not like:

“Hy het als ook baie intens ervaar, so `n kind sou net `n halwe iets verkeerd se dan was dit al vir hom al klaar honderd keer erger... En sy emosies was, jy sien nog een oomblik dat hy glimlag en die volgende oomblik het hy `n woede uitbarsting. Dis die vinnigste wat `n mens kan verander van emosie wat ek in my lewe nog gesien het.”/

“He experienced everything very intensely, a learner would just say something wrong and then he experienced it to be a hundred times worse. And his emotions were, you still see him smiling the one moment and the next moment he had an anger outburst. It was the quickest change in emotion that I have ever experienced.” (P2)

“...hy sal angstig raak oor die kleinste dingetjie en dan kan ek net absoluut niks daaraan doen nie.”/

“...the smallest thing would make him anxious and then I could do absolutely nothing about it.”(P5)

P6 and P7 did not experience the learner displaying any sort of behavioural difficulties. P6 stated that there was only one time that he threw his stuff on the ground and refused to work. She also could not recall his sensitivity to loud noises and even said that he sat in the hall during the inter schools sing songs without complaining about the noise. P7 stated that he got upset only when his peers were being rude to him, but that he never threw tantrums or got angry during class:

“Daar was een of twee dae wat hy baie ontsteld was wat die kinders met hom lelik was en dan was dit nou, man baie moeite gevat om hom te kalmee.”/

“There was one or two days that he was very upset, because his peers were rude to him and then it was, it took a lot of effort to calm him.” (P7)

When reviewing the above findings it seems that over the years the learner learned coping strategies to relieve his sensory sensitivity. These coping strategies can be linked to the successful development of his social competencies, which allowed him to become resilient to factors that would have previously concerned him.

Another feature of ASD which the learner displayed was very specific interests that gave him an escape from the anxiety and tension he experienced when doing things that he did not necessarily enjoy.

4.4.2 Specific interests

One of the diagnostic criteria for ASD, according to the DSM-5 (5th ed.; DSM-5; American Psychiatric Association, 2013), is the specific interests which learners with ASD display. They could find it difficult to talk about anything else which is not their interest, which makes it difficult for them to socially interact with their peers (Ghaziuddin & Mountain-Kimchi, 2004; Stichter et al., 2012). It is not uncommon for other learners who do not have ASD to also display specific interests. The difference is that learners with ASD tend to display such a fixed interest in a specific topic that it seems abnormal, almost like an obsession.

The learner in this study displayed very specific and fixed interests in everything related to science and science fiction. His interests, according to each participant are shown in Table 4.3 below.

Table 4.3: Interests of the Learner with ASD

Participant	Interests of learner with ASD
Participant 1	Space and rockets, dinosaurs, technology, designing and building robots
Participant 2	Technology and robots
Participant 3	Made drawings of mechanical stuff, science fiction, made related noises
Participant 4	Non-fiction, Star Wars, cards with weird robot cars
Participant 5	Anything computer related, dinosaurs
Participant 6	Science and experiments, television programme "Mythbusters"
Participant 7	Star Wars, space, he read thick sci-fi books

According to all the participants the learner displayed interest in things that are related to science or non-fiction. P1 also stated that he lived in his imagination. The boy told weekend news about things that were not necessarily true and were usually science fiction or non-fiction related.

P4 stated that he would act out scenes of a Star Wars movie during orals. There was even one of the participants, P6, who said that he did not enjoy school, because it was not of interest to him. Some of the participants claimed that, as the learner got older, he initiated conversation with his peers or adults by sharing his ideas and

interests with them. This shows a definite development in his social competencies and will be discussed later on in this chapter under the theme 'social interaction'.

4.4.3 Routine

Humphrey and Symes (2010) claimed that one of the core features that can be displayed by learners with ASD is to follow a strict routine and to be quite inflexible regarding this routine. Should something or someone disturb their routine, they would display behavioural difficulties and become anxious (5th ed.; DSM-5; American Psychiatric Association, 2013; Duerden et al., 2012; Kargas et al., 2014).

P1, P2, P3, P5 and P7 stated that the learner was comfortable when he followed a strict routine without any sudden changes or surprises. Whenever something disrupted his routine, he would display behavioural difficulties and anxiety, as discussed in 4.6.1. Some of the participants' statements are presented below:

"Ek het my dag se programme by hom op sy tafel geplak en byvoorbeeld vir hom geskryf...en ou maat as ons afwyk dan was hy omgekrap. En as dit foto dag was... hy moes amper maar by die huis bly, want dit was chaos en uitstappies...Dit was eintlik vir my die grootste uitdaging."/

"I pasted my daily schedule on his table and for example wrote... And beware if I didn't follow that schedule, then he was unruly. And if it was photo day... then he almost had to stay home, because it was chaos. And field trips... That was actually the biggest challenge for me." (P2)

"Sy het een dag nie opgedaag nie, ja, dit was nogals 'n storie gewees, want ja toe, ja is hy nou so jy weet angstig...enige iets doen met hom waarvoor hy nie voorbereid is nie dan is dit vir hom verskriklik moeilik, jy weet hy kan dan amper glad nie funksioneer nie..."/

"His facilitator didn't arrive one day, yes, that was quite a story, because then, yes, he was anxious... If you did anything with him that he wasn't prepared for then he will find it extremely difficult, you know, almost like he couldn't function." (P5)

"Ben het gesit op een plek in die klas en hy het nooit geskuif nie. Jy kon hom nie skuif nie... dit het vir hom `n week gevat om gewoon te raak aan die plek waar hy moes sit en aan sy nuwe roetine..."/*

"Ben* sat on one place in the classroom and never moved. You couldn't move him... It took him a week to get used to the place where he had to sit and to get used to his new routine." (P5)

P2 mentioned that there was chaos during photo days and field trips, because it was something outside of the normal day-to-day school routine, but when he knew exactly what to expect he was calm. P5 also stated that the learner had to be prepared for changes in his routine, so that he knew what to expect. Another participant mentioned that the learner was used to starting his day by delivering pancakes to the school every morning.

The above findings clearly portray the learner's inability to deal with changes in his routine. He felt comfortable when he knew what to expect and when he was prepared for any changes that might disturb his normal routine.

4.5 Social Interaction

Most of the participants found that the learner in this study experienced difficulties with social interaction and lacked social competencies. According to the literature and diagnostic criteria for ASD, a lack of adequate social competencies is one of the main characteristics of learners with ASD (5th ed.; DSM-5; American Psychiatric Association, 2013; Cotugno, 2009; Lindsay et al., 2014; Ashburner et al., 2010; Anderson et al., 2009). These deficits in social interaction can have a negative impact on the personal relationships of the learner and even affect their overall academic development, which can ultimately cause anxiety and tension (Laugeson et al., 2012).

4.5.1 Peers

Learners with ASD do not have the skills to form meaningful relationships with their peers, which can cause isolation, anxiety, exclusion and poor social support (Laugeson et al., 2012; Stichter et al., 2012). As previously discussed, the participants did experience the learner in this study having difficulty with anxiety and found that he isolated himself in certain situations. However, the learner did receive great social support from his peers, as they grew up with him. A more in-depth discussion of the extent of his relationships with his peers is presented below.

4.5.1.1 Inclusion in group activities

P2 stated that the learner's peers found him to be strange and they did not want to play with him or include him. All of them attended grade 3 at the time and were mostly ten years old. P3 found that when he attended her class in grade 4 he would

act funny on purpose, which made him part of the group. She also mentioned that the other learners loved and cared about him. According to P4 the other learners tried to make him feel comfortable during group activities. Both P5 and P6 stated that no bullying took place, and that his peers were very sensitive about including him. P6 found, however, that the learners would not include him of their own accord, but only when she told them to. Some of the participants' experiences are presented below:

"Party dae was hy snaaks en hy wou snaaks wees. Hy het vir hom heeltemal uit sy persoonlikheid uit snaaks gehou en dan dans hy nou deel van die groep."/

"Some days he was very funny and he wanted to be funny. He would be funny, totally out of character and then he would be part of the group." (P3)

"Dit was glad nie sy voorkeur om `n groepwerk taak te doen nie, maar die kinders het altyd probeer om hom in `n situasie te plaas wat hom gemaklik laat voel."/

"It wasn't his preference at all to take part in group activities, but the learners always tried to put him in a situation where he would feel comfortable." (P4)

"Hulle het hom altyd laat deel voel. Hulle was maar sensitief daarvoor. Ek kan nou nie vir jou sê of daar kinders was wat hom geboelie het of afgeknou het nie, maar ek het dit nooit gesien nie, want hy het pouses saam met hierdie twee vriende, of die een vriend wat toe twee geword het, gespeel."/

"They always made him feel part of them. They were very sensitive regarding that. I cannot tell you if there were any learners who bullied or hurt him, but I never saw it happen, because he spent his break time with his two friends..."

(P5)

As he got older Ben* had one friend who shared his interests and with whom he always spent time. When this friend added another friend to their 'group', it was difficult for Ben* to accept it at first. However, after a while he got used to the idea and from there on they were three friends who shared a love for computer related things. Throughout the interviews, the participants said that Ben's relationship with his two friends was positive and that they also protected him from bullying and exclusion by the rest of his peers.(P5)

On the question on whether or not the learner's peers would include him during group activities, P6 stated the following:

"As ons met hulle gepraat het, het hulle maar hulle het dit nie sommer vanself gedoen nie en ongelukkig um.. kry sulke kinders mos nou 'n, ek wil dit nie sê nie

*maar 'n "labe" van kleins af. Hy het van kleins af 'n fasiliteerder gehad so almal is bewus *Ben* het 'n fasiliteerder so daar is iets snaaks aan *Ben. Jy weet, so.. en hulle maak die afleiding sonder dat jy iets hoef te sê besluit hulle, nee hy is anders en vreemd, ons gaan nie met hom speel nie."/*

"If we spoke to them, but they didn't really do it out of free will and sadly learners like Ben* get labelled from a young age. He had a facilitator from a young age so everyone was aware Ben* has a facilitator, so there is something strange about Ben*. You know, so... and they make the assumptions, without you saying anything, they will decide, 'No he is different and strange. We do not want to play with him.'" (P6)

P7 found that, even though his peers wanted to include him during group activities, he did not want to be part of the group or would refuse to interact with them:

"...so die kinders se terugvoering aan my was, hy wil nie met hulle gesels het altyd nie. Hy het nie, hy was nooit deel van die groot groep nie, hy het altyd buite op sy eie."/

"The learners reported back to me that he didn't always want to have a conversation with them. He didn't, he was never part of the big group. He always played outside on his own." (P7)

4.5.1.2 Peers reaction to atypical behaviour

P1, P2, P3, P4 and P5 stated that the learner's peers laughed at his strange behaviour and at the strange faces he would pull, because they were not used to it. P2 even said that his peers found him to be the entertainment of the day and teased him to evoke reaction:

"Hulle het, kinders is mos maar vreemd, kinders hou van die reaksie, so hulle tart hom uit en dan het hy 'n heftige, 'n hewige reaksie. Dit is vir hulle snaaks en hulle hou daarvan en dan die volgende pouse, dit was hulle sports vir die dag. So die volgende pouse sou hulle weer dieselfde ding doen of nog erger, want hy het so uitbarsting gehad en dit was vir hulle so snaaks want dit was entertaining vir hulle."/

"They did, children can be strange sometimes, they liked the reaction, so they would tease him and then he would have a heavy reaction. They found it funny and they liked it and then the next break... it was their sports for the day. So during the next break they would do the same thing or worse, because he would have an outburst and they found it funny and entertaining." (P2)

Ben* clearly did not like being teased and laughed at, hence his outbursts. This touches on the subject of his peers portraying bullying behaviour and excluding him from the group. One must also remember that he was in grade 3 and 10 years old at the time, which means that his peers were still not entirely used to him being different. Furthermore, it could be concluded that his peers did not yet realise how their teasing could have a negative impact on him. They were only concerned about the joy they got out of witnessing his outbursts and saw it as pure entertainment.

P3 stated that the learner's peers would tease him during break, but that at some point during the year, they got used to and accepted him and his different ways. However, P4 stated that the learner's peers were already aware of him displaying strange behaviour at times and that they did not tease him to get a reaction. This shows how his peers gradually got used to and accepted his different behaviour. It could be said that they realised how their teasing had a negative impact on Ben*.

“Die kinders leer gou om dit te verstaan maar dit het 'n rukkie gevat en ek was nogal bang daarvoor gewees.”/

“The learners learned to understand him, but it took a while and I was kind of scared about that.” (P3)

“Kyk ek dink die feit dat hy al vanaf graad 1 saam met die kinders groot geword het... ek dink al die ander onderwysers het elke jaar ook vir die kinders verduidelik.”/

“I think the fact that he grew up with his peers from grade 1, made them accept him... I think all the other teachers explained it to them every year.” (P4)

P5 mentioned that the learner's inability to fully understand emotions and social cues protected him in a strange way, as he did not realise that the learners were laughing at his strange behaviour:

“...ongelukkig het hy snaakse maniere gehad en so, so die kinders het maar baie gelag en gelukkig het hy dit meeste van die tyd nie agtergekom nie. Hy't nie verstaan waaroor dit gaan nie, hy't nie verstaan dat hulle hom snaaks vind en dat hulle lag vir hom nie.”/

“Sadly he had strange manners and so the learners would laugh a lot and luckily most of the time he didn't realise that they were laughing. He didn't understand what it was about. He didn't understand that they found him funny and that they were laughing at him.” (P5)

According to Paisley and Smith (2013), learners with ASD find it difficult to understand adequate social cues or behaviour and would therefore experience difficulty in realising that someone was being rude to them or laughing at their strange behaviour. They also find it difficult to read facial expressions and emotions, like anger or happiness (Wong et al., 2012; Adamson et al., 2010).

Despite the literature suggesting that these negative reactions of their peers can ultimately lead to exclusion and bullying, this was not the case with Ben* as he got older (Humphrey & Symes, 2011; Hebron & Humphrey, 2013; Chan et al., 2009). His strange behaviour was not always understood by his peers and was often met with laughter. Unlike learners who do not have ASD, Ben* was not negatively affected by it. His peers gradually accepted his differences. It appears that he interpreted their laughter as positive; that they were enjoying his antics. He subsequently started a range of 'entertaining' behaviours which ensured his inclusion in all aspects of the life of the school, the most recent being inclusion in the school's variety show where he did a dance. P6 mentioned a very good example of the learner's peers enjoying his different behaviour:

"...kan hy die "party" oorvat met "spook-dancing". Dan is hy die hit... die kinders het vir hom "gecheer" en hande geklap en hoe meer hulle cheer en handeklap, hoe meer doen hy dit. Ek dink was vir hom fantasties."/

"He could take over a party with 'ghost-dancing'. Then he is the hit and the learners cheered and applauded him and the more they cheered and applauded, the more he continued to dance. I think it was fantastic for him." (P6)

4.5.1.3 Learner with ASD's interaction with peers

Learners with ASD will try to avoid social interactions because they prefer to speak only when they want to and if the topic of conversation is something that interests them (Cotugno, 2009; Lindsay et al., 2014; Ashburner et al., 2010; Anderson et al., 2009). All the participants found that the learner in this study had limited social interaction with his peers. They also stated that there were days where he would isolate himself and be quite happy to be alone:

"...hy het baie op sy eie gespeel."/

"...he played with his toys on his own." (P1)

"Die sosiale interaksie was baie beperk, baie beperk."/

“His social interaction was very limited, very limited...” (P5)

“...maar die kinders het dit moeilik gevind om betekenisvolle gesprekke met hom te hê want hy het net gesels wanneer hy wou gesels.”/

“...but the learners found it difficult to have meaningful conversations with him, because he only had conversations when he wanted to.” (P7)

However, P3, P4, P5 and P6 said that, as he got older, the learner found other ways of socially interacting with his peers. As previously mentioned, he would initiate conversation by talking about his interests and his peers would take part in the conversation, even though the interest was not always mutual. On good days he would dance and act, almost trying to entertain his peers. They would laugh at his purposefully entertaining behaviour and he would enjoy the laughter and attention. This shows a successful development of his social competencies over the years. He clearly learnt strategies to deal with possible bullying behaviour by his peers when they were younger. This made him resilient and able to change any negativity towards him into something positive.

“Partydae was hy snaaks en hy wou snaaks wees. Hy het vir hom heeltemal uit sy persoonlikheid uit snaaks gehou en dan dans hy nou deel van die groep.”/

“Some days he was funny and he wanted to be funny. He acted funny, totally out of his character and then he would be part of the group.” (P3)

“... party dae was hy ongelooflik snaaks en het hy `n mondeling gepraat en `n boek gelees en geact asof hy `n actor is”/

“... some days he was hilarious and he did orals and read books while acting like an actor... he really had moments where he was an absolute clown.” (P4)

“Ja soos ek sê op `n goeie dag was hy `n ander kind gewees. Hy het hulle mos dan probeer vermaak en as hulle gelag het, het hy verstaan hoekom hulle gelag het.”/

“Yes, like I said, on a good day he was a different child. He then tried to entertain them and if they laughed he understood why they laughed.” (P5)

According to the majority of participants, the learner experienced good and bad days, which had a direct impact on his social interaction with other learners. Even though his social interaction with his peers varied from day-to-day, he had one or two close friends who shared the same interests as him:

“...maar hy, hy’t nie baie maatjies gehad as ek reg onthou nie... pouses het die fasiliteerder vir my gese hy was maar, hy het maar heeltyd met die dogtertjie gespeel saam met wie hy altyd in die groepie gesit het”/

“...but he, he didn’t have many friends if I remember correctly... break time, the facilitator would tell me, that he played with the girl with whom he shared a facilitator...” (P1)

“Maar as mens kyk na regtig goeie vriende, was daar dalk een of twee en hy was eenkeer baie onsteld toe die een vriend nie met hom wou speel of nie met hom wou praat nie.”/

“But if one looks at really good friends, there were only one or two and he was very upset once when the one friend didn’t want to play or talk to him...” (P5)

According to the learner’s cumulative report the following was stated:

“Baie, baie min vriende.”/
“Very few friends.” (P3)

“Stil en nie op dieselfde vlak as sy vriende nie.”/
“Quiet and not on the same social level as his peers.” (P7)

The learner in this study clearly experienced difficulty with social interaction due to his lack of adequate social competencies and he did not have many friends, but he found a way to socially interact with his peers. All of the participants wrote in his cumulative report card that his social competencies developed every year. P6 is the only one who did not find that to be the case:

“Ek kon sien met Ben want ek het hom nou graad 4 beleef in die gange... hulle raak al hoe meer kinderlik en die ander kinders raak al hoe meer volwasse. So die “gap” raak al hoe groter ja.”/*

“I could just see with Ben*, because I experienced him when he was in grade 4 and walking down the hall, that he got more childlike and his peers would get more mature. So the ‘gap’ gets bigger yes.” (P6)

4.5.2 Group activities

According to Jung and Sainato (2013), learners with ASD experience difficulty with social play skills, especially during group activities. They find it difficult to display adequate and socially acceptable behaviour that would allow them to fit into a group activity (Bass & Mulick, 2007; Yang et al., 2003).

The majority of participants, P1, P3, P4, P5, P6 and P7, recall the learner in this study not enjoying group activities and preferring to be on his own. This can be explained by the fact that he does not know how to effectively participate in group activities. In this sub-theme, two types of group activities surfaced, including academic group activities and social group activities, like playing in a group.

The findings of the participants regarding his participation in academic group activities are presented below:

“Hy was nie goed in groepwerk nie. Hy het baklei, hy het nogal baklei want hy het gehou van ‘n ding soos sy manier. En dan was daar dalk nou net iemand wat verskil het, dan is dit nie meer vir hom lekker nie.”/

“He wasn’t good with group activities. He got into arguments; he argued, because he liked to have something his way. And then there was just one person who would differ from him, then he won’t enjoy it anymore.” (P3)

As previously mentioned, P5 placed the learner in a group with girls and had the following to say about that:

“...hy heeltemal fine gewees daarmee. En die dogters was gewoonlik baie gelukkig om hom te hê, want hy is slim, hy doen navorsing op ‘n rekenaar wat nogals wow is... hy sukkel in ‘n groep, want hy sukkel om te kommunikeer en so aan...”/

“...he was totally fine with it. And the girls were usually very satisfied to have him, because he is clever and he does research on a computer that is quite impressive... he struggles in a group, because he finds it difficult to communicate and so forth...” (P5)

P6 stated that the learner took part in social group activities, but that he was not sporty and did not always display socially acceptable behaviour that would allow him to successfully participate in these activities:

“...so dan sal hulle hom weer betrek maar sy sportiewe um.. sy sportiwiteit was nou ook nie so wonderlik nie. Jy weet, so speel hulle sokker is hy die ou wat aanmekaar die bal uitskop of mis skop of so. Speel hulle krieket dan kan hy nie die bal raakslaan nie en dan werk hulle hom uit...”/

“... so they would involve him, but his sporting abilities were not too good. You know, so if they played soccer, he would be the one that constantly kicks out or

misses the ball. If they played cricket then he won't be able to hit the ball and then they work him out..." (P6)

P6 also stated that the learner teased his peers when he took part in social group activities:

"...hy sal nou so eendag kom dan sal hulle vir hom sê kom speel saam maar dan speel hy nou nie saam nie dan skop hy sommer die bal soontoe. jy verstaan? Ag hulle het hom eintlik baie mooi verduur."/

"...he would approach them one day and then they would ask him to play with them. But then he wouldn't play together as a team, then he would purposefully kick the ball in the wrong direction. You understand? Oh, but they endured him in a very nice way." (P6)

This taunting behaviour can be a possible result of the learner's earlier years when his peers used to tease him and laugh at him. The fact that his peers worked him out when he took part in sport activities (P6) could have elicited feelings of anger and exclusion, which he possibly experienced when he was younger. This could have caused him to purposefully provoke his peers by, for example, kicking out a ball.

4.5.3 Adults

P1, P6 and P7 stated that the learner in this study would have social interaction with any adult, if he was allowed to talk about his interests. Learners with ASD find it difficult to have meaningful conversations with other people, but can have endless conversations when it revolves around their own interests. (Stichter et al., 2012; 5th ed.; DSM-5; American Psychiatric Association, 2013; Ghaziuddin & Mountain-Kimchi, 2004).

"...al die onderwysers het hom geken, want as hy in iemand vas loop sal hy begin gesels."/

"...all the teachers knew him, because when he walked into someone he would start a conversation." (P1)

P1 also wrote the following in the learner's cumulative report:

"Eet meestal gedurende pouse en gesels met fasiliteerder of assistente."/

"Ate during most of break and talked to facilitator or assistants." (P1)

On the question of whether or not he would have conversations with strangers, P6's response was as follows:

“Hang af oor iets wat hom interesseer. Hy sal somme hier nou vir jou kom vertel van iets... Ja ja ja ja. Hy sou sulke goed gedoen het en ja hy het nie ruimtelike spasie ten opsigte van jou nie, Hy wil naby jou wees.”/

“It depends if he can have a conversation about something that interests him. He would come and tell you about something. Yes, yes, yes. He would do things like that and then he doesn’t have personal space with regards to you. He wants to be near you.” (P6)

Referring to the findings, the learner’s seemingly comfortable approach in interacting with adults could be due to the fact that they did not mind listening and taking part in a conversation about his specific interests. His peers got bored easily, whereas adults or teachers tolerated his talking, causing him to immediately feel comfortable when interacting with them. To further support these findings, P7 stated that the learner would approach him between classes and tell him different stories and about his different interests:

“Hy was mal gewees oor ‘n tipe Star Wars tipe goed, soos space tipe goed het hy baie van gehou en dan het hy dit vir my vertel en of ek hom nou probeer keer het of nie. Dan het ek nou maar gemaak of ek belangstel...”/

“He loved Star Wars type of things, like space type of things. He enjoyed it and then he would tell it to me if I tried to stop him or not, he told me about it. Then I had to act as though I’m interested.” (P7)

4.5.4 Teacher strategies that developed social competencies

According to the literature there are quite a few strategies that teachers can use to assist in the development of social competencies in learners with ASD. These include social stories, peer-mediated intervention, paraprofessionals and classroom organisation (Weinstock, 2012; Flynn & Healy, 2012; Russel et al., 2015; Koenig et al., 2009; Deris & Di Carlo, 2013). The learners in his class were sensitised to Ben’s condition through his teachers providing information about ASD and how to treat persons with the disorder (P2, P3 and P4). His teachers urged their learners to be accepting of differences thereby facilitating a positive attitude towards diversity.

“...praat met die res van die klas en sê, ‘luister...’, mens moet met die res van die klas `n ernstige praatjie hê en hulle baie mooi opvoed.”/

“... And also tell the rest of the class, ‘Listen...’ you have to have a serious talk with the rest of the class and educate them.” (P2)

“Ek het met die kinders gepraat en gesê, ‘Hoor hier, dit is die situasie. Ons is nie almal dieselfde nie, jy moet dit aanvaar. Hy is dalk `n bietjie anders as van ons, julle is bietjie anders as hy.’”

“I addressed the learners and said, ‘Listen here, this is the situation. We are not all the same, you must accept that. He may be a bit different than some of us; you are a bit different than him.” (P4)

Almost all the participants, P2, P3, P4, P5 and P7 referred back to their readings on ASD to assist them in successfully facilitating the learner in this study. By doing this, they allowed the learner to successfully develop his social competencies, and supported him by trying to prevent placing him in stressful situations. As previously mentioned, the learner had difficulty with anxiety and tension and would get upset very quickly, especially when he was younger. The participants’ statements on how they dealt with this social anxiety are presented below.

“So ek het toe die assistent op `n stadium by hom, hy het begin boekies tel, want die assistent was besig om boekies te tel in die kraaines en hy het toe vir haar gehelp tel. En dit het hom help ontdooi.”

“So at one stage I had the assistant go to him and he started to count books, because the assistant was busy counting books in another classroom. And he helped her; it helped him calm down.” (P2)

“...ek dink ek was meer lenient met hom as wat ek met die ander was. Ek was nie so kwaai met hom gewees nie want ek wou hom nie kwaad maak nie. En ek dink dit het vir hom `n veiligheid geskep, dat hy half veilig begin voel later aan in sy omgewing.”

“...I think I was more lenient with him than I was with the other learners. I wasn’t as strict with him, because I didn’t want to make him mad. And I think that created a safe feeling for him, that he felt safe later on in his environment.” (P3)

P7 also took the learner outside when he got upset and tried to implement two strategies, which were recommended to him by the learner’s previous teachers. These two strategies included being very strict with the learner or being calm and collected when talking to him.

“Dan het ek hom buitentoe gevat...ek het altwee tegnieke probeer en snaaks genoeg, een dag het die een gewerk waar ek net rustig was en die ander dag het ek agter gekom nou moet ek bietjie ingryp en toe het ek ..., jy weet? Jy is in `n skool en toe het hy ook kalm, toe ek wel ferm teenoor hom opgetree.”

"Then I had to take him outside alone. I tried both techniques and strange enough, one day the one worked where I was calm and another day I realised I had to be a bit more strict... you know. He is in a school and then he also calmed down when I was firm with him." (P7)

P4 and P5 both used the strategy of peer-mediation where they placed the boy next to or in a group with learners who can facilitate him and steer him in the right direction. According to Chan et al., (2009) peer-mediation is when the learner with ASD is being assisted by a socially and academically stronger peer to help him develop acceptable social competencies. It is critical, however, to implement this strategy only when both learners are old enough to understand how to go about. It is especially important for the peer to be old enough in order for him to successfully mediate the learner with ASD (Flynn & Healy, 2012).

"Ek het probeer om hom saam met 'n wakker persoon te sit wat hom kan help wanneer dit nodig is as hy dalk bietjie agter raak met sy werk of so. En ek wil amper se iemand wat ek kon vertrou om hom die healtyd dalk in 'n positiewe omgewing te hou en hom op 'n manier te beskerm."/>

"I tried to place him next to a sharp learner who could help him when it is necessary if he falls behind with his work or so. And I almost want to say someone whom I could trust to keep him in a positive environment and protect him in a way." (P4)

P7 had a different strategy with regard to peer-mediation and gave each learner a chance to pay attention and socialise with the learner in this study.

*"As LO onderwyser dat en ek het vir die kind gaan sê, 'kom ons almal besluit elkeen kry 'n dag. Vandag is jy bitter nice met *Ben, ons gaan nou bietjie met hom gesels.' maar jy wil dit ook nie teveel doen nie want dan word hy in 'n boks geplaas."/>*

"As life orientation teacher I told the learners, 'Let's all decide everyone gets a day. Today you are going to be very nice with Ben. We are going to interact with him.' But you do not want to overdo it, because then you place him in a box." (P7)*

By implementing the strategy of peer-mediation, P4 and P7 allowed Ben* to develop adequate social competencies by casually learning from his peers in an interactive and productive manner.

P4 and P5 both placed the learner in groups with strong leaders who would allow him to feel safe and be part of the group:

"...in `n groep probeer plaas waar die kinders hom dalk leiding kon gee en help en hy dan op so manier kon..."

"... tried to place him in a group where the learners could lead him and help him and allowed him to..." (P4)

"Ek het hom gewoonlik ingedeel saam met mense wat hom kan help en so..."

"I usually placed him in a group together with people who could help him and so on." (P5)

There were some of the participants who were not able to implement any strategies, due to the general demands that come with teaching older learners. According to P6 she did not implement any strategies, because she was too work-orientated and focused on what had to be done in her class.

4.6 Factors that Facilitated the Social Interaction of the learner with ASD

4.6.1 Teacher knowledge of ASD and of the inclusion of learners with ASD in mainstream classes

In this theme the researcher deliberates each teacher's prior and acquired knowledge of learners with ASD. This knowledge, no matter when or how it has been acquired, is of particular importance in leading learners with ASD to develop adequate social competencies. Not only does this provide the teachers with the necessary skills to include and facilitate learners with ASD, but it also changes their overall attitude to inclusion by enhancing their confidence.

4.6.1.1 Prior knowledge

The prior knowledge of the participants in this study can be defined as their previous teaching experience in accommodating and facilitating a learner with ASD in their classroom. The importance of prior knowledge can be seen through the process of data analysis. This means that the participants who already had learners with ASD attending their classrooms had a more confident approach in including the learner discussed in this study.

This study revealed that the prior knowledge of the participants was not uniform. Some of them taught numerous learners with ASD before the learner in the study, while others had taught only one or no learners prior to this study.

Table 4.4: Prior knowledge

Participant	Prior knowledge	No prior knowledge
P1		X
P2	X	
P3		X
P4		X
P5	X	
P6	X	
P7		X

Three of the participants had prior knowledge of learners with ASD. P2 and P6 both accommodated two learners with ASD before the learner in this study and P5 had accommodated one learner who, in his experience, had milder type of ASD. Including the learners with ASD, P2 had previous experience of teaching learners with disabilities in her inclusive class. This included a girl with a physical disability who was in a wheelchair and a boy who was deaf. The prior knowledge and experiences of P5 and P6 are presented verbatim and then translated into English below:

“Ek het al leerders gehad met Asperger voor Ben, maar hulle het `n baie ligte mate gehad daarvan. Daar was byvoorbeeld `n seun in my klas wat so boeke gelees het end an kan hy onthou wat jy sê. En hy’t ook Asperger gehad, maar hy’t nooit `n woord gesê in die klas nie. Hy altyd op sy eie gewerk en sy eie ding gedoen. Dit was my eerste ervaring met so `n Asperger outistiese person. Met hom was dit heeltemal anders as met Ben*. Heeltemal, heeltemal anders. Ben* was `n baie unieke situasie gewees.”/*

“I had previous learners with Asperger’s before Ben*, but they had a very mild type of ASD...There was a boy in my class who also had Asperger’s, but never said a word in class. He always worked on his own and did his own thing. This was my first experience with a person with Autism. With him it was totally different than with Ben*. Totally, totally different. Ben* was a very unique situation.” (P5)

“Ja, ek het `n dogter in my klas gehad, `n paar jaar gelede ook in graad 7 ... sy en die seun was ook heeltemal verskillende alhoewel albei met Asperger gediagnoseer is. Dan het ek `n ander seun ook gehad...”/

“I had a girl in my class a few years ago also in grade 7...she and the boy were totally different even though both were diagnosed with Asperger’s. Then I had another boy...” (P6)

When referring to the above, P5 and P6 experienced all the learners with ASD to be unique and different from one another, even though they were diagnosed with the same disorder. In Chapter 2, section 2.2.2, the core diagnostic features of ASD are discussed. Each of the learners was diagnosed within these criteria, but this does not prove that all of them will display the same features. According to the DSM-5 (American Psychiatric Association, 2013, p.53), “Severity may vary by context and fluctuate over time”.

Both participants found Ben* to be a unique case and that he could not be treated and facilitated the same way as the other learners with ASD. The prior knowledge of these participants was not necessarily useful for Ben* in particular. It made them aware, however, that they had to acquire new knowledge each time a new learner with ASD attended their classroom.

P1, P4 and P7, had never taught a learner with ASD before the learner in this study. P3 was not entirely sure if she had an ASD learner or not, but she did recall that she did not know much about ASD before Ben* attended her class. Her response to the question of whether or not she taught previous learners with ASD was:

“Ek dink mens het maar nie tot so dat enige een gehad wat tot so erg outisties was soos wat hy was nie... Dalk was mens nie altyd bewus daarvan nie en dat jy dit dalk as verkeerdelik as verkeerdelik opgesom het maar ek dink tog... as ek terug dink nou na ek met hom gewerk het, ek moes gehad het.”/

“I think I have, but no one that was as severely autistic as he was...Perhaps one was not always aware of it and perhaps you wrongfully interpreted it, but I think... when I think back after I worked with him, I must have had.” (P3)

The above quotation shows how important it is for a teacher to acquire knowledge about ASD when they have a learner with ASD attending their classes. P3 was not aware of the diagnostic features of ASD, for example their deficits in social interaction and different behaviour. If she had prior knowledge, due to readings or accommodating previous learners with ASD, she would have been able to be more certain in answering the interview question.

4.6.1.2 Acquired knowledge

The following table displays the ways in which each participant acquired knowledge about ASD in general as well as in-depth knowledge by consulting with other teachers. This was done in preparation before, and also during, the time that Ben* attended their classrooms.

Table 4.5: Acquired knowledge

Participant	Read about it	Consulted previous teachers	Attended lectures/information sessions
P1	X		
P2	X		
P3	X	X	
P4	X	X	
P5	X	X	X
P6	X		
P7	X		X

While knowing something about ASD prior to having to teach a learner with ASD proved useful, teachers who did not know about ASD were able to acquire knowledge from books, courses, the internet and other teachers, which helped them in their inclusion of the learner in their classes.

P2, P3 and P5 felt that it is necessary for teachers to do research and read a lot about ASD when they are expecting a learner with ASD to attend their classroom.

“Dis nou een ding, `n onderwyser moet nooit dink hy is klaar gestudeer nie, want die tegnologie verander, die wetenskap verander en die navorsing verander so, ja `n mens moet definitief navorsing doen....”

“This is one thing; a teacher must never think he is done studying, because technology changes, science changes and research changes. Yes, a person must definitely do research...(P2)

“Ek dink as, as... voor hy die jaar by jou uitkom dink ek moet ‘n mens bietjie gaan oplees oor daardie kinders want dit help ongelooflik baie. Jy verstaan hulle baie baie beter.”

“I think, before he arrives for the school year, the teacher must read a bit on ASD, because it is extremely helpful. You understand them much, much better.” (P3)

P3, P4 and P5 consulted with the learner’s previous teachers to find out what his social and academic abilities were and how to facilitate him.

P5 and P7 both attended information sessions on ASD which they found very informative. P5 said that they had a staff development and information session a year before the boy attended his classroom. They received a document on ASD compiled by the lecturer, which he found to be very informative and helpful. P7, on the other

hand, is busy with his Masters in Educational Psychology. He took a module that addressed different disorders and learning problems, which informed him on ASD in general. He stated that he was quite excited to see how he could apply the theory he learned to include the learner with ASD:

“Ek het geleer rondom inklusiewe onderrig en al die verskillende leerhindernisse wat bestaan toe het ek nogals gedink dit is ‘n baie opwindende tyd om te kyk wat ek geleer het, of ek dit kan toepas met die kind, een of twee kinders in my klas wat wel al met outisme op die spektrum geval het.”/

“I had read about inclusive education and the different learning disabilities and I saw it as a very exciting time to see if I could apply what I’ve learned to the one or two learners in my class who fell in the Autism spectrum.” (P7)

All of the participants reflected that they found their acquired knowledge to be very helpful in understanding the learner in this study better. However, even though he did informal research, P4 saw ASD as an illness:

“..jy het met ander oe na hom gekyk en sekere gedrag aanvaar or sekere situasies aanvaar omdat jy weet hy het die siekte.”/

“...you looked at him through different eyes and accepted certain behaviour and situations, because you knew he had the illness.” (P4)

In Chapter 2, section 2.2.1, ASD is not defined as an illness, but rather as a neurodevelopmental disorder, which cannot be diagnosed by looking at a person’s appearance or physical features (5th ed.; DSM-5; American Psychiatric Association, 2013). The learner in this study did have certain physical traits, like a skew nose and eyes that slightly bulged, which made other people identify him as the boy that looked ‘different’, but that did not correlate with his ASD:

Ben se effense anderste gelaat het dit erger maak. Ja want kinders sou vir my, in kleiner grade, as ek iets sê of iets wou geweet het vir my sê oh dis die seuntjie wat anders lyk.”/*

“Ben’s slightly different appearance made it worse. Yes, because if I wanted to ask or know something about him, the children in younger grades would talk about the boy that looks different.” (P6)

P5 felt that he did not acquire the relevant knowledge in order for him to be successful in including Ben* in his classroom. He stated that he would have

appreciated the advice of a specialist in ASD to determine the extent of the learner's behaviour.

"...as mens iemand kan kry om jou te help byvoorbeeld soos 'n spesialis op daardie gebied wat net vir jou kan sê, 'Luister, Ben is so en so en so en dit is wat hom uniek maak en dit is die kenmerke van die kind,' Want ek het geweet wie Ben* is en ek het geweet hy doen snaakse goeters, maar ek het nie geweet tot watter mate toe hy Asperger het...'"*

"... if you can get someone to help you, for example a specialist in the field who can just tell you, 'Listen, Ben* is like this and this is what makes him unique.' Because I knew who Ben* was and I knew he did strange things, but I did not know to what extent he had Asperger's." (P5)

It is evident from the above findings that it is important to learn about and understand ASD. Even though each participant acquired knowledge of ASD which varied in quantity and quality, it prepared them to better understand Ben*. Therefore it can be said that Ben* was fortunate in attending classes of teachers who were well prepared to accommodate him in their classrooms.

Soto-Chodiman (2012) found that teachers who received adequate training were more confident in including a learner with ASD in their classroom. While this is certainly desired, a lack of prior knowledge can be overcome with training, self-study and collegial sharing once the learner has been admitted to the teacher's class. Given the unique characteristics of each learner, it was felt that there was a need to explore different aspects of ASD as the specific learner's needs arose.

4.7 Teacher Challenges

Many teachers experience challenges in including learners with ASD in their classroom. This can be due to numerous reasons, including the social deficits displayed by learners with ASD. Teachers feel inadequate in facilitating the learners' needs and find it challenging to divide their attention equally. They do not have the confidence to teach and successfully develop the social competencies of learners with ASD. These feelings of doubt can be related to a lack of adequate teacher training (Humphrey & Symes, 2011; Unianu, 2012; Lindsay et al., 2013; Soto-Chodiman, 2012).

All of the participants faced different challenges in including the learner in their classroom. Some concerns were raised about the disturbing presence of the facilitator in the classroom and while one participant saw it as a challenge only at the beginning, another continued to experience it as a challenge. P6 stated that the learner in this study did not see her as the teacher, but rather listened to her through his facilitator:

"...en dan was hy ook baie op die fasiliteerder gefokus. Ek dink juis juffrou voel partykeer jy is nie die juffrou nie, die fasiliteerder is die juffrou. So dis vir my sleg want ek 'bond' nie eintlik met hom nie."/

"...and then he was intensely focused on his facilitator. I think that's why teachers sometimes feel that they are not the teacher, but rather feel that the facilitator is the teacher. So I experienced this to be bad, because I didn't really bond with him." (P6)

According to Humphrey and Symes (2011) teachers find the presence of assistants or facilitators helpful. Furthermore, they found that the facilitator can provide routine for the learner with ASD, when being transferred to a different grade (Weinstock, 2012; Ashburner et al., 2010). The learner in this study was not fortunate enough to have a consistent facilitator throughout his primary school career, but rather had a different one each year. Studies have found, however, that the presence of a teaching assistant or facilitator can prevent the learner from paying attention to the teacher (Humphrey & Symes, 2011).

P2 stated that she was under a lot of pressure to include Ben, as she felt that he was her responsibility, just like the rest of the class. She said it took a lot of energy to accommodate him and that she found it stressful and challenging having him in her class.

"...dit is baie stresvol ook vir 'n juffrou, uhm... so dit vat definitief ook baie meer energie van die juffrou om so kind in haar klas te akkommodeer... stresvol om so 'n kind in jou klas te he, want jy wil hom ook gelukkig he en jy wil dit ook nie doen ten koste van die ander 30 in jou klas nie. Dit is absoluut 'n uitdaging."/

"...it is also very stressful for a teacher...so it definitely requires a lot more energy from the teacher to accommodate a child like that in the class... stressful to have such a child in your class, because you also want to make him happy and you do not want to keep him happy at the cost of the other 30 kids in your classroom. It is an absolute challenge." (P2)

P3 also reported feeling stressful about including Ben* in her class. She said she felt quite anxious when she heard that Ben* was being admitted to her class. Her anxieties emanated from her concerns about how his peers would receive him since he looked different to them and how he would adapt to the class. She was also concerned about how he would adapt to a different class to the previous year.

“Ek was bang. Ek was nommer 1 bang omdat hy, ek weet nie of ek dit mag sê nie maar hy lyk mos anders. Hy lyk anders né, hy lyk anders en ek was bang dat die... en nog ‘n ding, die kinders wissel van klasse voordat hulle by ons aankom, hy kom nie met sy selfde maats oor nie. Jy weet, jy moes hom nooit kwaad gemaak het nie. Dit was een ding wat baie belangrik was.”/

“I was afraid. I was firstly afraid, because he looks different and I was afraid that the...and another thing, the kids change classes before they get to us. He doesn't come to us with the classmates. You know, you shouldn't ever make him mad. That was one thing that was very important.” (P3)

Not all participants, however, experienced difficult challenges in accommodating the learner in their classrooms. Prior and acquired knowledge played a significant role and mitigated the challenges.

“Dit was vir my nogal ‘n aangename uitdaging want ek het op daardie oomblik ook geleer rondom inklusiewe onderrig en al die verskillende leerhindernisse wat bestaan toe het ek nogals gedink dit is ‘n baie opwindende tyd om te kyk wat ek geleer het, of ek dit kan toepas met die kind”/

“I found it to be a pleasant challenge because at that time I studied inclusive education and all the different learning disabilities that exist. So I thought that it was very exciting to see if I could apply my studies to the child.” (P7)

However, despite the new knowledge, old habits were hard to break. The old habits referred to by P7, include a reduction in the quality of time he used to or strived to spend with Ben*. He is a grade 7 teacher with a large group of learners with high demands, which made it difficult for him to divide his attention equally.

*“In alle eerlikheid jy word so gejaagd om jou werk in die klas te voltooi, dat jy nie kon tyd afstaan elke dag, die hoeveelheid tyd wat ek sou wou afstaan aan *Ben* kon ek nie afstaan nie want jy het daardie een kind in ‘n klas van 34 daardie tyd... Soos die jaar aangaan het ek meer uitgevind oor ASD, maar jy val so gou terug in jou ou gewoontes.”/*

“In all honesty, you are in such a rush to complete your work in the class that I couldn't put aside the amount of time that I wanted to attend to Ben*, because

you have one child in a class of 34 that time...As the year went past I did find out more about ASD, but I quickly fell back into my old habits.” (P7)

4.8 Role of the Parents

This theme addresses the role of the parents in providing the teachers with ‘relevant information’ about the learner, which was found to be helpful. P1, P2, P3 and P4 received information from the parents. This allowed them to understand Ben* better and successfully include him in the classroom, both socially and academically.

“...sy mamma het voor die jaar begin het sy ma met my kom praat en vertel. En van die fasiliteerder vertel en gese en moenie stres nie, die fasiliteerder is opgelei om met dit te kan werk.”

“...his mother did, before the year started his mother came and spoke to me and told me about the facilitator, but that I didn’t have to stress, because the facilitator was trained to work with Ben*.” (P1)

While the information was wellreceived, the many visits by the parent were considered overwhelming.

“Sy het baie vir my goeters gesoek en vir my kom gee en baie gekontak! Sy, ek wil amper se elke dag, elke tweede dag het sy kom vra hoe gaan dit met hom.”

“She contacted me a lot. She, I almost want to say every day, every second day, she came and asked how he was doing.” (P1)

4.9 Academic Progress

During the process of data analysis, the academic progress of the learner featured in all the interviews. In keeping with Stichter et al. (2012) who claim that learners with ASD severity level 1 have an average to above average intelligence and are able to perform academically well in a mainstream school, the learner on which this study is based achieved well academically. The academic progress of the learner was referred to frequently and isaddressed in the sub-themes below.

4.9.1 Academic achievement

All the participants saidthat the learner did not really experience learning problems and found him to be academically able to successfully adapt in the mainstream school. P3, P4, P5, P6 and P7 stated that he excelled in science and displayed a broad general knowledge of science:

“Hy is wetenskaplik baie sterk. Baie baie sterk. En hy het regtig baie kennis gehad...hy sou as ons byvoorbeeld, sê nou maar ons het gepraat oor sê nou maar wolke, wat maak wolke, dan sê hy vir jou van die Cirus wolke, Stratis wolke en die Kolumbus wolke...So hy sou, hy sou ‘n ding 10 keer verder uitgebrei het as wat ons die res van weet.”/

“He is very strong in science. Very, very strong. And he really had a lot of knowledge. So he would, he would expand on a subject 10 times more than the rest of us know. He would, if we discussed clouds, he would tell us about cirrus, stratus and cumulus clouds...” (P3)

The fact that he excelled in science can be connected to his specific interests in things that are science related, which have already been discussed earlier in this chapter.

To support the statements made about his intelligence and academic ability, some of the participants’ statements are presented below:

“Hy het nie so baie gesukkel nie, sy goeters was nou maar meer sosiale goeters. Nee hy het nie leerprobleme gehad nie, hy het net heeltyd engels gepraat.”/

“He didn’t struggle so much, his problems was more socially related. No he didn’t have learning problems, he just spoke English the whole time.” (P1)

“Hy is definitief `n 90% plus persoon, maar wat die ander ding weer is, is as Ben ‘n som doen, of as hy ‘n som doen op ‘n sekere manier en jyt hom reg gemerk en gesê daai ding is heeltemal reg dan sal hy hom amper nooit weer verkeerd kry nie.”/*

“He is definitely a 90% plus candidate, but the other thing is when Ben* does a sum, or if he does a sum in a certain way and you marked it correct and said that it is perfectly correct then he would never get it wrong again.” (P5)

The findings presented above prove that the vast majority of participants experienced the learner as performing well academically and that the real difficulty lay in his lack of social competencies.

4.9.2 Support for learning

The learner in this study required support for his attention deficits as well as occasional behavioural difficulties. Both of these difficulties can have a direct effect on his social and academic abilities.

4.9.2.1 Attention difficulties

It is not uncommon for learners with ASD to also present with difficulties in concentration and attention (Rumpf et al., 2012). A number of studies show that children with ASD display attention deficits and will tend to show signs of dreaminess or hyperactivity (Hochhauser et al., 2015; Cooper et al., 2013).

The participants reflected the sentiments of teachers in general who find attention difficulties challenging to manage.

“Sy was maar meestal vir hom, vir die seuntjie moes sy maar net die heeltyd help dat sy aandag by sy werk is. Dis nie dat hy nie die goeters kon doen nie..Sy moes net kyk dat dit wat van hom verwag word, dat hy dit doen.”/

“She had to help see that he paid attention while completing his work. It is not that he couldn’t do the work. She just had to see that he did what was expected of him.” (P1)

“Ek dink ook later in die dag, was die konsentrasie moeiliker en die lus om iets uit te voer was ook minder. Ek het hom nie eintlik moeiliker ervaar as ander kinders wat ook maar ADHD het nie.”/

“I think later in the day he found it more difficult to concentrate and his will to do something wasn’t there. I didn’t really experience him to be more difficult than other learners with ADHD.” (P6)

The other participants wrote about the learner’s difficulty with attention in his cumulative report card:

“Hy sukkel om op sy eie te focus.”/

“He struggles to focus on his own.” (P2)

“Werk baie stadig in die klas.”/

“Works very slowly in the classroom.” (P4)

“Hy het `n student gehad wat hom gehelp het gedurende die jaar, maar hy het steeds baie stadig gewerk.”/

“He had a student that helped him during the year, but he still worked very slowly.” (P7)

The above findings give the teachers’ perspectives on the learner’s inability to pay attention. As previously mentioned, the participants experienced challenges in including Ben* in the classroom. In addition to these challenges his attention deficits

seemed to have a negative impact on the way that they perceived him, especially when his facilitator was not present (P5, P6). Moreover, the participants found it difficult to successfully teach and develop the learner's social competencies as he was not able to pay the necessary attention.

4.9.2.1.1 Medication

To support his attention deficits, the learner used prescribed medication from grade 1 up until grade 7. All of the participants either mentioned it during their interviews or in the learner's cumulative report card. His psychological report also contains information on his prescription. He also received support from his facilitator, who assisted him in completing tasks and paying adequate attention to his teacher.

4.9.2.2 Facilitator

Although the learner was able to cope with the academic demands of school, a facilitator was appointed by his parents for several years at primary school as a form of learning support and was available whenever he needed assistance. Humphrey and Symes (2011) found that facilitators should relieve any tension the learner may experience, provide the learner with a strict routine and develop strategies to enhance social competencies (Russel et al., 2015; Mazurik-charles & Stefanou, 2007).

The support of the facilitator was considered a positive influence on the learner and a help to the teachers so that they could tend to all the learners in their class (P2, P1, P5 and P7).

"Sy was maar meestal vir hom, vir die seuntjie moes sy maar net die heeltyd help dat sy aandag by sy werk is. Dis nie dat hy nie die goeters kon doen nie..Sy moes net kyk dat dit wat van hom verwag word, dat hy dit doen."/

"She had to help see that he paid attention while completing his work. It is not that he couldn't do the work. She just had to see that he did what was expected of him." (P1)

"...omdat ek geweet het hy het 'n fasiliteerder maak dit jou as onderwyser ook rustig, dat jy weet hy gaan deur al die werk kom, selfs al raak hy agter."/

"...because you knew that he had a facilitator I could relax and knew that he was going to finish all his work, even if he fell behind." (P7)

The biggest challenge P5 experienced was the first three weeks of school when the learner did not have a facilitator.

“...hy het heeltemal onbeholpe gevoel amper en, ja snaaks met die fassiliteerder langs hom was daar nooit so geval gewees nie. Dit was omtrent nooit nodig vir my om aandag aan hom te gee nie...sy fasiliteerder was fantasties.”/

“When he got upset he felt totally helpless..., with the facilitator next to him there was never an incident like that. I almost never had to deal with his panic attacks, the facilitator was fantastic.” (P5)

While the facilitator was generally felt to be a help it was not so without some less helpful experiences. Her role in coming between the teacher and the learner and thereby making it difficult for the teacher to connect with the learner (P6) was raised.

“Ek dink juis juffrou voel partykeer jy is nie die juffrou nie, die fasiliteerder is die juffrou. So dis vir my sleg want ek “bond” nie eintlik met hom nie en dan die dag as die fasiliteerder siek is of so, probeer hy eers so paar ander dinge tot hy besef dat ek is eintlik die juffrou.”/

“I think you as teacher sometimes do not feel like the teacher, the facilitator is the teacher. So I found it to be bad, because I do not really bond with the learner and then on a day when the facilitator is sick, he tried a few new tricks until he realised that I am actually his teacher.” (P6)

Robertson (2003) found that it is important for the teacher to build a positive relationship with the learner, as this can determine the development of his social competencies. However, it is even more important that there should be a positive relationship between the teacher and facilitator. This will relieve some teacher tension and consequently create a suitable and friendly environment for the learner with ASD to learn acceptable social behaviour and understand social cues (Lindsay et al., 2013; Emam & Farrell, 2009).

It can happen that learners with ASD become too dependent on their facilitator and therefore find it difficult to adapt without them. In this case the learner became dependent on the facilitator for support and the teacher experienced her absence to have a negative effect on the learner (P6).

“Die een wat by Ben in graad 7 was, was baie afwesig. Sy was ‘n student wat met tye moes eksamen skryf...en baie weg moes gaan... terwyl ek gevoel het sy moet daar bly.”*

“The facilitator that was with Ben* in grade 7 was absent often. She was a student who had to write exams...and frequently needed to be away... while I felt she had to stay there.” (P6)

4.9.2.2.1 Support Strategies

The learner in this study presented with difficulties described in the literature as problems with anxiety and a tendency to get easily aggravated by sensory overload or any other situation likely to cause tension (Rodgers et al., 2012; Bellini, 2004; Turygin, 2013). The facilitator played an important role in calming the learner, whenever he got anxious, by using the following strategies:

“Dan het die fasiliteerder partykeer met hom net so entjie, ek wil amper sê so draaitjie gaan stap. Laat hy net eers rustig raak. Hulle het papiertjies opgetel of iets en dan het sy hom ingebring as alles nou weer rustig is.”

“The facilitator took him for a walk, to let him calm down. They picked up papers and then, when he was calm, she would bring him in.” (P1)

“Sy het net gereeld met hom gepraat, maar sy het nie, sy het nooit enige iets verduidelik nie sy het net vir hom gesê, “Kom nou Jonathan, hierso” en sy het hom die hele tyd gemotiveer en sy het gesê, “Jy weet jy kan dit doen, onthou jy ons het dit gister gedoen.”

“She regularly talked to him, but she never explained his work to him. She would just say, ‘Come Ben*, look here’ and she would motivate him throughout and tell him, ‘You know you can do this, do you remember we did this yesterday.’ (P5)

The calming strategies which the facilitators applied did not only have a positive influence on the learner, but it also caused the teacher to remain calm and positive. This is very important in ensuring a healthy teacher-pupil relationship. Facilitators or paraprofessionals should be able to work in cooperation with the teacher in implementing strategies to successfully facilitate the learner with ASD (Weinstock, 2012; Ashburner et al., 2010).

4.9.2.3 Learning support

According to all the participants, the learner received learning support throughout his primary school career. He went to the learning support teacher during school hours, as he required extra support to do well in languages as school subjects. This statement was given by P1, P3, P4 and P6.

4.9.2.4 Occupational therapy

The psychological reports of the learner in this study show that he was diagnosed with ASD at a very early age, which allowed him to receive occupational therapy in grade 1 at the age of six. Baranek (2002) states that the identification of sensory difficulties can be identified during the early development stages of children with ASD. If identified and diagnosed early enough, intervention can take place and prevent complications in the future development of the social competencies of children with ASD (Iarocci & Macdonald, 2006; Marco et al., 2011; Ashburner et al., 2008).

Chapter 5: Conclusion and Future Recommendations

5.1 Introduction

In the previous chapter the research findings were presented in six main themes. These themes were: the learner with ASD and how it manifested in the inclusive class; social interaction; factors that facilitated the social interaction of the learner with ASD; teacher challenges; the role of parents; and academic progress.

These themes were further discussed under the relevant sub-themes and categories. This chapter aims to answer the main research question and the four secondary questions.

Main research question

How do teachers experience the social competencies of a primary school learner with ASD?

Secondary questions

1. What is the nature of the learner's social competencies?
2. How does the teacher facilitate the social behaviour in the class?
3. Which social skills teaching strategies are experienced as effective?
4. What are the challenges that teachers experience?

5.2 Answering the Secondary Research Questions

5.2.1 What is the nature of the learner's social competencies?

According to the findings the learner in this retrospective case study had clear deficits regarding his social competencies and throughout his primary school career required substantial support in order to successfully develop these competencies. Furthermore, he experienced some difficulties which had a direct or indirect influence on his social competencies and affected his social interactions. He displayed unusual behaviours, repeating English phrases out of Star Wars movies; he had strange mannerisms including weird facial expressions; he showed sensitivity to loud noises which he accompanied by his own sounds of frustration. Furthermore, he portrayed clear signs of anxiety as well as sudden changes in his emotions. He had specific fixed interests in everything related to science, more specifically space, and he would

take part only in conversations that were about his interests. It was difficult for him to deal with changes in his routine and he isolated himself in certain situations.

As he got older, however, he developed a way of socially interacting with his peer group. It seems as if his ASD created a protective layer around him which made him oblivious to any possible bullying behaviour from his peers. When having to work in a group he did not have the skills to work effectively with other peers.

He differed from other learners in that he was used to valuing his own opinion and he preferred to be on his own. This caused tension and made it difficult for him to take part in group activities. He tended to taunt his peers when he played with them and he found it more comfortable to interact with adults.

It could be concluded that the learner in this case study felt isolated in his earlier school years, having no, or very few, social competencies. As he got older, however, he developed the adequate social competencies required to adapt in a mainstream primary school. Even though he preferred not to have many friends nor to be part of group activities, he interacted with his peers by entertaining them. This caused them to laugh with him, instead of at him, which made him feel part of the group and gained him the status of a “popular” learner as everyone knew him.

5.2.2 How does the teacher facilitate the social behaviour in the class?

Referring to the findings, an effective method of facilitation was to address the peers of a learner with ASD, informing them of the sometimes strange behaviour and social deficits that go together with ASD. It was also important, however, to address not only the learner’s peers, but also the teachers. This allowed them to better understand the learner and thereby created an inclusive environment for the learner where he could effectively develop his social competencies. When teachers and peers understand a learner with ASD, they know how to react and calm him when he experiences anxiety. Calming strategies included taking a walk outside or suggesting that they do something different, distracting him from the situation that caused tension and anxiety.

5.2.3 Which social skills teaching strategies are experienced as effective?

According to the findings, peermediation can be seen as a very effective strategy. This includes the learner with ASD following the lead of an academically and socially

stronger peer. It allows the learner to develop social competencies in an informal way, while at the same time creating a safe environment for him to interact socially with the leading peer, should the opportunity arise.

Another effective strategy for teaching social skills is to have the support of a facilitator for the learner with ASD. This appears to relax the teachers and consequently creates a better atmosphere in the classroom. The calmness of the teacher then allows the whole class to be calm and to create a better relationship among the learner, his teacher and the facilitator. Facilitators can also implement strategies to teach the learner socially acceptable behaviour, for example making eye contact, initiating conversations by talking about his interests and how to remain calm during stressful situations.

5.2.4 What are the challenges that teachers experience?

According to the findings one of the main challenges that the teachers experienced was to successfully include the learner with ASD. This definitely highlights the need for adequate teacher training. The teachers in the study who did receive training, found it to be very helpful, but still required the advice of a specialist in the field of ASD to inform them on the unique social deficits of the learner in this study. Another challenge, experienced by teachers, was the learner's strange behavior. This caused his peers to laugh at and tease him, which made him frustrated and led to outbursts. He calmed down only when he was taken out of the class. This is a challenge that was only experienced by the teachers in the earlier years of the learner's primary school career. The learner in this study did not yet have the skills needed to remain calm in these situations. All the pressure was therefore on his teachers. When he did not have a facilitator the teacher had to leave the rest of the class and attend to calming him down. This is one of the challenges accompanying the inclusion of a learner with ASD in a mainstream school without a facilitator or when the facilitator is absent. Teachers experience great levels of tension due to the fact that they want to divide their attention equally among all the learners in their class. The findings presented teachers who chose to focus on the rest of the learners in the class, paying little attention to developing the social competencies of the learner with ASD. Other teachers chose to make the learner with ASD their main focus and then the rest of the learners did not receive the deserved attention.

5.3 Recommendations

The inclusion of learners with ASD in mainstream schools is still new in South Africa and few teachers know how to successfully accommodate them in their classrooms or to develop the social competencies of learners with ASD. Therefore the need for adequate teacher training, focusing on the unique characteristics of each different learner with ASD, can clearly be identified. The reason for this is that each learner with ASD displays different behaviours as well as different social competencies. This means that each individual learner with ASD requires different levels of support in order to promote the development of their social competencies. When a school, for example, accommodates five learners with ASD, specialists in the field who work with the learners, should be able to present a training session for the teachers involved. Various specialists can be included, such as psychiatrists, psychologists, occupational therapists and speech therapists.

5.4 Limitations

As discussed in Chapter 3, it is difficult to generalise from a single case study as the scope is limited to one case. Multiple case studies regarding the same topic would have provided the researcher with a greater amount of data, allowing for a significant number of findings to generalise from.

Since the study was of limited scope and time was limited, the researcher only interviewed the teachers of the learner in the study and excluded the parents and the learner himself.

5.5 Concluding remarks

With reference to chapters 1 and 2 it is no question that learners with ASD experience difficulty with regard to the adequate social competencies required to attend a mainstream primary school. When parents place their child with ASD in a mainstream primary school, they need to realise that the learner will find it difficult to develop the necessary social competencies on his own. Teachers play a very important role in developing the social competencies of learners with ASD. They cannot do this on their own, however, and require cooperation and support from the learner's parents to ensure the successful inclusion of the learner. It is particularly important that the parents, teacher and the learner's facilitator maintain a healthy relationship throughout the learner's primary school career. Furthermore, it is the

principal's responsibility to ensure that the teachers receive high quality and learner specific teacher training.

All of the above concluding remarks will allow the teachers of learners with ASD to expand their knowledge of ASD and gain confidence in the process. This will result in an overall positive classroom environment and ensure that both the teacher and the learner with ASD experience the development of his social competencies as beneficial and empowering.

List of References

Adamson, L. B., McArthur, D., Markov, Y., Dunbar, B. & Bakeman, R. (2001). Autism and joint attention: Young children's responses to maternal bids. *Journal of Applied Developmental Psychology, 22*(4), 439–453. doi:10.1016/S0193-3973(01)00089-2

Alborz, A., Pearson, D., Farrell, P. & Howes, A. (2009) The impact of adult support staff on pupils and mainstream schools. Technical Report. In: *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

American Psychiatric Association (APA). (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.

Anderson, D. K., Oti, R. S., Lord, C. & Welch, K. (2009). Patterns of growth in adaptive social abilities among children with autism spectrum disorders. *Journal of Abnormal Child Psychology, 37*(7), 1019–1034. doi:10.1007/s10802-009-9326-0.

Ashburner, J., Ziviani, J. & Rodger, S. (2010). Surviving in the mainstream: Capacity of children with autism spectrum disorders to perform academically and regulate their emotions and behavior at school. *Research in Autism Spectrum Disorders, 4*(1), 18–27. doi:10.1016/j.rasd.2009.07.002

Ashburner, J., Ziviani, J. & Rodger, S. (2008). Sensory processing and classroom emotional, behavioral, and educational outcomes in children with autism spectrum disorder. *American Journal of Occupational Therapy, 62*(5), 564–573.

Babbie, E. (2010). *The practice of social research* (12th ed.). Wadsworth: Cengage Learning.

Baranek, G. T. (2002). Efficacy of Sensory and Motor Interventions for Children with Autism, *32*(5).

- Bass, J. D. & Mulick, J. A. (2007). Social play skill enhancement of children with autism using peers and siblings as therapists, *Psychology in the Schools* 44(7), 727–736.
- Baxter, P. & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *Qualitative Report*, 13, 4, 544-559.
- Bellini, S. (2004). Social Skill Deficits and Anxiety in High-Functioning Adolescents With Autism Spectrum Disorders. *Focus on Autism and Other Developmental Disabilities*, 19(2), 78–86. doi:10.1177/10883576040190020201
- Bellini, S., Benner, L. & Peters-Myszak, J. (2009). A Systematic approach to teaching social skills to children with Autism Spectrum Disorders: A guide for practitioners. *Beyond Behavior*.
- Bossaert, G., Colpin, H., Pijl, S. J. & Petry, K. (2013). Truly included? A literature study focusing on the social dimension of inclusion in education. *International Journal of Inclusive Education*, 17(1), 60–79. doi:10.1080/13603116.2011.580464.
- Causton-Theoharis, J., & Malmgren, K., (2005). Building bridges : Strategies to help paraprofessionals promote peer interaction. *Teaching Exceptional Children*, 37(6), 18-24
- Cervantes, P. E. & Matson, J. L. (2015). The relationship between comorbid psychopathologies, autism, and social skill deficits in young children. *Research in Autism Spectrum Disorders*, 10, 101–108. doi:10.1016/j.rasd.2014.11.006.
- Chan, J. M., Lang, R., Rispoli, M., O'Reilly, M., Sigafoos, J. & Cole, H. (2009). Use of peer-mediated interventions in the treatment of autism spectrum disorders: A systematic review. *Research in Autism Spectrum Disorders*, 3(4), 876–889. doi:10.1016/j.rasd.2009.04.003.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education* (7th edn.). London: Routledge.

Colle, L., Baron-Cohen, S., Wheelwright, S. & van der Lely, H. K. J. (2008). Narrative discourse in adults with high-functioning autism or Asperger syndrome. *Journal of Autism and Developmental Disorders*, 38(1), 28–40. doi:10.1007/s10803-007-0357-5.

Cooper, M., Martin, J., Langley, K., Hamshere, M., & Thapar, A. (2014). Autistic traits in children with ADHD index clinical and cognitive problems, 23–34. doi:10.1007/s00787-013-0398-6

Cotugno, A. J. (2009). Social competence and social skills training and intervention for children with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 39(9), 1268–77. doi:10.1007/s10803-009-0741-4

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd edn.). Thousand Oaks CA: Sage

Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (3rd edn.). Thousand Oaks: SAGE Publications Ltd.

Creswell, J. W. (2013). *Qualitative inquiry and research design: choosing among five approaches*. Los Angeles: SAGE Publications Ltd.

Delfos, M. (2010). Children with Autism Spectrum Disorders: A structured teaching and experience-based program for therapists, teachers, and parents. *European Journal of Developmental Psychology*, 7(5), 635–638. doi:10.1007/s10803-009-0792-6

Denzin, N. K. & Lincoln, Y. S. (2011). *The SAGE Handbook of Qualitative Research*. Thousand Oaks: SAGE Publications Ltd.

Deris, A. R., & Di Carlo, C. F. (2013). Back to basics: Working with young children with autism in inclusive classrooms. *Support for Learning*, 28(2), 52–56. doi:10.1111/1467-9604.12018

Dobbins, N., Higgins, K., Pierce, T., Tandy, R. D. & Tincani, M. (2009). An Analysis of Social Skills Instruction Provided in Teacher Education and In-Service Training Programs for General and Special Educators. *Remedial and Special Education*, 31(5), 358–367. doi:10.1177/0741932509338363.

Duerden, E. G., Oatley, H. K., Mak-Fan, K. M., McGrath, P. A, Taylor, M. J., Szatmari, P. & Roberts, S. W. (2012). Risk factors associated with self-injurious behaviors in children and adolescents with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 42(11), 2460–70. doi:10.1007/s10803-012-1497-9.

Emam, M. M. & Farrell, P. (2009). Tensions experienced by teachers and their views of support for pupils with autism spectrum disorders in mainstream schools. *European Journal of Special Needs Education*, 24(4), 407–422. doi:10.1080/08856250903223070.

Fisher, P., Masia-Warner, C. & Klein, R. G., (2004). Skills for social and academic success: A school based intervention for social anxiety disorders in adolescents. *Clinical child and family psychology review*, 7(4), 241-249. doi: 1096-4037/04/1200-0241/0.

Flick, U. (2007). *Designing qualitative research*. Thousand Oaks: SAGE Publications Ltd.

Flick, U. (2007). *Managing quality in qualitative research*. Thousand Oaks: SAGE Publications Ltd.

Flick, U. (2009). *An introduction to qualitative research (4th ed.)*. London: SAGE Publications Ltd.

Flynn, L. & Healy, O. (2012). A review of treatments for deficits in social skills and self-help skills in autism spectrum disorder. *Research in Autism Spectrum Disorders*, 6(1), 431–441. doi:10.1016/j.rasd.2011.06.016

Flyvberg, B. (2006). Five misunderstandings about case study research. *Qualitative Inquiry*. 12(2), 219–245. doi: 10.1177/1077800405284363.

Gavin, H. (2008). *Understanding Research Methods and Statistics in Psychology*. Thousand Oaks: SAGE Publications Ltd.

Ghaziuddin, M. & Mountain-Kimchi, K. (2004). Defining the intellectual profile of Asperger Syndrome: comparison with high-functioning autism. *Journal of Autism and Developmental Disorders*, 34, 3, 279-84.

Giangreco, M. F., & Suter, J. C. (2010). Paraprofessionals in Inclusive Schools : A Review of Recent Research, 41–57. doi:10.1080/10474410903535356

Given, L. M. (2008). *The SAGE Encyclopedia of Qualitative Research Methods Volume 1 & 2*. Thousand Oaks: SAGE Publications Ltd.

Hallett, V., Lecavalier, L., Sukhodolsky, D. G., Cipriano, N., Aman, M. G., McCracken, J. T. & Scahill, L. (2013). Exploring the manifestations of anxiety in children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 43(10), 2341–52. doi:10.1007/s10803-013-1775-1.

Hebron, J. & Humphrey, N. (2013). Exposure to bullying among students with autism spectrum conditions: A multi-informant analysis of risk and protective factors. *Autism : The International Journal of Research and Practice*, 18(6), 618–630. doi:10.1177/1362361313495965.

Heyvaert, M., Saenen, L., Maes, B., & Onghena, P. (2015). Comparing the percentage of non-overlapping data approach and the hierarchical linear modeling approach for synthesizing single-case studies in autism research. *Research in Autism Spectrum Disorders*, 11, 112–125. doi:10.1016/j.rasd.2014.12.002

Hochhauser, M., Weiss, P. L. & Gal, E. (2015). Negotiation strategies of adolescents with high-functioning autism spectrum disorder during social conflicts. *Research in Autism Spectrum Disorders*, 10, 7–14. doi:10.1016/j.rasd.2014.10.022.

Humphrey, N. & Parkinson, G. (2006). Research on interventions for children and young people on the autistic spectrum: a critical perspective. *Journal of Research in Special Educational Needs*, 6(2), 76–86. doi:10.1111/j.1471-3802.2006.00062.x

Humphrey, N. & Symes, W. (2011). Inclusive education for pupils with autistic spectrum disorders in secondary mainstream schools: teacher attitudes, experience and knowledge. *International Journal of Inclusive Education*, 17(1), 1–15. doi:10.1080/13603116.2011.580462.

Iarocci, G. & McDonald, J. (2006). Sensory integration and the perceptual experience of persons with autism. *Journal of Autism and Developmental Disorders*, 36(1), 77–90. doi:10.1007/s10803-005-0044-3.

Ingersoll, B. & Schreibman, L. (2006). Teaching Reciprocal Imitation Skills to Young Children with Autism Using a Naturalistic Behavioral Approach: Effects on Language, Pretend Play, and Joint Attention. *Journal of Autism and Developmental Disorders*, 36(4), 487–505. doi:10.1007/s10803-006-0089-y.

Jansen, J. D. (2010). The language of research. In K. Maree (Ed.), *First steps in research* (4th ed.), (pp. 15-22). Pretoria: Van Schaik.

Jones, A. P. & Frederickson, N. (January 01, 2010). Multi-informant predictors of social inclusion for students with autism spectrum disorders attending mainstream school. *Journal of Autism and Developmental Disorders*, 40, 9, 1094-103.

Jung, S. & Sainato, D. M. (2013). Teaching play skills to young children with autism. *Journal of Intellectual & Developmental Disability*, 38(1), 74–90. doi:10.3109/13668250.2012.732220.

Kargas, N., López, B., Reddy, V. & Morris, P. (2014). The Relationship Between Auditory Processing and Restricted, Repetitive Behaviors in Adults with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 45(3), 658–668. doi:10.1007/s10803-014-2219-2.

Koenig, K. P., Bleiweiss, J., Brennan, S., Cohen, S. & Siegel, D. E. (2009). The ASD Nest Program: A Model for Inclusive Public Education for Students with Autism Spectrum Disorders. *Teaching Exceptional Children*, 42(1), 6-13.

- Laugeson, E. A., Frankel, F., Gantman, A., Dillon, A. R. & Mogil, C. (2012). Evidence-based social skills training for adolescents with autism spectrum disorders: the UCLA PEERS program. *Journal of Autism and Developmental Disorders*, 42(6), 1025–36. doi:10.1007/s10803-011-1339-1.
- Leekam, S. R. & Ramsden, C. a H. (2006). Dyadic orienting and joint attention in preschool children with autism. *Journal of Autism and Developmental Disorders*, 36(2), 185–197. doi:10.1007/s10803-005-0054-1.
- Licciardello, C. C., Harchik, A. E. & Luiselli, J. K. (2008). Social Skills Intervention for Children with Autism during Interactive Play at a Public Elementary School. *Education and Treatment of Children*, 31, 1, 27-37.
- Lindsay, S., Proulx, M., Thomson, N. & Scott, H. (2013). Educators' Challenges of Including Children with Autism Spectrum Disorder in Mainstream Classrooms. *International Journal of Disability, Development and Education*, 60(4), 347–362. doi:10.1080/1034912X.2013.846470.
- Lindsay, S., Proulx, M., Scott, H. & Thomson, N. (2014). Exploring teachers' strategies for including children with autism spectrum disorder in mainstream classrooms. *International Journal of Inclusive Education*, 18(2), 101–122. doi:10.1080/13603116.2012.758320.
- Ma, H. K. (2012). Social Competence as a Positive Youth Development Construct: A Conceptual Review. *The Scientific World Journal*, 2012, 1–7. doi:10.1100/2012/287472.
- Macintosh, K., & Dissanayake, C. (2006). Social Skills and Problem Behaviours in School Aged Children with High-Functioning Autism and Asperger's Disorder. *Journal of Autism and Developmental Disorders*, 36(8), 1065–1076. doi:10.1007/s10803-006-0139-5

Marco, E. J., Hinkley, L. B. N., Hill, S. S. & Nagarajan, S. (2011). Sensory processing in autism: A review of neuropsychologic findings. *Pediatric Research*, 69(5), 48–54.

Maree, K. & Van der Westhuizen, C. (2010). Planning a research proposal. In K. Maree (Ed.), *First steps in research* (4th ed.), (pp. 24-44). Pretoria: Van Schaik.

Maxwell, J. A. (2012). *A realist approach for Qualitative Research*. Thousand Oaks: SAGE Publications Ltd.

Mazurik-Charles, R. & Stefanou, C. (2010). Using Paraprofessionals to Teach Social Skills to Children with Autism Spectrum Disorders in the General Education Classroom. *Journal of Instructional Psychology*, 37, 2, 161-169.

McMahon, C. M., Vismara, L. A & Solomon, M. (2013). Measuring Changes in Social Behavior During a Social Skills Intervention for Higher-Functioning Children and Adolescents with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 43(8), 43(8): 1843–1856. doi:10.1007/s10803-012-1733-3.

Merriam, S. B. (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco: Jossey-Bass.

Merriam, S. B. (2009). *Qualitative research: a guide to design and implementation*. San Francisco: Jossey-Bass.

Mertens, D. M. & McLaughlin, J. A. (2004). *Research and Evaluation Methods in Special Education*. Thousand Oaks: SAGE Publications Ltd.

Mertens, D. M. (2010). Transformative Mixed Methods Research. *Qualitative Inquiry*, 16(6), 469–474. doi:10.1177/1077800410364612

Morrison, L., Kamps, D., Garcia, J. & Parker, D. (2001). Peer mediation and monitoring strategies to improve initiations and social skills for students with autism. *Journal of Positive Behavior Interventions*, 3(4), 237-250. doi: 10.1177/109830070100300405.

Neuman, W. L. (2011). *Social Research Methods: Qualitative & Quantitative approaches* (7th ed.). Boston: Pearson.

Niditch, L. A., Varela, R. E., Kamps, J. L. & Hill, T. (2012). Exploring the Association Between Cognitive Functioning and Anxiety in Children With Autism Spectrum Disorders: The Role of Social Understanding and Aggression. *Journal of Clinical Child & Adolescent Psychology*, 41(2), 127–137.
doi:10.1080/15374416.2012.651994.

Nieuwenhuis, J. (2010). Introducing qualitative research. In K. Maree (Ed.), *First steps in research* (4th ed.), (pp. 47-68). Pretoria: Van Schaik.

Omeroglu, E., Buyukozturk, S., Aydogan, Y., Cakan, M., Cakmak, E. K., Ozyurek, A., Akduman, G. G., Gunindi, Y., Kutlu, O., Coban, A., Yurt, O., Kogar, O. & Karayol, S., (2015). Determination and Interpretation of the Norm Values of Pre-School Social Skills Rating Scale Teacher Form. *Educational Sciences: Theory and practice*, 15(4), 981-996. doi: 10.12738/estp.2015.4.2514.

Osborne, L. A. & Reed, P. (January 01, 2011). School factors associated with mainstream progress in secondary education for included pupils with Autism Spectrum Disorders. *Research in Autism Spectrum Disorders*, 5, 3, 1253-1263.

Paisley, K. & Smith, J. (2013). One parent's experience of autism spectrum disorder. *Learning Disability Practice*, 16(5), 21–25. doi:10.7748/ldp2013.06.16.5.21.e1432.

Palys, T. (2008). Purposive Sampling. In Lisa M. Given (Ed.), *The Sage Encyclopedia of Qualitative Research Methods*. (pp. 698-699). Thousand Oaks, CA: SAGE Publications, Inc. doi: <http://dx.doi.org/10.4135/9781412963909.n349>.

Patton, M.Q. (2002) *Qualitative Research and Evaluation Methods* (3rd edn.). London: SAGE Publications Ltd.

Ravet, J. (2011). Inclusive/exclusive? Contradictory perspectives on autism and inclusion: the case for an integrative position. *International Journal of Inclusive Education*, 15(6), 667–682. doi:10.1080/13603110903294347

Reynhout, G. & Carter, M. (2006). Social Stories for children with disabilities. *Journal of Autism and Developmental Disorders*, 36(4), 445–69. doi:10.1007/s10803-006-0086-1.

Reynolds, S., Bendixen, R., Lawrence, T., & Lane, S. (2011). A Pilot Study Examining Activity Participation, Sensory Responsiveness, and Competence in Children with High Functioning Autism Spectrum Disorder. *Journal of Autism & Developmental Disorders*, 41(11), 1496–1506. doi:10.1007/s10803-010-1173-x

Rispoli, M., Neely, L., Lang, R., & Ganz, J. (2011). Training paraprofessionals to implement interventions for people autism spectrum disorders : A systematic review, 14(December), 378–388. doi:10.3109/17518423.2011.620577

Robertson, K. (2003). General education teachers' relationship with included students with autism, 33(2).

Rodgers, J., Glod, M., Connolly, B. & McConachie, H. (2012). The relationship between anxiety and repetitive behaviours in autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 42(11), 2404–9. doi:10.1007/s10803-012-1531-y.

Rogers, S. J. (2000). Interventions that facilitate socialization in children with autism. *Journal of Autism and Developmental Disorders*, 30(5), 399–409.

Rotheram-fuller, E. & Mullen, L. M. A. C. (2011). Cognitive-behavioral therapy for children with autism spectrum disorders, 48(3). doi:10.1002/pits

Rumpf, A., Kamp-becker, I., Becker, K., & Kauschke, C. (2012). Research in Developmental Disabilities Narrative competence and internal state language of children with Asperger Syndrome and ADHD. *Research in Developmental Disabilities*, 33(5), 1395–1407. doi:10.1016/j.ridd.2012.03.007

Russel, C. S., Allday, R. A., & Duhon, G. J. (2015). Effects of Increasing Distance of a One-on-One Paraprofessional on Student Engagement, 38(2), 193–210.

Sansosti, J. M. (2012). Inclusion for Students with High-Functioning Autism Spectrum Disorders : Definitions and Decision Making, *49*(10), 917–932. doi:10.1002/pits.

Saulnier, C. A & Klin, A. (2007). Brief report: social and communication abilities and disabilities in higher functioning individuals with autism and Asperger syndrome. *Journal of Autism and Developmental Disorders*, *37*(4), 788–93. doi:10.1007/s10803-006-0288-6.

Schietecatte, I., Roeyers, H. & Warreyn, P. (2012). Exploring the nature of joint attention impairments in young children with autism spectrum disorder: associated social and cognitive skills. *Journal of Autism and Developmental Disorders*, *42*(1), 1–12. doi:10.1007/s10803-011-1209-x.

Silverman, D. (2007). *Doing qualitative research: A practical handbook* (3rd ed.). Thousand Oaks: SAGE Publications Ltd.

Silverman, D. (2013) *Doing qualitative research* (4th ed.). Thousand Oaks: SAGE Publications Ltd.

Simons, H. (2009). *Case Study research in practice*. London: SAGE Publications Ltd.

Soto-Chodiman, R., Pooley, J. A., Cohen, L., & Taylor, M. F. (2012). Students With ASD in Mainstream Primary Education Settings: Teachers' Experiences in Western Australian Classrooms. *Australasian Journal of Special Education*, *36*(02), 97–111. doi:10.1017/jse.2012.10

Slocombe, K. E., Alvarez, I., Branigan, H. P., Jellema, T., Burnett, H. G., Fischer, A. & Levita, L. (2013). Linguistic alignment in adults with and without Asperger's syndrome. *Journal of Autism and Developmental Disorders*, *43*(6), 1423–36. doi:10.1007/s10803-012-1698-2.

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks: SAGE Publications Ltd.

Stichter, J. P., Randolph, J., Gage, N., & Schmidt, C. (2007). A Review of Recommended Social Competency Programs for Students with Autism Spectrum Disorders. *Exceptionality*, 15(4), 219–232. doi:10.1080/09362830701655758

Stichter, J. P., O'Connor, K. V., Herzog, M. J., Lierheimer, K. & McGhee, S. D. (2012). Social competence intervention for elementary students with Aspergers syndrome and high functioning autism. *Journal of Autism and Developmental Disorders*, 42(3), 354–66. doi:10.1007/s10803-011-1249-2.

Sutton, S. K., Burnette, C. P., Mundy, P. C., Meyer, J., Vaughan, A., Sanders, C. & Yale, M. (2005). Resting cortical brain activity and social behavior in higher functioning children with autism. *Journal of Child Psychology and Psychiatry*, 46(2), 211–222. doi:10.1111/j.1469-7610.2004.00341.x.

Symes, W. & Humphrey, N. (2010). Peer-group indicators of social inclusion among pupils with autistic spectrum disorders (ASD) in mainstream secondary schools: A comparative study. *School Psychology International*, 31(5), 478–494. doi:10.1177/0143034310382496.

Syriopoulou-Delli, C. K., Cassimos, D. C., Tripsianis, G. I. & Polychronopoulou, S. a. (2012). Teachers' perceptions regarding the management of children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 42(5), 755–768. doi:10.1007/s10803-011-1309-7.

Trembath, D., Balandin, S., Togher, L. & Stancliffe, R. J. (2009). Peer-mediated teaching and augmentative and alternative communication for preschool-aged children with autism. *Journal of Intellectual & Developmental Disability*, 34(2), 173–86. doi:10.1080/13668250902845210.

Turygin, N. C., Matson, J. L., MacMillan, K., & Konst, M. (2013). The Relationship Between Challenging Behavior and Symptoms of Depression in Intellectually Disabled Adults with and without Autism Spectrum Disorders. *Journal of Developmental and Physical Disabilities*, 25(4), 475–484. doi:10.1007/s10882-012-9321-1

Unianu, E. M. (2012). Teachers' attitudes towards inclusive education. *Procedia - Social and Behavioral Sciences*, 33, 900–904. doi:10.1016/j.sbspro.2012.01.252.

Weinstock, M. (2012). Smooth transitions. *Hospitals and Health Networks*, 86(1), 10.

Whitaker, P. (2004). Fostering communication and shared play between mainstream peers and children with autism : approaches, outcomes and experiences, 31(4).

White, S. W., Oswald, D., Ollendick, T. & Scahill, L. (2009). Anxiety in children and adolescents with autism spectrum disorders. *Clinical Psychology Review*, 29(3), 216–29. doi:10.1016/j.cpr.2009.01.003.

Wong, N., Beidel, D. C., Sarver, D. E. & Sims, V. (2012). Facial emotion recognition in children with high functioning autism and children with social phobia. *Child Psychiatry and Human Development*, 43(5), 775–94. doi:10.1007/s10578-012-0296-z.

Wong, C. & Kasari, C. (2012). Play and joint attention of children with autism in the preschool special education classroom. *Journal of Autism and Developmental Disorders*, 42(10), 2152–61. doi:10.1007/s10803-012-1467-2.

Yin, R. K. (2009). *Case Study research: Design and methods (4th ed)*. Thousand Oaks: SAGE Publications Ltd.

Appendices

Appendix A: Approval Notice



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Approval Notice

Response to Modifications- (New Application)

05-Aug-2015

Van Deventer, Antel A

Proposal#: HS1187/2015

**Title: Teachers' experiences of the social competencies
of a primary school learner with Autism Spectrum Disorder**

Dear Ms Antel Van Deventer,

Your **Response to Modifications - (New Application)** received on **05-Jul-2015**, was reviewed by members of the **Research Ethics Committee: Human Research (Humanities)** via Expedited review procedures on **23-Jul-2015** and was approved.

Please note the following information about your approved research proposal:

Proposal Approval Period: **23-Jul-2015-22-Jul-2016**

General comments:

The REC would like to thank the researcher for her response to the REC's request for modifications. The researcher has responded according to best ethical practices.

The REC would like to suggest that the name and contact details of the registered psychologist be included in the revised consent form for teachers.

Please take note of the general Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

Please remember to use your **proposal number (HS1187/2015)** on any documents or correspondence with the REC concerning your research proposal.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor

the conduct of your research and the consent process.

Also note that a progress report should be submitted to the Committee before the approval period has expired if a continuation is required. The

Committee will then consider the continuation of the project for a further year (if necessary).

This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki and the Guidelines for Ethical

Research: Principles Structures and Processes 2004 (Department of Health). Annually a number of projects may be elected randomly for an external audit.

National Health Research Ethics Committee (NHREC) registration

number REC-050411-032.

We wish you the best as you conduct your research.

If you have any questions or need further help, please contact the REC office at 218089183.

Included Documents:

Supervisor response

REVISED_DESC Checklist

Informed consent form_parent

DESC Checklist form

REVISED_Assent form

REC Application form

Research Proposal

REVISED_Research proposal

Interview schedule

Assent form

Permission letter_WCED

REVISED_Informed consent form_teacher
Informed consent form_teacher

REVISED_Response to Modifications

Sincerely,

Clarissa Gr

aham

REC Coordinator

Research Ethics Committee: Human Research (Humanities)

Appendix B: Approval to Conduct Research



Directorate: Research

Audrey.wyngaard@westerncape.gov.za

tel: +27 021 467 9272

Fax: 0865902282

Private Bag x9114, Cape Town, 8000

wced.wcape.gov.za

REFERENCE: 20150211-43293

ENQUIRIES: Dr A T Wyngaard

Ms Antel van Deventer
Kouteri 4
Welgevonden
Stellenbosch
7600

Dear Ms Antel van Deventer

RESEARCH PROPOSAL: TEACHERS' EXPERIENCES OF THE SOCIAL COMPETENCIES OF A PRIMARY SCHOOL LEARNER WITH AUTISM SPECTRUM DISORDER

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from **01 March 2015 till 30 June 2015**
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
7. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
8. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
9. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
10. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
11. The Department receives a copy of the completed report/dissertation/thesis addressed to:

The Director: Research Services

**Western Cape Education Department
Private Bag X9114
CAPE TOWN
8000**

We wish you success in your research.

Kind regards.

Signed: Dr Audrey T Wyngaard

Directorate: Research

DATE: 12 February 2015

Appendix C: Teacher Consent Form



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UNIVERSITEIT STELLENBOSCH INWILLIGING OM DEEL TE NEEM AAN NAVORSING

Titel van die studie:

Onderwysers se ervarings van die sosiale vaardighede van 'n laerskool leerder op die Outisme Spektrum

U word gevra om deel te neem aan 'n navorsingstudie wat uitgevoer sal word deur Antel van Deventer, M.Ed Opvoedkundige Ondersteuning, van die Opvoedkunde departement aan die Universiteit Stellenbosch. Die bevindinge sal deel vorm van 'n navorsingsprojek wat in die vorm van 'n tesis gefinaliseer sal word. U is as moontlike deelnemer aan die studie gekies omdat u die onderwyser is/was van die leerder wat vir die gevallestudie gebruik gaan word.

1. DOEL VAN DIE STUDIE

Die doel van die studie is om vas te stel wat onderwysers se ervarings is ten opsigte van die sosiale vaardighede van 'n laerskool leerder op die Outisme Spektrum. Die rede hiervoor is om te kan vasstel waar daar sterktes en leemtes is in terme van die fasilitering en opvoeding van die leerder. Daar sal ook bepaal kan word watter sosiale vaardighede aandag benodig en hoe onderwysers die ontwikkeling van genoemde vaardighede moontlik in die toekoms kan bevorder.

2. PROSEDURES

Indien u inwillig om aan die studie deel te neem, vra ons dat u die volgende moet doen:

Daar sal van u verwag word om vrae te beantwoord rakende die leerder se sosiale vaardighede. Dit sal gedoen word deur 'n onderhoud wat min of meer 'n uur sal duur, by 'n plek van u keuse. Die onderhoud sal op band opgeneem word. Hierdie opname sal op my, die navorser se rekenaar bewaar word in 'n rekenaarleêr met 'n wagwoord wat slegs aan my bekend is. 'n Transkripsie van die onderhoud sal op soortgelyke wyse bewaar word en die data sal na 5 jaar vernietig word. U sal toegelaat word om die transkripsie van u onderhoud te lees na afloop van die voltooiing daarvan.

3. MOONTLIKE RISIKO'S EN ONGEMAKLIKHEID

As daar enige ongemaklikheid ervaar word tydens die onderhoud, is daar voorsiening gemaak vir die dienste van 'n sielkundige wat u mag spreek as u 'n behoefte het vir berading. U kan dus weier om enige vrae te beantwoord wat u ongemaklik kan laat voel. Beide die leerder sowel as sy ouers het egter toestemming gegee dat 'n onderhoud met u gevoer mag word.

MOONTLIKE VOORDELE VIR DEELNEMERS EN/OF VIR DIE SAMELEWING

Die navorsing wat gedoen word sal tot voordeel wees vir onderwysers, omrede hulle moontlik tot nuwe insigte sal kom ten opsigte van ander leerders met ASD se sosiale gedrag in 'n skool opset en hoe om dit dalk in die toekoms beter te bestuur. Die feit dat die studie fokus op onderwysers se ervarings van u kind se sosiale vaardighede, sal weer tot voordeel wees van ander leerders op die Outisme spektrum omdat daar meer gefokus kan word op die ontwikkeling van sekere vaardighede deur middel van toekomstige onderwyser opleiding en/of werkswinkels.

4. VERGOEDING VIR DEELNAME

Daar is geen vergoeding vir deelname aan die studie nie.

5. VERTROULIKHEID

Enige inligting wat deur middel van die navorsing verkry word en wat met u in verband gebring kan word, sal vertroulik bly en slegs met u toestemming bekend gemaak word of soos deur die wet vereis. Vertroulikheid sal gehandhaaf word deur middel van die stoor van stemopnames en die transkripsies daarvan, in 'n rekenaarleër wat deur middel van 'n wagwoord beskerm sal word. Die wagwoord sal slegs aan my, as navorser, en my toesighouer bekend wees.

Na afloop van die navorsingsproses, sal die bevindinge van die navorsingstesis aan die skool beskikbaar gestel word. Die rede hiervoor is met die oog op toekomstige opleiding en verbetering van onderwysers se kennis aangaande leerders wat op die Outisme spektrum is.

Indien u dit verkies, sal 'n kopie van die stemopname aan u gegee word, sodat u dit kan hersien. Transkripsies van die stemopnames sal gedoen word en daarna sal die opnames skoongevee word.

6. DEELNAME EN ONTTREKKING

U kan self besluit of u aan die studie wil deelneem of nie. Indien u inwillig om aan die studie deel te neem, kan u te eniger tyd u daaraan onttrek sonder enige nadelige gevolge. U kan ook weier om op bepaalde vrae te antwoord, maar steeds aan die studie deelneem. Die ondersoeker kan u aan die studie onttrek indien omstandighede dit noodsaaklik maak.

7. IDENTIFIKASIE VAN ONDERSOEKERS

Indien u enige vrae of besorgdheid omtrent die navorsing het, staan dit u vry om in verbinding te tree met Antel van Deventer [antelvd@gmail.com; 082 587 2697] of haar toesighouer, Mev Lynette Collair [lyncol@sun.ac.za; 021 8082306].

8. REGTE VAN DEELNEMERS

U kan te eniger tyd u inwilliging terugtrek en u deelname beëindig, sonder enige nadelige gevolge vir u. Deur deel te neem aan die navorsing doen u geensins afstand van enige wetlike regte, eise of regsmiddel nie. Indien u vrae het oor u regte as deelnemer by navorsing, skakel met Me Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] van die Afdeling Navorsingsontwikkeling van die Universiteit van Stellenbosch.

VERKLARING DEUR DEELNEMER

Die bostaande inligting is aan my, _____, gegee en verduidelik deur Antel van Deventerin Afrikaans en ek isdié taal magtig. Ek is die geleentheid gebied om vrae te stel en my vrae is tot my bevrediging beantwoord.

Ek willig hiermee vrywillig in om deel te neem aan die studie. 'n Afskrif van hierdie vorm is aan my gegee.

Naam van deelnemer

Handtekening van deelnemer

Datum

VERKLARING DEUR ONDERSOEKER

Ek verklaar dat ek die inligting in hierdie dokument vervat verduidelik het aan _____. Sy is aangemoedig en oorgenoeg tyd gegee om vrae aan my te stel. Dié gesprek is in Afrikaans gevoer en geen vertaler is gebruik nie.

Handtekening van ondersoeker

Datum

Appendix D: Parent Consent Form



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvenoot • your knowledge partner

UNIVERSITEIT STELLENBOSCH INWILLIGING OM DEEL TE NEEM AAN NAVORSING

Onderwysers se ervarings van die sosiale vaardighede van 'n laerskool leerder op die Outisme Spektrum

U word gevra om deel te neem aan 'n navorsingstudie wat uitgevoer sal word deur Antel van Deventer, M.Ed Opvoedkundige Ondersteuning, van die Opvoedkunde departement aan die Universiteit Stellenbosch. Die resultate deel sal word van 'n navorsingstesis. U is as moontlike deelnemer aan die studie gekies omdat u die ouers is van die leerder wat vir die gevallestudie gebruik gaan word.

1. DOEL VAN DIE STUDIE

Die doel van die studie is om vas te stel wat onderwysers se ervarings is ten opsigte van die sosiale vaardighede van 'n laerskool leerder op die Outisme Spektrum. Die rede hiervoor is om te kan vasstel waar daar moontlike vrese of ongemaklikhede is in terme van die fasilitering en opvoeding van die leerder. Daar sal ook ten einde bepaal kan word watter sosiale vaardighede aandag benodig en hoe onderwysers dit moontlik in die toekoms kan benader.

2. PROSEDURES

Indien u inwillig om aan die studie deel te neem, vra ons dat u die volgende moet doen:

Daar sal van u verwag word om vrae te beantwoord rakende u kind se sosiale vaardighede. Dit sal gedoen word deur 'n onderhoud wat min of meer 'n uur sal duur, by 'n plek van u keuse. 'n Bandopname van die onderhoud sal gevoer word. Hierdie opname sal op my, die navorser se rekenaar bewaar word in 'n rekenaarleër met 'n wagwoord wat slegs aan my bekend is. Verder word daar ook u toestemming gevra om toegang tot u kind se cumulatiewe kaart te verkry. Die rede hiervoor is om te bepaal wanneer u kind die eerste keer gediagnoseer is en om verskillende onderwysers se ervarings van u kind se sosiale vaardighede op skrif te kan sien. Ook hierdie cumulatiewe verslag sal veilig bewaar word in 'n kluis waar toegang slegs deur my verkry kan word.

3. MOONTLIKE RISIKO'S EN ONGEMAKLIKHEID

Nie van toepassing.

4. MOONTLIKE VOORDELE VIR DEELNEMERS EN/OF VIR DIE SAMELEWING

Die navorsing wat gedoen word sal tot voordeel wees van u as ouers, omrede u moontlik tot nuwe insigte sal kom in verband met u kind se sosiale gedrag in 'n skool opset. Die feit dat die studie fokus

op onderwysers se ervarings van u kind se sosiale vaardighede, sal weer tot voordeel wees van ander leerders op die Outisme spektrum omrede daar meer gefokus sal word op die ontwikkeling van sekere vaardighede deur middel van toekomstige onderwyser opleiding en/of werkswinkels.

5. VERGOEDING VIR DEELNAME

Daar is geen vergoeding vir deelname aan die studie nie.

6. VERTROULIKHEID

Enige inligting wat deur middel van die navorsing verkry word en wat met u in verband gebring kan word, sal vertroulik bly en slegs met u toestemming bekend gemaak word of soos deur die wet vereis. Vertroulikheid sal gehandhaaf word deur middel van die stoor van stemopnames in `n rekenaarleër wat deur middel van `n wagwoord beskerm sal word. Die wagwoord sal slegs aan my, as navorser, en my toesighouer bekend wees.

Na afloop van die navorsingsproses, sal die navorsingstesis aan die skool beskikbaar gestel word. Die rede hiervoor is met die oog op toekomstige opleiding en verbetering van onderwysers se kennis aangaande leerders wat op die Outisme spektrum is.

Indien u dit verkies, sal `n kopie van die stemopname aan u gegee word, sodat u dit kan hersien. Transkripsies van die stemopnames sal gedoen word en daarna sal die opnames skoongegee word.

7. DEELNAME EN ONTTREKING

U kan self besluit of u aan die studie wil deelneem of nie. Indien u inwillig om aan die studie deel te neem, kan u te eniger tyd u daaraan onttrek sonder enige nadelige gevolge. U kan ook weier om op bepaalde vrae te antwoord, maar steeds aan die studie deelneem. Die ondersoeker kan u aan die studie onttrek indien omstandighede dit noodsaaklik maak.

8. IDENTIFIKASIE VAN ONDERSOEKERS

Indien u enige vrae of besorgdheid omtrent die navorsing het, staan dit u vry om in verbinding te tree met Antel van Deventer [antelvd@gmail.com; 082 587 2697] of haar toesighouer, Mev Lynette Collair [lyncol@sun.ac.za; 021 715 1800].

9. REGTE VAN DEELNEMERS

U kan te eniger tyd u inwilliging terugtrek en u deelname beëindig, sonder enige nadelige gevolge vir u. Deur deel te neem aan die navorsing doen u geensins afstand van enige wetlike regte, eise of regsmiddel nie. Indien u vrae het oor u regte as deelnemer by navorsing, skakel met Me Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] van die Afdeling Navorsingsontwikkeling van die Universiteit van Stellenbosch.

VERKLARING DEUR DEELNEMER OF SY/HAAR REGSVERTEENWOORDIGER

Die bostaande inligting is aan my, _____, gegee en verduidelik deur Antel van Deventer in Afrikaans en ek isdié taal magtig. Ek is die geleentheid gebied om vrae te stel en my vrae is tot my bevrediging beantwoord.

Ek willig hiermee vrywillig in om deel te neem aan die studie. 'n Afskrif van hierdie vorm is aan my gegee.

Naam van deelnemer

Naam van regsverteenvoordiger (indien van toepassing)

Handtekening van deelnemer/of regsverteenvoordiger Datum

VERKLARING DEUR ONDERSOEKER

Ek verklaar dat ek die inligting in hierdie dokument vervat verduidelik het aan Marcelle Mullet. Sy is aangemoedig en oorgenoeg tyd gegee om vrae aan my te stel. Dié gesprek is in Afrikaans gevoer en geen vertaler is gebruik nie.

Handtekening van ondersoeker

Datum

Goedgekeur Subkomitee A 25 Oktober 2004

Appendix E: Information and Ascent Form



INLIGTINGSTUK EN TOESTEMMINGSVORM VIR DEELNEMERS



TITEL VAN NAVORSINGSPROJEK: Onderwysers se ervarings van die sosiale vaardighede van `n laerskool leerder met verskillende leerbehoefte.

NAVORSER(S): Antel van Deventer

ADRES: Kouteri 4
Welgevonden
Stellenbosch
7600

KONTAKNOMMER: 082 587 2697

Wat is navorsing?

Deur navorsing leer ons hoe dinge (en mense) werk. Ons gebruik navorsingsprojekte of -studies om meer oor opvoedkundige uitdagings uit te vind. Navorsing leer ons ook hoe om kinders met verskillende leerbehoefte beter te help.

Waarom gaan hierdie navorsingsprojek?

Die navorsingsprojek gaan oor onderwysers se ervarings ten opsigte van die sosiale vaardighede van `n laerskool leerder wie gediagnoseer is met verskillende leerbehoefte. Die rede hiervoor is om te uit te vind hoe hulle dit ervaar het om die leerder se leerbehoefte aan te spreek en vir hom klas te gee.

Hoekom vra julle my om aan hierdie navorsingsprojek deel te neem?

Die rede hoekom ons u vra vir toestemming is omdat u die fokus van die gesprekke met u onderwysers sal wees. Die gesprekke sal gaan oor u onderwysers se herinneringe van u toe u 'n leerder in hul klas was.

Tweedens wil ek by u uitvind of u sal instem dat ons toegang kan kry tot u skool kumulatiewe verslagkaart. U sal onder geen omstandighede genader word met vrae of observasie nie.

Wie doen die navorsing?

My naam is Antel van Deventer en ek is 'n juffrou by 'n laerskool. Ek is besig met my meestersgraad in opvoedkundige ondersteuning. Dit beteken dat ek die navorsing doen om onderwysers en leerders in die toekoms te kan ondersteun, veral ten opsigte van outisme in hoofstroom laerskole.

Wat sal in hierdie studie met my gebeur?

Soos reeds genoem sal u onder geen omstandighede genader word met vrae of observasie nie. Tydens hierdie studie het ons slegs u toestemming nodig omdat die fokus van die studie te wees en om toegang te verkry tot u kumulatiewe verslagkaart.

Kan enigiets fout gaan?

Daar is niks wat kan fout gaan nie.

Watter goeie dinge kan in die studie met my gebeur?

Die navorsing wat gedoen gaan word en die bevindinge na afloop van die studie kan tot voordeel wees van ander leerders wat ook spesiale leerbehoefte het.

Sal enigiemand weet ek neem deel?

U sal deur die hele studie anoniem bly, wat beteken dat u naam nie in enige skrywe oor die studie sal verskyn nie, U onderwysers sal ook anoniem bly. Alhoewel u kumulatiewe verslagkaart gebruik gaan word vir inligting, gaan u identiteit nooit bekend gemaak word nie en sal niemand anders behalwe die navorser en u ouers toegang hê tot die verslag nie. Niemand sal met ander woorde weet dat u die fokus van die studie is nie.



Met wie kan ek oor die studie praat?

U kan met my of my studieleier praat as u enige vrae of bekommernisse het. My nommer is: 082 587 26 97

My studieleier se naam is Lynette Collair en haar telefoonnommer is:

021 8082304

Wat gebeur as ek nie wil deelneem nie?

Dit is u eie keuse of u wil deelneem en u kan enige tyd onttrek aan die studie. Daar sal geen straf wees nie en u sal ook nie in die moeilikheid beland nie.

Verstaan jy hierdie navorsingstudie, en stem u in om die fokus van die studie te wees??

 JA NEE

Het die navorser ál jou vrae beantwoord?

 JA NEE

Verstaan jy dat jy kan ophou deelneem net wanneer jy wil?

 JA NEE

Handtekening van kind

Datum

Appendix F: Interview Guide

Interview guide (teachers)

1. Biographical/Personal information (teacher):
 - 1.1 Number of years teaching and age
 - 1.2 Experience regarding learners with ASD/ other disabilities

2. Classroom experience
 - 2.1 Reaction towards placement of a learner with ASD in your classroom.
 - 2.2 Preparation or reading done beforehand about ASD
 - 2.3 Social interaction of the learner with other learners/teachers
 - 2.4 Taking part in social activities
 - 2.5 Social competencies of the learner and behavioral difficulties experienced
 - 2.6 Reaction of other learners/teachers towards the learner
 - 2.7 Strategies used to develop social competencies

Appendix G: Example of data analysis into units of meaning

Interview with Participant 1 (Grade 1 teacher)

R: Researcher

P1: Participant

*name replaced with pseudonym

Transcript	Codes
<p>R: Ons kan begin met jou biografiese inligting, jou persoonlike inligting. Hoeveel jare het jy al ervaring, of gee jy al skool?</p> <p>P1: Dit is nou die 17e jaar.</p> <p>R: En uhm toe, toe die seuntjie, of by jou in die klas was, hoeveel, toe was dit, hy was toe in graad 1?</p> <p>P1: Ja, hy was in graad 1 so dit was seker dan nou nege jaar terug. Of, ek het toe nege jaar, nee 17 minus ag, so dit is ag.ja nege jaar.</p> <p>R: Het jy al vantevore voordat hy in jou klas was enige ander ervaring gehad met kinders wat ASD het?</p> <p>P1: Wat baie outisties is? Ek het nie in my klas nie, maar my kollega het gehad. Ja, maar sy was briljant slim. Sy het vinnig haar werk klaargemaak, sy't glad niks gesukkel nie. As sy dan biblioteek toe, sy't boeke en boeke gelees. Die hele skool het haar geken.</p> <p>R: Regtig? O was dit 'n dogtertjie gewees?</p> <p>P1: Ja, baie oulik! Maar sy was ook Asperger en ook op die spektrum.</p> <p>R: Uhm, wat was jou reaksie gewees toe jy gehoor het dat jy gaan 'n seuntjie kry wat ASD het, in jou klaskamer?</p> <p>P1: Ek het maar lees, gelees daaroor en sy mamma het voor die jaar begin het sy ma met my kom praat en vertel. En van die fasiliteerder vertel en gese en moenie stres nie, die fasiliteerder is opgelei om met dit te kan werk.</p> <p>R: O okay, so jy was nie gestres nie?</p> <p>P1: Mmm uh, bietjie meer gestres oor die fasiliteerder in my klas..Maar sy't toe, hulle het toe, omdat hy nie so erg gesukkel het nie, sy goeters was nou maar meer sosiale</p>	<p>Demographic details</p> <p>17 years teaching</p> <p>Not child with ASD in own class before this boy</p> <p>Read about it Mother gave information Told about facilitator</p> <p>Stressed about facilitator in classroom</p> <p>He didn't struggle so much with academics</p>

<p>goeters. En die ander dogtertjie het 'n leerprobleem gehad en toe het hulle mos besluit om die fasiliteerder te deel. So gelukkig was sy baie besig dat sy nou nie vir groot oomblikke gesit het en niks gedoen het nie. So sy was die heelyd besig. As sy nie die een gehelp het nie, dan het sy die ander een gehelp. Sy was maar meestal vir hom, vir die seuntjie moes sy maar net die heelyd help dat sy aandag by sy werk is. Dis nie dat hy nie die goeters kon doen nie..Sy moes net kyk dat dit wat van hom verwag word, dat hy dit doen.</p> <p>R: Okay, so hy't nie gesukkel nie?</p> <p>P1: Hy't nie, nee hy't nie leerprobleme nie, hy was, hy het heelyd Engels gepraat en baie keer het sy vir hom die goedjies dat hy dit net in Afrikaans sit, want dan wil hy iets in Engels skryf, dan sy sy nee, kom se dit gou in Afrikaans, en dan skryf ons dit in Afrikaans. En veral met klanke, as ek nou reg onthou het hy 'n bietjie met sy klanke en lees, hy het gehou van lees, maar die klanke was, het ons maar gewerk aan.</p> <p>R: Soos jy gese het, jy het nou al gese jy het voorberei, jy het bietjie gelees voor die tyd daarvoor, het jy enige artikels gelees of navorsing gedoen?</p> <p>P1: Ja ek het meestal artikels, daai tyd was die internet nog nie by ons so soos dit vandag is nie. Jy kon nie gaan <i>Google</i> nie. So ek het maar by my kollega wat saam met my gewerk het, wat graad 1 gegee het daai tyd, wat toe die outistiese kind gehad het..Sy's nou al, sjoe ek weet nie hoe oud is sy nou nie, ek dink sy is al uit die skool uit nou al. Toe het sy vir my haar artikels gegee, die mamma het ook vir my gegee wat sy al oor die jare bymekaar gemaak het, want toe is dit ook nog nie so lank, ek dink hy is eers in graad R is hy ge.. gediagnoseer, of hoe sê mens? Met sy uhm, met sy Aspergers. En toe het sy, toe was sy ook nogals op dit, die ma. So sy het baie vir my goeters gesoek en vir my kom gee en baie gekontak! Sy, ek wil amper se elke dag, elke tweede dag het sy kom vra hoe gaan dit met hom.</p> <p>R: Het dit jou gepla?</p> <p>P1: Aan die begin was dit vreemd. Want soos as hulle sport het dan moet ek gou vinnig sport toe gaan en dan wil sy net gou hoor hoe was die dag. En dan het ek baie keer maar gereel dat sy net met die fasiliteerders praat, en dit het op daai stadium het die fasiliteerder tot twaalfuur gebly, sy het nie tot aan die einde van die dag So toe het ons later 'n boekie gekry. Dan het sy elke dag in 'n boekie, dan het die fasiliteerder elke dag in 'n boekie</p>	<p>Struggled to keep attention.</p> <p>It's not that he couldn't do the work. Just had to be reminded.</p> <p>He didn't have learning problems.</p> <p>He spoke English, even though his home language is Afrikaans and he was being taught in Afrikaans.</p> <p>He struggled with his phonics and reading, even though he liked reading.</p> <p>Mother contacted the teacher regularly – almost every day.</p> <p>Teacher found it weird. They got a book for facilitator to write about the boy's day.</p>
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<p>presies geskryf uhm met wie hy gespeel het, wat hy gedoen het..</p> <p>R: Ag dis goed!</p> <p>P1: Pouse hoe sy hom gehelp het , uhm, was daar enige iets wat gebeur het pouse wat nou snaaks, wat hom bietjie dalk ontstel het, hoe het hy gereageer by LO, want daai tyd het ons mos nog LO gedoen. So sy het so boekie, toe het sy dagboek begin hou, dit het nogal baie tyd gespaar..Dan hoef mens nie so die heelyd te praat nie.</p> <p>R: Wat was sy sosiale interaksie teenoor ander die ander leerders en onderwysers, of veral teenoor jou as onderwyser?</p> <p>P1: Kyk hy het ander goeters gepraat as waaroor die kinders gepraat het. Hy sal soos by naweeknuus sal hy in sy verbeelding, hy was verskriklik in sy verbeelding gelewe, en as ek nou reg onthou, ek weet nie of dit rockets of wat dit was nie, wat het ons uhm.. dit was meer space, alles in die space. So dan het hulle, partykeer het die kinders snaaks na hom gekyk en gelag vir die goed wat hy gepraat het.. En dan het hy sy gesig ook so snaaks getrek. So partykeer was hy bietjie anders.. Ek wil bietjie sê hy was bietjie anderste as die ander kinders in die klas, maar hulle het, al die onderwyser het hom geken, want as hy iemand raakgehoop het het hy geselsie aangeknoop met almal.. Hy het altyd geloop, veral die onderwysers, veral ouer mense, en dan het hy altyd so geloop, ek onthou hy het altyd so geloop met sy hande in sy sakke en dan het hy sy kop ook so snaaks gemaak, en dan het hy altyd vir die, op daai stadium was onsnog net, as ek reg onthou, nog net twee graad 1 klasse.. En dan het hy altyd vir die ander klas se juffrou, hy het 'n spesiale band met haar ook gehad.. Seker omdat sy ook met so 'n kind gewerk het vantevore, het sy geweet hoe om met hom te inter, ek wil amper se interact, en uhm, maar hy, hy't nie baie maatjies gehad as ek reg onthou nie. En ek weet, ek, ek, ek kan nie onthou of hy op daai stadium by nasorg was nie, ek weet op 'n later stadium was hy by nasorg, want sy mamma was mos later was sy die nasorg juffrou. So hy moes in die middae moes hy toe nasorg toe gaan. En daar het sy ma nogals moeite gedoen dat hy met maatjies net moet speel en interact, pouses het die fasiliteerder vir my gese hy was maar, hy het maar heelyd met die dogtertjie gespeel saam met wie hy altyd in die groepie gesit het en saam met wie hy die fasiliteerder gedeel het en as ek reg onthou het hy nie vreeslik bal speletjie en sulke goed gespeel nie. Hy't baie keer het hy goedjies by hom gehad. Uhm speelgoetertjies</p>	<p>He pulled strange faces.</p> <p>He was a bit different sometimes.</p> <p>He loved space and rockets</p> <p>He lived in his imagination.</p> <p>His peers laughed at his behaviour.</p> <p>He made conversation with all the teachers.</p> <p>He didn't have many friends.</p> <p>Played with girl who was with him at the facilitator</p> <p>Mother worked at school's aftercare – made an effort with friends</p>
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<p>wat hy saamgebring het skool toe. Ek kan nou nie reg onthou wat dit was, of dit lego of dinosourisse, iets se amper vir my dit was baie dinosourisse wat hy altyd by hom gehad het en dan het hy altyd met die goedjies gespeel.</p> <p>R: So hy't nie regtig deelgeneem aan balspele en sosiale aktiwiteite wat hulle gedoen het, hy't nie regtig dit gedoen nie?</p> <p>P1: Uh hu. Sy moes, die fasiliteerder moes altyd vir hom ietsie gee, as sy die bal die slag gebring het of as hy iets gebring het, moes sy heeltyd kyk dat hy met 'n klomp maatjies speel want hy het nie regtig, hy't meer met net hierdie goedjies by hom gespeel.</p> <p>R: As u nou kan onthou? Was daar enige tipe gedragsprobleme of snaakse goed wat hy gedoen het.</p> <p>P1: Ek onthou die ore wat hy toegedruk het en partykeer as die kinders na pouse ingestap het en hulle gaan sit en skarrel so, dan het hy ook so gesit en geskree, "Haaaaaahhh." Dan het hy sulke geluide gemaak, want dit was te raserig vir hom. Dan het die fasiliteerder partykeer met hom net so entjie, ek wil amper sê so draaitjie gaan stap. Laat hy net eers rustig raak. Hulle het papiertjies opgetel of iets en dan het sy hom ingebring as alles nou weer rustig is. En ek onthou as hy iets nie reggekry nie dan het hy so geha... dis nie dat hy woede gekry het nie, dis asof hy net so frustreerd geraak het (sê dit in die stemtoon van die seun wat frustreerd is). Dan het hy ook so snaaks gemaak, ek weet hy het sy oë ook so groot gemaak. Dan het die fasiliteerder hom ook gevat en dan het hulle partykeer op die rugbypale gestap dat hy net lekker diep asem haal. En so terwyl hulle so gestap het, het sy hom altyd bietjie moed ingepraat en vir hom gesê, "Luister hier, dit was nie so erg nie. Uhm, kom ons probeer weer. Kom ons vee uit en kom ons skryf gou gou weer." Sy was baie oulik met hom, sy was rêrig oulik. En sy was die hele jaar by hom, dis nie dat hy 'n onderbreking gehad het nie. En in die saal het hulle, dan maak hulle mos so (stamp met voete) met hulle voete. Dit het hom heeltemal uitgefreak. Soos sy het altyd met hom so half aan die einde van die ry gesit. Sy't saam met hom saal toe gegaan alles, alles saam met hom gedoen. As sy huis toe gegaan het in tweede pouse dan was hy baie afhanklik van die dogtertjie.. onthou dit was nou sy eerste formele skooljaar so dit was, ek weet nie of dit dalk sy sekuriteit was nie. En sy't ook later baie afhanklik geraak van hom, die dogtertjie. Ek dink hulle was saam in graad 2 en in graad 3, maar ek weet in graad 2 het hy 'n nuwe</p>	<p>He always played with dinosaurs.</p> <p>Didn't like playing in a group. Ex. With a ball.</p> <p>Played on his own with his toys.</p> <p>Hands on ears when noisy</p> <p>Screamed and made noises – classroom too noisy for him</p> <p>The facilitator took him for a walk to calm him.</p> <p>Picked up papers or something</p> <p>When he couldn't do something he got frustrated</p> <p>Made his eyes big</p> <p>Facilitator encouraged him and talked in a gentle way</p> <p>Freaked out when kids stomped their feet in the hall.</p> <p>Facilitator would sit with him at the end of the row.</p> <p>Very dependent on the girl when facilitator went home</p>
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<p>fasiliteerder gekry, sy's nie saam met hom graad 2 toe nie. Sy't net sy een jaar, sy't gesê dis nou genoeg.</p> <p>R: Hoe sal u sê was die reaksie van die ander leerders teenoor hom?</p> <p>P1: Hulle het partykeer vir hom gelag, ek onthou hulle het partykeer vir hom gelag, want hy het partykeer vreemde goed gepraat, sy gesig snaaks getrek en daai goeters waaroor hy gepraat het, het hulle nou nie eintlik, dit was nou nie vir hulle so interessant soos wat dit vir hom was nie. En hy het altyd, wat vir my baie snaaks was is hy het altyd, hy wou altyd kom voor staan het. En ek het dit gelees dat dit nie, dat hulle nie hou van voor staan nie. En hy't gehou van voor staan en dan het hy altyd daai goeters kom vertel, maar net naweek nuus. En dan is dit hierdie fantasie goed wat hy vertel het, dan lag die kinders partykeer, want hulle weet dis mos nou nie waar nie. Maar hulle sê mos `n kind tussen 5 en 6 sukkel om te onderskei tussen fantasie en werklikheid. Of hy het `n fliek die naweek gekyk dat dit hom getrigger het om daaaaar te dink. Dan het hy dit kom vertel en dan is die ander kinders so half (giggel soos kinders).</p> <p>R: En dan, wat doen hy dan?</p> <p>P1: Ag nee wat dit het hom glad nie geaffekteer nie, glad nie, glad nie. Ek weet nie of hy later skaam geraak het nie.</p> <p>R: Behalwe vir die fasiliteerder wat by hom was, het u enige strategieë gehad wat u gebruik het in die klas om sy sosiale vaardighede te help ontwikkel?</p> <p>P1: Die fasiliteerder het altyd ingegryp, sy was altyd naby. As hulle op die mat sit, het sy by hom gesit of net agter hom op `n stoel gesit. O, ek onthou nou net iets interessant wat hy altyd gedoen het. Hy het niks gehou van papiere plak nie. Op daai stadium het ons mos begin met assesseringstakies en hulle het `n assesseringsboek gehad. Dan moes alles nou kleiner gesny word en dan moes hulle dit nou bladsy vir bladsy inplak. En ek weet ek het altyd, of die dag voor die tyd al sy goed in sy boek geplak of ek moes eers.. ek moes dit altyd vir hom doen of die fasiliteerder moes dit doen. Hy wou glad nie goed in sy boek plak nie. Ek weet nie of dit was omdat hy gegril het en of dit net was omdat hy dit nie reg kon meet en pas om dit in sy boek te kon kry nie. En dan het die fasiliteerder later ook ingegryp, as sy sien die papiere word uitgedeel dan plak sy dit sommer dadelik in. So ek weet nie of dit `n vrees was wat hy gehad het of.. dis `n vreemde, vreemde ding wat hy gedoen het. As hy dit ook</p>	<p>Peers sometimes laughed at him, because he talked about strange things and made strange faces.</p> <p>They weren't really interested in the things he had to say.</p> <p>Weekend news: He would love to stand in front and talk about fantasy stuff.</p> <p>Facilitator was always there.</p> <p>Didn't like to paste papers in his books.</p> <p>Teacher stepped in and cut all his papers smaller and pasted it in his book beforehand.</p> <p>If he didn't manage to get it right he would make noises again.</p>
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<p>nie ingeplak kry nie dan was dit vir hom net te erg en dan het hy half soos begin geluide maak. Dis nie dat hy snaakse geluide gemaak nie maar hy't so frustreerde, "Uuuuuuuuuuuuuuuuuuhhhh" gemaak. Daai tyd was daar nie regtig, speltherapie en daardie goed was nie so groot soos dit nou is nie. Daar was nie `n terapeut by die skool nie. As mens nou terugkyk dan dink mens, mens moes eintlik vir hom iets gekry het om te help om sy gevoelens te kon ontlaai. Speltherapie sou dalk in graad 1 vir hom baie oulik gewees het.</p>	
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Appendix H: Example of data analysis: Cumulative report

Cumulative report

Grade 1

Transcript	Codes
<p>Leerder se karakter-/emosionele-/sosiale ontwikkeling: Ben* weet nie altyd hoe om in `n groep te speel nie. Eet grootste gedeelte van die pouse en gesels met fasiliteerder en assistente.</p> <p>Klaskamerverhouding/dissipline/werktrots/taakvoltooiing/huiswerk: Gebruik medikasie om te fokus en fasiliteerder help daarmee. Dikwels afleibaar en dromerig. Werk baie netjies, maar rustig.</p> <p>Leerder se gesondheid: Baie afwesig. Bly gereeld by die huis en manipuleer ma.</p> <p>Leerders se belangstellings/aktiwiteite: Tegnologie. Bou gereeld robotte en geboue. Ontwerp graag "inventions."</p> <p>Ekstra hulp: didakties/ RO/ Arbeids-/ Spraak-/ Fisioterapie/ Sielkundige hulp/ Ander Arbeidsterapie, leerondersteuning en fasiliteerder</p>	<p>Doesn't know how to play in a group.</p> <p>Eat most of break and talked to facilitator or assistants</p> <p>Use medication for focus Facilitator helped with attention deficits and dreaminess. Work very neat, but slow.</p> <p>Absent a lot.</p> <p>Technology is his interest. Builds robots and buildings. Design inventions</p> <p>Occupational therapy, learning support, facilitator</p>

Appendix I: Example of data analysis into themes

Participant 1	
Grade 1 teacher 17 years teaching experience Female	
Codes (Themes and subthemes)	Units of meaning
1. Teacher knowledge (TK) 1.1 Prior knowledge(PK)	Not child with ASD in own class before this boy
1.2 Acquired Knowledge (AK)	Read about it
1.3 Challenges (C)	Teacher stressed about facilitator in classroom
2. Role of parents (PR)	Mother gave information Mother contacted the teacher regularly – almost every day. Teacher found it weird. They got a book for facilitator to write about the boy's day. Mother worked at school's aftercare – made an effort with friends
3. Academic Progress (AP) 3.1 Academic support (AS) 3.1.1 Facilitator (F)	Facilitator had to make sure he keep attention to his work Facilitator helped with attention deficits and dreaminess.
3.1.1.1 Strategies (FS)	The facilitator took him for a walk to calm him. Picked up papers or something Facilitator encouraged him and talked in a gentle way Facilitator would sit with him at the end of the row in the hall. Facilitator was always there.
3.1.2 Attention difficulties (AD)	Work very neat, but slow. It's not that he couldn't do the work. Just had to be reminded.
3.1.2.1 Medication (M)	Use medication for focus
3.1.3 Learning support (LS)	Went to learning support in school
3.1.4 Occup. Therapy (OT)	Went to occupational therapist in school
3.2 Academic achievement (AA)	He didn't struggle so much with academics He didn't have learning problems. He spoke English, even though his home language is Afrikaans and he was being taught in Afrikaans. He struggled with his phonics and reading,

	<p>even though he liked to read. Didn't like to paste papers in his books.</p>
<p>4. ASD Features (AF) 4.1 Behaviours (B)</p>	<p>He pulled strange faces. He was a bit different sometimes. Hands on ears when noisy Screamed and made noises – classroom too noisy for him Made his eyes big Freaked out when kids stomped their feet in the hall.</p>
4.2 Specific interests	<p>He loved space and rockets He lived in his imagination. He always played with dinosaurs. Weekend news: He would love to stand in front and talk about fantasy stuff. Technology is his interest. Builds robots and buildings. Design inventions</p>
4.3 Routine	<p>When he couldn't do something he got frustrated If he didn't manage to get something right he would make noises again.</p>
<p>5. Social interaction (SI) 5.1 Peers (P) 5.1.1 <i>Inclusion in group activities</i></p>	
5.1.2 <i>Peers' reactions to atypical behaviour</i>	<p>His peers laughed at his behaviour. Peers sometimes laughed at him, because he talked about strange things and made strange faces. They weren't really interested in the things he had to say.</p>
5.1.3 <i>Learner with ASD's Interaction with peers</i>	<p>He didn't have many friends. Played with girl who was with him at the facilitator Played on his own with his toys. Very dependent on the girl when facilitator went home</p>
5.2 Adults (A)	<p>He made conversation with all the teachers. Eat most of break and talked to facilitator or assistants</p>
5.3 Teacher strategies (TS)	<p>Teacher stepped in and cut all his papers smaller and pasted it in his book beforehand. Facilitator was always there.</p>
5.4 Group activities (GA)	<p>Didn't like playing in a group. Ex. With a</p>

	ball. Doesn't know how to play in a group.
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