

**A QUALITATIVE COLLECTIVE CASE STUDY EXPLORING THE EXPERIENCES
OF PARTICULAR ASPERGER SYNDROME LEARNERS IN INCLUSIVE
EDUCATION SETTINGS.**

LAUREN BURKE

204501956

Declaration

I, Lauren Burke declare that

- i. The research reported in this dissertation, except where otherwise indicated, is my original work.
- ii. This dissertation/thesis has not been submitted for any degree or examination at any other university.
- iii. This dissertation/thesis does not contain other person's data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
- iv. This dissertation/thesis does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:
 - a) Their words have been re-written but the general information attributed to them has been referenced;
 - b) Where their words have been used, their writing has been placed inside quotation marks, and referenced.
- v. Where I have reproduced a publication of which I am an author, co-author or editor, I have indicated in detail which part of the publication was actually written by myself alone and have fully referenced such publications.
- vi. This dissertation/thesis does not contain text, graphics or tables copied and pasted from the internet, unless specifically acknowledged, and the source being detailed in the dissertation and the References sections.

Signed:

Submitted in partial (for coursework) fulfillment of the requirements of the degree of Master of Social Science (Educational Psychology) in the School of Psychology, University of KwaZulu-Natal, Pietermaritzburg.

As the candidate's Supervisor I have approved this dissertation/thesis for submission:

Signed: 

Name: C. Mitchell

Acknowledgements

I would like to thank my supervisor Carol Mitchell for all her professional help and advice with this project. I extend my thanks to the schools who approached the parents of the learners with Asperger Syndrome in the inclusive education setting to provide them with the information about this research. I would also like to thank the parents of the Asperger's learners and especially the Asperger's learners themselves for giving their consent to participate in this research and for providing such in-depth information about their experiences of inclusive education.

Abstract

The purpose of this study was to explore the experiences of particular Asperger's learners in inclusive education settings. Five learners who had all been diagnosed with Asperger Syndrome (AS) and who were between the ages of eight and 13 years were interviewed for this research. Each of the participants was interviewed once using a semi-structured interview schedule and was also asked to participate in three projective drawing tasks. Results indicated that the AS learners' experiences of inclusion were dependant on four main factors: the pervasiveness of their special interests; their social experiences; the support that they received; and their academic self-concept. These findings were discussed in terms of the existing literature and policies on inclusive education. The implications of this research for the inclusion of AS learners and other special needs learners in inclusive education settings was also discussed.

<u>Contents Page</u>	
	Page
Chapter 1: Introduction	1
<i>1.1. Aims of this research</i>	3
<i>1.2. Research questions</i>	3
<i>1.3. Methodology</i>	3
<i>1.4. Definition of terms</i>	4
<i>1.5. Outline of the study</i>	4
Chapter 2: Literature Review	5
<i>2.1. Inclusion</i>	5
<i>2.1.1. Inclusive Education Policy in South Africa: The Education White Paper 6.</i>	5
<i>2.1.2. Benefits of inclusion for learners with special needs</i>	7
<i>2.1.3. Challenges of inclusion for learners with special needs</i>	8
<i>2.1.4. Research into the inclusion of learners with special needs</i>	10
<i>2.2. Asperger Syndrome</i>	14
<i>2.2.1. Diagnosis</i>	14
<i>2.2.2. Triad of impairments</i>	16

2.3. Inclusion for ASD learners	18
2.3.1. <i>Benefits of inclusion for ASD learners</i>	18
2.3.2. <i>Challenges of inclusion for ASD learners</i>	19
2.3.3. <i>Research into the inclusion of ASD learners</i>	21
2.4. Inclusion for AS learners	24
2.4.1. <i>Benefits of inclusion for AS learners</i>	24
2.4.2. <i>Challenges of inclusion for AS learners</i>	24
2.4.3. <i>Research on the experiences of AS learners in inclusive education</i>	25
2.5. Aim and rationale	29
2.5.1. <i>Research Objectives</i>	30
Chapter 3: Methodology	31
3.1. Research Design	31
3.2. Sample	31
3.3. Data Collection Procedure and Instruments	32
3.4. Data Analysis	34
3.4.1. <i>Analysis of the semi-structured interviews</i>	34

3.4.2. <i>Analysis of the drawings</i>	37
3.4.3. <i>Analysis of the timeline</i>	38
3.5. <i>Validity and Reliability</i>	38
3.6. <i>Ethical considerations</i>	40
3.7. <i>Limitations of the design</i>	42
3.8. <i>Conclusion</i>	43
Chapter 4: Results	44
4.1. <i>Thematic analysis</i>	44
4.1.1. <i>Theme 1: Entry to the inclusive education setting.</i>	45
4.1.2. <i>Theme 2: Current experiences of attending school.</i>	47
4.1.3. <i>Theme 3: Experiences of schoolwork.</i>	50
4.1.4. <i>Theme 4: Social experiences.</i>	54
4.1.5. <i>Theme 5: The role of special interests.</i>	62
4.1.6. <i>Theme 6: The effect of support and facilitation</i>	65
4.2. <i>Results of the projective drawing analyses</i>	67
4.2.1. <i>Drawing of the self at school.</i>	67
4.2.2. <i>Drawing of the self and others in the class doing something together</i>	69

4.3. Conclusion	72
Chapter 5: Discussion	73
5.1. Overall experiences of inclusion including changes over time in these experiences	73
5.1.1. Special interests	74
5.1.2. Social difficulties	75
5.1.3. Support	78
5.1.4. Academic self-concept	82
5.2. Factors influencing the experiences of inclusion for AS learners	85
5.2.1. Social factors	85
5.2.2. Academic factors	86
5.2.3. The pervasiveness of the AS learner's special interests	87
5.2.4. Support in the inclusive setting	87
5.3. Implications of this research for AS learners and for the inclusion of special needs learners as a whole	88
5.3.1. Individual differences	88
5.3.2. Support	89
5.3.3. Educator and facilitator training	90

5.3.4. <i>The adaptation of the school environment for these learners</i>	91
5.3.5. <i>Social skills training and awareness</i>	91
5.4. <i>Conclusion</i>	91
Chapter 6: Conclusion	93
6.1. <i>The implications of this research for the inclusion policy imperative in South Africa</i>	93
6.2. <i>The limitations of this research</i>	95
6.3. <i>Recommendation for future research</i>	96
References	98
Appendices	103
Appendix A: Semi-structured interview schedule and the instructions for the projective tasks	103
Appendix B: Informed consent form (parents)	105
Appendix C: Participant assent form	109
Appendix D1: Timeline: Josh	110
Appendix D2: Timeline: Nathan	111
Appendix D3: Timeline: Kyle	112
Appendix D4: Timeline: Sarah	113

Appendix D5:Timeline: Mark	114
Appendix E1:Drawing of the self: Josh	115
Appendix E2:Drawing of the self: Nathan	116
Appendix E3:Drawing of the self: Kyle	117
Appendix E4:Drawing of the self: Sarah	118
Appendix E5:Drawing of the self: Mark	119
Appendix F1: Drawing of the self and others: Josh	120
Appendix F2: Drawing of the self and others: Nathan	121
Appendix F3: Drawing of the self and others: Kyle	122
Appendix F4: Drawing of the self and others: Sarah	123
Appendix F5: Drawing of the self and others: Mark	124
<u>Tables</u>	44
Table 1: A summary of the research participants including their age, grade, the number of years they had spent in inclusive education settings, and a description of their school contexts.	44

Chapter 1: Introduction

The current study was mainly concerned with the experiences of Asperger Syndrome (AS) learners in inclusive education settings. This study considered the experiences of the AS learners as portrayed by the learners themselves. This research hoped to provide in-depth information of the experiences of AS learners in inclusive education settings so that greater understanding of the implications of inclusion for AS learners and other special needs learners could be gained. Although the results of this research are not generalisable, the researcher aimed to provide other researchers, educators, parents of AS learners and the AS learners themselves with a resource from which information and understanding could be gained.

The inclusive education policy in South Africa is governed by The Education White Paper 6. Inclusion is defined as the “process of responding to the uniqueness of individuals, including: their presence, access, participation and achievement in a learning society” (Summit on Inclusive Education, 2002, in Foster, 2003, p. 7). This 20-year policy plan highlights key principles for implementing inclusive education in South Africa. These key principles centre around the school system adapting to the diverse educational needs of learners; removing barriers in the system which serve to prevent or exclude learners from being educated by creating inclusive contexts; bringing resources to learners with special needs; and training teachers with the skills needed to meet the diverse needs of all learners (Ainscow, 2004). Given this policy, inclusive education is meant to include AS learners.

AS is one of five disorders that fall under the category of Pervasive Developmental Disorders in the DSM-IV-TR (American Psychiatric Association, 2000). AS falls onto the Autistic Spectrum which incorporates all of the Pervasive Developmental Disorders and is characterised by a triad of impairments in: language and communication, social interaction, and impairment in imagination and flexible thought processes (Autism South Africa, 2002). Individuals with AS usually experience less significant impairments in language and communication than other individuals on the Autistic Spectrum (Autism South Africa, 2002). The degree of the characteristic AS impairment affects the AS individual’s daily functioning and therefore their ability to cope in an inclusive education environment.

Literature has shown that there are both benefits and challenges for the inclusion of AS learners. Some of the benefits of inclusion for these learners are that the AS learner may develop social skills through interactions with typically-developing peers and may also develop appropriate coping skills for daily functioning (Mesibov & Shea, 1996; Szatmari, 2004; Jordan, 2005; Jordan, 2008). However, inclusion has only been shown to be successful in those circumstances where the AS learner or special needs learner has access to adequate support (Hunt, Staub, Alwell & Goetz, 1994, in Katz & Mirenda, 2002; Hollowood et al., 1994, in Katz & Mirenda, 2002; Farron-Davis et al., 1994, in Katz & Mirenda, 2002; Rafferty, Piscitelli & Boettcher, 2003, in Lindsay, 2007). Some of the challenges of inclusion for AS learners are that the static curriculum may not be suited to the needs of the AS learners and that educators are ill-equipped to teach these learners (Church, Alisanki & Amanullah, 2000; Jordan, 2008). The social difficulties that the AS learners experience in the inclusive education environment would also negatively influence their experiences of inclusion (Carrington & Graham, 2001).

Research conducted in this area is limited and only three other studies of this nature could be found at the time of this research, none of which were conducted in South Africa. The most relevant studies for this research were those of Humphrey and Lewis (2008); Carrington and Graham (2001); and Church et al. (2000).

This area of research is important as the experiences of AS learners in inclusive education settings have not been well-researched in South Africa. Inclusive education is a policy that is being implemented in South Africa yet there is limited research available that considers the impact that inclusion has on the learners themselves. Thus, the researcher felt it was important to research the experiences of inclusion for AS learners from the perspective of the learners in order to gain a more holistic picture of inclusion as a whole. Although there are benefits of inclusion for AS learners, there are also some significant challenges in the implementation of such a policy especially in the South African context. This research hoped to highlight some of these benefits and challenges in the South African context where resources and sources of support, which are key elements of inclusion, are limited.

1.1. Aims of this research

The present study aimed to:

- Explore the experiences of AS learners in inclusive education settings including the factors that enhance or negatively impact on their experiences.
- Highlight the similarities and differences in the experiences between the research participants.
- Explore the changes in the AS learners' experiences of inclusive education over time.
- Describe the possible factors which may influence the experiences of inclusion for AS learners as a whole.

1.2. Research questions

The main research question in this study was:

1. What are the experiences of particular AS learners who are included in inclusive education settings?

The following sub-questions were also investigated:

1. What is the overall experience of inclusion for AS learners who have been included in inclusive education settings?
2. What factors influence the experiences of inclusion for these learners?
3. What are the similarities and differences in the experiences of the AS learners?
4. Are there changes in the experience of inclusion over time? If so, what are the changes?
5. What are the possible factors that influence the experiences of AS learners in inclusive education settings?

1.3. Methodology

This study used a descriptive and exploratory qualitative design using an interpretive approach that focused on gaining in-depth information about the participants' experiences of inclusive education from the AS learners themselves. This research was a collective case study with five AS learners who were each interviewed once in their home environments. Four male participants and one female participant were available for this research. Each participant was given a pseudonym in order to maintain confidentiality. A semi-structured

interview schedule and three projective tasks were used to collect data from each participant. Chapter three provides a full explanation of the methodology used in this research.

1.4. Definition of terms

Typically-developing peers: Those learners who have followed the expected developmental pattern.

Autistic Spectrum Disorders: Abbreviated to ASD. ASD's consist of all the Pervasive Developmental Disorders defined in the DSM-IV-TR (American Psychiatric Association, 2000). These disorders fall onto the Autistic Spectrum which has different degrees of impairment depending on the severity of the disorder. Individuals with ASD's experience a triad of impairments in: impairment in language and communication, impairment in social interaction, and impairment in imagination and flexible thought processes.

Asperger Syndrome: Abbreviated to AS. Individuals with AS fall on to the Autistic Spectrum and therefore experience different degrees of impairment. AS is one of five developmental disorders that is classified under Pervasive Developmental Disorders in the DSM-IV-TR (American Psychiatric Association, 2000). Individuals with AS experience two main impairments in: social interaction, and restricted, repetitive, and stereotyped patterns of behaviour, interests and activities (Department of Health and Human Services, 2009).

1.5. Outline of the study

Chapter one has introduced the background and motivation for this research. Chapter two considers relevant literature and provides the theoretical background for this research. Chapter three outlines the methodology used for this research including the: research design, sampling process, data collection process, data analysis, validity and reliability, ethical considerations, and the limitations of the research design. Chapter four presents the findings of the current research. These findings and the implications of this research are discussed in relation to the existing literature in Chapter five. Finally, Chapter six looks at the implications of this research for the policy imperative in South Africa, the limitations of the research, and the recommendations for future research.

Chapter 2: Literature Review

This literature review outlines the policy context in South Africa with regards to inclusion by considering the existing Education White Paper 6: Special Needs Education (Department of Education, 2001). The benefits and challenges of inclusion in general are discussed with reference to the “Big-Fish-Little-Pond” debate. Asperger Syndrome (AS) and its features are defined. The evidence regarding the benefits and challenges of inclusion for Autistic Spectrum Disorder (ASD) children is presented, with a focus on inclusion for AS learners. The literature review also discusses the findings of the limited research in this area.

2.1. Inclusion

2.1.1. Inclusive Education Policy in South Africa: The Education White Paper 6.

The Summit on Inclusive Education (2002, in Foster, 2003), defines inclusion as a “process of responding to the uniqueness of individuals, including: their presence, access, participation and achievement in a learning society” (p.7). The aim of inclusion is to create full-service schools in which all learners and their wide range of learning needs can be accommodated (Department of Education, 2001).

There are four key elements which are central to inclusive education (Ainscow, 2004). Firstly, inclusion is a process whereby school systems find better ways of responding to the diversity of learners. Secondly, inclusion is concerned with the “identity and removal of barriers i.e. problem-solving in the school system” (Ainscow, 2004, p. 9). Thirdly, inclusion is about the “presence, participation and achievement of all learners” (Ainscow, 2004, p. 9). Lastly, inclusion involves particular emphasis on “those groups who may be at risk of marginalisation, exclusion or underachievement” (Ainscow, 2004, p. 9).

Inclusive education recognizes that learning not only occurs in schools but in the home and cultural environment as well. It aims to “empower learners by developing their strengths and enabling them to participate critically in the learning process” (Department of Education, 2001, p. 19). It has been recognized that in order for inclusive education to be successful, educators need to improve their current skills and learn new skills which will equip them to teach all learners. This policy is a 20-year plan focusing on enabling educators to perform multi-level instruction and prepare lessons that are appropriate for all the learners’ individual

needs (Department of Education, 2001). The notion that the difficulties faced by learners with special education needs exist solely within them needs to be challenged (Ainscow, 2004). In order for inclusive education to be sustainable, there needs to be a change in both teaching approaches as well as in the school system as a whole.

Inclusive education focuses on overcoming those barriers which exist in the current education system so that education structures will be enabled to serve the full range of learning needs which exist among learners. Inclusive education involves bringing the necessary resources to the learner and requires that the learner “only benefits from being in the class rather than having to keep up with the other students” (Ajuwon, 2008, p. 11). This means that the resources are brought to the learner with special learning needs rather than placing the learner in an isolated setting where the resources are located (Smith, 2007, in Ajuwon, 2008). The move towards inclusion remains focussed on increasing the capacity of existing mainstream schools so that they are able to fully support the participation and learning of an increasingly diverse range of learners each with specific needs.

The policy of inclusive education for all learners has been met with both positive and negative reactions. The policy makers emphasise that unless there is an integrated approach with both general education teachers and special education teachers working together to implement inclusive education, it will not work effectively. It is clear that simply placing learners together does not necessarily mean that they will interact and imitate each other (Simpson, de Boer-Ott & Smith-Myles, 2003). Inclusive education has been shown to be more successful if it is “staged with a move from a specifically-adapted schooling environment to full integration” (Jordan, 2005, p. 105). Successful inclusion requires a fundamental change in the organizational structures of the school environment and in the roles and responsibilities of key role players such as teachers (Burstein, Sears, Wilcoxon, Cabello & Spagna, 2004). Ainscow (2004), points out that inclusion requires a “social process within a given workplace that influences people’s actions and, indeed, the thinking that informs these actions” (p. 5). Inclusion is not simply about changing where children with special education needs attend school, but is rather necessarily based in changing the entire structure of education for these learners. It is vital that there are appropriate resources available in the inclusive education setting to enable a flexible schooling system which can meet the needs of all learners. If training and resources are not available, the fundamental

principle of inclusive education, providing access to education which meets the range of learners' needs, is undermined. Placing a learner in an inclusive setting without the appropriate resources or support places unfair pressure on educators as well as leading the child towards "integration without social inclusion or educational progress ... and exclusion from school in the worst case" (Batten, 2005, p. 94).

2.1.2. Benefits of inclusion for learners with special needs

There are both positive and negative perceptions of inclusive education for learners with special needs. According to McCarty (2006), benefits of inclusion include the fact that the learners with special needs are exposed to role models for correct behaviour and that they benefit from the academic standard which is set in the inclusive education setting. Through the modelling of correct behaviour, learners with developmental disabilities seem to be able to learn behaviours that are important for successful integration. These behaviours include: "following rules, waiting their turn, and problem-solving in social situations" (Katz & Mirenda, 2002, p. 28). Teachers in inclusive education settings tend to have increased expectations of the learning potential of included learners which therefore aids in more learning taking place and an increase in the self-esteem in the included learners (Mesibov & Shea, 1996).

Inclusion allows learners with special needs to establish friendships with peers without special needs and allows these learners to begin to perceive themselves as full members of the regular learning community (Vaughn, 2001, in Timmons & Breitenbach, 2004). The social benefits of inclusion which inclusive education settings can provide include "not only direct social skills and outcomes (such as pragmatic language development, a sense of belonging, and friendships), but also more indirect outcomes such as happiness, self-concept development, and positive behavioural changes" (Katz & Mirenda, 2002, p. 26).

Typically-developing learners in the class also experience some benefits of inclusive education. They are exposed to learners with special needs and become more accepting and understanding towards people with special needs in general society. Social relationships allow companionship and models for communication and behaviour to develop. These relationships can help to reduce the stress of inclusion for the included learner through the emergence of supportive action and communication as well as positive self-concepts through

“feedback and reciprocal interactions” (Katz & Mirenda, 2002, p. 30). Social relationships are important in creating a sense of belonging which is seen as essential for a child’s psychological well-being (Katz & Mirenda, 2002).

If adequate support is given to the included learner then the “student is included in meaningful and appropriate learning experiences” (O’Shea & O’Shea, 1997, in Tapasak & Walther-Thomas, 1999, p.216), which will enable the learner to develop and engage more actively in their learning. Lipsky and Gartner (1996, in Peetsma, Vergeer, Roeleveld & Karsten, 2001), report that most inclusive education programs which have been evaluated report an improvement in the academic, behavioural and social realms for those learners with special needs.

2.1.3. Challenges of inclusion for learners with special needs

McCarty (2006), warns that the inclusive education setting must not be seen as appropriate for all learners. The included learner may be disruptive within the classroom and this makes it hard for the educator to teach. This affects the rate at which the other learners in the class can learn and some believe that this may lead to the lowering of the standard of learning in schools (McCarty, 2006). Learners with special needs often also experience difficulties in attention and motivation which, according to Peetsma et al. (2001), may lead to a vicious cycle between learning and motivation. If the learner with special needs experiences learning difficulties, he or she may experience a lack of motivation to perform. However, extra motivation and perseverance is needed to improve learning. The learner with special needs who experiences learning difficulties may become unmotivated to work and this lack of motivation serves to perpetuate the learning difficulty. This may further promote the learner with special needs to have a negative experience of education (Peetsma et al., 2001).

The training of teachers to deal with learners with special needs is another challenge for inclusive education. For inclusion to be beneficial for learners with special needs, it is “imperative for general education teachers to be able to teach a wide array of children, including those with varying disabilities” (Ajuwon, 2008, p. 11). This lack of training affects the included learners’ experiences of inclusion negatively if these learners do not receive the support that they require (McCarty, 2006). Burstein et al. (2004), indicate that educators have reported in numerous surveys that they are insufficiently trained and therefore do not have the

skills to teach students with special needs. In order for inclusion of special needs learners to be successful, it is essential that teachers are adequately trained in dealing with and supporting these learners so that these learners as well as the other learners in the classroom are able to learn effectively and experience inclusive education positively.

The “Big-Fish-Little-Pond” debate (Marsh & Craven, 2002), should be considered when discussing inclusive education. This debate considers that “academic self-concept is influenced substantially by the ability levels of other students in the immediate context in addition to one’s own ability and academic accomplishments” (Marsh & Craven, 2002, p. 8). Academic self-concept is defined as “one’s knowledge and perception about one’s academic ability” (Seaton, Marsh & Craven, 2009). A negative “Big-Fish-Little-Pond” effect may occur when students of average ability attend a school where other learners’ ability is high thus creating an academic self-concept which is below average. Students who attend high-ability schools tend to have “lower academic self-concepts than equally able students in lower-ability classes or school” (Seaton et al., 2009, p. 3). This may also occur when students who perform highly attend a school where other students perform poorly thus creating an academic self-concept which is above average. Thus “academic self concept is negatively related to school-average achievement” (Marsh & Craven, 2002, p. 8). The academic self-concept is distorted once the learner compares him or herself with other peers. With regards to special needs learners, because they may achieve lower than their typically-developing peers, they may develop negative academic self-concepts and therefore view themselves as less able than their peers. This would have a negative impact on their self-concept as a whole. At the same time, their typically-developing peers may develop an academic self-concept that is above average when they compare themselves to their special needs peers. This may affect their expectations of their own academic performance thus lowering the standard of work that they produce.

Seaton et al. (2009), tested whether the “Big-Fish-Little-Pond” effect could be moderated by academic self-regulation or socio-economic status or whether it remained the same, regardless of these two constructs. This study considered socio-economic status and academic achievement; as well as academic self-regulation (the degree to which the learners are active in their own learning processes). Academic self-regulation was made up of four different areas namely: motive, study methods, overall behaviour, and social, which was made up of

social relationships and the learners' abilities to see how others can help or hinder learning. The sample for this study was 276 165 pupils aged 15 years from 41 different countries. The learners were given a range of standardised assessments to complete. This study found that the higher the *sense of belonging* that the learner had, the lower the "Big-Fish-Little-Pond" effect. This meant that those learners, who felt that they belonged socially in their classes, tended to have a better academic self-concept and did not compare themselves to their peers as often as those learners who did not have a high sense of belonging. Special needs learners often experience social difficulties which, according to this research, would therefore negatively affect their academic self-concept. The more *motivated* a learner was, the better their academic self-concept. However, motivation did not change the fact that learners still compared themselves and their scholastic achievement to that of their peers. The "Big-Fish-Little-Pond" effect was higher for those higher-ability learners who attended high-ability schools, than for those equally able learners in low or average-ability schools. This meant that for those learners who had higher abilities but who attended schools for higher-ability learners, academic self-concept was lower. For those learners who had higher ability but who attended schools for low or average-ability learners, academic self-concept improved. This meant that if these learners were to attend schools where there is less pressure to perform, their academic self-concept would improve (Seaton et al., 2009). The converse of this is also true: if learners attend schools where there is a greater pressure to perform, their academic self-concept would decrease. This research therefore supports the idea that special needs learners who are placed in inclusive education settings may develop negative academic self-concepts when comparing themselves to their typically-developing peers.

2.1.4. Research into the inclusion of learners with special needs

Studies of the inclusion of learners with special needs have indicated that there are mixed outcomes for these learners.

Hunt et al. (1994, in Katz & Mirenda, 2002), researched the academic achievement of students with multiple disabilities in cooperative learning groups in inclusive classrooms. They found that the learners with disabilities learned to use basic communication and motor skills through their engagement with other typically-developing peers. It was also found that these learners generalized these skills to other settings (Hunt et al., 1994, in Katz & Mirenda, 2002). It is, however, important to note the support that these learners obtained. Their peers

provided them with support in terms of cues, prompts and consequences (Hunt et al., 1994, in Katz & Mirenda, 2002). The small cooperative groups allowed the learners with disabilities to develop more skills through intensive small group work. Although this had a positive impact on these learners, it is not always possible to have small cooperative learning groups in inclusive education settings.

Farron-Davis et al. (1994, in Katz & Mirenda, 2002), recorded the rate and type of engagement of students with developmental disabilities in inclusive versus segregated classrooms. This study found that students with developmental disabilities in inclusive classrooms showed “higher levels of engaged behaviour than did those in self-contained classrooms” (Katz & Mirenda, 2002, p. 15). Furthermore, the learners with developmental disabilities in inclusive classrooms were found to be more actively engaged than those learners in segregated classrooms (Katz & Mirenda, 2002). The learners with developmental disabilities in the inclusive classrooms also had access to support from special education teachers which affected the outcome of this research.

Reports indicate few negative consequences of inclusion are experienced for typically-developing learners in inclusive education settings. Hollowood et al. (1994, in Katz & Mirenda, 2002), considered the impact that having learners with special needs in the classroom had on “the time allocated for instruction, the actual time used for instruction, and students’ engaged time” (p. 19). This research looked at the difference in these variables across two settings: one setting with included learners and one without included learners. Results of this study indicated that there were no differences in the amount of time in which typically-developing learners were engaged in instruction across the two settings. However, the learners with special needs were given extended instructions by instructional aides who were available to support them through their work, thus not affecting the instructional time available for typically-developing learners. This supported the notion that having learners with special needs in the classroom does not have a negative impact on the other typically-developing learners, if the special needs learners obtain the support that they require.

Lindsay (2007), considered appropriate papers on inclusive education from various journals between 2000 and 2005. 14 papers were selected that reported comparative outcome studies

of children with some form of special education needs. Some of these studies are discussed below.

Rafferty et al. (2003, in Lindsay, 2007), conducted research on two inclusive education classrooms each with 12 to 18 learners and one segregated class with six learners. In each of the inclusive classrooms, 53 and 75 percent of the learners respectively had some form of special education needs, while 100 percent of the learners in the segregated class had special education needs. Each classroom had one special education educator and one early childhood educator who were available to support the learners intensively. This research found that the type of setting had no significant impact on children with low-level disabilities in terms of language or social competency, but that the severely disabled learners showed greater improvements in the inclusive education setting (Rafferty et al., 2003, in Lindsay, 2007).

Wallace, Anderson, Bartholomay and Hupp (2002, in Lindsay, 2007), conducted research on 118 inclusive classrooms in four high schools. This research found that both students with and without disabilities had equally high levels of academic engagement and low levels of inappropriate behaviour (Wallace et al., 2002, in Lindsay, 2007).

Buyse, Goldman and Skinner (2002, in Lindsay, 2007), conducted a quantitative study on 333 pre-school children, 120 of whom had disabilities and 213 of whom were typically-developing children. The disabilities included deafness, autistic spectrum disorders and mental retardation. The children who were placed in a child-care setting with the least number of learners with disabilities were found to have more friends, and were more likely to have a typically-developing friend than those placed in a specialised setting where more learners with disabilities were placed (Buyse et al., 2002, in Lindsay, 2007). This research would have been negatively influenced by the number of typically-developing learners available in each class because there were more typically-developing learners than those with disabilities in this research. This means that it would have been more likely for the learners with disabilities to have a typically-developing friend simply due to the fact that there were more typically-developing learners available to engage with.

Zelege (2004, in Lindsay, 2007), examined the self-concept of children with learning disabilities and compared it to the self-concept of typically-developing learners. This research

found that the children with learning disabilities had significantly lower scores on academic self concept than their typically-developing peers. However, there was no significant difference in the social self-concepts of the two groups (Zelege, 2004, in Lindsay, 2007).

Research done by Monchy, Pijl and Zandberg (2004, in Lindsay, 2007), considered the social inclusion of 25 learners, aged between nine and 12 years, with behavioural problems who attended full-time mainstream education classes. This research found that the students with behavioural problems were excluded socially more often than their peers without special education needs (Monchy et al., 2004, in Lindsay, 2007). It is important to note that the educators in this research under-estimated the frequency of bullying that the learners with special education needs experienced, as well as the frequency of bullying that the learners with special education needs inflicted on others. This would have impacted on the experience of inclusion for the learners with special education needs as well as the experiences of their peers.

Markussen (2004, in Lindsay, 2007), conducted research on 777 students who had special education needs. 285 of these learners attended special education classes while 492 of them were in mainstream education settings. The group of 777 learners was compared to 463 learners who did not have special education needs. The learners with special education needs who attended special education classes showed a significantly lower level of success than their peers in mainstream education settings after all other factors had been controlled. There were, however, no significant differences found among the learners with special education needs who attended mainstream education classes, in terms of the achievement of formal competence. This result was unchanged even if they received help in class or in small groups outside of the classroom (Markussen, 2004, in Lindsay, 2007).

Lastly, in a study done by Hanson et al. (2001, in Lindsay, 2007), only ten percent of 25 children with special education needs who initially attended inclusive education pre-schools remained in the inclusive education system five years later. This was found to be as a result of five different factors: professional influence, the family's ability to access information, the influence of advocates, the match between the family and school needs and expectations, and the influence of the child and family characteristics. This research indicated that definite tensions exist between the desire for learners to receive education in inclusive education

settings and the difficulties of meeting the needs of these learners with the limited resources available (Hanson et al., 2001, in Lindsay, 2007).

What is notable in the studies cited above is the access to support and resources that the special needs learners had and how this affected their progress in inclusive education settings. Those learners who received intensive support or who had access to support and resources, tended to have better outcomes in inclusive education settings than those learners who did not have equal access to support and resources. The access that learners had to support not only affected the special needs learners but also their typically-developing peers and their experiences of having special needs learners in their classes.

Even though some of these studies have large sample sizes, their results are not necessarily generalisable to South Africa due to vastly different educational contexts. In South Africa, where there is a significant lack of resources and educational support, the outcomes of inclusive education may be considerably different. Simply providing evidence that inclusive education can work does not necessarily mean that it will work in every context. The resources, values and support in each context must be individually considered. One cannot simply focus on the rights of learners to education in inclusive settings, but should rather view the change holistically to include the effects of inclusion on all learners, especially in contexts where resources are limited.

There is a policy imperative for inclusive education but there is a challenge of meeting the needs of all learners with the available resources. These studies provide a useful international perspective on inclusion, but more locally focussed research needs to be conducted to draw realistic conclusions regarding inclusive education in South Africa.

2.2. Asperger Syndrome

2.2.1. Diagnosis

AS is one of five disorders which fall under the category of Pervasive Developmental Disorders in the DSM-IV-TR (American Psychiatric Association, 2000). The five disorders are: Autistic Disorder (classic Autism), Childhood Disintegrative Disorder, Rett's Disorder, Asperger Syndrome, and Pervasive Developmental Disorder not otherwise specified

(Atypical Autism) (Sicile-Kira, 2003). Learners with AS fall onto the Autistic Spectrum which consists of all of the above-mentioned Pervasive Developmental Disorders.

Given the inclusion policy, inclusive practices are intended to incorporate learners with AS. The exact prevalence rate of ASD's among the South African population is unknown. However, it is estimated that ASD's in South Africa affect one in every 158 children under the age of six years. ASD is four times more likely to occur in boys than girls (Autism South Africa, 2002).

Some of the features of ASD learners are that they experience significant problems in the basic areas of functioning, including social interaction, communication, learning and behaviour (Simpson et al., 2003). ASD learners often present with difficulties relating appropriately to others and may show a wide variety of language and communication disorders and abnormalities. These learners also “frequently encounter difficulties in success following and mastering an unmodified school curriculum, have an obsessive insistence on environmental sameness and are well known for their atypical mannerisms and often difficulty in understanding behaviour” (Simpson et al., 2003, p. 116).

According to the DSM-IV-TR (American Psychiatric Association, 2000), the main diagnostic criteria for AS are:

- 1) Qualitative impairment in social interaction and,
- 2) Restricted, repetitive and stereotyped patterns of behaviour, interests and activities (Department of Health and Human Services, 2009). The main difference between AS and Autism is that in AS, there is no clinically significant general delay in language (Department of Health and Human Services, 2009).

It is difficult to diagnose a person with AS as there is no physical test which can confirm the diagnosis. However, Dr Christopher Gillberg (1989, in Autism South Africa, 2002), created the following list of criteria (all of which must be present) which may help in the diagnosis of AS:

1. Severe impairment in reciprocal social interaction with at least two of the following – inability to interact with peers; lack of desire to interact with peers; lack of appreciation of social cues; socially and emotionally inappropriate behaviour.

2. All-absorbing narrow interests with at least one of the following – exclusion of other activities; repetitive adherence; more rote than meaning.
3. Imposition of routines and interests with at least one of the following – on self, in aspects of life; on others.
4. Speech and language problems with at least three of the following – superficially, perfect expressive language; formal, pedantic language; odd prosody, peculiar voice characteristics; impairment of comprehension, including misinterpretation of literal or implied meanings.
5. Non-verbal communication problems with at least one of the following – limited use of gestures; clumsy body language; limited facial expression; inappropriate expression; peculiar, stiff gaze.
6. Motor clumsiness.

Although these features are characteristic of individuals who are diagnosed with AS, ASD's more broadly are characterised by a triad of impairments.

2.2.2. Triad of impairments

Individuals who are diagnosed with ASD experience what is known as the triad of impairments. This triad is also experienced by people with AS. The triad consists of: impairment in language and communication; impairment in social interaction and; impairment in imagination and flexible thought processes (Batten, 2005).

AS individuals tend to experience less of an impairment in language and communication than other individuals along the Autistic Spectrum. AS individuals usually display a large vocabulary yet their speech is often pedantic and stereotyped in content. AS individuals battle to understand the different tones used by others to convey particular meanings and seldom react to the verbal responses of others to them (Autism South Africa, 2002). Due to their lack of understanding of non-verbal communication, AS individuals struggle to engage with other people in a conversation. The AS learners' inability to engage in conversation with others has an enormous effect on their experiences of inclusive education. AS learners are able to speak using a large vocabulary yet cannot engage with others and therefore struggle in a classroom which requires cooperative listening and communication.

In terms of the impairment in social interaction, AS individuals are notably isolated yet do not initially appear to be visibly concerned about their isolation (Autism South Africa, 2002). AS individuals display a desire for friendships but due to their lack of understanding of the emotional aspect of friendships and their inability to read social cues, they struggle to develop and sustain relationships. As the AS individual grows older, there is an increased demand for appropriate social skills which creates more anxiety and tension for the AS person in social settings (Autism South Africa, 2002). AS learners want to form friendships at school yet struggle to maintain any relationships that they establish. As the AS learner moves through school, there is a greater desire for friendships and a greater pressure for social conformity which creates more anxiety for these learners in the inclusive and social school context.

The last impairment is one in imagination and flexible thought processes. AS individuals are known to be very skilled in working with concrete facts and figures yet show a distinct weakness in their ability to think abstractly (Autism South Africa, 2002). AS individuals have a strong rote memory but show a “resistance to change, an obsessive demand for the preservation of sameness and a strong adherence to repetitive activities” (Autism South Africa, 2002, p. 5), which may affect their lives negatively. AS individuals are often unable to think creatively and therefore lack in imaginative thought. They are also unable to transfer the skills they have learned from one environment to another (Autism South Africa, 2002). This impairment may affect AS learners in an inclusive setting where they are often required to think creatively and abstractly especially in terms of problem solving. AS learners face unique challenges in trying to understand abstract thinking when they are based in a very literal and concrete way of thinking. AS learners may also learn some skills which are applicable in many settings yet cannot generalize these skills to each new setting.

The impairments faced by AS learners have a bearing on the current study insofar as these impairments have an effect on the way in which the AS learners function in the inclusive education setting as well as the experiences that these learners have in these settings.

2.3. Inclusion for ASD learners

In terms of the inclusion of ASD learners specifically, there are varying perspectives regarding the benefits and challenges of inclusion for these learners and the effect that inclusion has on these learners.

2.3.1. Benefits of inclusion for ASD learners

Some of the benefits of inclusion centre around the fact that it creates a natural setting in which the ASD learner can thrive. ASD learners often struggle to develop appropriate social skills and ways of communicating with others (Timmons & Breitenbach, 2004). Being in an environment with typically developing peers “provides them with the opportunity to learn appropriate social and communication skills” (Szatmari, 2004, p. 153), and therefore allows ASD learners to engage in social interactions which create the opportunity for individual development (Timmons & Breitenbach, 2004). It has been shown that ASD learners can learn social interaction skills which generalize better in integrated rather than segregated settings (Mesibov & Shea, 1996). This means that any social skills which are learnt in inclusive education settings are likely to be generalized to other settings such as home, more than if the ASD learner was in a special education setting.

Due to their exposure to ASD learners, the typically-developing learners in the class are able to develop the important life-skills of empathy and acceptance (Timmons & Breitenbach, 2004). This is only achieved, however, if the teachers model this acceptance as well as provide the typically-developing learners in the class with information and support around ASD (Timmons & Breitenbach, 2004).

Routine is of vital importance to ASD learners and the inclusive classroom can provide the ASD learner with routine and structure which enables them to know what to expect (Siegel, 1996).

The role of inclusive education should be seen as a treatment for learners with ASD, with the goal of helping reduce the core differences of social, behavioural, language and learning caused by ASD (Jordan, 2005). The inclusive education setting can help the ASD learner to develop some skills in coping with the challenges of everyday life through engaging them in everyday learning and social experiences.

2.3.2. Challenges of inclusion for ASD learners

There are, however, some authors who believe that inclusion is not without its challenges. One difficulty surrounding the inclusion of learners with ASD is that the “basis of most programs for inclusion were, in fact, not inclusion at all, but forms of integration” (Jordan, 2008, p. 12). The curriculum has not changed for each group of learners as it is assumed that the content is already relevant to all learners (Jordan, 2008). Changing the curriculum may be hard due to “traditional practices and little support for innovation” (Burstein et al., 2004, p. 105), as well as a lack of resources. ASD learners need to learn about intentional behaviour and have different developmental and learning patterns when compared to other learners (Jordan, 2008). By keeping the curriculum content the same for all learners, concern arises over whether or not ASD learners are learning what they need to in order to develop in inclusive education settings.

Mainstream education remains “oblivious to diversity in children, even in ASD” (Jordan, 2008, p. 12). A challenge which remains prominent for the inclusive education of ASD learners is the fact that there is a lot of variation within the ASD learners themselves in terms of their cognitive and educational strengths and deficits (Simpson et al., 2003). For example, some ASD children require a lot of stimulation in the classroom for them to engage while others react to each and every noise or texture in a negative way (Church et al., 2000). Children with ASD’s bring some unusual challenges into the inclusive classroom because of their diversity in strengths and weaknesses. Learners in inclusive schooling are sometimes labelled in terms of their greatest strength or greatest weakness which ignores the variability which can occur within skill sets (Mayton, 2005). When the focus is on a learner’s strength, it is assumed that he or she has already acquired other skills and that these skills are also strengths. Therefore where “marked challenges are present, the assumption is made that performance deficits are wilful acts with premeditated intent” (Mayton, 2005, p. 86). This means that the child is assumed to have the skills to perform the task yet is not completing the task and thus is labelled as displaying challenging behaviour. The assumptions that are made regarding learners affect the support and resources which are given to learners. This is problematic for ASD learners as they present with a variety of strengths and weaknesses (Mayton, 2005).

Even if inclusive education is flexible in its approach to ASD learners, there is still the problem of individual difference. It is necessary to assess each individual ASD learner in order to correctly manage an appropriate education program for each learner.

In terms of their academic development, ASD learners “may not attend to human voices and may not recognize that they are being addressed” (Jordan, 2005, p. 109). This may cause them to miss instructions or be labelled as rude children within the class. ASD learners are also mostly visual learners and in classrooms where verbal instruction is most prominent, this may serve to negatively impact on ASD learners’ ability to learn effectively (Jordan, 2005). Educators may use general teaching strategies that are irrelevant for ASD learners and may not have the skills to accommodate these ASD learners in their teaching methods. If educators have to over-extend themselves in order to accommodate ASD learners, the other learners in the class may suffer (Williams White, Scahill, Klin, Koenig & Volkmar, 2007). Educators have also reported that it is difficult to motivate ASD learners to work effectively in class due to the ASD learner’s fixation on a particular topic, or due to the learners’ restrictive range of interests, which he or she may struggle to defer from (Church et al., 2000).

With regards to the behaviour of ASD learners in inclusive settings, there is a chance that ASD learners, having developed socially acceptable behaviour, may regress back into characteristic negative behaviours when there is “uncertainty or a need for help which cannot readily be expressed in words” (Connor, 2004, p. 3). The negative behaviour may be as a result of stress or frustration which may in turn cause the ASD learner to display aggression (Szatmari, 2004). According to Barnard, Prior and Potter (2000), “one in five children with Autism or AS are excluded from school at some point” (p. 8) because teachers are ill-equipped to deal with negative ASD behaviour and ask parents to remove their child from the school for periods of time. This leaves both parents and teachers frustrated around the best educational option for the ASD child. It therefore becomes essential to research the experiences of AS learners in inclusive education settings in order to understand how the stress or frustration of these learners can be mediated. It has also been found that teachers tend to have “less conflictual relationships with children with less behavioural problems” (Robertson, Chamberlain & Kasari, 2003). Since ASD learners vary in their displays of

behaviour, it is expected that teachers may have a poorer relationship with some ASD learners.

Another challenge with the inclusion of ASD learners is the facilitators that some ASD learners have for support in inclusive education settings. One purpose of inclusion of ASD learners is to enable them to experience social interaction, however, the facilitators who are available to support the ASD learners may serve to make them more isolated from their peers. This is due to the ASD learners being seen as even more different from their peers and because of this noticeable difference, peers tend to withdraw from them (Jordan, 2008). Facilitators are seldom trained to enable the ASD learners to have positive contact with their peers thus dampening the ASD learners' ability to develop friendships (Jordan, 2008).

2.3.3. Research into the inclusion of ASD learners

Research conducted on the inclusion of ASD learners specifically is limited and has focussed mainly on: social behaviour in inclusive education settings, the factors which affect the success of inclusion of ASD learners, and teachers' and parents' perceptions of the inclusion of these learners. The results of this limited research present both positive and negative arguments for the inclusion of ASD learners into mainstream education settings. There do not appear to be any published studies of the experiences of inclusion for ASD learners as reported by the learner themselves.

Whitaker (2007, in Ashburner, Ziviani & Rodger, 2010), completed a survey with 173 families of children with ASD in inclusive education settings. This research found that over 40 percent of the parents of these ASD learners were concerned by the response of the school staff to their child's challenging behaviours. The school staff also blamed the child for their behaviour which raised more concerns for the parents (Whitaker, 2007, in Ashburner et al., 2010).

Gutierrez, Hale, Gossens-Archuleta and Sobrino-Sanchez (2007), conducted research which aimed to evaluate the social behaviour of preschool children with autism in an inclusive playground setting. This quantitative research looked at three different learners with ASD. Results of this research showed that the autistic students rarely initiated any social interactions with the typically developing peers when they had the opportunity to do so. It

was also noted that typically developing peers rarely initiated social interactions with the autistic learners. An interesting observation made during this study was that the teaching staff and facilitators did not facilitate any social interactions between the children. Although the facilitators were trained in strategies and general ways of teaching learners with autism, it seemed that they also required some training in ways of facilitating positive peer contact for those learners with autism (Gutierrez et al., 2007).

Reed and Waddington (2006), investigated the factors affecting the success of inclusion, and reported that both parents and local authority workers stated that finding a placement that met learners' needs was vital. This is important in order to avoid placing learners in inclusive schooling where they are certain to fail. Children with ASD range in intellectual ability from severe learning disabilities to superior intellectual ability. Reed and Waddington (2006), argue that "with such diversity, the insistence for inclusion for all persons with autism seems short-sighted and simplistic" (p. 161). Instead, there should be a focus on finding individual educational placements which provide the learner with the opportunity to develop to his or her full potential in an environment which meets his or her individual needs.

Ashburner et al. (2010), conducted quantitative research which compared teachers' perceptions of students with ASD to their perceptions of typically-developing children, with regard to their capacity to perform academically and regulate their emotions and behaviours in mainstream classrooms. This study involved 28 ASD and 51 typically-developing learners from twelve different schools in Australia. This research found that 54 percent of the ASD learners were rated as under-achievers academically as compared to eight percent of typically-developing learners. The ASD learners were found to show higher levels of emotional and behavioural issues which included attitude difficulties; internalised behaviours (e.g. anxiety and withdrawal) and externalised behaviours (e.g. aggression). 53 percent of the ASD learners showed difficulties in emotional regulation which included frequent temper outbursts, the tendency to cry easily, rapid mood changes and becoming easily frustrated when their demands were not met (Ashburner et al., 2010). 43 percent of the ASD learners were found to be high in their need for perfectionism which included an over-focus on details, an insistence of things being done in a certain way and a desire for things to always be neat and clean. This research concluded that teachers may "struggle to manage the behaviours of these (ASD) learners therefore increasing the likelihood of suspension or

exclusion” (Ashburner et al., 2010, p. 24). The results of this research may indicate that the current inclusive education system is not enabling many of the included ASD learners to reach their full academic potential.

Research done by Jones and Frederickson (2010), in England, examined the differential profiles of behaviours that were considered to predict successful inclusion for ASD learners. The researchers obtained behaviour ratings from the parents, teachers and peers of the ASD learners. The researchers also used a social inclusion survey and obtained reports from parents and teachers on the behaviours of the ASD learners. A range of assessment measures were used to consider interactions of the learners. 86 learners were involved in this research, 43 of these had been diagnosed with an ASD. This research found that ASD learners were rated as being less often chosen to work with and were described mainly as help-seeking and shy. The ASD learners were rated by parents and teachers as being significantly more hyperactive, had greater emotional and peer problems and were less pro-social than their peers. Those ASD learners who were considered to be cooperative by their peers experienced a higher degree of acceptance by their peers while those who were seen as un-cooperative were rated highly on social rejection ratings. The researchers concluded that social skills training for ASD learners in inclusive education settings may promote social acceptance and successful inclusion (Jones and Frederickson, 2010.).

A qualitative study done by Downing, Morrison and Berecin-Rascon (1996, in Katz & Mirenda, 2002), researched the benefits of moving from a segregated classroom to an inclusive classroom for three students with ASD. This study found that, by the end of the year, all three students improved their social communication skills and experienced higher rates of interaction with the typically-developing learners. The ASD learners also began interacting with their typically-developing peers during breaks and began to respond to directions given by these peers (Katz & Mirenda, 2002). In terms of their challenging behaviours, all three of the ASD learners had displayed extreme challenging behaviours such as biting, kicking and hitting while in the segregated classrooms. However, once the ASD learners were in the inclusive education setting, these challenging behaviours had almost ceased by the end of the year (Katz & Mirenda, 2002). Importantly, these ASD learners were also exposed to a behavioural treatment program throughout this year which would have impacted on their development and ability to adjust to the inclusive education environment.

This emphasises the importance of adequate resources and support when placing ASD learners in inclusive education settings.

2.4. Inclusion for AS learners

2.4.1. Benefits of inclusion for AS learners

The literature has shown that the benefits for the inclusion of AS learners into inclusive education settings are the same as the benefits for ASD learners, and mainly centre around: the inclusive setting providing a natural setting for the ASD learners where they can interact with typically developing peers, the routine and structured environment that the inclusive classroom can provide, as well as allowing the ASD learner to develop some skills to help them to cope with everyday challenges (Mesibov & Shea, 1996; Szatmari, 2004; Jordan, 2005; Jordan, 2008).

2.4.2. Challenges of inclusion for AS learners

Likewise research indicates that the challenges of inclusion for AS learners into mainstream education settings are the same as the challenges faced by ASD learners. These challenges include: the static curriculum which may not be suited to AS learners' needs, the lack of focus on the diversity of AS learners which causes teachers to miss the diversity in skills sets of these learners, and the lack of effective teaching strategies such as more visual teaching methods which are more suitable for AS learners (Burstein et al., 2004; Church et al., 2001; Jordan, 2008; Mayton, 2005). Additional challenges of inclusion for AS learners have been reported by some researchers, these are discussed below.

AS learners may also experience stress within the school environment due to the environment itself. AS learners may find any noise in the classroom distracting or painful and the colourful materials presented in the classroom may prove to be over-stimulating for the AS learner (Mesibov & Shea, 1996). When the schedule of school changes quickly, the AS learner may struggle to keep up and may become anxious and stressed during unstructured and un-scheduled times such as during lunch break (Williams White et al., 2007). Learning environments that lack resources and services could be the source of major frustration and anxiety for AS learners. These frustrations may in turn result in challenging behaviour (Mayton, 2005). The challenging behaviour may lead to the AS learner being placed in a more restrictive environment as he or she moves through school.

Another source of stress for the AS learner may be the social situation which is presented (Carrington & Graham, 2001). AS children find it difficult to interpret social situations and the cues which are presented to them and this may cause them to react or behave inappropriately towards their peers. This may in turn create stress for the AS learner who has a negative perception of their difference from other learners yet still has the desire to engage with peers (Carrington & Graham, 2001). Teachers have also reported that some AS learners struggle to 'fit in' with their peers and that they sometimes exhibit behaviour which is difficult to manage (Timmons & Breitenbach, 2004). Furthermore, AS learners tend to try to 'fit in' socially even though their social skills are limited and this creates more frustration for these learners. AS learners will often wait until they return home from school to release their stored frustration thus leaving the source of frustration at school unidentified (Mayton, 2005).

2.4.3. Research on the experiences of AS learners in inclusive education

Little research focuses on the experiences of AS learners in inclusive education contexts in particular. Previous research and literature has focused on parent and teacher perceptions of inclusion and how teachers should deal with ASD learners in the classroom (Friedlander, 2009; Starr, Foy, Cramer and Singh, 2006).

One study (Humphrey & Lewis, 2008), researched the experiences of AS learners in inclusive education settings. This study collected data from 20 AS learners, aged 11 to 17 years, in inclusive education schools in North-West England. This study used semi-structured interviews and pupil diaries as well as pupil drawings in order to obtain the central themes around the AS pupils' experiences of inclusion. Pupil drawings were not part of the original research design for this study but one participant drew a picture of his life in school and the researcher therefore included this in the data collection process.

The central theme that emerged from Humphrey and Lewis (2008), was how particular AS learners constructed their understanding of what their AS meant to them, as the way in which the learners view themselves will impact their experiences of inclusive education as a whole. This study found that the AS learners tended to have negative perceptions of their differences, experienced anxiety and stress, had difficulties with peers and teachers and a desire to 'fit in' (Humphrey & Lewis, 2008). Although there were a number of barriers which prevented the learners from having a fully positive experience of inclusion, they were

beginning to slowly adapt to functioning in an inclusive education setting which was leading towards a more positive experience of inclusion. Humphrey and Lewis (2008), concluded that simply being included in inclusive education settings does not mean that education becomes a positive experience. AS learners have particular needs which must be met in inclusive education settings in order for their experience of inclusion to be positive.

Another study done by Carrington and Graham (2001), used a case study approach with two 13 year old AS males and their mothers. This study collected data using semi-structured interviews. The aim of this study was to provide descriptive data which would give teachers the insight they need into AS so that they can better understand the social world of these learners.

The first important theme which emerged was that of social and communication difficulties (Carrington & Graham, 2001). Children with AS struggle to understand the social cues which arise from others and therefore experience some degree of difficulty in social situations. This is especially true in terms of interpreting non-verbal cues from others as well as in terms of the AS learners using inappropriate non-verbal cues themselves. This makes it difficult for these learners to interact socially. Another difficulty experienced by these two AS learners was that of their restricted range of interests (Carrington & Graham, 2001). These boys tended to each have their own restricted range of interests (such as in Apple Macintosh computers) which inhibited their ability to concentrate in the school setting.

Lastly, both boys spoke about the stress that they felt at school. Although they were able to cope with their stress at school, their mothers reported that they would often act out this stress within the safety of the home environment (Carrington & Graham, 2001). This stress was mainly reported to be due to the desire to 'fit in' as well as the attempt to adjust to social situations. This was especially true for these boys at the age of 13 in that at this age, social interaction becomes more desirable and their inability to engage effectively in these social situations created much stress. These researchers concluded that AS learners need support and help in order to be able to adjust to the social situation which exists in an inclusive education setting. This is important for adolescent AS learners where peer relationships are important. AS learners are aware that they are different from the other learners and have the

desire to 'fit in' yet are unable to know how to engage successfully in the social world (Carrington & Graham, 2001).

Church et al. (2000), conducted a study which used a retrospective chart review to consider the social, behavioural and academic experiences of children with AS in inclusive education settings. This study included 40 AS children who were monitored at different stages between 1986 and 1998. The children fell into the following age groups: preschoolers, elementary learners, middle school learners and high school learners. The results highlighted the differences that exist between the different age groups.

In the preschool age group, the learners had difficulty "initiating, sustaining, or maintaining relationships with other children" (Church et al., 2000, p. 13). Many of these children struggled to read social situations and therefore tended to act inappropriately in school settings. The need for routine played a major factor in the behaviour which these learners displayed and any change was often met with tantrums and negative behaviour (Church et al., 2000). Some of the learners in this age group also displayed some language difficulties including: "lack of use of gestures, difficulty maintaining two-way conversations or talking to a person from the other side of a room" (Church et al., 2000, p. 14).

In the elementary age group, the AS learners were seen as having noticeable social problems. Again, the AS learners misread social situations and therefore acted inappropriately. These learners also struggled to acknowledge the view of another learner, which created many ineffective social interactions and further alienated these learners from their peers (Church et al., 2000). In this age group, the AS learners seemed to be very rule-based and became very upset when any rules were broken. This therefore led the AS learners to 'tell-on' which also served to alienate them from their peers (Church et al., 2000). AS learners tend to become fixated on particular subjects or objects which lead to "perseverations on the same topics day after day" (Church et al., 2000, p. 15). This was found to bore their peers and impact on the friendships that the AS learners could form. Handwriting also presented as a major difficulty experienced by AS learners in this age group.

In the middle school age group, AS learners were reported to experience social difficulties as their area of major weakness (Church et al., 2000). Some of the social problems which made

the AS learners stand out socially from their peers were: “an inability to read social cues of their peers, awkward body posture, awkward use of gestures, annoying habits such as making noises or drumming desks, highly variable eye contact, and odd body language” (Church et al., 2000, p. 17). Although routines were still considered to be important, the AS learners showed more of an ability to adapt to changes and reacted better to transitions in this age group (Church et al., 2000). In terms of their academic development, AS learners in this age group excelled in work which dealt with factual knowledge but had difficulty with abstract concepts. Teachers also reported that it was a challenge to motivate these students to engage with any subject that was outside of their areas of interest with which they had become fixated (Church et al., 2000).

The last age group considered by this study was the high school age group. As the AS learners developed, social interaction became important to them. However, social interaction was reported by parents as the “clearest and most challenging problem” (Church et al., 2000, p. 18), facing the AS learners. Again, the AS learners struggled to read social cues and did not interact with their peers on an age-appropriate level. Any friendships which were formed seemed to be on a superficial level, often based on common interests in what the AS learner was interested in (Church et al., 2000).

The overall finding from the Church et al. (2000), study was that as the AS learners matured their desire to ‘fit in’ with their peer group increased. This caused some distress in these learners as they lacked the skills and social knowledge to interact efficiently with their peers. However, as the AS learners grew older, they were able to learn some social skills which would enable them to partially interact with their peers on a day-to-day basis (Church et al., 2000).

The above studies indicate that inclusion for AS learners has both benefits and challenges. Some of the key problematic findings of these studies has been the AS learners’ desire to ‘fit in’ with peers and the social difficulties that these learners experience (Humphrey & Lewis, 2008; Carrington & Graham, 2001; Church et al., 2000). These studies have indicated that AS learners struggle to interpret social cues and therefore often act inappropriately which may serve to alienate them from their peers. The AS learners’ restricted range of interests has been

shown to impact on their ability to concentrate and remain motivated at school (Carrington & Graham, 2001; Church et al., 2000).

However, other research has highlighted that inclusive education is in fact a positive social experience which allows for improvements in social skills over time (Downing et al., 1996, in Katz & Mirenda, 2002). Although researchers agree that it takes time for AS learners to adapt to the inclusive environment, they are still able to learn to function relatively well in the inclusive education setting (Humphrey & Lewis, 2008; Church et al., 2000). Although the social aspect of inclusive education is problematic for AS learners, academically AS learners seem to be able to learn to cope relatively well while experiencing strengths and weakness as displayed by all learners. The diverse factors found in these studies all impact on the AS learners' experiences of inclusion in different ways and further highlight the need for more research to be done in this area.

2.5. Aim and rationale

Due to the lack of research that has been conducted on AS learners in inclusive education settings, there is a distinct need to gather data regarding the experiences of inclusion for AS learners themselves so that a greater understanding of inclusive education from AS learners' perspectives can be obtained. It is vital that the implications, both positive and negative, of inclusive education are understood, so that informed decisions around the education of AS learners can be made. This will in turn allow these learners to develop to their full academic and social potential.

There is no known research in this area in South Africa and given our diverse and complex society which has limited resources, studies of this nature are essential "to better inform future policy and associated practice to maximize educational outcomes" (Foster, 2002, p.11). This research aimed to provide parents, educators, researchers and those learners with AS with in-depth information around the experiences of AS learners in inclusive education settings so that a better understanding of inclusion for these learners can be achieved and that where possible, appropriate changes to current practices may be recommended. This research also aimed to highlight the individualised experiences of those learners with AS thus drawing attention to the diversity between AS learners and the need to assess each child individually before making informed decisions around the child's education.

This research further aimed to provide and develop understanding of the experiences of AS learners in inclusive education settings, so that individuals who work with these learners will be provided with correct information which allows them to be able to support AS learners adequately in the inclusive education environment.

2.5.1. Research Objectives

This study aimed to:

- Explore the experiences of AS learners in inclusive education settings including the factors that enhance or negatively impact on their experiences.
- Highlight the similarities and differences in the experiences between the research participants.
- Explore the changes in the AS learners' experiences of inclusive education over time.
- Describe the possible factors which may influence the experiences of inclusion for AS learners.

Chapter 3: Methodology

This chapter explains the case study methodology used for the research, the exact methods used to obtain data, and the sampling process. It also considers issues of validity and reliability and the data analysis techniques that were used.

3.1. Research Design

This study used a descriptive and exploratory qualitative design using an interpretive approach which emphasized the experiences of AS learners in inclusive education settings. Descriptive case studies describe a phenomenon, such as AS learners' experiences in inclusive contexts (Yin, 2003, in McGloin, 2008). This study was a collective case study which used multiple participants who were interviewed using a semi-structured interview schedule. Collective case studies are those which are interested in studying a "group of cases" (Stake, 1995, in McGloin, 2008, p. 48). The researcher chose to use multiple cases as the "evidence from multiple cases is often considered more compelling" (Yin, 2003, p. 46). The sample size remained small as the aim of this research was to obtain in-depth data about each case so that the findings can be used as a rich data source from which information about inclusion and AS can be drawn.

Since there has been very little qualitative research in this area, this study was also exploratory. Exploratory case studies are "used to explore those situations in which the intervention being evaluated has no clear, single set of outcomes" (Yin, 2003, in Baxter & Jack, 2008, p. 548). The analysis revealed the common themes in the AS learners' experiences, the differences and the factors that impacted on these experiences. The aim was to gain a rich and descriptive understanding of the AS learners' experiences of inclusion.

3.2. Sample

The sample for this research consisted of five learners who have been diagnosed with AS and who are attending inclusive education schools. AS learners were selected based on their availability to the researcher, as well as the learners fitting the established criteria for the research. This included the criterion of being included in mainstream education. The age of the learners was between seven and 13 years. Due to the higher prevalence of AS in males than in females, four male participants and one female participant were available for this

research. The sample consisted of: one male in grade two (aged eight years) at a private school with smaller classes; one male in grade three (aged nine years) at a government school; one female in grade three (aged nine years) at a private school with smaller classes; one male in grade four (aged 11 years) at a government remedial school which follows the mainstream syllabus and had smaller classes; and one male in grade seven (aged 13 years) at a private school with smaller classes. This male had had access to a facilitator up until three months prior to this research.

The sampling was therefore purposive and convenient. Purposive sampling occurs when particular research situations are chosen because the researcher needs to “discover, understand and gain insight” (Merriam, 1988, in Ghesquiére et al., 2004), and therefore chooses a sample from which the most relevant information can be obtained. Due to the nature of the research, accessibility is crucial and therefore convenience sampling where a “group of individuals who are readily available to participate in a study are chosen” (Yin, 2003, p. 78), was used. Even though the sampling was purposive and convenient, participation in this study was voluntary. Schools and support groups in the Pietermaritzburg and Durban areas were approached regarding the nature of the research and were then asked to contact the parents of possible participants to obtain their consent. Only once parental consent was obtained, assent from the AS learners was obtained.

3.3. Data Collection Procedure and Instruments

Due to the qualitative nature of this research, data was gathered using face-to-face interviews. The interviews were semi-structured so that new ideas had the opportunity to arise during the interview. The semi-structured interviews meant that the researcher could ground the discussion in the child’s experiences that they presented therefore creating a more collaborative research process (Crivello, Camfield & Woodhead, 2009). Due to the nature of AS, individual interviews were used, as focus groups or group interviews may have caused undue anxiety in the AS learners. The individual interviews gave the AS learners the opportunity to communicate their feelings and experiences to the researcher without the added pressure of having others in the room. By allowing the AS learners to provide insight into their own experiences, the child was affirmed as an expert in his or her own life and was viewed as a valid source of data (Langsted, 1994, in Crivello et al., 2009). The individual

interviews were recorded and lasted approximately 60 minutes. During this time, the learners were asked to respond to a series of semi-structured questions (see attached Appendix A).

The researcher decided to use multiple methods for collecting data from the AS learners as it provided more insight into their experiences. In a study done by Humphrey and Lewis (2008), on the experiences of AS learners in mainstream education settings, semi-structured interviews as well as pupil diaries were used. Originally, drawings were not included in this research. However, after one participant drew a picture of his life in school, the researchers decided that drawings would be useful in providing more insight into the AS learners' experiences of mainstream education. In addition to asking the AS learners to answer the semi-structured interview questions, the current researcher also asked the AS learners to participate in some projective tasks, for example: drawing a timeline of their inclusion experience from the start to the present time. The learners were also asked to draw a picture of their life at school. The last drawing that the learners were asked to draw was one of them and the other learners in their class doing something (see instructions attached Appendix A). Their explanation of these drawings were used to gain insight into the feelings and experiences of the AS learners in the inclusive education setting.

There are some practical advantages to using visual data gathering methods in research. These include that fact that drawing is a popular activity amongst children and it does not require the child to have literacy or verbal skills (Merriman & Guerin, 2006) – a common difficulty for children on the Autistic Spectrum. Children also generally view drawing activities as fun and non-threatening which allows the child to “express both conscious and unconscious attributes, wishes and concerns” (Koppitz, 1968, in Fury, Carlson & Sroufe, 1997, p. 1154). The non-verbal nature of drawings may “free the child to express emotions and attitudes that are otherwise difficult to assess” (Koppitz, 1968, in Fury et al., 1997, p. 1154). One cannot assume, however, that children are not simply drawing what they know (Thomas & Jolley, 1998, in Merriman & Guerin, 2006), thus it is essential that drawings are not the sole method of data collection. Other methods should be used in conjunction with the drawings so that collaborative information can be gathered. Some critics argue that the artistic ability of the child may affect the projective meaning that can be interpreted from their drawing. Ogdon (1975), however argues that personality characteristics can be seen in projective drawings regardless of their quality. The way in which the child represents him or

herself and other figures gives some indication of their attitude towards themselves and others.

In the current research, the researcher used both semi-structured interviews and drawings in order to provide an overall idea of the experiences of the AS learners in mainstream education settings. The verbal explanations of the drawings were also considered when analyzing the data presented.

Data was collected at the home of the AS learner under parental supervision so that the learner could be protected from identification outside of the home environment. Conducting the interview at the AS learners' homes provided the learners with an environment in which they were most comfortable to speak about their experiences of inclusive education. After obtaining informed consent (see attached Appendix B) from the parents of the AS learner, the researcher introduced herself to the AS learner and explained the purpose of the research and what it would involve. Informed assent was then obtained from the AS learner (see attached Appendix C). The researcher began with the semi-structured interview questions. The AS learner was then asked to complete the timeline exercise which included a discussion around what s/he included on the timeline. The researcher then asked the AS learner to draw a picture of his/her life at school which also included a discussion about his/her feelings in the picture as well as a description of what was happening in the picture. The AS learner was also asked to draw a picture of him/herself and the other children in their class doing something together. The researcher asked the AS learner to explain the drawing and engaged in a conversation with him/her around the drawing and what was included. The AS learner was given the opportunity to say anything more that s/he felt was important for the researcher to know. The researcher then thanked the AS learner and his/her parents for their participation in the research.

3.4. Data Analysis

3.4.1. Analysis of the semi-structured interviews

The recorded interviews were transcribed verbatim. Thematic analysis was used to organize and describe the data in rich detail and also allowed for some interpretation of different facets of the research topic (Braun & Clarke, 2006). The following different steps for the interpretive thematic analysis of data were used (Braun & Clarke, 2006):

1) Familiarizing oneself with the data

Familiarization involves immersing oneself in the data in order to become familiar with the content. The first part of this process was to transcribe the data in a verbatim manner. The researcher listened to each interview and transcribed what was said by each participant. The researcher read the data many times in an active way so as to search for underlying patterns and meanings in the data (Braun & Clarke, 2006). During this step, the researcher was also able to look for ideas for the coding of the interviews.

2) Generating initial codes

This step involves the “production of the initial codes from the data” (Braun & Clarke, 2006, p. 88). Codes capture a feature of the data which is of interest to the researcher and are considered to be the most basic element of the data (Braun & Clarke, 2006). The researcher used a theory-driven approach where the researcher approached the data with specific questions in mind that needed to be coded around. These questions were consistent with the research questions of this project. The researcher coded each interview manually by writing on the transcripts. The purpose of this stage of analysis was to organize the data into meaningful groups so that interesting aspects that may form the basis of repeated patterns could be identified (Braun & Clarke, 2006).

3) Searching for themes

Searching for themes occurs once all the data has been coded initially. The purpose of this step is to re-focus at a broader level in order to identify themes which the codes may be grouped into (Braun & Clarke, 2006). At this stage, the aim is to begin to analyse the codes and consider how these codes may combine to fit into overarching themes (Braun & Clarke, 2006). The researcher wrote each of the different codes on pieces of paper in order to group them into their respective themes. It was also important to make a list of the different extracts which corresponded to the different codes and themes so that the researcher could remain focused on what the essence of each code and theme was. During this time, the different interviews were kept separate so as to allow for individual analysis before integration which occurred during a later phase.

4) Reviewing themes

This phase, as the name suggests, involves a refinement of the initial themes. The purpose of this stage is to make sure that the themes are coherent and to rework the themes that need to be changed (Braun & Clarke, 2006). This stage can be broken into two separate levels. Level one was concerned with reviewing at the level of the coded extracts where the researcher looked at the extracts for each code under each theme and made certain that the extracts were coherent. Level two involved considering the entire data set and analyzing whether or not the themes reflect the meanings that were evident in the data set as a whole (Braun & Clarke, 2006). The researcher completed both levels for each of the individual interviews.

5) Defining and naming themes

During this step, the aim is to define and refine what each theme captures (Braun & Clarke, 2006). One must also consider each theme and its application to the broader data. The researcher considered each separate theme and decided on what narrative should accompany each theme in a way that would allow for each theme to be highlighted in terms of what was interesting and important about it. It was important to consider each theme individually but also in terms of how the different themes related to one another in order to see how the data answered the research questions (Braun & Clarke, 2006).

At this stage in the analysis, the researcher brought together all of the individual interviews in order to integrate them. The integration of cases is used when multiple cases are used, such as multiple interviews as in this research. The aim of the integration is to look across all the cases to “obtain a more generalized understanding of the phenomenon” (Willig, 2001, p. 58). In the current study, the researcher was concerned with looking at AS learners’ experiences of inclusive education. The researcher looked at the different themes which emerged from each individual interview and looked for emerging higher order themes which were then checked against the transcripts to ensure their consistency and validity. Integration allows for the emergence of master themes that “capture the quality of particular shared experiences of the phenomenon” (Willig, 2001, p. 59). The researcher made a list of the master themes that had emerged with a list of the constituent themes that made up each master theme.

6) Producing the report

This is the last step in the interpretive thematic analysis as set out by Braun and Clarke (2006). This step involves the final analysis and the write-up of the report. The aim of this stage is to provide enough evidence of the data collected to convince the reader of the validity and importance of the research (Braun & Clarke, 2006). Although it is important to capture each theme through data extracts, it is equally important that the extracts are “embedded within an analytic narrative that compellingly illustrates the story...about your data” (Braun & Clarke, 2006, p. 93).

At this stage, the researcher considered each theme and provided evidence for each one from the different interviews that were conducted. The data that was used offers overall insight into the experiences of each of the AS learners, highlighting both their common and unique experiences of inclusive education.

3.4.2. Analysis of the drawings

The drawing of the AS learners’ life at school was analysed using Ogdon’s (1975), method while the drawing of the AS learner and the other children in his or her class was analysed using Knoff and Thompson’s (1985), method. Each of the drawings were analysed in terms of their different aspects and what they represented about the AS learners’ lives at school. The verbal explanations of the drawing were used to gain further insight into the AS learners’ feelings and experiences of inclusive education. The researcher analysed the drawings in terms of their projective meaning for the AS learners.

The drawing of the AS learners’ life at school was interpreted using Ogdon’s (1975), Human Figure Drawing analysis method. Ogdon (1975), provides explanations for different parts of the drawing that are presented. The parts include, among many others: placement of the drawing, facial features, the size of the drawing as well as, distortions or omissions in the drawing. Ogdon (1975), noted that it is essential to remember that focusing on one single aspect of the drawing is inconclusive. Rather, it is necessary to look at the drawing overall, within its context, so that an accurate interpretation can be made. It is noted that “many indicators may be considered best as contributing to an overall index of adjusting or maladjusting” (Ogdon, 1975, p. 67). For the analysis in this study each aspect of the AS

learners' drawings was considered and related to the verbal explanation of the drawings provided by the child.

The drawing of the AS learner and the other children in his or her class was analysed using Knoff and Thompson's (1985), method which considers both the Kinetic Family Drawing interpretation and the Kinetic School Drawing interpretation. After this analysis was done, the researcher was able to use the general Human Figure Drawing guidelines set out by Ogdon (1975), to gain further information about the figures presented by the AS learners. Knoff and Thompson (1985), note that when interpreting Kinetic School Drawings, one should also consider the information presented in the interpretation of the Kinetic Family Drawing as there is much overlap between the two interpretations. Kinetic School Drawing interpretations are separated into five categories which were all considered for this research. The categories are: actions of and between figures, figure characteristics, position, distance and barriers, style, and symbols (Knoff & Thompson, 1985). The researcher used the verbal explanations of the drawing as collaborative information to the projective interpretation in order to gain more accurate insight into the AS learners' classroom interactions and experiences.

3.4.3. Analysis of the timeline

The researcher used the timeline as collaborative information for the interviews that were conducted. The information that was presented by each of the AS learners on the timelines gave the researcher an idea of how the AS learners' experiences of inclusion had changed over time. The AS learners' explanations of the timelines provided the researcher with additional information about their experiences and was used as a tool to strengthen the research rather than as a separate method of data collection and analysis.

3.5. Validity and Reliability

Notions of validity and reliability are different in qualitative research to quantitative research, due to the differences in the aims of each research type. Qualitative research uses a naturalistic approach that seeks to understand phenomena in context-specific settings (Golafshani, 2003). The aim of qualitative research is not to generalize but to rather obtain "understanding and extrapolation to similar situations" (Hoepfl, 1997, in Golafshani, 2003, p

600). The notions of reliability and validity in qualitative research are represented by: credibility; dependability; confirmability; and transferability (Golafshani, 2003).

The main question that was considered by the current researcher was whether or not the research allowed for a good understanding of a situation or phenomenon to be obtained (Golafshani, 2003). This research gathered in-depth information from each participant in order to gain a better understanding of their experiences within the inclusive education environment.

Credibility refers to whether or not it can be established that the results are believable from the perspective of the participants (Trochim, 2006). Since the purpose of qualitative research is to understand a phenomenon from the participants' view, the only way to gain credibility is to ask the participants to judge the credibility of the results (Trochim, 2006). In this research, the researcher constantly checked for her understanding with the participants to ensure that she could gain their perspectives of their experiences of inclusive education.

Dependability in qualitative research considers the 'quality' of the understanding that the researcher obtains (Trochim, 2006). Dependability is achievable when the "steps of research are verified through examination of such items as raw data, data reduction products and process notes" (Campbell, 1996, in Golafshani, 2003). This research had raw data in the forms of recordings and transcriptions. The data reduction products included the categorizing of raw data into different themes through interpretive analysis. The process notes included a thorough documentation of the process of data collection.

Confirmability in qualitative research refers to the degree to which the results of the study can be confirmed or corroborated by others (Trochim, 2006). The researcher can document the procedures for checking and rechecking data throughout the study (Trochim, 2006). In the current research, the researcher worked closely with her supervisor who was able to confirm the results of the study. Also, the process of thematic analysis allowed for constant checking and rechecking of the data as themes emerged so that the researcher could ensure that the results were accurate reflections of the AS learners' experiences of inclusive education.

Transferability deals with the generalisability of the findings of a study to other similar settings (Golafshani, 2003). Although the sample size was relatively small, the researcher was not aiming to generalize or transfer the research findings to the experiences of all AS learners. Rather, the researcher aimed to allow for in-depth information and understanding to be obtained which could then be used as a resource for other researchers, educators, parents and AS learners themselves.

Triangulation is an important way of increasing the quality of qualitative research. Triangulation involves the use of different methods of data collection. This is important in qualitative research as “engaging multiple methods ... will lead to more valid, reliable and diverse constructions of reality” (Golafshani, 2003, p. 604). The current study used both verbal and pictorial methods to collect data. This increased the understanding which was obtained from this research because the preferred means of communication for the AS learners may have been pictorial rather than verbal which, allowed the researcher to gain accurate insight into the learners’ real experiences of inclusion. The researcher gathered a variety of data from each participant which provided the researcher with a holistic picture and better understanding of each AS learner’s experience of inclusion.

3.6. Ethical considerations

The most important ethical considerations for this research were: informed consent, non-maleficence, confidentiality and beneficence. These are discussed below.

Informed consent was obtained from the parents of the learners with AS. Due to the fact that the learners were under the age of 18, consent had to be obtained from the learners’ parents. The informed consent form also indicated that the parents were able to remove their children from the study at any time without prejudice or discrimination. This did not occur at any stage in the current study. Assent was also obtained from the AS learners themselves. The researcher explained to each AS learner what the research involved and what was required of them. By giving their assent, the AS learners indicated that they participated in the research voluntarily and that they understood the nature of the research as well as their right to withdraw from the research at any time without prejudice or discrimination. Informed consent and assent also included permission to record the interviews. The researcher obtained

informed consent and assent from each of the participant's parents and the learners themselves.

Regarding non-maleficence, the research participants were not harmed in any way. However, the literature indicated that the AS learners' experiences of inclusion may be both positive and negative. Because the AS learners were discussing their experiences of inclusive education, sensitive issues such as bullying arose which, may have caused the AS learner to become upset or anxious. Prior to each interview, the researcher explored the support mechanisms available to each child so that if the child became upset, he or she could be appropriately referred for assistance. The researcher was sensitive to these issues and emotions and was prepared to stop the interview if necessary to preserve the well-being of the learner. The researcher was also prepared to seek support for the learner from the learner's parents or support staff. Due to the fact that the interviews and drawings were done in the child's home under parental supervision, the researcher ensured that the child had his or her support systems close should he or she need them. Participating in the research was also voluntary and, if the AS learner's parents felt that the child was in any way indicating that they were unhappy participating in the study, they had the right to withdraw the child from the research without any prejudice or discrimination. Also, should the child have wanted to withdraw from the research at any time, s/he had the right to do so without any prejudice or discrimination. The researcher also had previous experience in working with children with Autistic Spectrum Disorders, having worked specifically with an Autistic child in a case study when she completed her honours project. She was also being trained as a professional educational psychologist and therefore used these skills when working with these children and their families. None of the participants in this research became upset or felt that they needed to withdraw from the study. The parents of the AS learners did not withdraw any of their children from the study.

In terms of confidentiality, the researcher signed confidentiality forms which stated that at no time during the study or after the study would the identity of the research participants be revealed. Each participant was given a pseudonym at the beginning of the study which was used in all notes and records of the study. All records of observations were kept in a locked cupboard to which only the researcher had access. This ensured that the participants could not be identified as being part of this study. Any research data that was entered on to the

computer was kept in a folder with a password which only the researcher knew. All data was stored under the pseudonyms in order to further protect confidentiality. Due to the fact that the AS learners were interviewed in their home environment under the supervision of their parents, they could not be singled out or be identifiable in school as being research participants. This further protected their identities. Once the research was complete, all of the raw data such as the written transcriptions was shredded. The only record of this information is kept in the password folder in the computer. The tapes will be kept under the pseudonyms in a locked cupboard to which only the researcher has the key for a period of five years before being destroyed.

Regarding beneficence, although the study may not benefit the AS learners directly, the research created a resource of information regarding their experiences which may lead to a greater understanding by parents and educators of AS learners who are in inclusive environments.

Ethical clearance for this study was obtained from the higher degrees committee at the School of Psychology, University of KwaZulu Natal.

3.7. Limitations of the design

There were some limitations to the design of this research. These included: that this study was not longitudinal, that there was only one interview conducted with each participant, that the researcher relied solely on the AS learners' accounts of their experiences, and the projective interpretations that were made from the AS learners' drawings.

A longitudinal study may have provided more insight into the AS learners' experiences of inclusion. In the current research, there is the limitation that the AS learners may have only conveyed those issues that were affecting them at the time of the interview and therefore not a holistic portrayal of their experiences. Due to the limited time available for this research, a longitudinal study could not be done. However, the researcher did control for some of this factor by asking the learners about their previous school years.

The once-off interview that was conducted may have affected the responses that the AS learners gave. It may have been more beneficial to have two sessions with the AS learner –

one to establish rapport with the child and another to complete the interview – so that the AS learners could have felt more at ease to reveal their experiences of inclusion. However, due to the practicality and availability of the AS learners to be seen twice in their home environments, the once-off interview had to be used. The researcher did, however, spend some time at the beginning of the session with the AS learner establishing a level of rapport.

Relying solely on the AS learners' accounts of their experiences of inclusive education limited the information that could be obtained. Although the main aim of this research was to gather information from the AS learners themselves, it would have enhanced the research design if the researcher had been able to gather collateral information from the parents and teachers of these AS learners in order to gain a more holistic idea of these AS learners' experiences of inclusion. Again, due to the time limit of this research, further information could not be obtained. However, this was not the focus of the research, rather the researcher wanted to know from the children themselves what inclusion had been like for them.

Lastly, some criticisms have been made about the use of projective interpretations in research. (Thomas & Jolley, 1998, in Merriman & Guerin, 2006) The researcher did, however, use standardized methods for interpreting the AS learners' drawings and ensured that the interpretations made correlated to the AS learners' verbal explanations of the drawings. The drawings were also only used to gather more information about the AS learners' experiences and not as the sole method of data collection. Thus, it was only relevant information that was used from the drawing interpretations to enhance the research.

3.8. Conclusion

Having provided an overview of the methods used to collect and analyse the data in this research, the results of this study are discussed in the following chapter.

Chapter 4: Results

This chapter will report on the results of the interviews with the children, firstly, by focusing on the themes that emerged during the thematic analysis and, secondly, by presenting the analysis of the children’s drawings.

<u>Name*</u>	<u>Age</u> (years)	<u>Grade</u>	<u>Number of years in</u> <u>Inclusion</u>	<u>School context</u>
Nathan	8	2	3 (since Grade R)	Private school Small class
Josh	9	3	4 (since Grade R)	Government school Large class
Sarah	9	3	4 (since Grade R)	Private school Small class
Mark	11	4	5 (since Grade R)	Government remedial school Small class Received therapeutic intervention at school
Kyle	13	7	8 (since Grade R)	Private school Small class Facilitator up until 3 months before his interview

Table 1: A summary of the research participants including their age, grade, the number of years they had spent in the inclusive education setting, and a description of their school contexts.

* Pseudonyms have been used throughout this research in order to protect the identity of the participants.

4.1. Thematic analysis

Thematic analysis indicated that the participants had both unique and common experiences of inclusion. Some of the AS learners’ experiences depended on how long they had been in the inclusive education setting as well as on the support that they received. The common

experiences of inclusive education for the AS learners included: difficulties in forming and maintaining friendships, their experiences of bullying at some stage in their schooling in the inclusive education environment, their experience of having some friends in their classes who they could engage with, and their negative experiences of their schoolwork. The participants differed with respect to their first experiences of school, their particular difficulties in their current experiences of inclusive education, the way in which their special interests interfere in their education as well as their experience of support within the inclusive education setting.

The following themes for these AS learners are presented below: the initial experiences of attending school in an inclusive environment, the current experiences of attending school in an inclusive environment, the AS learners' experiences of schoolwork, their social experiences, their special interests and how they influence their experiences of inclusion, and the experience of support and facilitation on the experiences of inclusion for two of the participants.

4.1.1. Theme 1: Entry to the inclusive education setting.

Although all of the participants began attending school in the inclusive education setting in Grade R, they each had different experiences of this process. The experiences of beginning school which were reported by the participants may not be that different from the normal adjustment expected of typically-developing children when starting school. The AS learners' experiences on entering the inclusive education setting was also affected by their teacher and their perceptions of their teacher as supportive and understanding.

For three of the participants Grade R was a positive experience. Josh reported that he found Grade R his easiest year, as fewer expectations were placed on him and he found that he had more freedom to do what he wanted to do.

I liked Grade R. It was so fun. (Josh)

My funnest day was in Grade R. They have no uniforms. They don't forget their aftercare clothes because they don't have aftercare clothes. (Josh)

Sarah reported that she enjoyed Grade R because the teachers were all nice to her and she was able to meet some new girls.

*Can you tell me what it was like when you first started going to School X?
(Researcher)*

I had fun. (Sarah)

What was the best part? (Researcher)

The teachers were nice. There were quite a lot of girls. I am still making friends with everyone. (Sarah)

Mark enjoyed Grade R because there was no homework and he was able to engage with one of his special interests – Spiderman.

Let's start with Grade R. What were some of the things you liked in Grade R?

(Researcher)

We used to play in the mornings. And I could play with cool Spiderman toys. And we didn't have any homework. (Mark)

For Kyle, Grade R was a positive experience although he found it had difficult aspects as well.

I can remember I enjoyed it but...um...not that much. (Kyle)

Nathan found that beginning school in an inclusive education setting was a difficult adjustment. He reported that his experiences were negative and that he did not enjoy attending school at first. This was partially due to him being unfamiliar with the people in his school.

Um...it was quite weird, I didn't know who anyone was. (Nathan)

Although Nathan found it difficult to adjust to school in the inclusive education setting, he found school to be pleasant when he was able to engage in his special interest of Star Wars. The nature of Grade R meant that he was given more freedom to engage with his special interest on a more regular basis.

But then one day I liked Star Wars in Grade R and I saw R2D2 in the other class and I asked for it and I played with it but I didn't know there was a whole army inside with one character who is the boss [proceeded to tell the whole story]. (Nathan)

Nathan, Mark, Josh and Sarah had positive experiences of their teachers in Grade R which initially helped them to adjust to the inclusive education setting. The level of acceptance and support from their teachers was important to the AS learners.

What else did you like in Grade R? (Researcher)

I will write the word teacher. (Nathan)

And your teacher in Grade R? (Researcher)

Yip. She was very nice. (Mark)

I liked my teacher [in Grade R]. I liked all my teachers. (Josh)

When drawing positive things in Grade R:

My teacher. This is what she looks like. (Sarah)

Mark moved to a new school environment in Grade one. This was an ambivalent experience for him and affected his initial experience of inclusion. He seemed to have struggled to adjust to some school rules but was able to form some friendships.

Can you tell me what it was like when you first started coming to this school?

(Researcher)

Grade one. It was nice but I was getting into trouble a lot. (Mark)

How come? (Researcher)

Because I was busy doing stuff I was not supposed to. Once I had a sweet and I decided to go to the bathroom and I decided to eat my sweet and my teacher yelled at me. She said I must eat it at break. (Mark)

What else do you remember? (Researcher)

I made some new friends. That's when I met Br. (Mark)

4.1.2. Theme 2: Current experiences of attending school.

At the time this research was conducted each of the participants had a different experience of attending school in the inclusive education setting. It appeared that the amount of time the child had spent in the inclusive education setting as well as their experiences of social difficulties influenced their current experiences of school. The perception that the AS learners had of their current teachers also affected the experiences of inclusion for three of the participants.

Interestingly Josh, who experienced entry into inclusive education as positive, was struggling in his current educational context. He reported that the expectations placed on him made it

difficult for him to fit in to the inclusive education setting. Josh also experienced the greatest difficulties in peer relationships which influenced his current experience of school in the inclusive education setting negatively.

I wish my mommy could be there with me so she can see what really happens. (Josh)

Josh decided that he would rather avoid the process of having to attend school itself and complete his work in the home environment. It therefore appeared that the social dynamic of the inclusive education setting had the most impact on Josh's experience of inclusive education. He also had a negative perception of his current teacher which affected his experiences of school. Interestingly, Josh was also the only participant who attended a government school with large classes which would have negatively affected the relationship that he could form with his teachers.

It is much more fun to have school at home. Imagine everyone could have their own teacher at home. (Josh)

When drawing negative things about Grade three:

But I don't like my new teacher this year. Mrs M left and now we have Mrs S. (Josh)

What don't you like about Grade three? (Researcher)

My uniform and Mrs S. (Josh)

Although Nathan presented as being quite ambivalent about attending school, he reported "Monday headaches" which indicated how difficult the experience may have been for him. Nathan reported that he sometimes became angry and fought with his parents when he had to go to school. For him, Mondays were particularly difficult days to deal with.

I don't like Mondays. I'm scared of them sometimes cause I get headaches a lot on Mondays. (Nathan)

Why do you get headaches on a Monday? (Researcher)

I don't know. (Nathan)

Nathan's feelings around attending school also seemed to be influenced by whether or not his special interest in Star Wars could be entertained in the experience.

It's much better now because we can sometimes watch a DVD in the car and it's about Star Wars. (Nathan)

Nathan did, however, report that he liked his current teacher who helped to make his current experience of inclusion more positive.

Miss L is my teacher and she makes Grade two easier. I love her and I loved all my other teachers. (Nathan)

In Grade one you have to colour in nicely all the time and in Grade two it doesn't matter all the time cause you can play sometimes. (Nathan)

For Sarah, the experience of attending school each day was a positive one. She felt happy when she arrived at school and although she found the work to be more difficult, she still enjoyed attending school each day. This was also influenced by her being able to see her friends each day.

What's it like going to school now? (Researcher)

Okay. Nice but...um...the work is hard. (Sarah)

And when you have to get in the car and drive to school and when you arrive at school, how do you feel? (Researcher)

I feel happy. (Sarah)

What are your favourite things about school? (Researcher)

That I get to see my friends. (Sarah)

Mark generally had a positive experience of attending school each day although there were some aspects of school that he found difficult. He had developed a strategy for dealing with those days when he did not want to attend school.

What's it like coming to this school now? (Researcher)

Oh...it's harder work now in Grade four... And I like coming to school and doing work and seeing my friends. And detention. That's what I don't like doing. (Mark)

And when you arrive at school, how do you feel? (Researcher)

I feel lazy and tired but I say that it is going to be a good day. (Mark)

Mark had also been able to develop a good relationship with his teachers who helped to make his experience of inclusion more positive.

Ja. They help me. The teachers are nice. They sometimes help you with your work. My teacher is very nice. She helps me a lot. Sometimes when people are done [with work] and some people are not done, we just say the answer so the people who are not done can get the answer. And last term I was the monitor. It was fun being the monitor.

(Mark)

Kyle had been in the inclusive education for seven full years and was in his eighth year when this research was conducted. Although his first experiences of inclusive education had negative aspects, Kyle reported currently only having positive experiences of attending school. Therefore, Kyle's experience of inclusive education became more positive over time. It appeared that the support that Kyle received during his schooling positively influenced his current experiences of school.

Apparently I am supposed to have overcome it and I am almost back on track where I should be and I am enjoying it [school] now. (Kyle)

4.1.3. Theme 3: Experiences of schoolwork.

Overall the participants indicated that they had both positive and negative experiences of their schoolwork. These experiences were influenced by their special interests as well as by their academic self concepts and depended on the work they were presented with.

"Everyday subjects I am now fine with"

Kyle's experiences of schoolwork changed over time from negative to positive. He found current work to be easier to cope with. This was influenced by the individual support that he received from his facilitator.

What would you say is the biggest difference between when you first started school and now? (Researcher)

I think the biggest difference was that I couldn't cope very well with everything and too much of one thing made me...um...I used to even cry when things got too much. But that was like in Grade 3. (Kyle)

And that was when your facilitator was useful to you? (Researcher)

Yes. (Kyle)

Both Josh and Nathan's positive experiences of schoolwork were influenced significantly by their ability to engage with their special interests.

I wish everyday was computers. That would be so fun. (Josh)

When drawing positive things in Grade 2:

What about school work? (Researcher)

I like computers in Grade R, and Grade one and Grade two. (Nathan)

Sarah found work, especially math and writing, very difficult and enjoyed the opportunity to have a break from work during the school day.

What is it that you don't like about school? (Researcher)

Work. (Sarah)

What kind of work? (Researcher)

I do not like maths. (Sarah)

How come? (Researcher)

It's hard. (Sarah)

And what about writing? (Researcher)

Oh ja, I don't like that. (Sarah)

When asked what makes school better for her:

That we get two lunch times instead of one. We get play time. (Sarah)

Okay, so you get to have a bit of a break from work. (Researcher)

Ja. You just sit there and you get stuck and you say...what's the answer... and then the bell goes. Oh yay break. All my problems are over. (Sarah)

Sarah also indicated that she preferred non-academic work to the work which she found difficult. When drawing positive things for Grade 3:

And school work? (Researcher)

Art. I like art. (Sarah)

For Mark, tests played a vital role in his experiences of schoolwork. Although he enjoyed work and recognised its importance, he struggled with tests and disliked it when he was unable to achieve full marks.

What are some of the things that make school hard for you? (Researcher)

Tests. I sometimes don't know the answers that I never heard before. (Mark)

When drawing positive things for Grade three:

And what about work? (Researcher)

It's a good thing. It helped me to learn. Getting tests wrong is a bad thing. (Mark)

When drawing negative things for Grade four:

Anything else that you don't like? (Researcher)

Tests are a good thing when I get them right. I always sometimes get twenty out of twenty. (Mark)

"I don't like doing work I don't want to do"

For each of the participants there were some aspects of schoolwork that they did not enjoy or felt that they could not do. The learners also tended to compare themselves to their peers. The expectations that were placed on the AS learners were particularly difficult for Nathan to cope with. Both he and Sarah found writing very difficult.

Please tell me more about why you find writing hard. (Researcher)

Cause you mostly have to write neatly and I don't really always know how to write neatly. Sometimes I do and I haven't got ten stars yet in my writing book and the other children have because I'm not good in my writing book. (Nathan)

What don't you like about writing? (Researcher)

I'm always writing. We write all the time. (Sarah)

Do you think you are fast at writing? (Researcher)

Um...no. The others are usually quite fast. (Sarah)

Nathan also compared himself to his peers in other ways.

And homework? (Researcher)

I hate it. (Nathan)

Do you ever fight with mom [over homework]? (Researcher)

Sometimes. Sometimes I just do it and sometimes I just forget it. I forgot it about three or two times. Nobody else has. (Nathan)

The negative academic self-concept that the individual AS learners had of themselves negatively impacted on their experience of their schoolwork.

I don't like Zulu or Afrikaans. I'm terrible at Afrikaans. (Kyle)

I just don't like maths. I'm not really good at the times tables. (Josh)

What are some of the things that make school hard for you? (Researcher)

Okay. Problem-solving is hard. That is the hardest subject ever. Especially if it's with money. I just don't get the Rands and everything. (Sarah)

And I'm not good at my times. But sometimes I do good. And I do division. That's a bit tricky. When I learn I always forget the answer. I get confused. (Mark)

Mark was also concerned with the end of year tests and doubted his abilities to be able to pass these tests.

My friends on the bus said we do some tests at the end of the year. I doubt I am ready for that yet. (Mark)

Why not? (Researcher)

I am not old enough yet to probably do those. I will probably have to be thirteen. That's when I am a teenager. (Mark)

Interestingly, it seemed that boosting their own academic self-concepts and overall self-concepts was important for Nathan and Sarah to make themselves feel more confident. It was noted that these two participants did not hesitate to report their strengths and therefore seemed to have missed what others may have learned as the 'social etiquette' regarding pride and boasting.

I'm nearly top. I think I might be the top maths person in the class and there is this one boy who is quite better than me but I know what half of 90 is. (Nathan)

What is half of 90? (Researcher)

45. What's half of 30? (Nathan)

What? (Researcher)

15. (Nathan)

And some of my friends can't read and they have no idea how to read these [Star Wars] names. I can say all of the names [proceeded to say all of the names]. (Nathan)

K and A are the oldest [in my class]. They stayed back a year. K stayed back in Grade one last year. It must have been so embarrassing. And then A stayed back in Grade R. It must also have been embarrassing. They turn nine this year. So they are the oldest in the class. They are supposed to be in Grade three. (Nathan)

And I am good at maths. (Sarah)

Oh? (Researcher)

Well, tell me if you know anyone my age who can work out 600×3 ? It's 1800. (Sarah)

Well done. (Researcher)

I can tell you how many second there are in an hour...3600. (Sarah)

Wow. (Researcher)

I can spell Supercalifragilisticexpialidocious. I will have to write it. (Sarah)

Anything else you want to add or feel that I should know? (Researcher)

Well, I am above my class. (Sarah)

4.1.4. Theme 4: Social experiences.

All of the participants in this research reported to have been able to make some friends in the inclusive education setting. However, every AS learner in this research experienced some social difficulties that significantly impacted on their experiences of inclusive education as a whole.

“And I have a few best friends and we like each other a lot”

Each of the AS learners in this research reported that they had made some friends at school. Many of these friendships were based on the friend sharing the same interests as the AS learner, in particular when it came to the AS learner's special interests. It was clear that the AS learners' ages influenced the friendships that they formed.

Nathan had special interests in Star Wars and soccer and based some of his friendships around these.

Sometimes I play soccer; sometimes I play it with my friends. (Nathan)

Josh was the participant who experienced the most difficulty in forming friendships. He was able to make some friends but found that his friends were inconsistent.

I don't have a lot of friends. Sometimes they are nice and sometimes they are not nice to me. (Josh)

What do you do together when they are nice? (Researcher)
Play. (Josh)

Sarah had struggled with friendships in Grade R, one and two. She also experienced some difficulties in Grade three although she had managed to form a close friendship with a girl in Grade two which had carried through to Grade three. She referred to her as her best friend and wanted to spend as much time with her as possible.

Can I tell you about my good friend? (Sarah)

Of course you can. (Researcher)

D. We are best friends. We stick together even if we have gotten into a fight. (Sarah)

Is she in the same class as you? (Researcher)

Yes. She sits next to me. Unknowingly, Mrs B. put D there. Cause L, she sat there next to me after M, she wanted [to sit] somewhere else. So D immediately offered. (Sarah)

Sarah had also managed to form friendships with other learners in her class. Although these friendships were not as important to her as her friendship with D, she was able to play with these friends when D was unavailable or absent. It became apparent, however, that Sarah may have relied on D to a large extent and may have become hyper-focussed on her as her friend.

So, you were telling me about your friends at school. Do you play with D every day? (Researcher)

Ja. Except I didn't play with her today. She wasn't here. (Sarah)

And do you have someone to play with when she is not around? (Researcher)

Ja. Mom started calling D and my group of friends, D and co. The group of friends I've got, they are just called co. (Sarah)

When drawing the picture of her and others in her classroom doing something together:

Who else are you going to put in your picture? (Researcher)

Is that D? (Researcher)

Ja. She usually waters my plants with me. (Sarah)

It sounds like you two do a lot of stuff together. (Researcher)

We do. (Sarah)

Mark had also struggled with friendships throughout his schooling in the inclusive education environment. He did, however, manage to form a group of friends who he engaged with on a regular basis. He had formed a particularly close friendship with one of the boys in the group.

Can you tell me more about your friends at school? (Researcher)

T is my best friend. We always stay together. Sometimes when I am not here then he always stays with Br, B, S and A. (Mark)

And if he is not at school, who do you play with? (Researcher)

I play with Br. And by the way, T is the leader of the group. And I am the second leader and Br is the third leader.

So you have quite a lot of friends to play with? (Researcher)

Ja. And they are nice friends to me. Sometimes friends fight. That's okay. (Mark)

Although Mark had been able to form friendships easily throughout his schooling, he still struggled to maintain these friendships.

And by the way, Br never used to be nice to me even in Grade three and even in Grade two. And that's when I had an old friend N. She forgot that she was my friend. Now its just me and Br and T ... and B and A and S. (Mark)

Mark also found that his friends were a source of support for him. He felt that his friends understood him and could help him when he found something difficult to cope with.

Can you tell me about a time when you felt sad at school? (Researcher)

I felt sad yesterday. And then B was also teasing me. He said that I was running. And I threw a fit. And then T spoke to him and then he wasn't fighting with me anymore. (Mark)

So T helps you when you are a bit sad? (Researcher)

Yip. He helps me. And Br came to me at the end of Grade three when I was so sad after my Granny left and he told me to be calm and think about how she was doing on the plane. (Mark)

It was clear that Kyle developed a desire for friendships as he became older and therefore tended to orient himself towards his peers' interests. When drawing the picture of himself and others in his class doing something together, Kyle drew a picture of them playing soccer.

We are supposed to be playing soccer. I do that now. I never really used to like sport at all that much a couple of years ago but now I am fine with it and I play soccer sometimes. (Kyle)

"They call me names and hurt me"

Although the participants were able to make some friends, they all reported experiencing some form of bullying, either occurring in the past or as a part of their current experiences when this research was conducted. It also seemed that these AS learners tended to perceive particular social actions as bullying whereas other typically-developing peers may not have viewed these actions in the same way. This would have been affected by the AS learners' difficulties in social functioning especially in terms of their understanding of social cues and social behaviour. For Nathan and Josh, bullying interfered with their social functioning and affected their experiences of inclusion almost on a daily basis.

There is a boy called M who likes to hurt me. He is ugly. I don't do anything to him. (Josh)

When I say something she says the same thing. And she is very rude and she takes things off my desk and she borrows them and she puts things back in my bag. She doesn't know I actually see that. (Nathan)

Sarah had experienced bullying and became angry when she perceived others to be bullying her. She was also found to interpret some actions as bullying due to her social difficulties.

Do you ever get angry at school? (Researcher)

Yes. Guess what happened. D and I went to play on the hopscotch. And you know what this little girl says. She says: Go away. Why don't you move then? I was here first. And I was like: Excuse me? She says: You think you are so cool. And I say:

Why's that? And she says: Cause you wear sunglasses and stuff. You're weird. She called me weird. (Sarah)

And that made you a little bit mad? (Researcher)

Yes. A little? (Sarah)

A lot? (Researcher)

Yes. (Sarah)

When drawing negative things for Grade one:

What about your friends? (Researcher)

That's when M started bothering me. (Sarah)

And by bothering you, what do you mean? (Researcher)

She seemed to take Z away from me. (Sarah)

Okay, so you were friends with Z and she took her away from you? That can be a bit hard. (Researcher)

Ja. And also I was a bit jealous of her [M]. You see, Z is Afrikaans and so is M. So they could have been like making fun of me and I wouldn't even know it. (Sarah)

Mark was also found to have experienced some bullying, both in the past and as part of his daily experiences at school. It was noted that when Mark felt he had the support of his friends, he was able to cope better with the bullying he experienced. It also became apparent that Mark did not like to be bullied in front of other people, especially his friends, because he was aware of the reaction that he would have.

When drawing negative aspects of Grade R:

A boy used to sit on the 'grow good' mat. I ran around and then he tripped me with his leg. He was a bully to me. I tripped on his leg. (Mark)

Oh dear. Is there anything else for Grade R? (Researcher)

About the fighting with my old bully. And playing with my best friends and helping them when they were sad. Just like T and Br help me now when I am sad. (Mark)

What is it that you don't like about school? (Researcher)

Woah...tests, bullies and sometimes detention. And sometimes when I go to break some people tease me. Like C, D and Q. Every time I be ugly to Q, he pretends to cry because he wants me to get into trouble. (Mark)

What kinds of things do the bullies do? (Researcher)

They tease me about stuff and what I do. They tease me about when I draw stick men. I'm not sure how to draw proper people. Sometimes they bully me about T and Br. They say that they are ugly. (Mark)

By the way, yesterday I was so embarrassed about something. A boy named Q teased me about my dad and me doing that funny dance for the World Cup Soccer match. I was making a silly dance and he was teasing me in front of T, Br and A. He did it in front of them. And I got so embarrassed that I actually yelled at him in front of everybody. I was so embarrassed and everyone was looking at me. (Mark)

Mark was also found to misinterpret some actions of others due to his social difficulties which therefore impacted on his social experiences. He also exercised caution with some learners with whom he had past negative social experiences.

They say...Q said that he wanted to kill us. In the morning he said he was joking but I don't believe him. Sometimes I don't believe Q. Sometimes he doesn't keep his promises. By the way, he doesn't like me. He just wants to be my friend. And I don't like him. (Mark)

And has T been your friend for a long time? (Researcher)

Yes. Since Grade three. That's when I first met him. (Mark)

And N? (Researcher)

She forgot she was my friend when we first came to Grade four. She's not too nice anymore. She sometimes now today when we were doing work, she was sitting behind me and she said: Hi Mark. And I was thinking why she was saying hi to me. (Mark)

Kyle's experiences of bullying had decreased as he had moved through the inclusive education system. This may have been affected by the longer amount of time he had spent in the inclusive schooling system.

Can you remember a time at school when you were teased or anything? (Researcher)

About three years ago in Grade 4 I was bullied. About halfway through Grade 5 it eventually stopped. (Kyle)

Sarah's experiences of bullying had also decreased over time. This was partly due to her ability to form a close friendship with D but also due to the social skills that she was learning as she moved through the inclusive education system. Sarah had her worst experiences of bullying when she was in Grade two which she found difficult to cope with.

Can you tell me about a time when you felt sad at school? (Researcher)

I have made friends this year. But guess what? When I was in Grade two, there were awful tricks played on me. (Sarah)

Please tell me a bit about that. (Researcher)

Okay. There was this one time when X, Z and M...they left me on the field. They said they were going to the bathroom. But they went up to the library. I told C I couldn't find them and she said they were in the library. (Sarah)

When drawing negative things for Grade two:

What about things you didn't like in Grade two? (Researcher)

M. And then X came along. I think it was X that made everything worse. You know a rumour actually went around that...hey Sarah, Z says she hates you. That was a rumour. I'm going to underline X. In fact she is bold. (Sarah)

And the friends that you didn't get along with last year, are they better now or are there still some children that are not always nice to you? (Researcher)

Z is better. M has ignored me. (Sarah)

Is she in your class? (Researcher)

No. Thank goodness. (Sarah)

Three of the AS learners indicated a desire to sometimes be alone which, along with their difficulty in maintaining friendships, negatively affected their social experiences in the inclusive education setting. Even though Kyle reported that he did not have many friends at one stage but had made a few in recent times, he still faced some challenges around maintaining his friendships.

Um...I sit with a couple of people but every now and then I am wandering around and sometimes I play a game of soccer. Every now and then I feel a bit ...well...I feel that my space has been a bit...um...and then I just want to be alone. (Kyle)

When Josh reported that he would rather have school at home, the researcher asked him how he would feel about missing out on his friends if he had school at home.

You could just get a ball and play outside. (Josh)

Josh did not seem too concerned about losing his friends and preferred to play independently. This would have been influenced by his negative experiences of socialising as well as the bullying that he was experiencing at the time this research was conducted.

Although Nathan reported to have many friends that he could play with, it also became apparent that he had difficulties in maintaining these friendships. When discussing his friendships, the researcher explored who he preferred to play with.

So, do you play with her every day? (Researcher)

Not every day. But sometimes. Only when I can find her. But I don't find her a lot. (Nathan)

Nathan also reported to struggle in another friendship with the boy who he named as his 'best' friend.

We fight sometimes cause he starts things and he wants me to do things for him but I don't always do them. (Nathan)

Both Nathan and Josh's need for strict adherence to school rules also negatively impacted on their social experiences in the inclusive education setting. Nathan seemed to take on the role of the 'rule enforcer' which influenced his ability to engage with the other learners on a social level.

Do you ever get angry at school? (Researcher)

I do when people cheat me and when I say go back and walk and they have to. It's a school rule. (Nathan)

What do you mean by 'cheat you'? (Researcher)

When they run. You aren't allowed to run. What happens if you smack into somebody? We tell them for a reason and sometimes we try to protect them. What happens if they smack into the headmaster? He will report them. (Nathan)

Josh applied rules to himself as well as to the other learners and became upset when these rules could not be followed through.

Do you ever get angry at school? (Researcher)

Sometimes. When I bring a ball that I have been playing with back [to where it should be kept] and then a child kicks it back to where I have just come from. (Josh)

4.1.5. Theme 5: The role of special interests

For four of the participants, special interests played an important role in the experiences they had of inclusive education as a whole. This was especially true for Nathan who measured each aspect of school against whether or not he could engage or had engaged with his special interests. His special interests were Star Wars and soccer. These special interests tended to pervade every aspect of the research questions and each experience conveyed by Nathan somehow related either to Star Wars or to soccer.

Tell me about some of the things that help to make school better? (Researcher)

I love playing soccer. It's my best sport and I love scoring goals. And the term coming up is hockey and I don't like hockey as much as I like soccer...and in soccer I know a lot of rules about soccer. (Nathan)

It is interesting to note that Nathan linked his experiences of the school terms as either positive or negative depending on whether or not it was a soccer term or a term in which another sport is played.

I hate cricket...it's ugly because you get two cricket terms and only one soccer term and one hockey term. (Nathan)

When discussing things that make him happy at school, Nathan immediately oriented himself towards world book day which allowed him to engage with his special interest.

So, please tell me more about world book day. That made you feel happy? (Researcher)

You could bring your own book and read it and I brang my Star Wars book and I had a Star Wars book at that time and there was a game inside but we didn't play the game. (Nathan)

During the timeline exercise, Nathan measured each year in terms of his special interests and struggled to see beyond these to other aspects that would have affected his experiences in the inclusive education setting. When drawing positive things in Grade R:

It's R2D2 from Star Wars. (Nathan)

When drawing positive things in Grade 1:

It starts with a S and I was very good at it...yes soccer. And I liked soccer in grade 2 and I was very good at it. I scored a goal in my first soccer match. (Nathan)

When asked to draw a picture of himself at school, Nathan decided to draw his Star Wars Cruiser as he had been allowed to take his own Star Wars Cruiser which he had built to school.

It's picking up signal there. It has lots of them so if it breaks then there are lots. (Nathan)

Josh's special interest of computers also played an important role in his experience of inclusive education.

What is your best part of school? (Researcher)

Computers. It's fun. (Josh)

What things help to make school better? (Researcher)

I don't know. I wish every day was computer. (Josh)

When drawing positive things in Grade one:

Mrs K and computers. (Josh)

When drawing positive things in Grade two:

I liked Mrs F and computers. Should I also write computers by Grade three? (Josh)

Sarah's special interests were reading and animals. These special interests were functional in the school environment as the ability to read and the enjoyment of reading is valued in this

context. Sarah's special interests also did not appear to be pervasive in her life although she did measure many positive experiences against them.

Let's think about what you liked in Grade R? (Researcher)

I enjoyed learning about letter-land. (Sarah)

Can you tell me about a time when you felt really happy at school? (Researcher)

Okay...when they said who would get what certificate for reading and I got platinum. (Sarah)

Wow. So you like reading a lot? (Researcher)

Ja. I'm a bookworm. That's what my mom calls me. I'm the family bookworm. (Sarah)

I love animals. (Sarah)

Do you like reading about animals? (Researcher)

Yip. The very first thing I dreamed about being is a horse trainer. (Sarah)

Mark's special interests also played a significant role in his experiences of inclusive education. His special interests were Spiderman and reading. Like Sarah, Mark's special interest of reading was functional in the school environment. Mark was also given opportunities in the school environment to engage with his special interest of Spiderman which helped to prevent his special interests from being too pervasive. He had also developed strategies for incorporating his special interests into his daily routine which helped him to cope better in his school environment. Although Mark measured some of his experiences against whether or not he had engaged in his special interests, his special interests did not define his experiences of inclusion.

Shall we start thinking about Grade two? What did you like? (Researcher)

The toys. They had nice toys there. She had Spiderman stuff. (Mark)

Let's think about Grade four. What do you like? (Researcher)

Book club. (Mark)

And what else? (Researcher)

Choosing books. (Mark)

Can you tell me about a time when you felt happy at school? (Researcher)

I felt very happy when I did nice stuff. When I chose my books. Reading helps you know words. Book club is today. That's why I am bringing one of my books that I got from Books To You to read – it's Spiderman. I love Spiderman. He's cool. I get to play with Spiderman sometimes at school. I have my Spiderman book here today. And I get to play with Spiderman in therapy and there is a Spiderman suit but it is a bit too small. (Mark)

4.1.6. Theme 6: The effect of support and facilitation

This theme became prominent in the interviews conducted with Kyle and Mark. Kyle had the support of a facilitator from Grade R up until three months before the research was conducted. The support of his facilitator as well as the allowances that his school made to support Kyle to work to his full potential impacted on his experience of inclusive education positively and allowed him to adjust in his own time.

Do you still have your facilitator? (Researcher)

No. She left about three months ago...it's going okay. Slowly I have been developing from there. (Kyle)

Kyle was allowed to work within his own ability level which helped him to learn to cope in the inclusive education setting.

Is there something that your teacher lets you do or some stuff you don't have to do? (Researcher)

No. I do the same stuff as everyone else. (Kyle)

Has it always been like that? (Researcher)

No. It's been a gradual thing. At one stage...um...when I was very young, I only did about half my work at school and the facilitator told me which ones to do and which things not to do. (Kyle)

Kyle was also only expected to fulfil certain goals of school and did not have to partake in activities that may have been overwhelming for him. He received support in all aspects of his schooling – academic and non-academic.

So, looking at your timeline, you weren't going to assembly before this year? (Researcher)

No. I just stayed around the classroom. (Kyle)

Ok. And how are you finding it now? (Researcher)

I am finding it okay. (Kyle)

Through the ongoing support and facilitation that Kyle received, he learned to self-regulate his emotions. By working within his own abilities, Kyle was able to stay focussed on what he could achieve without extra pressure which may have been too overwhelming for him.

Is there any time you feel like you are not coping? Do you have somewhere to go? (Researcher)

Um...no...I just push through. (Kyle)

Mark also received intensive support in his school environment. Although he did not have a facilitator, he received support in terms of Occupational therapy, Speech therapy and Psychotherapy for social skills. Therapy was very important for Mark in his experiences of inclusion.

What is your best part of school? (Researcher)

Therapy. Psychology and the normal therapy. (Mark)

What helps to make school easier for you? (Researcher)

Doing therapy. Doing listening skills and I do some work there also. (Mark)

So you get to go to Occupational Therapy, Speech Therapy and the Psychologist? (Researcher)

Yip. (Mark)

Mark also felt that his teachers provided him with the support that he needed to cope better in the inclusive education setting. It was also noted that the school made allowances for Mark that helped to support him in his experiences of inclusive education.

When drawing positive things for Grade three:

Oh, my nice teacher was named Miss K. She was the nicest teacher. I miss all of my old teachers. (Mark)

That's good that they could help you. And what else did you like? (Researcher)

Oh yes...Daffy Duck. She had a Daffy Duck toy. (Mark)

Okay, so these teachers let you play sometimes. (Researcher)

Yes. Cause grade one, two and three are a little easier on the learners. (Mark)

Why do you get to have your phone at school? (Researcher)

Because I can play with it on the bus. (Mark)

Does it make the bus trip easier for you? (Researcher)

Ja. I get to play games. (Mark)

4.2. Results of the projective drawing analyses

The AS learners' drawings provided the researcher with further insight into the emotions and the experiences that they had in the inclusive education setting (see attached Appendices E1 – F5). There were both similarities and differences present between the drawings of the AS learners. Some of the similarities in the drawings of the self at school were: general feelings of insecurity, a possible desire to control the environment, a need for support, and introversive tendencies. Some of the similarities in the drawings of the AS learners and others in their class doing something together were: a lack of interaction between figures, a preference to engage in non-academic activities, and an avoidance of social interaction. The results of these drawings support the results of the interviews with the AS learners.

Each learner's drawings will be discussed individually in terms of the ways in which they may view themselves, their interaction with others as well as their experiences of inclusive education. It is important to note that the interpretations that could be made from the drawings were affected by the AS learners' artistic ability which was taken into consideration when analyzing each drawing.

4.2.1. Drawing of the self at school.

The drawing of the self at school provided the researcher with insight into the AS learners' feelings around being in an inclusive education setting. This drawing was analysed using Ogdon's (1975), method for the projective interpretation of Human Figure Drawings. Each of the drawings was analysed in the context of the verbal explanations that the AS learners gave of their drawings. Aspects of the drawings which were considered important are discussed below.

Josh:

Josh drew a picture of himself wearing his P.E uniform (see attached Appendix E1). He described himself as being happy in the picture but was reluctant to give any other information about his picture.

The small drawing may have indicated feelings of insecurity and inferiority. The placement of the drawing on the bottom of the page may have shown that Josh had a need for support as well as a tendency to avoid new social situations. Josh drew himself with small eyes and long legs which may have indicated that he had a strong introversive tendency and a strong need for autonomy. The long thin arms may have indicated a desire to control the environment.

Nathan:

Nathan drew a picture of his Star Wars cruiser which again indicated his preoccupation with his special interest when measuring his experiences of school (see attached Appendix E2). He then included himself and a friend in the drawing. There was no interaction between the figures in the drawings except that they were standing together. The Star Wars cruiser was the largest figure in his drawing which indicated the importance and pervasiveness of this special interest in his life.

The placement of the self drawing on the bottom edge of the page and the wide stance of the figure may show that Nathan had a need for support, feelings of insecurity and low self-assurance. The small eyes and long legs may have indicated introversive tendencies and a strong need for autonomy. The over-sized arms may indicate a desire to control the environment. The outstretched arms and hands suggested a desire for environmental or interpersonal contact perhaps with a need for help from others. The omission of feet in his drawing suggested a feeling of constriction with a lack of independency or helplessness. Although Nathan may have desired interpersonal contact, there were also some times when he would have preferred to be alone.

Kyle:

Kyle drew himself sitting at his desk (see attached Appendix E3). He also added the board, windows and door in the classroom.

The small drawing may have indicated feelings of inadequacy and insecurity while the central placement of the drawing may have shown rigidity in interpersonal relationships. The omission of facial features suggested evasiveness and superficiality in interpersonal relationships or poor adjustment to the environment. The long arms of the figure may have shown a need for a protective mother figure or a desire to control the environment, while the stick figure, although influenced by his ability to draw, suggested evasive tendencies associated with insecurities and poor interpersonal relationships.

Sarah:

Sarah drew a picture of herself, her best friend D and another friend (see attached Appendix E4). She said that they were talking to each other. The fact that she included D in this picture showed her reliance on D and the importance of their friendship to her.

The small eyes that Sarah drew may have shown introversive tendencies while the long legs of the figures may have shown a strong need for autonomy. The shaded hands with fewer than five fingers indicated anxiety and feelings of inadequacy.

Mark

Mark drew a picture of himself completing his daily routine of: going to the bus in the morning, arriving at school, going to his classroom and then to the field (see attached Appendix E5). He decided to map out a day for him at school. Mark chose to draw himself as a stick figure as he lacks confidence in his drawing ability. The nature of this drawing made it difficult to interpret. However, the structured way in which Mark drew this picture indicated that he needs structure and routine in his life.

The small drawing of the self may have shown feelings of inadequacy, insecurity or anxiety. The excessive detail Mark chose to include could have indicated rigidity.

4.2.2. Drawing of the self and others in the class doing something together

This drawing was analysed using Knoff and Thompson's (1985), method for interpreting Kinetic Family Drawings and Kinetic School Drawings. Once these interpretations had been made, the researcher used Ogdon's (1975), method to gain further information about the figures presented in each drawing. The researcher used the verbal explanations of these

drawings as collaborative information and interpreted aspects of the drawings that were the most relevant for this research. Each of the AS learner's drawings are discussed below.

Josh:

Josh decided to draw a picture of himself and another child doing art (see attached Appendix F1). He said that he did not know who the other child was. Interestingly, he noted that the child who bullied him in school was not doing art but was the only child still busy with his work.

Josh's decision to draw the learners engaging in a non-academic activity may have indicated the best part of school for him or a tendency to prefer to avoid academic activities. Josh's small drawing may have shown feelings of inadequacy and insecurity as well as a tendency to withdraw from others. The lack of people drawn in the picture could have indicated an avoidance of social interaction. The lack of interaction between the figures drawn may have pointed towards poor communication skills or relating to others, while the distance between the figures may have shown an isolation of the self. Josh emphasized the furniture in his drawing which may have indicated a need for structure, dependency on others or an avoidance of social interaction. The desks may have indicated a protective barrier and a secure structure for him in the classroom.

Nathan:

Nathan drew himself in class sitting with his best friends (see attached Appendix F2). All of the figures were holding paintbrushes and were doing an art activity – a painting which they had completed at school the previous day.

Nathan decided to draw all of the figures in a similar way which may have indicated feelings of admiration, identification with the others or a desire to be like the other figures in the drawing. He also drew all the figures close to one another which could have shown that he identified with them and had a need for attention, support and acceptance from them. Nathan drew himself as close to one of his best friends which could have indicated that he liked her, wished to be closer to her or wanted more attention from her. Nathan also emphasized the furniture in his drawing which may have shown a need for structure, a dependency on others

or an avoidance of social interaction. The omission of feet in Nathan's drawing could have shown feelings of constriction with a lack of independence, loss of autonomy or helplessness.

Kyle:

Kyle drew himself and two other learners playing soccer together (see attached Appendix F3). He revealed that he enjoyed playing soccer more than he used to. This may have been influenced by his desire to engage with other learners.

Kyle drew the learners engaging in an outdoor non-academic activity which may have indicated the best part of school for Kyle or an avoidance of school activities. The omission of feet and facial features in this drawing may have shown that Kyle experienced feelings of instability, inadequate environmental contact or probable withdrawing tendencies. The fact that Kyle chose to draw all stick figures may have indicated evasive tendencies, but may have been influenced by Kyle's artistic ability.

Sarah:

For this drawing, Sarah drew herself and D watering their herbs (see attached Appendix F4). Sarah said that D usually helped her water her herbs which again indicated the reliance that Sarah had on D. This was also emphasized by the fact that Sarah did not include any other learners in the drawing even though she was asked to draw a picture of her and the other children in her class doing something together.

Sarah drew her and D very close together which may have indicated that she identified with her and had a need for support and acceptance from her. She may also have wanted more attention from her. The lack of people drawn in this picture may have shown that Sarah preferred to avoid social interaction. Sarah decided to draw an outdoor picture of a non-academic activity which indicated that she may have disliked the academic aspect of school or may have become anxious and avoided academic activities.

Mark:

Mark chose to draw the daily routine of school for him and his friends (see attached Appendix F5). This picture was also very structured which may have shown his need for structure in his life at school. He drew a Wednesday at school and included the

Psychologist's building as he saw her for therapy on a Wednesday. He indicated how he found his friends each day and how they go to class together and then how they go to the field at break time.

Mark decided to draw the figures engaging in a non-academic activity which may have indicated that he may have disliked the academic aspect of school or may have preferred to avoid academic activities.

4.3. Conclusion

The results of this research have indicated different factors that impact on the experiences of inclusion for AS learners. These factors along with the implications of this study for AS learners and inclusive education as a whole will be discussed in the next chapter.

Chapter 5: Discussion

This research had four main objectives namely: to explore the experiences of AS learners in inclusive education settings including the factors that enhance or negatively impact on their experiences, to highlight the similarities and differences between the research participants, to explore the changes in the AS learners' experiences of inclusive education over time, and to describe the possible factors which may influence the experiences of inclusion for AS learners. Each of these objectives will be discussed in terms of the findings of this research and will link these findings to the existing literature. This chapter will also discuss the implications of this research for AS learners and for inclusion of special needs learners as a whole.

5.1. Overall experiences of inclusion including changes over time in these experiences

The overall experiences of inclusion for these particular AS learners had both positive and negative aspects. It is possible that the AS learners' experiences of inclusion may not differ greatly from the experiences that their typically-developing peers had of starting school. However, the severity of their experiences, the way in which they interpret these experiences, and the impact that these experiences have on their overall functioning is likely to differ significantly from their typically-developing peers.

The AS learners' experiences of inclusion were dependant on four main factors: the pervasiveness of their special interests, their social experiences, the support that they received, and their academic self-concept. It was found that the more pronounced the characteristic AS impairments – such as the impairment in social functioning, strict adherence to rules and routines, and all-absorbing narrow interests – the greater their impact on the AS learners' experiences of inclusion. Thus those AS learners who were higher functioning on the ASD spectrum, such as Kyle and Sarah, experienced inclusion more positively. Those AS learners who experienced more pervasive impairments, such as Josh, experienced inclusion more negatively.

The participants in the current study were asked to complete a timeline in an attempt to document their experience of inclusion over time. The participants revealed changes over time in three main areas: social, academic self-concept, and support. The coping mechanisms

that these AS learners developed over time as well as their degree of characteristic AS impairments also influenced the changes that were noted over time. It was important to note that the longer the period of time that the AS learner had been in the inclusive education environment, the more positive their experience of inclusion. This was also moderated by the other factors mentioned above.

5.1.1. Special interests

The AS learners' special interests played an important role in their experiences of inclusive education. For Nathan and Josh, whose special interests were pervasive, their experiences of schoolwork were often dependent on the opportunity for them to engage with their special interests. When class activities allowed them to engage with their special interests, these AS learners were more positive about their experiences. However, subjects where these AS learners could not engage with their special interests were viewed more negatively. This finding is consistent with the Carrington and Graham (2001), study which found that the AS participants had a restricted range of interests which inhibited their ability to concentrate in the school setting.

The opportunities that the AS learners' schools provided for them to engage with their special interests also affected their experiences of inclusion. If the AS learner was able to engage in his or her special interest at school, school experiences became more positive. This was because engaging with the special interest provided the AS learner with an escape from what may have otherwise been an overwhelming situation. For example, one of Nathan's happiest moments at school was world book day because he was allowed to bring his Star Wars book and share with the class. This provided Nathan with a positive experience associated with school. Mark was also given the opportunity to engage with his special interests in the school setting. He took part in book club each week which allowed him to bring a book of his choice (usually Spiderman) to read. It was interesting to note Nathan, Mark and Josh reported positive experiences in Grade R. This may be because Grade R provides learners with more freedom thus allowing these AS learners to engage with their special interests more frequently.

Mark and Sarah's special interests were not pervasive in the school environment. This may have been influenced by the fact that both learners had frequent opportunities in the school

environment to engage with their special interest of reading which was functional in this environment.

5.1.2. Social difficulties

The AS learners had the opportunity to develop friendships with typically-developing peers in the inclusive education setting. Changes were noted in the participants who were able to develop valuable friendships over time thus decreasing the social difficulties that they experienced. This finding supported other research (Vaughn 2001, in Timmons & Breitenbach, 2004; Buysse et al., 2002, in Lindsay, 2007), who said that inclusion provides learners with special needs the opportunity to develop friendships with typically-developing learners which then allows the learners with special needs to view themselves as part of a regular learning community. Even though all of the participants reported some level of bullying either in the past or as part of their current experiences, they were still able to form friendships. Some of the AS learners struggled to maintain these friendships, but were still able to engage with other typically-developing peers on some social level which helped to improve their social experiences. The longer the AS participant had been in the inclusive education setting, the less the number of social difficulties that they experienced. For example, Kyle, who was in his eighth year of inclusion when this research was conducted, reported that he no longer had any significantly negative social experiences. Josh's greatest impairment was in social functioning which had an increasingly negative effect on his experiences of inclusion as he progressed through the inclusive education system.

These typically-developing peers would have also acted as role-models for appropriate social behaviours and skills for these AS learners which they could then internalize and use in their everyday experiences. This is consistent with McCarty (2006), who reported that special needs learners in inclusive education settings are exposed to role models for acceptable behaviour and benefit from learning these skills.

Both Mark and Sarah had been able to form a close relationship with another child in each of their classes. They had also both been included in a group of friends that played a vitally important supportive role in their experiences of inclusion. Nathan had also developed some friendships while Kyle had developed a desire to form and maintain friendships over time. Josh was the only participant whose social difficulties were his greatest impairment.

Due to Kyle having developed a desire for friendships as he grew older, he was able to adjust his own interests to that of his friends (e.g. soccer), which meant that he could then form friendships around others' interests as well. This was also affected by the support that Kyle had received from his facilitator as well as the amount of time that he had spent in the inclusive education setting. This finding is contrary to that of Carrington and Graham (2001), who found that their two 13 year old participants had the desire to engage with peers but found this stressful as they did not have the social skills to engage with others effectively. This may have been because Kyle had access to a facilitator who helped to teach him social skills. Church et al. (2000), reported that as the AS participants grew older, they also had a desire to be accepted by their peers, and the development of some social skills allowed them to partially interact with their peers on a daily basis.

Some inconsistency in friendships was noted because, although these participants were able to form some friendships, they found them difficult to maintain. The friendships that the AS learners in the current research formed were often based around their special interests. They tended to look for those typically-developing peers who had similar interests to them and then formed friendships with these learners. A difficulty then arose that the AS learners' typically-developing friends had a wider range of interests and therefore became bored when the AS learner remained focused solely on one or two special interests. These AS learners also desired to sometimes be alone which then meant that both the typically-developing peer and the AS learner displayed some inconsistent behaviour. Due to the AS learners' difficulty in understanding social relationships, the inconsistency that was sometimes present in peer relationships was difficult for them to interpret. As neither the AS learners or their typically-developing peers were able to predict their interactions on a daily basis, the friendships that could be formed and maintained were negatively affected. This was especially true for Nathan who had the most pervasive special interests out of the participants. Nathan measured each school experience against his special interests and because his special interest in Star Wars was not functional in this environment, it affected his ability to engage with others.

Similarly Church et al. (2000), found that AS learners in the elementary age group tended to become fixated on particular interests which they repeatedly played out, this bored their typically-developing peers and negatively affected the friendships that the AS learners could form.

Through time and through receiving the correct support, Kyle and Mark were able to learn self-management techniques which allowed them to monitor themselves and their social needs thus allowing them to work through those times when they desired to be alone.

Another aspect of inclusion which affected the overall experiences of these AS learners was the bullying that each participant had experienced either in the past or at the time of this research. The results indicated that the more severe the participant's impairment in social functioning, the more often they perceived social interactions as negative or as bullying. Monchy et al. (2004, in Lindsay, 2007), also found that those special needs learners who displayed some behavioural difficulties were excluded socially more often than their typically-developing peers. For the participants in the current research, the effects of bullying were minimised by the presence of some kind of friendships. Although these learners still experienced bullying, they were able to rely on their friends to support them through it. However, Josh, who was unable to form consistent friendships and whose impairment in social functioning was his greatest difficulty, experienced the largest amount of bullying and negative social experiences. The support that these AS learners could gain from their close friends or other significant individuals in the school environment (e.g. facilitators, therapists or teachers) played an important role in the outcomes that the bullying had on these learners. If they experienced support socially and academically then the likelihood of them experiencing consistent negative effects of the bullying was minimized.

Interestingly, some of the incidences that were reported by the participants may not have been viewed as bullying by their typically-developing peers. The bullying which the AS learners experienced was often due to their difficulty in understanding subtle social nuances. These AS learners therefore often misinterpreted social situations which affected not only their interactions with others but also their perceptions of bullying. This could be seen in some of the reports of 'bullying' that were made by these learners. Carrington and Graham (2001), found that AS learners struggled to understand the social cues of others and therefore experienced social difficulties where they may have misinterpreted the actions of others. The AS learners in the current research may have over-reported what they perceived as 'bullying' to their teachers who may then have over-looked 'real' occurrences of bullying. It is important to note that the AS learners would have still perceived the actions of others as bullying and thus believed that they were being bullied, asked for help from their educators

but received no support. This would have impacted negatively on their overall experience of inclusion and would have served to further isolate these AS learners socially.

Monchy et al. (2004, in Lindsay, 2007), found that educators under-estimated the frequency of bullying that the learners with special education needs experienced, as well as the frequency of bullying that the learners with special needs inflicted on others. In the current research, the educators may not only have dismissed the reports of the AS learners due to their known difficulty in social functioning but also the reports of their typically-developing peers of the AS learners bullying them.

Over time the AS learners had also developed coping strategies for dealing with negative social experiences. For example, Mark was cautious with those learners such as N with whom he had negative past experiences and with the boy who bullied him, and decided that he did not 'like them' – thus protecting himself from hurt.

Nathan and Josh's strict adherence to rules also affected their interpretations of social interactions. For example, Nathan spoke of others cheating *him* when they broke a school rule. Church et al. (2000), also found that in the elementary age group, the AS learners often misread social situations and acted inappropriately. In this age group, the AS learners were rule-based and became upset when any rules were broken (Church et al., 2000). Due to the fact that Nathan and Josh were rule-based and could not understand how rules may change in certain circumstances, they often misinterpreted the social actions of others. This may have led them to 'tell on' their peers often which as a consequence would have affected their interactions with their peers negatively.

5.1.3. Support

Like any typically-developing child, the AS learners displayed a need for support and acceptance from those around them. Four of the participants' projective drawings indicated a need for support, attention and acceptance from others. Educators play a vital part in the experiences of any learner in any education setting. If the AS learners had a positive perception of their educator and felt accepted by her/him, their experience of inclusion was more positive. This was evident in Sarah, Mark and Nathan's interviews as they had positive relationships with all of their educators. Conversely, if the AS learners had a negative

perception of their educator or felt as if they were not accepted by her/him, their experience of inclusion was significantly more negative. This was evident in the experiences of Josh who did not have a good relationship with his educator at the time of this research.

Humphrey and Lewis (2008), found that AS learners tended to have a negative perception of their differences, experienced anxiety and stress, had difficulties with peers and teachers and a desire to 'fit in'. These researchers found that AS learners have particular needs which have to be met in the inclusive education environment, and that simply being included in a mainstream academic setting is insufficient and does not mean that the inclusive experience will be positive (Humphrey & Lewis, 2008). These needs would include feeling accepted and supported by their educator. Mark attended school in a remedial inclusive environment. This meant that his educators were trained in dealing with learners with learning difficulties. Even though the school followed a mainstream syllabus, Mark's educators would have been equipped with more skills in working with learners with special needs such as those with AS. This would have benefited Mark in terms of the support he received from his educator.

The support and facilitation that these AS learners received played a significant role in their overall experiences of inclusive education. The type of school environment in which these AS learners were placed affected the amount of support that they could receive. Those AS learners, such as Kyle and Mark, who were able to receive intensive support in the school environment, tended to experience inclusion more positively than those learners who received no support, such as Josh. Support in the inclusive education environment was the factor which mediated the consequences of the other factors. If an AS learner struggled with schoolwork and had some social difficulties but also received support at school, the effects of the negative factors would be lessened. However, if the same AS learner did not receive any support at school, their overall experiences of inclusion would become increasingly more negative.

Another interesting finding in this study was that the AS learners displayed a need for support not only in academic aspects but with all aspects of school that may have been overwhelming for them. For example, Kyle was unable to cope with assembly until the year in which this research was done. Kyle's projective drawings showed that he may have a difficulty in adjusting to new environments. His facilitator had been able to detect that assembly was too

overwhelming for Kyle and therefore eliminated this factor for him to lessen the number of negative experiences he had in the inclusive education setting. Kyle was able to access the acceptance and support that he needed from his facilitator who was more central to his experience of inclusion than his educators. Kyle was thus able to progress over time in the inclusive education environment and acquire necessary skills up until the point when he could cope on his own and no longer required his facilitator.

Jordan (2008), reported that facilitators serve to isolate ASD learners from their peers and are not trained to help the ASD learners with their social interactions. Gutierrez et al. (2007), also found that the facilitators who worked with the ASD learners in their study were only trained in general ways of teaching these learners. This study found that facilitators also needed to be trained in assisting the ASD learners with positive peer contact. This was not the case with Kyle who experienced his facilitator positively and was able to learn some social skills from her. Kyle had also still managed to form some friendships while his facilitator worked with him.

All of the AS learners experienced a need for support from those around them. However, the level of support required changed over time depending on the support that the AS learners had already received. The longer the amount of time that AS learner had spent in inclusive education combined with support early on in their experiences of inclusion, led to less support being required over time. Those who spent longer in the inclusive education setting had the opportunity to learn appropriate skills over time which helped them cope better in that setting. This finding is consistent with the Church et al. (2000), study which found that as the AS learners grew older, they were able to learn necessary social skills that enabled them to interact with their peers more regularly.

Due to the intensive support that Kyle received in his early years, he required less support later on as he had developed his own coping strategies which allowed him to manage in the inclusive education environment. However, most of the participants did not have access to early support and relied on the friendships that they had developed over time for their support. These AS learners still required a large degree of support as they had not yet developed adequate coping skills themselves. This was especially true academically as these

AS learners felt more pressure as they moved up the grades and had a need for greater support as this was overwhelming for them.

Although Mark did not have access to a facilitator, he received support through Occupational Therapy, Speech Therapy and Psychotherapy in the school environment. Each therapy provided a different kind of support for Mark – Occupational and Speech Therapy for academic aspects and Psychotherapy for social skills. Mark viewed each therapy as vitally important and each played an integral role in his experiences of inclusion. This was especially true in terms of the social skills intervention he received. Past research done by Jones and Frederickson (2010), found that social skills training especially, may promote social acceptance and successful inclusion. Downing et al. (1996, in Katz & Mirenda, 2002), also found that ASD learners who were exposed to a behavioural treatment program improved their social communication skills and had more positive experiences with their peers.

Social support from friends was vitally important for those AS learners who were able to form meaningful friendships in the inclusive education setting. Importantly though, it also became evident that these AS learners may become hyper-focused on their closest friends. For example, Sarah referred to her group of friends as 'D and co' which illustrated her dependency on D. This dependency may have caused some level of distress when these closest friends were absent from school. However, by having their friends as their main support group, these AS learners could find some degree of structure and some security needs in their inclusive education experiences.

Josh did not have access to the same level of support in terms of academic, social or emotional factors as the other participants. Josh also notably had the most negative experiences of inclusion. Josh did not have a good relationship with his educator and was unable to form any consistent friendships. This was affected by Josh being in a government school with large classes. This meant that he had virtually no support system in the school environment. Josh also struggled academically. Even though the other participants also experienced some social and academic difficulties, Josh also did not have a support network to facilitate these negative experiences. The combination of all of these difficult factors meant that Josh felt consistently overwhelmed and therefore could not cope adequately in the

inclusive education environment. He would therefore have sacrificed attending school as a way of protecting himself from these negative factors.

Whilst access to a facilitator is not often possible, access to some level of support and facilitation appeared to reduce the number of negative factors in the inclusive education context and enabled these learners to develop functional ways of coping. This was the case for four of the participants. However, without any level of support, Josh struggled to both cope and progress in his academic environment as he was simply focused on making it through each day.

5.1.4. Academic self-concept.

The last factor which impacted on these AS learners' experiences of inclusion was their academic self-concept. All of the AS learners experienced some difficulties with their schoolwork. This experience is likely no different to that of any of their typically-developing peers who may also have struggled with some aspects of academic work. However, the AS learners' interpretations of these difficulties and the comparisons that they made of themselves to their typically-developing peers affected their experiences of inclusion as a whole. For those participants who did not receive adequate support and who experienced significant social difficulties, a negative academic self-concept was noted. When an AS learner, such as Josh, struggled both socially and academically, he or she tended to compare himself to his or her peers more often which, due to his or her social difficulties, negatively affected his or her academic self-concept. All of the AS learners made some comparisons to their typically-developing peers. However, if the AS learner had academic and social support, these comparisons did not have the same negative affect as they would have if the AS learner struggled academically and socially. The academic self-concept that the AS learners formed over time depended on the academic pressure they felt, their social relationships, and the support that they had.

Kyle was guided by his facilitator in terms of what work he should complete and could therefore work within his own potential. This meant that he could focus solely on his work without feeling a high degree of academic pressure from those typically-developing peers around him.

For the other four participants, the pressure to perform academically became more prominent as they moved through the grades. The AS learners' projective drawings showed the learners engaging in non-academic activities which may have shown that they would prefer to avoid academic work. These AS learners tended to compare themselves to their typically-developing peers especially with regards to work which they found more challenging thus increasing the negative "Big-Fish-Little-Pond" effect and worsening their academic self-concepts as described by Seaton et al. (2009). The social difficulties that these AS learners experienced combined with their academic comparison to their peers affected their academic self-concept negatively. For those participants who had managed to form friendships, this negative "Big-Fish-Little-Pond" effect was reduced. Those AS learners who had formed friendships over time experienced a more positive academic self-concept than those who continued to experience immense social difficulties. The AS learners who felt that they belonged socially had less of a need to compare themselves to their typically-developing peers. Although they were aware of their academic difficulties and experienced somewhat of a negative academic self-concept, they did not remain focused on their differences as they could engage with these typically-developing peers on a social level.

Seaton et al. (2009), also reported that the participants who felt that they belonged socially had a better academic self-concept thus lowering the "Big-Fish-Little-Pond" effect. In addition they found that special needs learners experience more pressure to perform and therefore have a lower academic self-concept. The AS learners' projective drawings also indicated some feelings of inadequacy and inferiority relative to their typically-developing peers which again indicated the effect that these comparisons have on the AS learners' academic self-concept. Zeleke (2004, in Lindsay, 2007), also found that children with learning difficulties had significantly lower scores on academic self-concept than their typically-developing peers.

The support that the AS learners received from their educators or facilitators played an important role in the formation of their academic self-concept over time. All of the participants experienced an increasing amount of academic pressure as they progressed through the inclusive education system. This was due to their increased workload and them being presented with work they found challenging that their peers may have been better equipped to cope with. However, if the AS learners' educator or facilitator was able to reduce

the pressure placed on the AS learner to perform, the AS learners' academic self-concepts improved over time. Seaton et al. (2009), found that in academic situations where there is a reduced pressure to perform academically, an improved academic self-concept is noted.

The participants' academic self-concepts also depended on the mechanisms that they had managed to develop for coping with the academic pressure they felt. For example, Nathan and Sarah could recognize what aspects of schoolwork they struggled with and how their typically-developing peers coped better than they did. However, they had developed a coping mechanism of boosting their own academic self-concepts and therefore their self-concept as a whole, by boasting about their abilities. Although this served to improve their academic self-concepts, these participants struggled to understand that social etiquette favours humility. This 'self-boosting' behaviour may therefore have negatively impacted on their social experiences.

Only one other study (Church et al., 2000), documented the changes in learners' experiences of inclusion over time. They reported that the elementary age group (such as Nathan, Josh and Sarah) had significant social difficulties, were rule-based which often led them to 'tell on' their peers, and had specific fixations (Church et al., 2000). These learners also found schoolwork to be difficult. The middle age group (such as Mark and Kyle) also experienced social difficulties but also showed more of an ability to adapt to changes and tended to cope better academically (Church et al., 2000). Overall, Church et al. (2000), found that AS learners had a desire to 'fit in' with their peers as they matured which was also indicated in the current research with Mark and Kyle. Church et al. (2000), also found that as the AS learners grew older, they were also able to develop social skills which aided in their experiences of inclusion.

The combination of social experiences, support and the academic self-concept that AS learners have in an inclusive education setting influences their experiences of inclusion and how these learners develop over time. It thus seems that as AS learners move through the inclusive education system, they have the ability to develop adequate social skills and coping strategies to manage in the inclusive education environment.

5.2. Factors influencing the experiences of inclusion for AS learners

There are four main factors that impact on the experiences of AS learners in inclusive education settings: social factors, academic factors, the pervasiveness of the AS learners' special interests, and the support that they receive. The school environment also plays an important role in the experiences that AS learners have of inclusive education. These factors are interrelated and moderate one another. Thus one cannot consider each factor in isolation when working with an AS learner but should rather consider the dynamic relationship that exists between these factors so that a holistic understanding of the experiences of these learners can be obtained.

5.2.1. Social factors

One of the characteristic impairments of AS is in social functioning. The school environment provides one with many different social experiences which one needs to be able to deal with. Thus one would expect that placing an AS learner, who struggles socially, in a setting with other typically-developing peers would result in some level of social difficulties such as bullying.

However, it is the severity of this impairment that greatly affects the experiences of the AS learner in the inclusive education setting. The more severe the AS learner's impairment in social functioning, the more social difficulties they will experience which may lead to an increased amount of bullying and the misinterpretation of the social actions of others. The misinterpretations of others' actions is a cause of much difficulty for the AS learner who struggles to understand subtle social nuances.

Those AS learners whose impairment in social functioning is less severe tend to be able to form social relationships in the inclusive education setting. These social relationships provide the AS learner with a support system which in turn helps to decrease the negative effect of the bullying that these learners experience. This finding supports research done by Vaughn (2001, in Timmons & Breitenbach, 2004), and Buysse et al. (2002, in Lindsay, 2007), which found that inclusion allows learners with special needs to develop social relationships with typically-developing peers.

Forming friendships with typically-developing peers also means that the AS learners are exposed to appropriate ways of responding in social situations which helps them to develop social skills. Szatmari (2004), said that exposure to typically-developing peers allows ASD learners to learn appropriate social skills. This aids AS learners in learning how to deal with everyday social situations which increases their ability to cope overall. Downing et al. (1996, in Katz & Mirenda, 2002), also found that ASD learners were able to develop social communication skills over time through interactions with their typically-developing peers. AS learners who are able to develop a sense of belonging in the inclusive education environment tend to experience inclusive education more positively than those learners who are socially excluded.

5.2.2. Academic factors

Most learners, both typically-developing and those with special needs, experience a degree of academic difficulty that impacts on their experiences of school. When this academic difficulty is coupled with other factors such as social difficulties and a lack of support, the effect of the academic difficulties on the AS learners becomes significant.

The academic pressure that AS learners experience in inclusive education settings affects their ability to cope overall. These learners are aware of their differences from their typically-developing peers and due to the other factors that they struggle with, these academic differences become overwhelming. The comparison that is made between the AS learners and their typically-developing peers creates a negative academic self-concept in the AS learners (i.e. the “Big-Fish-Little-Pond” effect). This comparison is found particularly in those AS learners who have considerable social difficulties. These learners tend to only have negative social experiences and therefore tend to compare themselves to their peers more frequently. Due to this lack of social support, AS learners are constantly made aware of their differences, both socially and academically. Thus, their academic differences place a large amount of pressure on these learners to perform academically so that they can ‘fit in’ with their peers. If the AS learner is not supported in developing the appropriate skills in the school environment to deal with this overwhelming pressure, their overall experience of inclusion is negatively affected.

The converse is therefore also true. AS learners who have fewer negative social experiences and who are supported in dealing with academic pressure are able to cope better in the inclusive education environment. Seaton et al. (2009), found that special needs learners who attend schools where there is less pressure to perform and who have a high sense of belonging experienced a better academic self-concept which helped them to cope overall.

5.2.3. The pervasiveness of the AS learner's special interests

Another characteristic of AS is a restricted range of interests that AS individuals display. This means that these learners become fixated on particular interests (e.g. Star Wars) and struggle to engage with other subjects and see them as meaningful. The degree of this impairment differs across individuals but for those whose special interests are pervasive, their experience of inclusion is greatly affected.

Pervasive special interests impinge on every aspect of the AS learner's daily functioning including the academic and social aspects of school. Academically, these AS learners struggle to engage with any task that does not revolve around their special interest thus making learning exceptionally difficult for them. The AS learners' special interests also affect them socially in the friendships that they can form. Carrington and Graham (2001), found that the two AS learners used in their research each had their own restricted range of interests which affected their ability to focus and cope in the inclusive education environment.

If an AS learner is given the opportunity to engage with his or her special interest in the school environment, then he or she is able to cope better. Providing AS learners the chance to escape from possibly overwhelming situations by engaging with their special interests allows them to be able to focus on other areas at school.

5.2.4. Support in the inclusive setting

Support is the most vital factor to consider when looking at the experiences of AS learners in inclusive education settings. The inclusive education environment has to be equipped with the necessary resources to adequately support AS learners. AS learners who have access to some level of support, either through a facilitator or a trained educator, are able to develop skills that will allow them to cope with other factors that they may struggle with.

Educators who are able to identify areas of difficulty for AS learners can adapt their teaching methods for these learners thus reducing the amount of academic pressure that they experience in the inclusive education setting.

Friends also prove to be a source of support for those AS learners who are able to develop meaningful friendships. Friends can help AS learners through difficult social situations and also help to improve their academic self-concept and their self-concept as a whole. This finding is consistent with Hunt et al. (1994, in Katz & Mirenda, 2002), who found that through the support that the special needs learners received from their typically-developing peers, they were able to learn cues, prompts and consequences for their actions.

If adequate support can be given to an AS learner, then he or she has a considerably better chance of experiencing inclusion positively and developing to his or her full potential in the inclusive education setting.

5.3. Implications of this research for AS learners and for the inclusion of special needs learners as a whole.

This study has provided an in-depth account of the experiences of particular AS learners in inclusive education settings. The findings of this research, although non-generalisable, have important implications for AS learners and for the inclusion of special needs learners as a whole and can be used as a source of information for other researchers, educators, parents and these learners themselves. The implications of this research that should be considered are: individual differences, support, educator and facilitator training, the adaptation of the school environment for these learners, and social factors. Each of these should be considered when deciding on the most appropriate education setting for an AS learner or a learner with special needs.

5.3.1. Individual differences

Assuming that all learners with special education needs are on the same intellectual level and have the same skills is a simplistic notion that needs to be re-examined when working with these learners. Individual differences exist among special needs learners as well as between AS learners whose impairments and abilities fall along the autistic spectrum. Due to these individual differences, this research has shown that not all AS learners, and therefore special

needs learners, are suited to the inclusive education setting. These learners have different coping skills and varying degrees of potential and placing them in an inclusive education system that is not necessarily equipped to cope with these differences, is not beneficial for every child. There needs to be an individual assessment of each learner to determine whether or not placing them in an inclusive education environment would allow them to develop to their full potential as well as be a positive experience for them. For an AS learner, like Josh, who experienced significant social difficulties coupled with academic difficulties and a lack of access to support, the inclusive education environment may not be suitable. However, for an AS learner like Kyle, who was higher-functioning on the autistic spectrum and who received the necessary support, inclusive education was a positive experience that allowed him to develop adequate coping and social skills. Reed and Waddington (2006), also found that individual education placements are essential due to the diversity that exists among ASD learners. This applies, not only to AS learners, but to all special needs learners that are candidates for inclusive education.

5.3.2. Support

This research has shown that the access that AS learners have to support in the inclusive education setting is an essential part of their experiences of inclusion and is a determining factor in the outcomes of inclusion. If an inclusive education environment provides the learners with adequate support socially and academically then these learners are more likely to adapt to inclusive education and develop within it. However, those environments that are not equipped to offer these learners the support that they require, create negative experiences of inclusion for these learners and hamper the progress that these learners can make in this setting. These learners often rely on their typically-developing peers for support with all aspects of inclusion but this is only the case for those learners who are less socially-impaired and who have managed to form friendships with typically-developing peers.

Most of the research in this field has shown that access to some level of support in the inclusive education environment is fundamental in determining the success of inclusion and the experiences that AS learners have in these settings (Hunt et al., 1994, in Katz & Mirenda, 2002; Hollowood et al., 1994, in Katz & Mirenda, 2002; Farron-Davis et al., 1994, in Katz & Mirenda, 2002; Rafferty et al., 2003, in Lindsay, 2007). This need for support therefore

extends to all special needs learners who experience varying degrees of difficulty that need to be facilitated in the inclusive education environment.

5.3.3. Educator and facilitator training

In any school environment and in particular, in the inclusive education environment, educators, and facilitators if they are available, are crucial in the development of all learners.

This study found that those teachers who were better equipped in terms of skills and who understood the AS learner and his or her impairments, could help these learners develop coping skills in the inclusive education environment. Unfortunately, in many school environments, as seen in this study, educators simply do not have the skills or the time to support each learner individually. This lack of training in necessary skills for coping with these learners in an inclusive education setting affects the experiences of inclusion that these learners have. Past research has found teachers to be ill-equipped to cope with the behaviours of special needs learners (Whitaker, 2007, in Ashburner et al., 2010), and that AS learners in inclusive education environments often report difficulties with educators which affects their experiences of school negatively (Humphrey & Lewis, 2008).

It was also found that educators need to be trained in all aspects of supporting these learners in the inclusive education environment, not only in the academic realm but in the social realm as well as the social experiences that the learners have a significant influence on their experiences as a whole.

For those AS learners who have access to a facilitator, it is important that the facilitator is also trained in assisting the learner with his or her social difficulties which is an integral part of the learner's experience of inclusion. Often, the facilitators who work with AS learners focus solely on working with the learner's academic experiences and ignore the social factors that influence the AS learner. Gutierrez et al. (2007), found that facilitators were not trained in facilitating social interactions which hampered the social progress of learners.

It is therefore crucial when choosing an academic environment for learners with special needs, that one ensures that the learner will have access to some level of support that facilitates their inclusion and improves their overall experience of inclusion.

5.3.4. The adaptation of the school environment for these learners

One of the fundamental principles of inclusive education is the adaptation of the school environment to meet the diverse needs of its learners. In this study it became evident that this was not being done in many school environments which resulted in negative inclusion experiences for some learners.

AS learners are often expected to change themselves in order to adapt to the school environment and not the other way around. This is difficult for these learners who experience many overwhelming factors in the inclusive environment. This study showed that this was the case for most of the participants who were expected to simply be able to cope in their school setting.

All learners with special needs require their school environment to be able to adapt to their specific learning needs which is in essence what inclusive education claims to offer. However, this requirement does not seem to be fulfilled in most inclusive school environments which is concerning in terms of the overall experiences of inclusion that AS learners and learners with special needs can have.

5.3.5. Social skills training and awareness

The social aspect of inclusion for AS learners was shown to play an important role in their experiences of inclusion. Those learners who had less of a social impairment were shown to be able to better adapt to the inclusive education environment. These learners were able to develop some social skills that enabled them to cope with varying social situations and form some friendships within their school setting. Social skills training proved to be a useful method of supporting these learners in developing ways of coping with social situations. Jones and Frederickson (2010), also found that social skills training for ASD learners in inclusive education settings may improve their experiences of inclusion as a whole. Social skills training would benefit all learners with special needs who experience social difficulties as a way of decreasing their negative experiences of inclusion.

5.4. Conclusion

This chapter has attempted to summarise the main findings in the study. This study has found that AS learners' experiences of inclusion are dependent on four main factors: the

pervasiveness of their special interests, social factors, support, and academic self-concept. Support was found to be the most vital factor that influences AS learners' experiences of inclusion. This study also found that the more pronounced the AS learners' characteristic AS impairment, the more impact the impairment has on their experiences of inclusion. Changes over time were noted in three main areas: social, academic self-concept, and the need for support. The coping mechanisms that the AS learners developed over time also impacted on their experiences of inclusion. It seemed that the longer the AS learner had been in the inclusive education system, the more likely it was that he or she would experience inclusion more positively if given the correct support. The implications of this research for AS learners and for inclusive education as a whole that need to be considered are: individual differences, support, educator and facilitator training, the adaptation of the school environment, and social factors.

Chapter 6: Conclusion

This chapter will discuss the implications of this research for the inclusion policy imperative in South Africa, consider the limitations of the study, and discuss recommendations for future research.

6.1. The implications of this research for the inclusion policy imperative in South Africa

Inclusive education is defined as the process of responding to the uniqueness of individuals (Summit on Inclusive Education, 2002, in Foster, 2003). It aims to create full service schools where the school environment is adapted to meet learners' diverse needs (Department of Education, 2001). Learners in inclusive education settings are to be empowered with skills by teachers that have been trained in dealing with these learners (Ainscow, 2004). Fundamentally, inclusive education is about working to one's own potential with essential support. Resources are supposed to be brought to the learners who need them in order to provide these learners with opportunities for development in an inclusive education system.

In South Africa there have been immense difficulties in applying the inclusive education policy. The current research pointed towards issues surrounding resources and indicated that learners in inclusive education settings are not all receiving the resources that they require. This impacts negatively on their experiences of inclusion and on their ability to cope in these environments. South Africa currently lacks the essential resources to make inclusive education feasible.

This research also showed that many learners do not have access to sources of support. In South Africa, many classes are over-sized and teachers are unable to provide learners with the individual attention and support that they require. Without adequate support, learners in the inclusive education environment can become overwhelmed by all the difficult factors that they have to deal with. Thus it becomes almost impossible for these learners to cope and reach their potential as none of the negative factors are reduced. Their focus then becomes simply on coping on a daily basis rather than on developing and learning skills that they can apply.

Educators in South Africa remain un-trained and ill-equipped for dealing with learners with special needs in inclusive education settings. The current research found that educators are not always viewed as sources of support for learners and that their lack of understanding of these learners often adversely affects the experiences that these learners have of inclusion. In order for inclusion to be successful, educators need to be trained in ways of coping with these learners so that they can provide the learners with the support that they require. Research has shown that successful inclusion was also based on the skills of the educators to cope with the learners in their class as well as on the support that the educators had within the classroom in the form of instructional aides or facilitators (Burstein et al., 2004; Hollowood et al., 1994, in Katz & Mirenda, 2002; Farron-Davis et al., 1994, in Katz & Mirenda, 2002; Rafferty et al., 2003, in Lindsay, 2007).

The inclusive education policy also emphasizes that all learners, except for those that are severely impaired, should be included. This research, along with other research (Reed & Waddington, 2006), has indicated otherwise as there are individual differences that should be examined within groups of learners who may be seen as able to be included. AS learners are one of these groups. There are considerable differences in the impairments experienced by AS learners. This research indicated that the more severe the characteristic AS impairment, the less likely the AS learner is to be able to cope in the inclusive education environment. Of course, with adequate support, these learners would be able to manage to a degree in inclusive environments. However, as discussed above, these learners do not have equal access to support and thus are placed in inclusive environments where their experiences are negative. This in turn adversely affects their ability to develop and learn sufficient skills to be able to cope in everyday life.

Conceptually, inclusive education is a good idea *if* each inclusive environment could adapt to the needs of learners and provide them with the resources and support that they need. However, in South Africa this is not yet possible due to the lack of resources that is experienced. Typically-developing peers face difficulties in school environments due to a lack of resources so it is no wonder that learners with many areas of difficulty – social, academic and emotional – struggle to develop in the current inclusive education system. The inclusive education policy is currently focused on a rights-based approach without considering the resources that are available which affect learners' experiences of inclusion.

6.2. The limitations of this research

This research was designed to highlight and privilege the experiences of the AS learners, and to create a rich descriptive picture of their inclusion experiences. As a result there are limitations to the research which include: a lack of a longitudinal perspective, no observations of the AS learners in their educational context, no collateral information, a limit to the types of school environments of the AS learners, a lack of a comparison group in this kind of design, and the small sample used.

A longitudinal study that monitored AS learners over time as they moved through the inclusive education setting would have provided more in-depth information around the changes in their experiences of inclusion over time. However, due to the short period of time available for this research, a longitudinal design was not possible.

It may have been useful to observe the AS learners in their academic contexts in order to gain a more holistic idea of how they behaved in these settings and the social interactions that they had. However, due to time constraints as well as the ethical issue of others identifying the AS learners as part of the research, it was not possible to observe these learners.

The findings of this research would have been enhanced if the researcher had been able to gather collateral information from the educators and parents of the AS learners. Although the researcher was concerned with the experiences of inclusion from the AS learners' perspective, collateral information would have provided more insight into the reasons for these experiences.

The limited type of school environments that these AS learners came from was another limitation of this research. The AS learners mostly attended private schools with only one participant who attended a government school. Although Mark attended a government school, it was a remedial school which meant he had access to more support than is found in government schools. It may have been valuable to gather data from a range of participants in different inclusive education environments. However, due to the convenience sampling used in this research, the researcher collected data from any participant who consented to the research process.

A further limitation relates to the lack of a comparison group in this kind of design. The responses of the participants in this research could therefore not be compared to the responses of their typically-developing peers in the same educational contexts; or to the experiences of AS learners who are in specialised educational settings. The degree to which the experiences of the AS learners are unique and a function of having AS is therefore not clear.

Lastly, research of this nature involves a small sample. Although qualitative studies do not aim for generalisability, some element of transferability is desirable. Given the state of South Africa's services to children with special needs there are likely to be many children with AS who have not yet been diagnosed and who are therefore not accessing any kinds of intervention and support. The results of this study are therefore only transferable to those children with AS in inclusive education settings.

6.3. Recommendation for future research

Future research could aim to follow a longitudinal design as it would be beneficial to follow AS learners from different age groups as they moved through the inclusive education setting. It would also be beneficial to choose participants who have varying degrees of characteristic AS impairments to gain better insight into the effects that these impairments have on their experiences on inclusion. It would also be useful to investigate the role of facilitators and the impact that they have on AS learners' experiences of inclusion.

It may also be beneficial to consider the experiences of AS learners in different types of inclusive education contexts. The experiences of inclusion differ across different settings (e.g. private school with small classes versus a government school with large classes). An investigation into these differences may further provide stakeholders with essential information when considering the academic placement of AS learners and learners with special needs.

Although gathering the experiences of inclusion for AS learners from the learners themselves is imperative in understanding their experiences, these experiences form part of a larger system of inclusion. It would therefore benefit researchers to conduct a study that considers the views of all the stakeholders in the inclusion process, including educators, parents and the learners themselves. Using a semi-structured interview schedule allows researchers to gather

in-depth information from participants and should be used in gathering collateral information. The projective drawings used in the current research were useful and should be considered for future research. This is because these drawings provided the researcher with additional insight into the emotional experiences of inclusion of these AS learners which these learners may not have spoken about in the semi-structured interview.

Although the aim of this study was not to provide generalisable results for AS learners as a whole, it has provided an in-depth account and analysis of the experiences of particular AS learners in inclusive education settings. This study has shown that inclusive education can be successful and can become a positive experience over time if AS learners are provided with sufficient resources, support and interventions. However, inclusive education cannot simply be applied to all learners. There are individual differences in the AS learners' ability to cope and develop in the inclusive education setting. It is vital to consider aspects of inclusion such as social factors, academic self-concept, the availability of support, and the severity of the characteristic AS impairments that these learners face in inclusive education settings. This is important when looking at whether inclusive education will be a positive or negative experience for these learners.

This study has therefore provided a greater understanding of AS learners' experiences in inclusive education settings and hopes to be a resource for researchers, educators, and parents who work within and who are a part of inclusive education settings. This study may also provide insight for AS learners themselves into their own experiences thus helping them to understand what they may need to do in order to make their experiences of inclusion more positive.

Reference List

- Ainscow, M. (2004). *Developing inclusive education systems: what are the levers for change?* Unpublished manuscript.
- Ajuwon, P. M. (2008). Inclusive education for students with disabilities in Nigeria: benefits, challenges and policy implications. [Electronic version]. *International Journal of Special Education*, 23(2), 120-127. Retrieved 19 July, 2009.
- American Psychiatric Association. (2000). Pervasive developmental disorders. *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: American Psychiatric Association, 69-70. Retrieved February 12, 2009, from <http://www.cdc.gov>
- Ashburner, J., Ziviani, J. & Rodger, S. (2010). Surviving in mainstream: Capacity of children with autism spectrum disorders to perform academically and regulate their emotions and behaviour at school. [Electronic version]. *Research in Autism Spectrum Disorders*, 4(2010), 18-27. Retrieved July 3, 2010.
- Autism South Africa. (2002). *Asperger Syndrome*. [Brochure]. Johannesburg: Memorial Institute of Health and Development.
- Barnard, J., Prior, A. & Potter, D. (2000) *Inclusion and Autism: is it working?* London: National Autistic Society.
- Batten, A. (2005). Inclusion and the autism spectrum. [Electronic version]. *Improving Schools*, 8(1), 93-96. Retrieved July 20, 2009.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. [Electronic version]. *The Qualitative Report*, 13(4), 544-559. Retrieved February 12, 2009 from <http://www.nova.edu>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in Psychology. [Electronic version]. *Qualitative Research in Psychology*, 3, 77-101. Retrieved April 1, 2009 from <http://www.QualiResearchPsych.com>
- Burstein, N., Sears, S., Wilcoxon, A., Cabello, B., & Spagna, M. (2004). Moving towards inclusive practices. [Electronic version]. *Remedial and Special Education*, 25(2), 104-116. Retrieved May 18, 2009.
- Carrington, S., & Graham, L. (2001). Perceptions of school by two teenage boys with Asperger's syndrome and their mothers: a qualitative study. [Electronic version]. *Autism*, 5(1), 37-48. Retrieved May 19, 2009.

- Church, C., Alisanki, S., Amanullah, S. (2000). The Social, Behavioural and Academic Experiences of Children with Asperger Syndrome. [Electronic version]. *Focus on Autism and other developmental disabilities*, 15(1), 12-20. Retrieved July 3, 2009.
- Connor, M.J. (2004). *Students with Autism and ASD in the community*. Retrieved February 5, 2009 from <http://www.mugsy.org/connor52.htm>
- Crivello, G., Camfield, L., & Woodhead, M. (2009). How can children tell us about their well-being? Exploring the potential of participatory research approaches within Young Lives. [Electronic version]. *Soc Indic Research*. 90, 51-72. Retrieved July 2, 2010.
- Department of Health and Human Services. (2009). *Autism Information Centre: DSM-IV-TR diagnostic criteria for the Pervasive Developmental Disorders*. Retrieved February 9, 2009 from <http://www.cdc.gov>
- Department of Education. (2001). *Education White Paper 6. Special needs education: Building an inclusive education and training system*. Retrieved February 9, 2009 from <http://www.info.gov.za>.
- Engelbrecht, P., & Oswald, M. (2003). Including learners with intellectual disabilities: stressful for teachers? [Electronic version]. *International Journal of Disability, Development and Education*, 50(3), 293-308. Retrieved May 19, 2009.
- Foster, G. (2003). *The nature of educational inclusion for children with Autistic Spectrum Disorder and challenging behaviours*. Retrieved February 3, 2009 from <http://eprints.qut.edu.au>
- Friedlander, D. (2009). Sam comes to school: Including students with Autism in your classroom. [Electronic version]. *The Clearing House*, 82(3), 141-144. Retrieved February 11, 2009.
- Fury, G., Carlson, E. A., Alan Sroufe, L. (1997). Children's representations of attachment relationships in family drawings. [Electronic version]. *Child development*, 68(6), 1154-1164. Retrieved July 2, 2010.
- Ghesquiére, P., Maes, B., & Vandenberghe, R. (2004). The usefulness of qualitative case studies in research on special needs education. [Electronic version]. *International Journal of Disability, Development and Education*, 51(2), 171-184. Retrieved January 30, 2009.

- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. [Electronic Version]. *The Qualitative Report*, 8 (4), 597-607. Retrieved April 7, 2009.
- Gutierrez, A., Hale, M. N., Gossens-Archuleta, K., & Sobrino-Sanchez, V. (2007). Evaluating the social behaviour of preschool children with autism in an inclusive playground setting. [Electronic version]. *International Journal of Special Education*, 22(3), 25-31. Retrieved July 19, 2009.
- Humphrey, N., & Lewis, S. (2008). 'Make me normal': The views and experiences of pupils on the Autistic Spectrum mainstream secondary schools. [Electronic version]. *Sage Publications and the National Autistic Society*, 12(1), 23-46. Retrieved January 30, 2009.
- Jones, A. P., & Frederickson, N. (2010). Multi-informant predictors of Social Inclusion for Students with Autism Spectrum Disorders attending mainstream schools. [Electronic version]. *Journal of Autism and Developmental Disorders*, 2010(40), 1094–1103. Retrieved July 2, 2010.
- Jordan, R. (2005). Managing autism and Asperger Syndrome in current educational provision. [Electronic version]. *Paediatric Rehabilitation*, 8(2), 104-112. Retrieved July 1, 2009.
- Jordan, R. (2008). Autistic Spectrum Disorders: a challenge and a model for inclusion in education. [Electronic version]. *British Journal of Special Education*, 35(1), 11-14. Retrieved June 12, 2009.
- Katz, J., & Mirenda, P. (2002). Including students with developmental disabilities in general education classrooms: education benefits. [Electronic version]. *International Journal of Special Education*, 17(2), 14-24. Retrieved July 19, 2009.
- Knoff, H. M., & Thompson, H. (1985). *Kinetic Drawing System for Family and School: A handbook*. United States: Western Psychological Services.
- Lindsay, G. (2007). Educational Psychology and the effectiveness of inclusive education/mainstreaming. [Electronic version]. *British Journal of Educational Psychology*, 2007(77), 1-24. Retrieved July 2, 2010.
- Marsh, H. W., & Craven, R. G. (2002). The pivotal role of frames of reference in academic self-concept formation: the big fish little pond debate. [Electronic version]. Retrieved May 18, 2009 from <http://www.gifted.uconn.edu>

- Mayton, M. R. (2005). The quality of life of a child with Asperger's disorder in a general education setting: a pilot case study. [Electronic version]. *International Journal of Special Education*, 20(2), 85-101. Retrieved July 19, 2009.
- McCarty, K. (2006). *Full inclusion: the benefits and disadvantages of inclusive schooling*. [Electronic version]. Retrieved April 25, 2009.
- McGloin, S. (2008). The trustworthiness of case study methodology. [Electronic version]. *Nurse Research*, 16(1), 45-55. Retrieved February 12, 2009.
- Merriman, B., & Guerin, S. (2006). Using children's drawings as data in child-centred research. [Electronic version]. *The Irish Journal of Psychology*, 2006 (27.5), 48- 57. Retrieved July 5, 2010.
- Mesibov, G. B., & Shea, V. (1996). Full inclusion and students with Autism. [Electronic version]. *Journal of Autism and Developmental Disorders*, 26(3), 337-346. Retrieved June 11, 2009.
- Ogdon, D. P. (1975). *Psychodiagnostics and Personality Assessment: A Handbook* (2nd ed.). United States: Western Psychological Services.
- Paquette, D. & Ryan, J. (2001). *Bronfenbrenner's Ecological Systems Theory*. Retrieved February 11, 2009 from <http://pt3.nl.edu>
- Peetsma, T., Vergeer, M., Roeleveld, J., & Karsten, S. (2001). Inclusion in Education: comparing pupils' development in special and regular education. [Electronic version]. *Educational Review*, 53(2), 125-133. Retrieved May 25, 2009.
- Reed, P., & Waddington, E. M., (2006). Parents and local education authority officers' perceptions of the factors affecting the success of inclusion of pupils with Autistic Spectrum Disorders. [Electronic version]. *International Journal of Special Education*, 21(3), 151-163. Retrieved July 19, 2009.
- Robertson, K., Chamberlain, B., & Kasari, C. (2003). General education teachers' relationships with included students with Autism. [Electronic version]. *Journal of Autism and Developmental Disorders*, 33(2), 123-130. Retrieved May 19, 2009.
- Seaton, M., Marsh, H.W., & Craven, R. G. (2009). Big-Fish-Little-Pond effect: generalizability and moderation – two sides of the same coin. [Electronic version]. *American Educational Research Journal: XX(X)*, 1-44. Retrieved July 2, 2010.
- Sicile-Kira, C. (2003). *Autism spectrum disorders: The complete guide*. London: Random House UK Ltd.

- Siegel, B. (1996). *The world of the Autistic child: understanding and treating Autistic Spectrum Disorders*. New York: Oxford University Press.
- Simpson, R. L., de Boer-Ott, S. R., & Smith-Myles, B. (2003). Inclusion of learners with Autistic Spectrum Disorder in General Education Settings. [Electronic version]. *Top Language Disorders*, 23(2), 116-133. Retrieved May 20, 2009.
- Starr, E. M., Foy, J. B., Cramer, K. M., & Singh, H. (2006). How are schools doing? Parental perceptions of children with Autistic Spectrum Disorder, Down Syndrome and Learning Disabilities: A comparative Analysis. [Electronic version]. *Education and Training in Developmental Disabilities*, 41(4), 315-322. Retrieved February 11, 2009.
- Szatmari, P. (2004). *A mind apart: understanding children with Autism and Asperger syndrome*. New York: Guilford Press.
- Tapasak, R. C. & Walther-Thomas, C. S. (1999). Evaluation of a first-year inclusion program. [Electronic version]. *Remedial and Special Education*, 20(4), 216-225. Retrieved February 2, 2009.
- Timmons, V., & Breitenbach, M. (2004). *Inclusionary Practices for Children with Autistic Spectrum Disorders*. [Electronic version]. Retrieved May 19, 2009 from <http://www.upei.ca>
- Trochim, W. M. K., (2006). *Research Methods Knowledge Base*. [Electronic version]. Retrieved August 24, 2010, from <http://www.socialresearchmethods.net>
- Williams White, S., Scahill, L., Klin, A., Koenig, K., & Volkmar, F. R. (2007). Educational placements and service use patterns of individuals with Autistic Spectrum Disorders. [Electronic version]. *Journal of Autism Developmental Disorders*, 37, 1403-1412. Retrieved July 3, 2009.
- Willig, C. (2001) *Introducing Qualitative Psychology*. Buckingham: Open University Press.
- Yin, R.K. (2003). *Case study research: Designs and methods* (3rd ed.). United States of America: Sage Publications.

Appendices

Appendix A: Semi-structured interview schedule and the instructions for the projective tasks.

Semi-structured interview schedule

Please can you tell me what it was like when you first started going to this school?

Please can you tell me what it is like going to School X now?

Please can you tell me more about how you feel when you go to school everyday?

What are the things that help to make school better?

Please can you tell me about a time when you felt happy at school?

What is it that you like about school?

What is your best part of school?

What is it that you do not like about school?

Please can you tell me about a time when you felt sad at school?

What are some of the things that make school hard?

Please can you tell me about your friends at school

Instructions for the projective drawings.

Timeline

A time line is a line that shows things that happened long ago and works towards things that happen now. It can also show your feelings about something long ago and how your feelings might have changed over time until how you feel now. Things move along a time line from long ago to now. For example, if you were to draw when your Grandmother, your mother and you were born - your Grandmother would be first because she was born a long time ago; then your mother further along the time line and then you because you were born the most recently.

Please could you draw me some pictures along this time line which show me how you felt about school when you first started going to School X up until how you feel about going to School X now. You need to choose a place where you want to start. At the start please can you draw me some pictures to show me what it was like when you first started at school and then you can work to the end putting in other drawings as you go. So, you can tell me what it

was like, or if special things happened over time. Carry on until you get to now. That is the end of the drawing.

Drawing of the self at school

Please could you draw me a picture of what school is like for you? I want you to draw a picture of yourself at school. You can add absolutely anything else you want to the picture.

Drawing of the self and others at school

Please could you draw me a picture of you and the other children in your class doing something together? I want you to draw a picture of yourself and the other children in your class doing something together. You can add absolutely anything else you want to the picture.

Appendix B: Informed consent form (parents)

School of Psychology
P/Bag X01 Scottsville

PIETERMARITZBURG, 3209

South Africa

Phone: +27 33 2605853



To whom it may concern,

The experiences of particular Asperger's learners in inclusive education settings.

Consent to participate in this case study:

Hello, I am Lauren Burke. I am from the University of Kwa-Zulu Natal and am currently studying my masters in Psychology. I am very interested in working with children with Asperger's Syndrome (AS) and so would like to ask you to participate in a study that I am conducting around the inclusion of learners with AS.

I am asking you to participate in this study because your child has been identified as suiting the criteria which I have for this study which are: your child has been diagnosed with Asperger's Syndrome; is between the ages of seven and thirteen years and has been included in mainstream education within the last eight years.

Why is this important?

I am interested in exploring the experiences of AS learners in inclusive education settings including looking at the different factors which may enhance or impact negatively on their experiences. I am also interested in looking at the change in the AS learners' experiences over time – from when they were first included up until the present time. I also want to examine possible factors which may have an affect on AS learners' experiences of inclusion

as a whole. This is important research because I am able to gain in-depth data regarding your child's experiences of inclusion. This will allow for you and others to gain a better understanding of the thoughts, feelings and overall experiences of AS learners who have been included in inclusive education settings.

What is required of you and your child?

I will need to interview your child once in his/her home environment under your supervision. The reason for choosing the home environment is so that your child cannot be identified as being a part of this research and so that he/she is in an environment in which he/she is most comfortable. Your supervision is required so that you are close to your child should he/she need you. The interview will need to be recorded in order for the researcher to obtain accurate accounts of your child's experience of inclusion. The interview will last for approximately 60 minutes.

Your child will be required to answer a number of questions about his/her experiences at school (questions and instructions are attached). He/she will also be asked to participate in drawing a timeline showing the change in his/her experiences from when he/she was first included until the present time. Your child will also be asked to draw a picture showing his/her life at school. The drawings will allow me to gain better insight and understanding into their experiences at school as it may be easier for your child to show me their experiences rather than talk about them.

What benefits does your child receive from this research?

Your child's progress is constantly being monitored throughout this research. This means that, should your child express that their experience of inclusion is inherently negative or that they are experiencing bullying, for example, I will be able to inform you thus allowing you to be able to deal with the problem effectively. This study hopes to indirectly benefit all children with AS as well as their parents or caregivers and educators by providing valuable insight into the experiences of AS learners in inclusive education settings.

What will happen to the information collected?

The data that is collected for this study will be used for this study and may also be used for journal articles and presentations. While the data is being analyzed, it will be stored in a

locked cupboard that only I have access to. The tapes used for the recordings will also be stored in this locked cupboard for a period of five years after which they will be destroyed. Any raw data such as notes that are made from the recorded interviews will be disposed of after the study is complete. Any notes on my computer will be stored in a folder with a password that only I know.

Confidentiality:

Your child's confidentiality is of the utmost importance to me. I will provide your child with a pseudonym so that no one can identify that it is him/her who has been studied. Also, because the data is stored under his/her pseudonym in the locked cupboard, his/her identity and confidentiality remains intact. I will sign confidentiality forms stating that I am unable to give the identity of the child to anyone and this will further protect the child and ensure confidentiality.

Participation:

The participation of your child is completely voluntary and you are not being forced into participating in this study. If you decide that you do not want your child to participate in the research, simply inform me of this and there will not be any disadvantage to you if this is your decision. Also, if you decide during the study that you no longer want your child to participate, then you can do so without any prejudice. Your child also has the right to withdraw from this study at any time should he/she decide that he/she no longer wants to participate in the study. Participation in this study is entirely your choice and if you decide against partaking in the study, your decision will be accepted and there will be no discrimination placed against you.

If you have any questions or queries please do not hesitate to contact me: Lauren Burke, 0828581315, dolchie@gmail.com or my supervisor: Carol Mitchell, 033 260 6054, mitchellc@ukzn.ac.za

First part of informed consent:

I..... (Full names of legal guardian/parent) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to allowing my child to be interviewed for the research project.

I understand that my consent to my child's participation in this study is completely voluntary and that I am able to withdraw my child from the study at any time for any reason without any discrimination.

Signature of Guardian / Parent

Date

.....

Second part of informed consent:

I..... (Full names of legal guardian/parent) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to allowing my child's interview to be recorded for this research project.

I understand that my consent to the recording of my child's interview is voluntary and that I am allowed to withdraw my consent to record the interview at any time for any reason without any discrimination.

Signature of Guardian / Parent

Date

.....

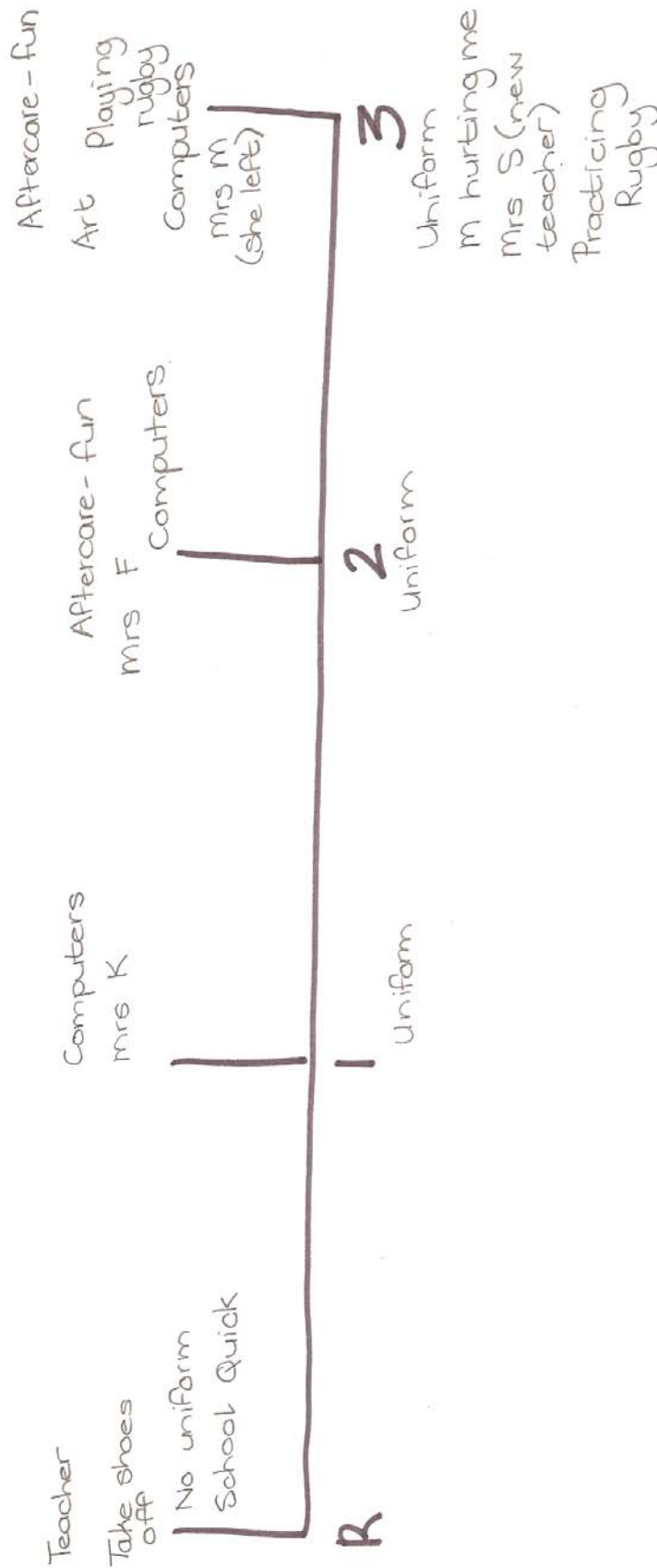
Appendix C: Participant Assent

Verbal explanation to AS learners

Hello, my name is Lauren Burke. I am very interested in finding out about you and your school for a study that I am doing. I would like to ask you a few questions about your experience of school and what you like and don't like about school. I would also like to ask you to draw me a few pictures of what it is like to be at school for you. I will need to record what you say so that I can listen to what you say later and write it all down. I will use what you tell me in my study but I will not use your real name but will let you choose another name that you want to be called. You do not have to help me with this study and if you decide that you do not want to be in this study at any time, you can tell me and you can stop straight away. Do you have any questions for me? Would you like to help with this study?

Appendix D1: Timeline: Josh

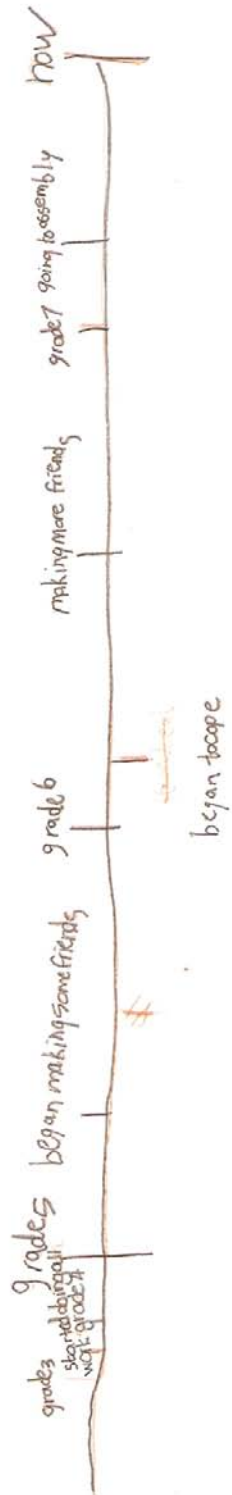
Note: Josh asked the researcher to write on his timeline for him.



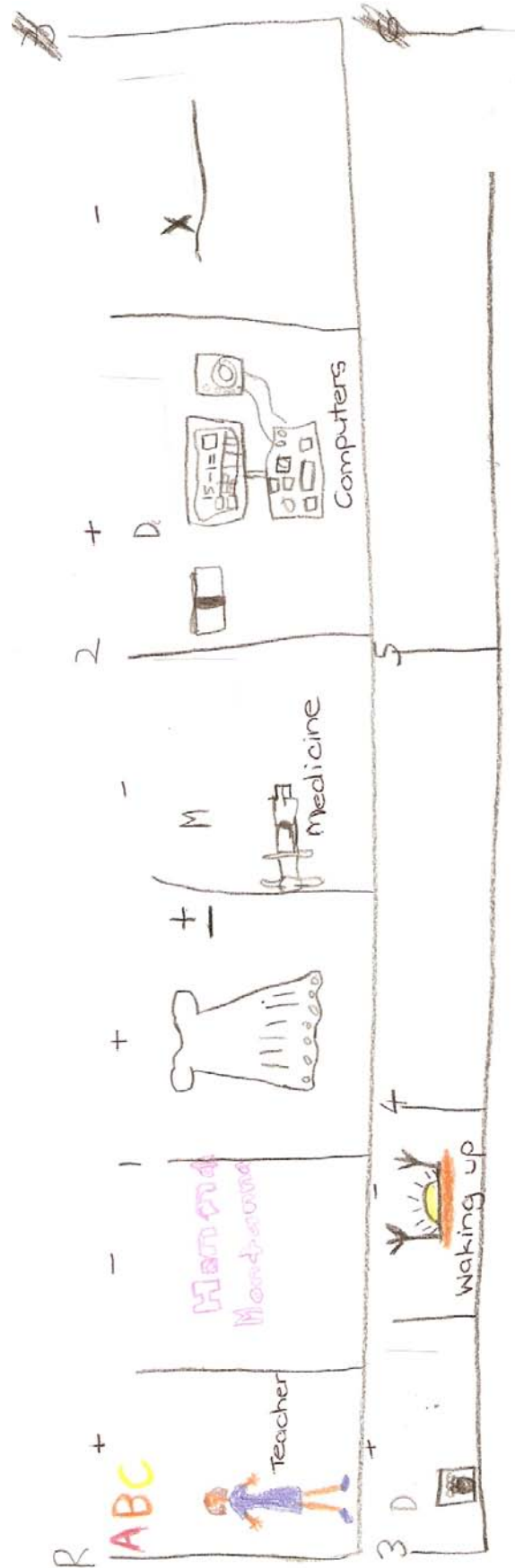
Appendix D2: Timeline: Nathan



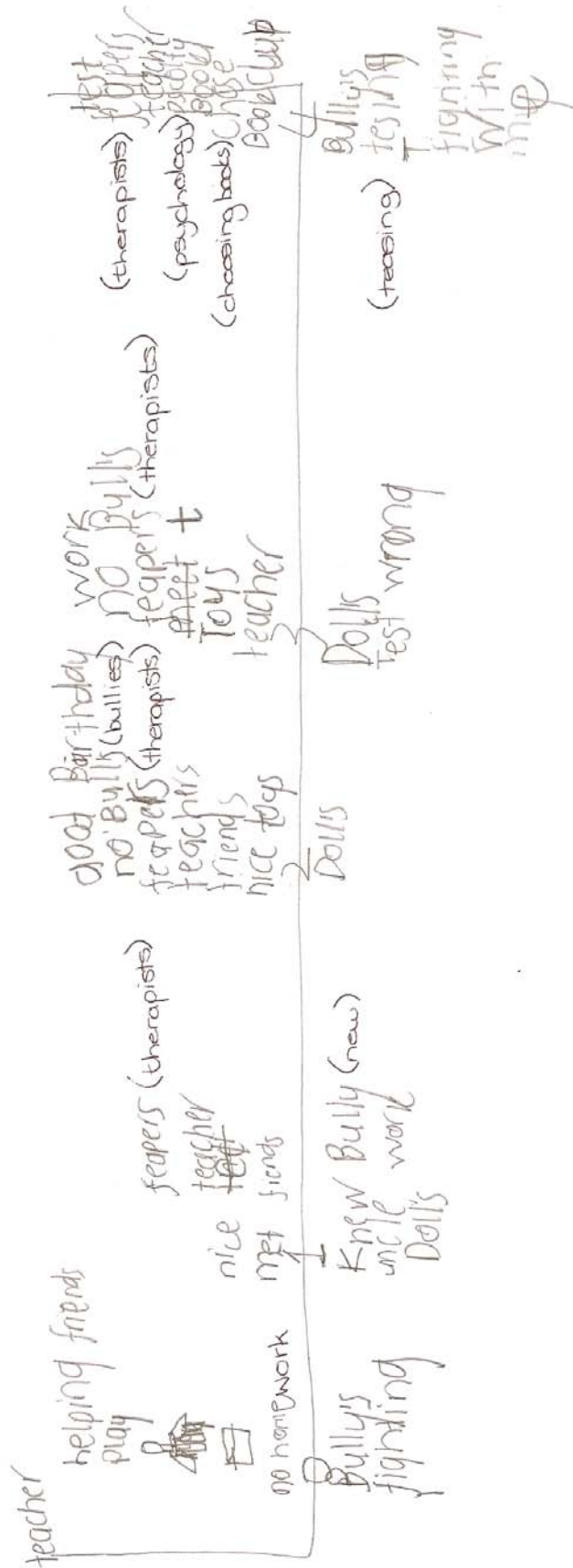
Appendix D3: Timeline: Kyle



Appendix D4: Timeline: Sarah



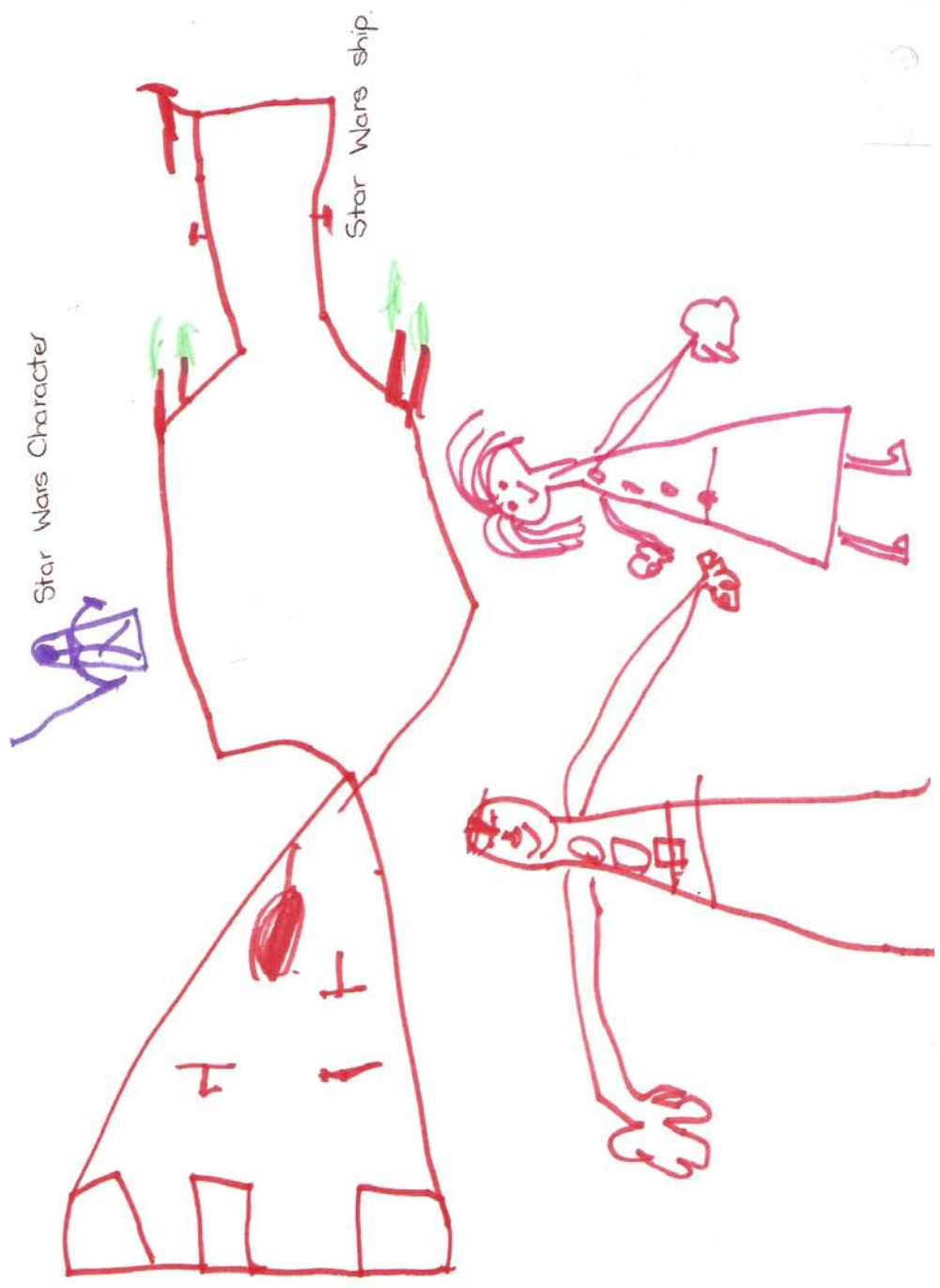
Appendix D5: Timeline: Mark



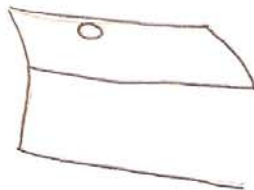
Appendix E1: Drawing of the self: Josh



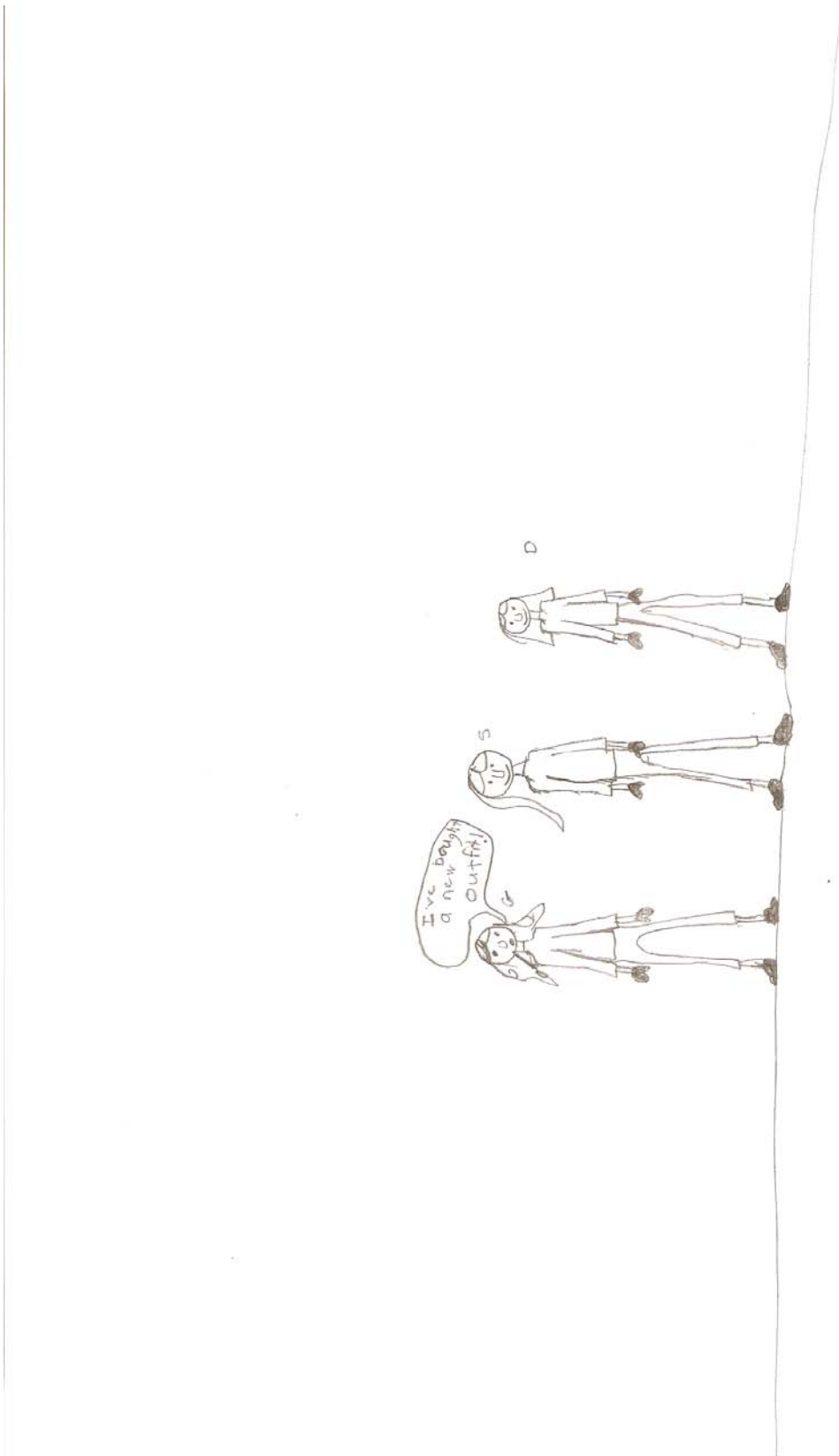
Appendix E2: Drawing of the self: Nathan



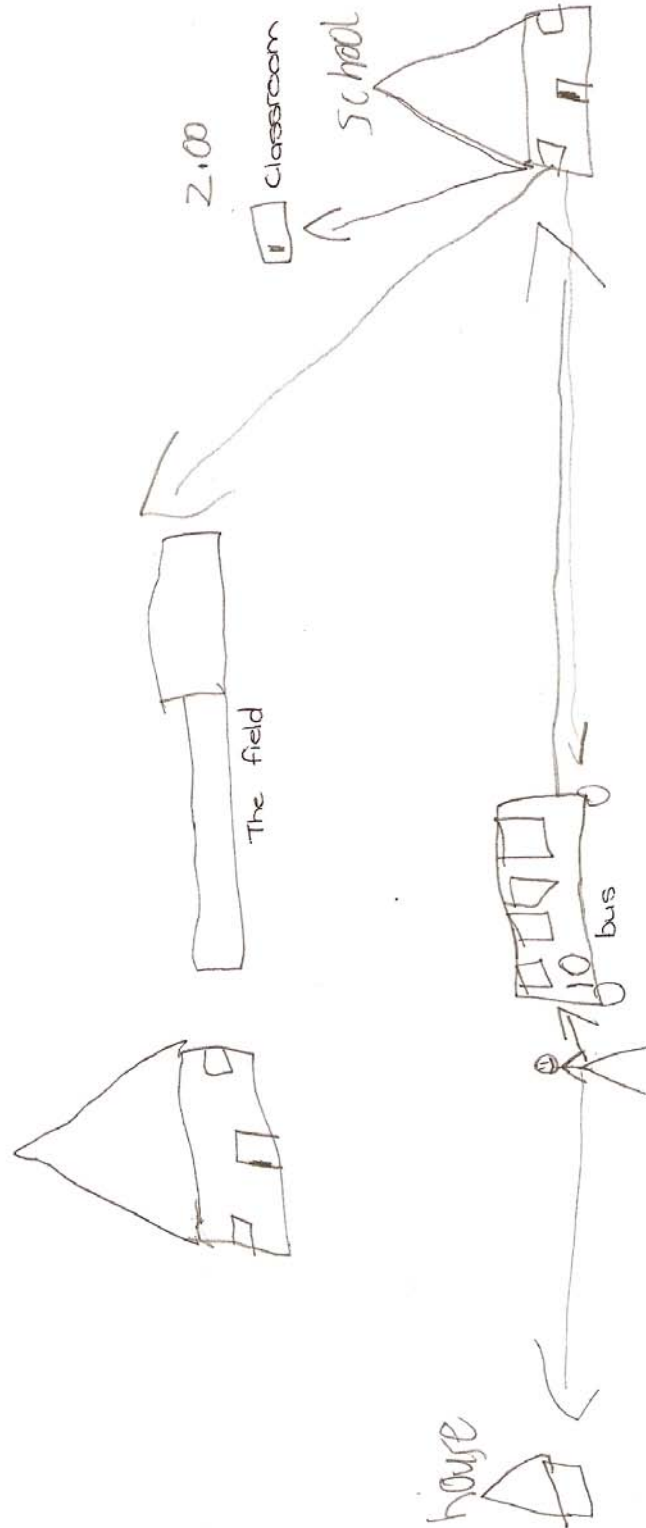
Appendix E3: Drawing of the self: Kyle



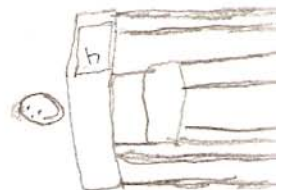
Appendix E4: Drawing of the self: Sarah



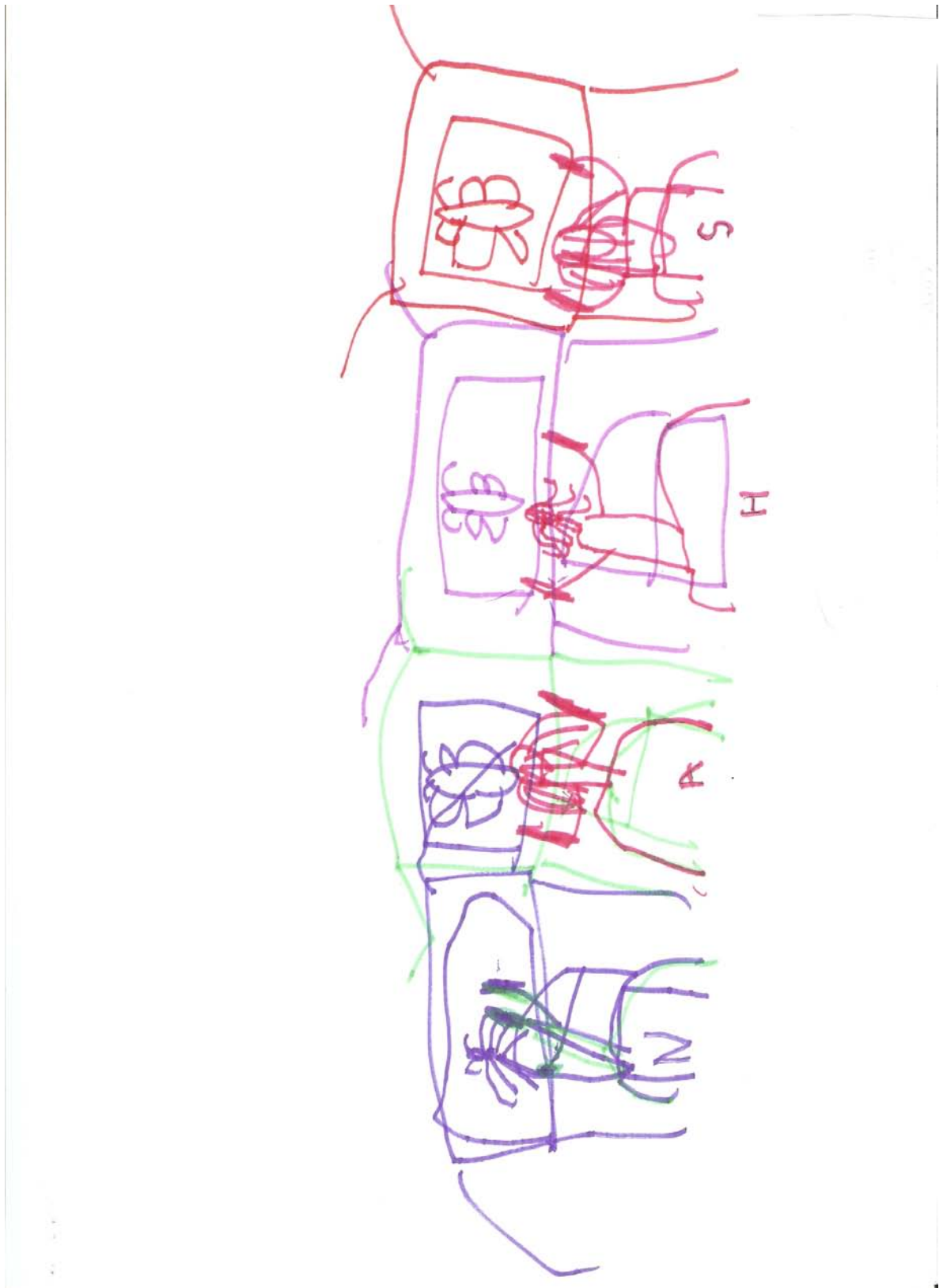
Appendix E5: Drawing of the self: Mark



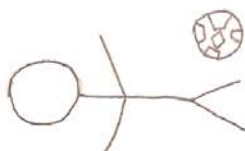
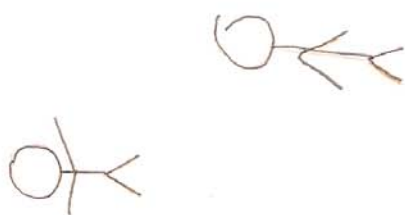
Appendix F1: Drawing of the self and others: Josh



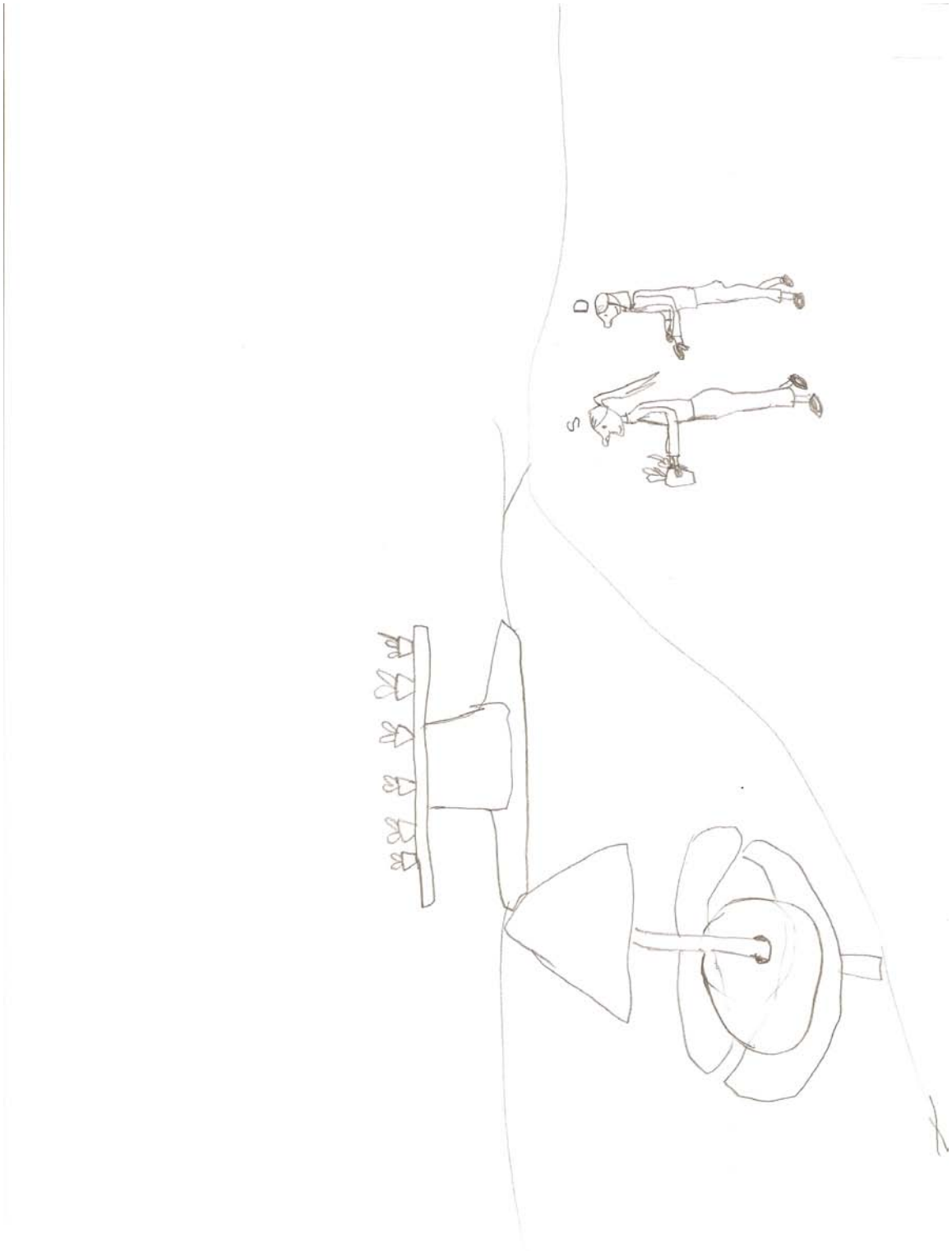
Appendix F2: Drawing of the self and others: Nathan



Appendix F3: Drawing of the self and others: Kyle



Appendix F4: Drawing of the self and others: Sarah



Appendix F5: Drawing of the self and others: Mark

