THE IDENTIFICATION AND ANALYSIS OF SOCIAL AND COMMUNICATION SKILLS STRATEGIES USED TO PROMOTE THE INCLUSION OF A STUDENT WITH ASPERGER'S SYNDROME, RESULTING IN THE RECOMMENDATION OF NEW STRATEGIES AND METHODS OF CONSOLIDATING THE CURRENT STRATEGIES.

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The work contained in this thesis has not been submitted previously for a degree or diploma at any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

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ABSTRACT

This study identified and analysed the social and communication skills strategies used to promote the inclusion of a student with Asperger's Syndrome within an inclusive setting. The study used a qualitative approach, with a case study methodology gathering data through observations, interviews, sociometric measures and secondary data. Results indicated that the student's teacher and peers used natural social and communication skills strategies to support the student's inclusion. However, the current strategies did not represent a conscious collaborative response to the student's needs and skill deficits. Recommendations are suggested for strengthening, first, the current strategies being used in the classroom, and, second, new programs and strategies that may further promote the student's inclusion and educational experience.

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CHAPTER 1

INTRODUCTION

Due to the individual nature of Asperger's Syndrome there is no standardized model or policy for the inclusion and teaching of students with Asperger's Syndrome. The research reported here focuses on the identification and delineation of the social and communication skills strategies implemented by a teacher to support the inclusion of a student with Asperger's Syndrome. This chapter overviews the background of the study, as well as its significance, purpose and structure.

1.1 Background of the Study

Since the introduction of the Disability Discrimination Act (1992) there has been a movement towards inclusive schooling for children with Asperger's Syndrome (Georgiou, Jackson, Woodcock and Woolner, n.d.). Inclusive schooling is defined as the unconditional placement of any child in any school, (Commonwealth Department of Health and Ageing, n.d.) and successful inclusion involves the ability to socialize, and participate in interactive tasks and educational experiences (Goodman and Williams, 2007).

This study specifically focuses on the identification of social and communication skill strategies being used to support the inclusion of a student with Asperger's Syndrome. Social and communication skills are required for the successful participation in an inclusive classroom. However the diagnostic criteria of Asperger's Syndrome dictate

that these skills be developmentally delayed. Therefore, students with Asperger's Syndrome need to be exposed to a structured social (and communication) skills program in their school environment (Baker, 2003). Teachers are responsible for sourcing, evaluating, implementing and monitoring appropriate programs, and strategies for the inclusion of students with Asperger's Syndrome (Stephenson, 2004).

1.2 Significance of the Study

Although there is a significant body of research regarding Asperger's Syndrome, there is minimal literature reporting how teachers of inclusive classes support the inclusion of students with Asperger's Syndrome through addressing the developmental delay in areas such as social and communication skills. The study aims to inform classroom practice through highlighting conscious, and unconscious, strategies in use by the teacher and students within the classroom. The study will compile the strategies being used, as well recommend appropriate strategies based on observations of the child, and current research. The recommendations could be used by the child's teacher and/or support teacher with the hope that they would improve the educational experiences of the child.

The study holds great worth in the further development of the researcher's own classroom practice and pedagogical knowledge. In addition, pre-service teachers should be exposed to the research study during their course of study to raise awareness of strategies that facilitate the inclusion for one child with Asperger's Syndrome. Therefore, the study holds great worth for the child, their classroom teacher and support teacher.

1.3 Purpose of the Study

The purpose of the study was to observe, identify and delineate what supportive social and communication skills strategies are used to facilitate the inclusion of a student with Asperger's Syndrome. It aimed to provide data to support the development of recommendations for the child with Asperger's Syndrome under study. It is anticipated that, following the completion of the research study, the implementation of the recommendations by the teacher will significantly improve the child with Asperger's Syndrome's educational experiences, especially within the social domain. Further, pre-service teachers should be exposed to the research study during their course of study to raise awareness of strategies that facilitate inclusion.

1.4 Structure of the Study

The study employed observations, sociometric techniques, interviews, questionnaires and primary documents to gather data regarding the student with Asperger's Syndrome, their abilities and deficits, the social interactions within the class, and the social and communication skills strategies implemented by the teacher and peers. The number of data sources allowed for the triangulation of data and confirmability of results. The structure of the thesis is now outlined.

Chapter two provides a detailed summary of the literature relating to Asperger's Syndrome, the skill deficits and needs of students with Asperger's Syndrome, the importance of social and communication skills, and outlines the requirements of

inclusive education. From the literature reviewed a series of research questions were formulated which are outlined at the close of the chapter.

Chapter three outlines the methodology chosen for the study, and describes the methods used for research and analysis, as well as providing a research and subject profile.

Chapter four presents the results of the study in relation to the research questions developed from the review of the literature.

Chapter five discusses the implications of the research findings and makes recommendations based on the results of this study, and current research.

Chapter six summarises the major findings of the study, as well as outlining the implications of the research. This chapter also presents the limitations and delimitations of the study and its findings.

CHAPTER 2

LITERATURE REVIEW

The previous chapter outlined the background of the study, as well as its significance and purpose. A detailed review of the literature regarding Asperger's Syndrome and inclusive education was performed, and the findings are now summarised.

2.1 Asperger's Syndrome Overview

In 1943 Leo Kanner published his paper on autism and one year later Hans Asperger discovered a similar phenomenon which he termed "autistic psychopathy" (Safran, 2001, p. 152). However, Asperger's work remained essentially unknown in English literature until Wing (1981 as cited in McLaughlin-Cheng, 1998, p, 235) coined the term "Asperger's Syndrome". At this time individuals with Asperger's characteristics were classified under the broad term of Pervasive Developmental Disorders (PDD) in the American Psychiatric Association's (APA) Diagnostic and Statistical Manual of Mental Disorders – IV (DSM-IV), or as having High Functioning Autism (HFA). It was not until the 1990s that Asperger's Syndrome was formally recognized as a separate mental disorder in both the DSM-IV and in the World Health Organisation's (WHO) International Classification of Diseases (ICD-10), and still there is confusion regarding diagnosis (Safran, 2001). Some researchers suggest Australian clinicians take a spectrum approach to autism (ASD), where it is recognized that several forms of autism exist on a spectrum, ranging from mild to severe and with different levels of functioning

(Attwood, 2006; Kluth, 2003). For the purpose of this literature review, the approach will be taken that Asperger's Syndrome sits on the mild end of the Autistic Spectrum.

Asperger's Syndrome is primarily a social disability, and to fulfill diagnostic requirements individuals do not experience cognitive, or general language, developmental delays. Individuals with Asperger's Syndrome display impairments in social interactions and communication, and exhibit restricted or repetitive behaviours (Fine & Myers, 2004). Due to the absence of cognitive delay, students with Asperger's Syndrome are included in regular schools, where they may meet academic requirements, but struggle with the social requirements (Connor, 2008; Tryon, Mayes, Rhodes & Waldo, 2006). No two individuals with Asperger's Syndrome present with the same characteristics, or interests (Winter, 2003).

2.2 Diagnosis

Pervasive Developmental Disorders (PDD) is a category of mental illness in the DSM-IV, in which the Autistic Spectrum and Asperger's Syndrome sit. All disorders under the PDD share three common areas of developmental delay:-

1. Social Interaction
2. Communication, and
3. Restricted or Repetitive Behaviours (Szatmari 1998 as cited in Safran, 2001).

The DSM-IV (Table 2.1) and ICD-10 (Table 2.2) set out formal diagnostic criteria for the classification of Asperger's Syndrome. The average age of diagnosis for Asperger's

Syndrome is 8 years old (Eisenmajer, Prior, Leckham, Wing, Gould, Welham & Ong, 1996 as cited in Elder, Caterino, Chao, Shacknai & De Simone, 2006). If a person meets the diagnostic criteria for Asperger's Syndrome, they cannot meet the diagnostic criteria for Autism (Volkmar & Klin, 2000 as cited in Klin, Pauls, Schultz & Volkmar, 2005).

Table 2.1: Diagnostic Criteria for Asperger's Disorder from DSM-IV (1994 as cited in Attwood, 1998 , pp198-199)

A. Qualitative impairment in social interaction, as manifested by at least two of the following:
   1) marked impairment in the use of multiple nonverbal behaviours such as eye-to-eye gaze, facial expression, body postures, gestures to regulate social interaction
   2) failure to develop peer relationships appropriate to developmental level
   3) a lack of spontaneous seeking to share enjoyment, interests or achievements with other people (e.g. by a lack of showing, bringing or pointing out objects of interest to other people)
   4) lack of social or emotional reciprocity

B. Restricted repetitive and stereotyped patterns of behaviour, interests and activities, as manifested by at least one of the following:
   1) encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
   2) apparently inflexible adherence to specific, nonfunctional routines or rituals
   3) stereotyped and repetitive motor mannerisms (e.g. hand or finger flapping or twisting, or complex whole-body movements)
   4) persistent preoccupation with parts or objects

C. The disturbance causes clinically significant impairment in social, occupational, or other important areas of functioning

D. There is no clinically significant general delay in language (e.g. single words used by the age 2 years, communicative phrases used by age 3 years)

E. There is no clinically significant delay in cognitive development or in the development of age-appropriate self-help skills, adaptive behavior (other than in social interaction), and curiosity about the environment in childhood

F. Criteria are not met for another Pervasive Developmental Disorder or Schizophrenia

Table 2.2: Diagnostic Criteria of Asperger's Syndrome from ICD-10 (World Health Organisation, 1993 as cited in Attwood, 1998, pp200-201)

A. There is no clinically significant general language delay in spoken or receptive language or cognitive development. Diagnosis requires that single words should have developed by 2 years of age or earlier and that communicative phrases be used by 3 years of age or earlier. Self-help skills, adaptive behaviour, and curiosity about the environment during the first 3 years should be at a level consistent with normal intellectual development. However, motor milestones may be somewhat delayed and motor clumsiness is usual (although not a necessary diagnostic feature). Isolated special skills, often related to abnormal preoccupations, are common, but are not required for diagnosis.

B. Qualitative abnormalities in reciprocal social interactions are manifest in at least two of the following areas:

a) failure adequately to use eye-to-eye gaze, facial expression, body posture, and gesture to regulate social interaction:
b) failure to develop (in a manner appropriate to mental age, and despite ample opportunities) peer relationships that involve mutual sharing of interests, activities or emotions;
c) lack of socio-emotional reciprocity as shown by an impairment or deviant response to other people's emotions: or lack of modulation of behaviour according to social context: or a weak integration of social, emotional and communicative behaviours;
d) lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g. lack of showing, bringing or pointing out to other people objects of interest to the individual).

C. The individual exhibits an unusually intense, circumscribed interest or restricted, repetitive and stereotyped patterns of behaviour, interests, and activities manifest in at least one of the following areas:

a) an encompassing preoccupation with stereotyped and restricted patterns of interest that are abnormal in content or focus: or one or more interests that are abnormal in their intensity and circumscribed nature though not in the content or focus;
b) apparently compulsive adherence to specific non-functional routines or rituals:
c) stereotyped and repetitive motor mannerisms that involve either hand/finger flapping or twisting, or complex whole body movements:
d) preoccupations with part-objects or non-functional elements of play materials (such as their colour, the feel of their surface, or the noise/vibration that they generate);

However it would be less usual for these to include either motor mannerisms or preoccupations with part-objects or non-functional elements of play materials.

D. The disorder is not attributable to the other varieties of pervasive developmental: simple schizophrenia, schizo-typal disorder, obsessive-compulsive disorder, anankastic personality disorder, reactive and disinhibited attachment disorders of childhood.

Clinicians do not always strictly adhere to the DSM-IV classification criteria (Tryon et al, 2006). Three approaches to the diagnosis criteria of Asperger's Syndrome have been suggested, all different from the standard DSM-IV or ICD-10 criteria:

- modified DSM-IV or ICD-10
- interchangeability of HFA and Asperger's Syndrome, or
- researcher developed (Klin, Pauls, Schultz & Volkmar, 2005).

Examples of researcher developed diagnostic criteria include Wing (1981) (Table 2.3), and Gillberg and Gillberg (1989) (Table 2.4). Researcher developed diagnostic criteria still requires proven impairment in the three domains – social interaction, communication and, restricted and repetitive behaviours.

Table 2.3: Clinical Diagnostic Criteria developed by Wing (1981 as cited in McLaughlin-Cheng, 1998, p236)

a) a lack of empathy for others b) one-sided social interactions c) speech deficits d) poor non-verbal communication e) high frequency and long duration of idiosyncratic topics of interest

Table 2.4: Gillberg and Gillberg Researcher Developed Criteria (1989 as cited in Attwood, 1998, pp195 – 196)

1. ***Social impairment*** (extreme egocentricity)
   (at least in two of the following):
   - (a) Inability to interact with peers
   - (b) Lack of desire to interact with peers
   - (c) Lack of appreciation of social cues
   - (d) Socially and emotionally inappropriate behaviour

2. ***Narrow interest***
   (at least one of the following):
   - (a) Exclusion of other activities
   - (b) Repetitive adherence
   - (c) More rote than meaning

3. ***Repetitive routines***
   (at least one of the following):
   - (a) On self, in aspects of life
   - (b) On others

4. ***Speech and language peculiarities***
   (at least three of the following):
   - (a) Delayed development
   - (b) Superficially perfect expressive language
   - (c) Formal pedantic language
   - (d) Odd prosody, peculiar voice characteristics
   - (e) Impairment of comprehension including misinterpretation of literal/implied meanings

5. ***Non-verbal communication problems***
   (at least one of the following):
   - (a) Limited use of gestures
   - (b) Clumsy/gauche body language
   - (c) Limited facial expression
   - (d) Inappropriate expression
   - (e) Peculiar stiff gaze

6. ***Motor clumsiness***
   Poor performance on neuro-developmental examination

2.2.1 Asperger's Syndrome and High Functioning Autism (HFA)

There is debate in the literature regarding the classification of Asperger's Syndrome as part of the Autism Spectrum (ASD), or as a separate disorder under the broad PDD classification. Further, when Asperger's Syndrome is classified as part of the Autism Spectrum it is often referred to, or confused with High Functioning Autism (HFA) blurring the classification categories (Smith Myles & Simpson, 2002).

Until Asperger's Syndrome was formally recognized by the DSM-IV children who displayed autistic characteristics, with the exception of delayed cognitive and language development, and who displayed better developed social skills were diagnosed as having HFA (Attwood, 2006). HFA is not listed in the DSM-IV and has no clinical criteria. However, the term is commonly used to describe autistic individuals with an IQ above 69 and with more developed verbal functioning (McLaughlin-Cheng, 1998; Thede & Coolidge, 2006). Adhering to DSM-IV diagnostic criteria Asperger's Syndrome is only diagnosed in the absence of cognitive and verbal delay, similar characteristics to HFA (Macintosh & Dissanayake, 2006). The DSM-IV provides further diagnostic criteria such as motor clumsiness, no mental retardation and a later onset to differentiate Asperger's Syndrome from (High Functioning) Autism (McLaughlin-Cheng, 1998). This highlights the complexity of identifying two separate disorders with very similar clinical presentations and the need for further research and comparison of disorders on the Autistic Spectrum.

Attwood (2006) suggests that Australian clinicians use the terms Asperger's Syndrome and HFA as interchangeable, focusing on the spectrum approach rather than the

categorical approach. This is supported by research that suggests that most individuals diagnosed with Asperger's Syndrome fit the DSM-IV criteria for Autism, with the exception of cognitive delay (Howlin, 2003; Mayes, Calhoun & Crites, 2001 as cited in Tryon, Mayes, Rhodes & Waldo, 2006).

2.2.2 Sharing the Diagnosis

It is the parent's decision whether or not to tell the child about their Asperger's Syndrome diagnosis. There are both reasons for and against sharing the diagnosis with the child, and the decision is made in consultation with the appropriate professionals, and in consideration of the child's developmental and emotional maturity (Jones, 2002). Giving a child who is high-functioning information regarding their diagnosis may provide them with explanations for their behaviour, and result in better self-understanding and self-awareness (Baker, 2003). Through understanding their diagnosis of Asperger's Syndrome individuals may be able to plan effective strategies for overcoming their social deficits, or provide explanations to others regarding their needs. In addition, individuals that have an understanding of their diagnosis may display improved self-esteem. Alison Hale (1998 as cited in Jones, 2007, p27) a woman with Asperger's Syndrome believes that her diagnosis aided her self-understanding and prompted her to develop strategies for living. Hale stated "...one of my strongest defences against all of my disabilities is the awareness of where my problems lie".

2.3 Prevalence

Using the Gillberg diagnostic criteria the prevalence rate of Asperger's Syndrome is between 36 and 48 per 10 000 children, with a male to female ratio of 4.8:1 (Attwood, 2006). Asperger's Syndrome and Autism Spectrum diagnosis rates are increasing. Fine & Myers, (2004) believe this is due to better diagnostic tools, more awareness of Asperger's Syndrome and training of professionals. However, Charman (2002) hypothesized that the increased prevalence rates are not in fact true increases, but are instead due to the expansion of, and relaxed adherence to the WHO ICD-10 criteria.

There is little research regarding the discrepancy in the prevalence of Asperger's Syndrome or ASD between the genders. The research literature regarding the female gender and Asperger's Syndrome is underwhelming, and highlights a significant gap in the understanding of Asperger's Syndrome (and ASD), and its causes. There has been conjecture that females are able to better disguise the characteristics, particularly in the area of social skills much better than males and this may cause the discrepancy. However, this is unsubstantiated and requires further research (Attwood, 2000 as cited in Fine & Myers, 2004).

2.4 Cause

The cause of ASD and Asperger's Syndrome is still unknown (Attwood, 1998). Tsai (2007) outlined investigations into genetic correlations of Asperger's Syndrome, in particular the character traits of family members. It has been found that individuals diagnosed with Asperger's Syndrome have family members that display social deficits

or characteristics of the syndrome. This has been found to be common in fathers (Bowman, 1998 as cited in Volkmar, Klin & Pauls, 1998). This work is founded on the hereditary link proposed by Hans Asperger in 1944 (Bauer, 1996 as cited in Fine & Myers, 2004). Folstein & Rutter (1997, as cited in Volkmar, Klin & Pauls, 1998) stated that studies on twins diagnosed with Asperger's Syndrome have supported a genetic link, supporting that Asperger's Syndrome is caused by a genetic defect/abnormality.

Baron-Cohen, Knickmeyer & Belmonte (2005) proposed that Asperger's Syndrome is caused by a neurological impairment, and the discrepancy in male and female prevalence rates of Asperger's Syndrome reflect the brain differences of males and females in general. This theory is termed "Empathizing-Sympathizing (E-S) Theory" (Baron-Cohen, Knickmeyer & Belmonte, 2005, p820), and is based on the psychological differences of each sex. Females demonstrate greater empathizing such as identifying own and others emotional states and appropriate responses. Males demonstrate greater systemizing skills such as systematic analysis of situations in order to predict response/behaviour. This theory accurately reflects the prevalence rates and diagnostic criteria of Asperger's.

2.5 Impairments

2.5.1 Social Relating

Social skills are accepted behaviours based on societal norms and once generalized, they collectively constitute social competence. Social competence is essential for an individual to successfully function in society (Mathur & Rutherford, 1996 as cited in

Johns, Crowley & Guetzloe, 2005). Due to the impairments that characterize Asperger's Syndrome social competence will not naturally develop in an individual with Asperger's Syndrome. Social skills are invisible and persons unfamiliar with Asperger's Syndrome may not recognize skill deficits (Baker, 2003).

Schools are natural environments where social skills are required for participation (Elder, Caterino, Chao, Shacknai & De Simone, 2006). Individuals with Asperger's Syndrome do not form age-appropriate peer relationships and as a result have few friends, play alone or with younger students, or seek adult company. Individuals with Asperger's Syndrome often feel confusion in social situations, stumbling over unwritten social laws and non-verbal aspects of social situations (Attwood, 2006). For example, individuals with Asperger's Syndrome may have difficulty with social skills such as: maintaining an acceptable distance, making appropriate and relevant comments, conversational turn-taking, and understanding gestures and facial expressions (Myles & Simpson, 2001 as cited in Fine & Myers, 2004). Many individuals engage in one-sided conversations and have difficulty negotiating, compromising and accepting other's ideas (Marks, Schrader, Levine & Hagie, 1999). Individuals may also display a lack of social reasoning and understanding of consequences (Elder, Caterino, Chao, Shacknai & De Simone, 2006). Students with Asperger's Syndrome may notice their differences which may result in low self-esteem and confidence, and anxiety in social situations (Sansosti & Powell-Smith, 2006; Smith Myles & Simpson, 2002).

Social rejection and isolation may be a result of social skills deficits (Macmillan, Gresham & Forness, 1996 as cited in Chamberlain, Kasari & Rotheram-Fuller, 2006).

Individuals with Asperger's Syndrome desire social interaction and social acceptance, but lack innate social abilities and feel frustrated by their inability (Fine & Myers, 2004,; Smith Myles & Simpson, 2002). Making friends requires interpersonal skills that individual's with Asperger's Syndrome may lack. Individuals with Asperger's Syndrome must be prepared for social interactions by training and practice (Attwood, 2006). Mixed ability friendships may raise behavioural expectations for the child with Asperger's Syndrome by providing role models, and skilled interactional partners (Chamberlain, Kasari & Rotheram-Fuller, 2006).

2.5.2 Communication

Children with Asperger's Syndrome do not have cognitive or language developmental delay, but do display communication deficits such as an unusual use of language (Attwood, 2006). Language differences include the rate of speech, a lack of fluency and poor modulation of volume (Elder, Caterino, Chao, Shacknai & De Simone, 2006). Conversation may be one-sided with little reciprocity and literal interpretation. Conversational skills related to social skills such as eye contact, variation in pitch, the repair or ending of a conversation may also be in deficit (Attwood, 2006).

Individuals with Asperger's Syndrome have difficulty with the reading and translation of facial expression and body language. Due to this difficulty individuals may not display these non-verbal cues. Individuals with Asperger's Syndrome may also fail to read contextual information and cues, that may explain or help predict behaviours. Individuals with Asperger's Syndrome have difficulty understanding cues within speech,

such as intonation, tone or inflection, and misuse them within their own speech (Attwood, 2006).

2.5.2.1 Theory of Mind

Theory of Mind refers to the ability to understand another's thoughts, feelings and understandings, which allows the person to respond and/or to use this to predict behaviours. In common terms Theory of Mind is the ability to put one's self into another person's shoes and understand their perspective (Attwood, 2006). In a typical child Theory of Mind develops spontaneously, and by age 4 typical individuals recognize that other people have thoughts and feelings. A child with Asperger's Syndrome does not develop Theory of Mind until the ages 9-14, and this development is still a gradual, taught process, not a natural development (Safran, 2001)

2.5.3.Restricted and Repetitive Behaviour

All human behaviour comes about as an attempt to fulfill a need (Attwood, 1998). For individuals with Asperger's Syndrome, the world presents a challenging, confusing and possibly stressful entity which may result in the individual displaying behavioural excesses. Behavioural excesses include: self-stimulation, resistance to change, strict adherence to routines, odd or challenging behaviours, disruptive behaviours, destructive behaviours and/or self-injurious behaviours (Smith et al, 2004).

Many children and adults with Asperger's Syndrome develop intense interests in one or more areas. The abnormality is in the intensity of the interest and the focal point that it may become. Individuals typically spend large amounts of time both collecting

information about their interest(s), and talking about their interest(s). The interests may develop from good or successful experiences, or memories. Interests are usually based in the physical world, and do not require flexible thinking (Attwood, 2006).

2.6 Characteristics

2.6.1 Cognitive Profile

Individuals with Asperger's Syndrome have no cognitive developmental delay, and exhibit average, or above average, intelligence (APA, 2000 as cited in Griswold, Barnhill, Smith Myles & Simpson, 2002; Attwood, 2006). The patterns of thoughts and feelings of individuals with Asperger's Syndrome may not mirror the patterns of thoughts and feelings of typical individuals (Attwood, 1998). Individuals with Asperger's Syndrome have an academic preference for fact-based material. This is due to poor comprehension of abstract ideas, and difficulty with flexible thinking (Attwood, 1998; Church, Alisanki & Amanullah, 2000 as cited in Smith Myles & Simpson, 2002; Griswold, Barnhill, Smith Myles & Simpson, 2002). Individuals with Asperger's Syndrome are visual thinkers and may record experiences in images, employing well developed long term memory (Attwood, 1998).

In accordance with the Asperger's Syndrome characteristic of narrow interests, individuals focus on details, rather than the big picture (Attwood, 2006). Individuals may demonstrate difficulties with planning, organisation, spelling, reading and penmanship (Attwood, 2006; Griswold, Barnhill, Smith Myles & Simpson, 2002). It has also been noted that individuals may demonstrate a deficiency in common sense (Ehlers,

Nyden, Gillberg, Sandberg, Dahlgren, Hjelmquist & Oden, 1997 as cited in Smith Myles & Simpson, 2002). Individuals with Asperger's Syndrome may be reluctant to attempt tasks for fear of failure, or imperfection (Attwood, 2006).

2.6.2 Self-awareness

Individuals with Asperger's Syndrome lack understanding of their own emotions and actions, which can be impact on their interactions with others, as well as their awareness of their abilities and limitations (Baker, 2003).

2.6.3 Sensory

Dunn, Myles and Orr (2002 as cited in Smith Myles & Simpson, 2002) found that a high number of children in their study showed problems with endurance/tone, hearing sensitivity, attention and registration. Individuals may display hypo-sensitivity or hyper-sensitivity (Attwood, 2006).

2.6.4 Movement

Wing (1981 as cited in Smith Myles & Simpson, 2002) first observed that children with Asperger's Syndrome displayed poor motor skills. Individuals with Asperger's Syndrome may exhibit movement problems, and a lack of fine and gross motor skill coordination. This may be demonstrated through illegible or poor handwriting, clumsiness, or an impaired ability to run, throw or catch (Attwood, 2006). In a study conducted by Knights and Norwood, (1997 as cited in Jansiewicz, Goldberg, Newschaffer, Denckla, Landa & Mostofsky, 2006) individuals with Asperger's

Syndrome performed 3 to 4 standard deviations below the mean on the Grooved Pegboard test.

2.6.5 Comorbidity

Klin, Pauls, Schultz and Volkmar (2005 as cited in Tsai, 2007) found that individuals with Asperger's Syndrome displayed higher rates of comorbid disorders. Comorbid disorders include Tourettes, ADHD, mood disorders, anxiety, depression and schizophrenia (Tsai, 2007). Tantam (2000 as cited in Bellini, 2004) stated that anxiety is almost always comorbid with Asperger's Syndrome. Further, Bellini (2004, as cited in Attwood, 1998) found that adolescents diagnosed on the Autism Spectrum experience a greater level of anxiety than the general population. Anxiety can be debilitating, and affect an individual's social performance, creating a downward spiral (Bellini, 2004). In turn, social failure is positively correlated with depression, and may cause low self-esteem (Barnhill, 2001 as cited in Elder, Caterino, Chao, Shacknai & De Simone, 2006; Fine & Myers, 2004).

2.7 Inclusive Education

Inclusion refers to the unconditional placement of any child, in any school (Commonwealth Department of Ageing, n.d.). There is a growing trend to place students with disabilities, including students with Asperger's Syndrome and Autism, inclusively in regular classrooms in line with the Disability Discrimination Act (1992), and the Disability Standards for Education (2005) (Australian Association of Special Education, n.d; Bryer, 2005; Georgiou, Jackson, Woodcock & Woolner, n.d.). The placement of

children with Asperger's Syndrome in the regular classroom is often done with the notion that this option will provide the best education (Bullard, 2004). When students are enrolled in a regular school they are assigned a learning support team, which may comprise of parents, teachers, the principal, support teachers, counselor, and when needed, specialist personnel. The support team participates in an ongoing support cycle of programming, appraisal, access (to support services and specialists) and reappraisal (NSW Department of Education and Training, 2008).

When compared to their peers in self-contained classrooms, students on the Autism spectrum in inclusive classrooms have better social development (Fisher & Meyer, 2002 as cited in Goodman & Williams, 2007; Wolfberg,1999 as cited in Boutot, 2007). Inclusive classrooms allow students to learn from their peers, engage their intellect and experience broad educational activities (Kluth, 2003).

Inclusive schooling is mutually beneficial and benefits all learners by developing independence and interdependence (Commonwealth Department of Ageing, n.d; Kluth, 2003). Inclusive education reduces the labeling of disabled students, and increases interactions between disabled and non-disabled students (Harrington & Taylor, 2003).

> "Inclusion offers the non-disabled student an opportunity to develop an appreciation for the complexity of human characteristics as well as an appreciation for individual differences" (Harrington & Taylor, 2003).

Inclusive education dictates that students are socially included, as well academically included (Foreman, 2005; Harrington & Taylor, 2003). However, placing students in inclusive classes does not guarantee their inclusion. Clear goals, support services, resources, parental support, positive attitudes and effective teaching are all requirements of successful inclusion (Harrington & Taylor, 2003). Social inclusion implies that all students feel that they belong, and requires the ability to socialize and participate in interactive activities (Boutot, 2007; Goodman & Williams, 2007). Students with Asperger's Syndrome need to be taught specific social and communication skills to successfully interact with their typical peers. In addition, typical peers need to be taught strategies for interacting with students with Asperger's Syndrome (Bryer, 2005; Commonwealth Department of Ageing, n.d).

Inclusive education involves differentiating curriculum in order to facilitate equal access to education for all students (van Kraayenoord, 2007). Each student with Asperger's Syndrome is unique in their abilities, deficits, behaviours and interests (Cost, Murdock & Tieso, 2007; Kluth, 2003). This results in the inability to create a standardized model for the successful inclusion for Asperger's Syndrome students, and dictates that students are planned for on an individual basis (Commonwealth Department of Ageing, n.d.).

2.7.1 Programming

Teachers need to be armed with the most effective strategies to facilitate inclusion, and strategies should be founded on classroom based evidence to transfer to effective classroom practice (Goodman & Williams, 2007). Due to the nature of Asperger's Syndrome, programming needs to be developed on an individual basis to cater for

student's needs and context. No single program or practice will be effective for all individuals with Asperger's Syndrome, and programming and strategies must be informed by a close knowledge of the student and consultation with the child's parents (Kluth, 2003; Smith Myles & Simpson, 2002). Programs should be based on the individual's cognitive learning characteristics and appeal to rational thinking (Marks, Schrader, Levine & Hagie, 1999).

Kluth (2003) outlined that effective programming for the facilitation of inclusion involves the practice of inclusive pedagogy, consisting of many areas including -

2.7.2 Collaboration

The parents of a child are the child's first teachers, and this continues throughout the child's life (Lambie, 2004). Parents implement and evaluate strategies of their own for communication and behaviour purposes prior to the child attending school (Jacobsen, 2005). Parents have the greatest responsibility in regards to a child, and therefore, should be treated as partners in the child's education (Smith et al, 2004). This knowledge and experience can be utilized by teachers to effectively plan for the student. McKenzie & Porter (2000) found that interventions, programs or strategies that involve parents are more successful than ones that do not. When parents work collaboratively with teachers and professionals the academic and social performance of their child improves (Buzzell, 1996).

Friend & Cook (1996 as cited in Rainforth & England, 1997) defined collaboration as two or more equal partners working towards common goals. Successful collaboration is

founded on the shared values of common goals, shared responsibility and equality of the partners. Common goals are established by the partners, and strategies implemented to fulfill these goals; with each partner accepting equal responsibility and accountability. Parent and professional collaboration provides a balanced picture and results in balanced decisions. Successful collaboration requires professionals not to assume the knowledge, needs or opinions of the family (Smith et al, 2004). Parental involvement in the planning and implementation of interventions, programs and strategies results in the interventions, programs and strategies fitting the child, and long-term behaviour change (Marshall & Mirenda, 2002; McKenzie & Porter, 2000).

2.7.2.1 Collaborative Teams

Jacobsen (2005) suggests that the ideal collaborative structure is as a team, often referred to as a learning support team (LST). The team plans, implements and assesses interventions, programs and strategies and acts as a support system for the child. The team may include professionals such as teachers, therapists, speech pathologists, psychologists, counselors, and non-professionals such as teacher's aides, parents, other family members, the student or peers (Lambie, 2005; Snell & Janney, 2005). The whole team is responsible for the establishment of goals and approaches, which are recorded in the student's IEP. Working as a team offers each member the opportunity to interact with others, to share decisions and information, and ownership of goals and approaches (Jacobsen, 2005). Teams also provide an opportunity for family members to interact with professionals and acquire new skills and knowledge (Lambie, 2004).

2.7.2.2 Individual Education Plan (IEP)

The Individual Education Plan (IEP) is the focus of a student-centred approach and outlines the supports and services that the student will need (Rainforth & England, 1997; Snell & Janney, 2005). IEPs include both short and long term goals for the student, and how they will be addressed. IEPs should be collaboratively developed and parent input into the IEP ensures that the values and expectations of the home and school are synonymous (Karten, 2005). Once an IEP is completed the parents should be provided with a copy, and should be given an opportunity to reflect on its success and the possibility of other inclusions (Jones, 2002).

2.7.2.3 Home-School Relationship

Parental experiences and expectations of schooling affect the home-school relationship, and often parents do not feel as equals with the teacher (Buzzell, 1996). Successful parent-professional relationships offer mutual support, and are built on information sharing and a consistent approach (Howley & Rose, 2007). A good parent-professional relationship can result in the whole family feeling valued (Boult, 2006; Buzzell, 1996). The behaviour and communication strategies and routines that are successful in the classroom should be trialed at home, and vice versa (Kluth, 2003; Smith et al, 2005).

2.7.2.4 Communication

Open communication can prevent problems and misunderstandings, and ensure that concerns of all parties are known (Smith et al, 2004). When students observe teachers and parents communicating they understand that the teacher and parents are working together (Boult, 2006). Communication should be regular, whether it is on a formal or

informal basis. Educational goals may not be met if there is not regular and relevant communication between home and school (Smith et al, 2004). Good communication between home and school provides teachers with invaluable resources and information regarding the child. Parents should be consulted regarding the type and frequency of communication between the school and home. One method of home-school communication is through a communication book (Boutot, 2007). Many commercial social skills programs include examples of methods of communication with parents (Baker, 2003; Painter, 2006).

2.7.3 Social Support

Social interactions, an imperative aspect of inclusive classrooms, require the use of social and communication skills. Students display social skills through response to social interactions, questions from others, interacting with others and expressing their needs and wants. Social skills are dependent on receptive and expressive communication skills, and the inability to engage with other people and tasks can affect the acquisition and development of social skills (Goodman & Williams, 2007). Social skills learned during childhood are the foundation of the socially acceptable behaviours of adulthood. Social interaction skills and communication abilities have implications regarding how well the individual will function independently as an adult (Cost, Murdock & Tieso, 2007).

Social impairment in individuals with Asperger's Syndrome, results in difficulty in forming relationships and in understanding social situations and social rules. Many of the rules of social interaction are unwritten and learnt incidentally. Each social environment has hidden rules that participants are required to abide by in order to meet

the norms of that social environment. For example, in schools the hidden rules or "hidden curriculum" (Myles & Simpson, 2001 as cited in Smith Myles, 2005) may include: how to dress, behaviours that will define a student as a good friend, teacher expectations and what behaviours are considered appropriate. These features are not explicitly taught but are expected of individuals within that environment and learned incidentally. Individuals with Asperger's Syndrome do not learn social skills or social rules incidentally; instead they require direct instruction (Smith Myles, 2005). A teacher can create opportunities for social interactions where social and communication skills can be practiced. A range of interactions, using a variety of strategies, where skills are taught in both structured and incidental settings, should be included in the child's individualized education plan (IEP) (Kluth, 2003; Marks, Schrader, Levine & Hagie, 1999).

Building social interactions around the individual's interests may reduce stress and anxiety felt in social situations. Instruction in coping strategies for unexpected situations or responses can reduce stress and anxiety (Marks, Schrader, Levine & Hagie, 1999). Social skills lessons can teach rules for social situations but will not prepare students for situations that do not fit taught expectations. Therefore social skills training needs to include instruction in problem-solving and generalization (Jacobsen, 2005).

Due to the range of social skills deficits experienced by an individual with Asperger's Syndrome, no one program or intervention will be sufficient to over the range of deficits experienced, and no one program or intervention will successfully cater for all individuals with Asperger's Syndrome. Therefore, professionals, educators and parents

must choose a range of programs and interventions to suit the individual's needs (Jones, 2002).

2.7.3.1 Social Skills Groups

Social skills groups provide an opportunity to learn and practice social skills in a structured non-confronting environment (Attwood, 1998). The aim of social skills groups is to improve the application of social skills outside of the group. If the skill is not practiced outside of the group, in the natural context of the skill, it will not be internalized. It is important that both teachers and parents are aware of the skills being targeted in social skills groups, for continual reinforcement and generalization of skills (Baker, 2003; Painter, 1998). Hoag (1996 as cited in Painter, 2006) evaluated the effectiveness of the frequency and duration of social groups. Hoag found that groups with duration of 60 minutes produced more results than groups with duration of more or less than 60 minutes. It was also found that groups that met more than once a week were no more effective than groups that met once a week.

2.7.3.2 Class Social Skill Instruction

Typical peers that interact with individuals with Asperger's Syndrome who tease, bully or ignore the individual with Asperger's Syndrome also display social skill deficits. Therefore, social skills need to be taught to both the individual with Asperger's Syndrome and typical peers (Baker, 2003). Baker (2003) found that classroom (natural) settings enable better social skill development and generalization, and advises that for classroom instruction one skill should be targeted each week. The skill should be

targeted through one formally structured 30 to 40 minute lesson at the beginning of the week, followed up by less structured practice time later in the week.

2.7.3.3 Social Stories

Social Stories are short, individualized stories that provide students with an understanding of social situations, and appropriate actions and responses in these situations (Winter, 2003). When tested by Sansosti and Powell-Smith (2006) Social Stories were found to be effective in improving the social behaviour of children with Asperger's Syndrome in 2 of the 3 research participants. From this study, Sansosti and Powell-Smith were able to infer that home support and home-school collaboration are essential to the effectiveness of Social Stories.

2.7.3.4 Commercial Programs

There are few commercial programs designed specifically for teaching individuals with Asperger's Syndrome social skills. These include:

- Navigating the Social World: A Curriculum for Individual's with Asperger's Syndrome, High Functioning Autism, and Related Disorders (McAfee, 1997)
- Social Skills Groups for Children and Adolescents with Asperger's Syndrome: A step by step program (Painter, 2006)
- Social Skills Training for Children and Adolescents with Asperger Syndrome and Social Communication Problems (Baker, 2003)

2.7.4 Curriculum Content

According to the Disability Standards (2005) teachers must differentiate curriculum in order for all students to participate in educational experiences. This may include altered teaching materials, delivery methods and assessment (Australian Association of Special Education, n.d.). Skills being taught should be task analyzed and linked to long term goals where mastery and generalization of the skill is the objective (Foreman, 2005). The special interests of students with Asperger's Syndrome should be utilized and related to curriculum content in order to ensure meaningful connections and understandings are formed (Karten, 2005; Smith Myles, 2005).

2.7.5 Supportive Environment

Curriculum and skills need to be taught in a supportive and structured environment. The use of classroom routines, for example entering or leaving the classroom, and visual schedules allow students stability and control over their environment (Smith Myles, 2005). A comfortable classroom can be established by the consideration of student needs, preferences and sensitivities as relating to lighting, sounds, smells, temperature, appropriate types of seating and the use of quiet areas (Kluth, 2003). Seating the child with Asperger's Syndrome at the front of the classroom allows for better eye contact, and direct questioning. Seating the child with a buddy, gives the child with Asperger's Syndrome social support as well as a typical role model (Fine & Myers, 2004).

In addition, a safe place or safe haven, for example a quiet corner, a chair or the library, can act as a place of comfort for the individual with Asperger's Syndrome. The safe

place may be used as somewhere to avoid stress or anxiety, or as somewhere that the individual may process new information (Smith Myles, 2006).

2.7.6 Functional Approach to Behaviour

Individuals with Asperger's Syndrome may recognize the need to adhere to classroom rules and obvious social rules, and attempt to assimilate. This may result in increased pressure or stress on the individual during school time (Attwood, 1998). Individuals with Asperger's Syndrome may express anxiety, stress or fear through tantrums, challenging or aggressive behaviours. Challenging and aggressive behaviours can be minimized by creating a low stress/ anxiety environment (Smith Myles, 2005). Using a functional approach, the behaviour is analyzed by describing the behaviour of the student and class, then collecting and measuring data, and from the data creating a behaviour plan and later determining its effectiveness (Smith Myles, 2005). Behaviours can be tapered or controlled by teaching individuals to self-monitor behaviours through interviews, journals and self-recording of behaviours (Johns, Crowley & Guetzloe, 2005).

2.8 Research Question

The literature has shown for inclusion to be considered successful students must socialize and participate in interactive activities, which is adverse to the nature of Asperger's Syndrome. The specific teaching of social and communication skills must be included in a child with Asperger's Syndrome individual program. Strategies need to be based on research and best practice, as well as be informed by a close knowledge of the

child, and collaboration with parents. From the literature reviewed the main question developed was -

"What are the social and communication skills strategies used by the teacher and/or students to facilitate the inclusion of a child with Asperger's Syndrome?"

From the main question sub-questions were developed:-

1. What are the abilities, deficits and interests of the child with Asperger's Syndrome?
2. Social interaction within the class? What is the child's social standing in the class?
3. Does the child spend unstructured times engaged with peers?
4. What are the social and communication skills strategies currently being used? Are these strategies from a commercial program and are they specifically targeted at including the child with Asperger's Syndrome?
5. How does the child respond to the inclusion strategies?

This chapter has summarised current research in relation to Asperger's Syndrome, including the characteristics and skill deficits of individuals with Asperger's Syndrome. The chapter also examined inclusive education and its requirements in relation to students with Asperger's Syndrome. The subsequent chapter outlines the methodology chosen for the study. The methodology was chosen as a reflection of the research questions developed in this chapter and the individual nature of Asperger's Syndrome.

CHAPTER 3

METHODOLOGY

The previous chapter reviewed and summarised the current literature in relation to Asperger's Syndrome and inclusive education. The methodology for this study was chosen as a reflection of the research questions developed in the literature review. The methodology was chosen to suit the individual nature of Asperger's Syndrome, as well as the classroom context of the study. The methodology is outlined below.

3.1 Methodology Considerations

When planning the study a number of research methodologies were weighed in consideration of the questions developed from the literature and methodologies present in the studies found in the literature.

3.1.1 Quantitative and Qualitative Research Methodologies

Traditionally within the world of educational research there were two research paradigms – quantitative (rationalistic) and qualitative (naturalistic). These two paradigms exist today, along with the mixed-methods approach that was developed to encompass the best aspects of the two traditional paradigms (Mertler & Charles, 2008). Each paradigm has its own world-views and philosophical assumptions that researchers prescribe to (Creswell, 2007).

The quantitative paradigm is the quantification of data and the study of the variables. Quantitative research is a deductive process and is used to test hypotheses, to look at cause and effect, and to make predictions and generalizations. Quantitative researchers believe that reality is an independent entity, separate from the researcher that can be objectively measured (Creswell, 2007).

The qualitative paradigm is the study of a phenomenon within its natural context and qualitative researchers believe that individuals construct their own reality. Qualitative research is an inductive process, and researchers construct a picture of the world as relating to the phenomenon under study through minimizing distance between the phenomenon and the researcher. Qualitative research relies on narrative data and is used to identify and interpret meanings, perceptions, ideas, beliefs, attitudes and experiences (Creswell, 2007).

Due to the individual nature of the identified research problem and the need for in-depth observation and investigation, it was decided that the qualitative research paradigm was appropriate for the study. After reviewing the literature, and consideration of the qualitative methods in respect to the individual nature of Asperger's Syndrome, it was decided that a case study was the best method for the research project.

3.1.2 Data Sources

In agreement with the Creswell's definition of a case study as a bounded case, Yin (2003 as cited in Creswell, 2007) suggests that researchers use as many as six data sources in a case study. In accordance, multiple data sources were engaged in the research study.

These included: direct observation, participant observation, sociometric techniques, interviews and secondary data: such as the student's clinical psychologist report. Unfortunately, due to confidentiality issues the researcher was unable to use audiovisual recordings in the data collection.

3.1.3 Validation

The researcher's belief that each phenomenon is unique, and generalizations impossible dictated that the traditional form of validity and reliability be refuted (Gay, Mills & Airasianl, 2006). After consideration of the various schools of thought regarding validity and reliability, Guba and Lincoln's (1985) approach was adopted for the research study. Guba and Lincoln developed the concept of trustworthiness to reflect the qualitative assumptions. Trustworthiness contains four aspects- credibility, transferability, dependability and confirmability and refers to the authenticity of data, its analysis, the researcher's interpretations, and the study's results. In order to fulfill these aspects, the researcher created an audit trail including the creation of a researcher journal; used the process of triangulation; data analysis and interpretation were peer reviewed, and results were confirmed with participants (namely the teacher).

Triangulation was completed by verifying researcher observations with the teacher in informal interviews and through using sociometric techniques. The data were further verified by comparing researcher observations and provided documentation, thus establishing trustworthiness.

3.1.4 Ethical Considerations

The project involved the observation of a teacher and child within a classroom context. Permission was gained from the relevant Education Department, the principal of the school, the class teacher and the child's parents. Written consent was gained from the child's parents and the teacher. After consultation with the child's parents it was disclosed that the child does not know of her condition, and that a stipulation of consent was confidentiality of the diagnosis of Asperger's Syndrome from both the child and her classmates. This was a significant factor at the beginning of the project and the researcher carefully considered any interaction with the child and her classmates, and the questions that were asked, in order to maintain confidentiality.

The teacher, child and child's family's privacy is protected through anonymity of the child in the thesis and the confidentiality of the data collected. The project was considered by Avondale Ethics Committee and ethical clearance was granted in December 2007.

3.2 Subject Profile

The site was an independent school that has three year 5 classes. The boundaries of the case study were one female year 5 student with Asperger's Syndrome, her class and teacher.

3.2.1 The Student with Asperger's Syndrome

The subject (Student A) was chosen on the requirement that she participates in inclusive schooling and needs additional support in order to fully participate in the class. This

support was provided in the form of one withdrawal lesson per week for social skills training.

Student A's physical disabilities were diagnosed in 2003 (Year 1). It was recognized that Student A had underdeveloped gross and fine motor skills, flat feet and a curvature of the spine. Occupational Therapy (OT) provided some improvement. In 2007, Student A was diagnosed with Asperger's Syndrome. The school had reported difficulties with Student A, and this prompted an evaluation by a clinical psychologist. The advice given to Student A's parents was to ensure that Student A participates in a social skills program and to be aware of possible behavioural and emotional problems as a result from social difficulties at school. Student A has not been told of her diagnosis, nor have her peers.

3.2.2 The Teacher

The classroom teacher had been absent from the class for the first term of school and was beginning 'fresh' with the class. The teacher stated that she knew little of Asperger's Syndromes and its implications, but expressed a desire to increase her knowledge.

3.2.3 The Class

The class has experienced many teacher practicums and observation lessons, and as a result did not query the researcher being in the classroom. The class consisted of 21 students, 7 females and 14 males.

3.2.4 Other

In addition, the child's parents and school support staff were used for consultation and collaborative purposes.

3.3 Research Profile

3.3.1 Observations

Researcher observations were the main data collection tool and were carried out daily over a two week period, with three short follow up observations of one hour. Observations were sectioned using the school day, eg. morning session, recess, middle session, lunch and afternoon session, and lasted approximately fifty minutes. The researcher took the roles of both outside observer and participant observer, beginning as an outsider and evolving into participant.

Observations were limited to the identification of social and communication strategies used by the teacher and the student's peers. The researcher used the results from the parent and teacher social skills questionnaires (Appendix 2 and Table 4.1) to guide observations and observations were confirmed with the teacher. The researcher alternated daily the observation of social and communication skills. Due to the issue of confidentiality of Student A's diagnosis, the student and peers were not told that they were being observed.

3.3.2 Interviews

Due to permission issues, interviews were conducted on an informal basis and were not recorded. Initial interviews with the teacher and parents were conducted prior to the observational period, and the researcher used both open questions and social skills questionnaires (Appendix 2) developed from Goldstein and McGinnis's (1997, p282) Parent Skillstreaming Questionnaire. The permanent class teacher had been absent from the class for the first term, and a casual teacher had been engaged for that period. The casual teacher was asked to complete the questionnaire in conjunction with the regular class teacher.

Further interviews were conducted during the observational period. The researcher informally interviewed the support teacher regarding the current program (and its structure) being used for the student. Informal interviews were conducted daily with the teacher, to collaborate and validate researcher observations and inferences. The researcher was also given the opportunity to informally interview the student with Asperger's Syndrome. Through this the researcher was able to confirm observations and understand the reasons behind some of the student's and her peers' actions. At the conclusion of the project the teacher was given a list of initial recommendations (based on observations and conversations with the teacher) which were discussed and agreed upon.

3.3.3 Sociometric Measures

Sociometric measures investigate the dynamics of peer groups and social interactions. Mayeux, Underwood & Risser (2007) noted that sociometric measures may have a

negative effect on students by asking them to both identify, and report on, negative behaviours of their peers and through forcing students to rank their peers in terms of acceptance and popularity. However, in a study of 145 researchers who had used sociometric measures Bell-Dolan & Wessler (1994 as cited in Mayeux, Underwood & Risser, 2007) found that less than 5 % of researchers reported that the measures had a negative effect on participants.

Sociometric measures (peer nomination) were identified as the best method to ascertain the student with Asperger's Syndrome's social standing, the social relationships within the class, and as a method of measuring the student's social competence. The "Friends task" (Appendix 3) and "Class Profile" scales (Appendix 4) developed by Francey and McGrath (1991) were implemented at the beginning of the research project.

3.3.4 Secondary Data

The researcher was given access to the student's school file, including diagnostic reports. This provided the researcher with greater understanding of the student and her diagnosis, as well as reference point to confirm data and conclusions against (triangulation).

3.3.5 Researcher Journal

The researcher kept a daily journal throughout the project which outlined progress made, challenges met and solutions implemented. The journal provided a reference point for the researcher when transcribing results, evaluating strategies, drawing conclusions and during the writing of the program. The journal outlined the perceived strengths and

weaknesses of the project and the researcher's opinions regarding the subject, progress, results and how the researcher's opinions changed over the course of the project.

3.4 Schedule of Tasks

The project carried the time constraint of approximately ten months, to be written in thesis format by October 2008

Table 3.1: Schedule of Events

Approximate date	Event
Late November 2007	Ethics committee application
December- February 2008	Compilation of strategies, interventions and existing programs that target social skill development.
March 2008	- Sociogram - Interviews with teacher, support teacher and parents - Observation of child in class
April – May	-Transcription of data from interviews and observations - Identification of strategies through emergent themes in the data
May – mid May	Follow up observation and confirmation of emergent themes
Mid May - September	Writing of thesis
Mid October	Submission of thesis

3.5 Summary of Methodology

The study may be sequenced into eight steps-

1. Initial interviews with the teacher and parents
2. Observation of the child and teacher within the natural setting of the classroom
3. Sociogram of the class to identify the child's social placement.
4. Informal interviews with the teacher, support teacher and parents to ascertain their views on the importance of social skill strategies to

successful inclusion, their views on the strategies being used and possible areas for addition or expansion

5. Descriptions sociogram to illuminate negative and positive behaviours of class
6. Analysis of observations and interviews based on emergent themes.
7. A short follow up observation to confirm data analysis conclusions.
8. Development of recommendations for the consolidation of current strategies and the recommendation of new strategies.

The methodology has been outlined and was sequenced into eight steps for implementation. The subsequent chapter summarises and synthesizes the results of the research, and outlines the answers to the research questions developed from the literature review.

CHAPTER 4

RESULTS

The previous chapter outlined the study's methodology, subject and research profiles. In this chapter the results of the will be presented. Data were collected through formal and informal interviews with the student's parents, teacher and support teacher; observations of the student and teacher within the natural context of the classroom; sociometric measures; and the analysis of secondary documents, primarily the student's clinical psychologist report. The data were synthesized and analyzed and emergent themes were examined in the context of the five questions formulated from the literature. The five research questions were:

1. What are the abilities, deficits and interests of the child with Asperger's Syndrome?
2. Social interaction within the class? What is the child's social standing in the class?
3. Does the child spend unstructured times engaged with peers?
4. What are the social and communication skills strategies currently being used? Are these strategies from a commercial program and are they specifically targeted at including the child with Asperger's Syndrome?
5. How does the child respond to the inclusion strategies?

4.1 What are the Abilities and Deficits of the Child with Asperger's Syndrome?

The student was found to display a range of basic social skills required for participation within the class, and both the parents and the teachers identified several (yet different) social and communication skills believed to be well-developed in the student as well as numerous social and communication skills believed to be poorly developed.

Prior to beginning the observational period, informal interviews and social skill questionnaires (Appendix 2) were completed by Student A's parents, and the casual teacher and teacher (together) to establish the perceived strengths and weaknesses of Student A, and to enable the comparison of the perceptions of the parents and teachers. For comparative purposes the same social skills questionnaire was used for both parties. The questionnaire contained 40 questions across five social skill domains – classroom skills, emotions, friendships, dealing with stress and dealing with aggression. The questions were answered using one of five categories on a sliding scale – *almost never, seldom, sometimes, often* and *almost always*. In addition, the researcher was provided with a copy of the clinical psychologist's report which outlines Student A's presentation, and confirmation of the Asperger's Syndrome diagnosis based on the presentation and reported history, to indicate the student's deficits.

4.1.1 Parent Interview

Student A's parents reported that she had told them that children at school call her a weirdo. Her parents suggested that she is a loner who would prefer the company of adults to the company of the other children. For example, Student A reported that she

spends a lot of her lunch time in the library or helping teachers. This demonstrates Student A's comfort in adult presence and the avoidance of peer interaction.

Student A's parents also reported that she has a strong attachment to soft toys. Student A has been shown to exhibit intense interests, in narrow areas for periods of time. It was reported that Student A is literal in understanding, and often does not understand jokes. She is reported to be creative and visually stimulated. However, Student A lacks the motor coordination to carry out creative tasks requiring fine motor skills. Student A's parents view her as emotionally underdeveloped.

4.1.2 Parent Questionnaire

The parents identified 25 per cent of the skills as *often* and *almost always* skills, inferring that Student A displays competence in these skills. The other 75 per cent (30 skills) were identified as *almost never, seldom* and *sometimes*. This infers that Student A does not display competence in the majority of skills referred to.

- Skills identified as *sometimes* skills were – listening, asking for help, asking a favour, ignoring, following directions, joining in, asking to talk, dealing with fear, showing affection and being honest.
- Skills identified as *seldom* skills were – waiting your turn.
- Skills identified as *almost never* skills were – trying when it's hard, interrupting, reading others. sharing, playing a game, feeling left out, dealing with teasing, dealing with feelings, deciding if it's fair, solving a problem, accepting consequences, relaxing, dealing with mistakes,

knowing when to tell, dealing with losing, waiting to be first, saying no and accepting no.

4.1.3 Teacher Questionnaire

The teachers identified only three skills in the *often, almost always* categories, leaving thirty seven skills in the *sometimes, seldom* and *almost never* categories. Fifty per cent (15) of the skills were categorized as *sometimes* skills, 7.5 per cent of skills were categorized as *almost never* skills and the remainders were categorized as *seldom skills*.

- Skills identified as *sometimes* skills were – listening, using nice talk, using brave talk, rewarding yourself, following directions, interrupting, waiting your turn, deciding what to do, sharing, offering help, asking someone to play, playing a game, showing affection, dealing with feelings, deciding if it's fair, knowing when to tell, dealing with losing, saying no, accepting no.
- Skills identified as *seldom* skills were – saying thank you, asking for help, asking for a favour, asking a question, trying when it's hard, reading others, joining in, knowing your feelings, feeling left out, dealing with fear, dealing with teasing, solving a problem, relaxing and dealing with mistakes.
- Skills identified as *almost never* skills were - asking to talk, accepting consequences and being honest.

Fifty per cent of the questions resulted in vastly different answers from the parents and teachers. This demonstrated the different perceptions of the parents and teachers regarding Student A's abilities and deficits, which may infer that Student A demonstrates different skill levels between the home and school setting. Skills such as waiting to be first, and dealing with losing were reported differently across the two settings (home and school). For the skill waiting to be first, in the home setting it was reported as *almost never*, yet in the school setting it was reported as *often*. This may be as a result of the number of children in a class as opposed to Student A's only sibling, as well as the different expectations across the two settings. The perceptual difference demonstrated Student A's recognition of the differences between the two settings, and that she has developed basic skills to cope with the expectations of the classroom.

Further, the discrepancy in the reporting of skills such as asking a question (home reported as *almost always*, school reported as *seldom*) and asking to talk (home reported as *sometimes*, school reported as *almost never*) demonstrated Student A's comfort levels across each setting. Attwood (1998) found that some students with Asperger's Syndrome may recognize the need to assimilate to classroom social and behavioural rules, which may result in the student feeling increased stress or anxiety.

Table 4.1: Comparison of Parent – Teacher Questionnaire Responses

Question	Parent	Teacher
Accepting no	*Almost never*	*Sometimes*
Saying no	*Almost never*	*Sometimes*
Waiting to be first	*Almost never*	*Often*
Dealing with losing	*Almost never*	*Sometimes*
Knowing when to tell	*Almost never*	*Sometimes*
Being honest	*Sometimes*	*Almost never*
Solving a problem	*Almost never*	*Sometimes*
Deciding if it's fair	*Almost never*	*Sometimes*
Dealing with teasing	*Almost never*	*Sometimes*
Asking to talk	*Sometimes*	*Almost never*
Knowing your feelings	*Often*	*Seldom*
Playing a game	*Almost never*	*Sometimes*
Offering help	*Almost always*	*Sometimes*
Sharing	*Almost never*	*Sometimes*
Interrupting	*Almost never*	*Sometimes*
Asking a question	*Almost always*	*Seldom*
Rewarding yourself	*Almost always*	*Sometimes*
Saying thank you	*Almost always*	*Seldom*
Using brave talk	*Almost always*	*Sometimes*
Using nice talk	*Almost always*	*Sometimes*

Questions that were answered in the *almost never, seldom* and *sometimes* categories by both parties were viewed as identified skill deficits. The researcher further correlated this data by observing the identified skill deficits. The observed skill deficits included: listening, asking for help, asking a favour, following directions, trying when it's hard, interrupting, reading others, joining in, waiting your turn, sharing, playing a game, feeling left out, asking to talk, dealing with fear, showing affection, dealing with teasing, deciding if it's fair, solving a problem, accepting consequences, relaxing, dealing with mistakes, being honest, knowing when to tell, dealing with losing, saying no and accepting no.

The identification of these skill deficits guided the researcher in knowing the skills that had been identified as requiring improvement, and may have therefore formed the basis of skills being addressed by the teacher.

4.2 Social Interaction Within the Class? What is the Child's Social Standing in the Class?

In their interview Student A's parents reported that Student A is a loner and spends many of her lunch times in the library reading. Student A's parents also reported that Student A had told them that her classmates call her a weirdo. This was verified through an informal interview with Student A when she told the researcher that she does not play with her peers and that they call her names such as "weirdo", "spazzy" and "mental". The researcher observed both the loner behaviour, and the name calling on several occasions. Typical peers that interact with individuals with Asperger's Syndrome who tease, bully or ignore the individual with Asperger's Syndrome also display social skill deficits. Therefore, social skills need to be taught to both the individual with Asperger's Syndrome and typical peers (Baker, 2003). To ascertain Student A's social standing and the social interactions in the class two sociometric measures were implemented. These are outlined below.

4.2.1 "Friends Task"

The "Friends task" (Appendix 3) required students to nominate three other students in the class that they enjoy playing with at recess and lunch. This sociometric measure allowed the researcher to ascertain Student A's social standing within the class, figure 4.1 represents the data collected. Four students, including Student A were not peer

nominated placing them at the bottom of the social ladder. Student G was one of the four students not peer nominated although this maybe excused in relation to his recent placement in the class.

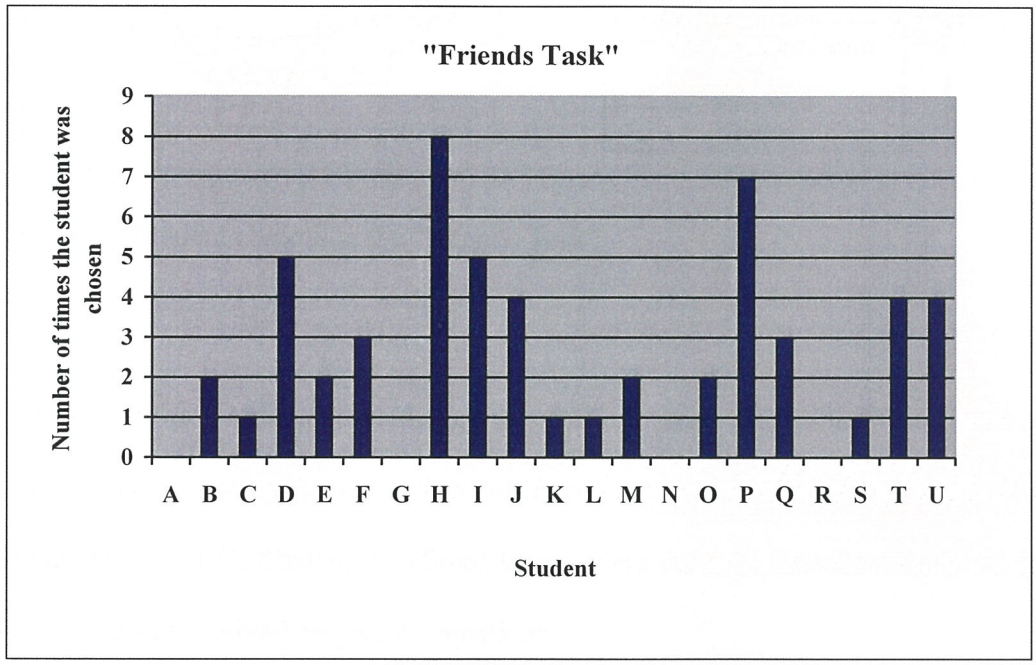


Figure 4.1 – Results of the "Friends Task"

Also from this data, the dominant (most popular) male and female were identified. The dominant male was Student H and he was chosen by 8 other students. The dominant female was Student D and she was chosen by 5 other students. Students generally did not choose peers of the opposite sex.

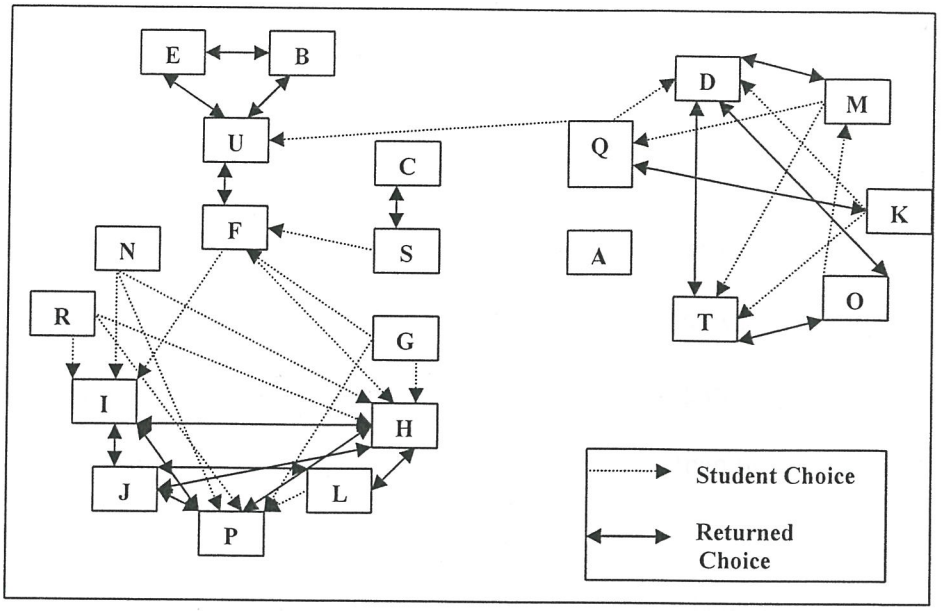


Figure 4.2 – Student choices in the "Friends Task"

Figure 4.2 shows the distinct gender groups with minimal cross over. This figure also represents the friendship groups within the class, for example Students E, B and U and Students D, T and O. Student A refused to complete the task, therefore made no peer nominations and received no peer nominations.

4.2.2 "Descriptions Task"

The second sociometric measure was a "Descriptions Task" (Appendix 4) where students had to anonymously name one or two peers for each descriptor. There were six positive and fourteen negatives descriptors. Figure 4.3 shows the number of positive and negative comments that each students received. Students A and O received no positive comments, and Students C, G, I, P, R and U received no negative comments. Student A

received more than three times the number of negative comments than Student S who received the closest number of negative comments to her.

The class average (excluding Student A for comparative purposes) for positive comments was 7.85 and for negative comments the average was 3.4. Student A received 0 positive comments and 48 negative comments. In comparison, Student T received 5 positive comments and 1 negative comment which is less than the class average.

For integrity to be maintained, only negative descriptors where Student A was named at least three times were used in data analysis. Student A was picked at least three times in eight out of the fourteen negative comments – plays alone, bosses others, thinks no-one likes them, poor loser, doesn't take part, gets teased, won't play by the rules and not good at sport. For comparison, Student T was not chosen three times in any of the negative comments.

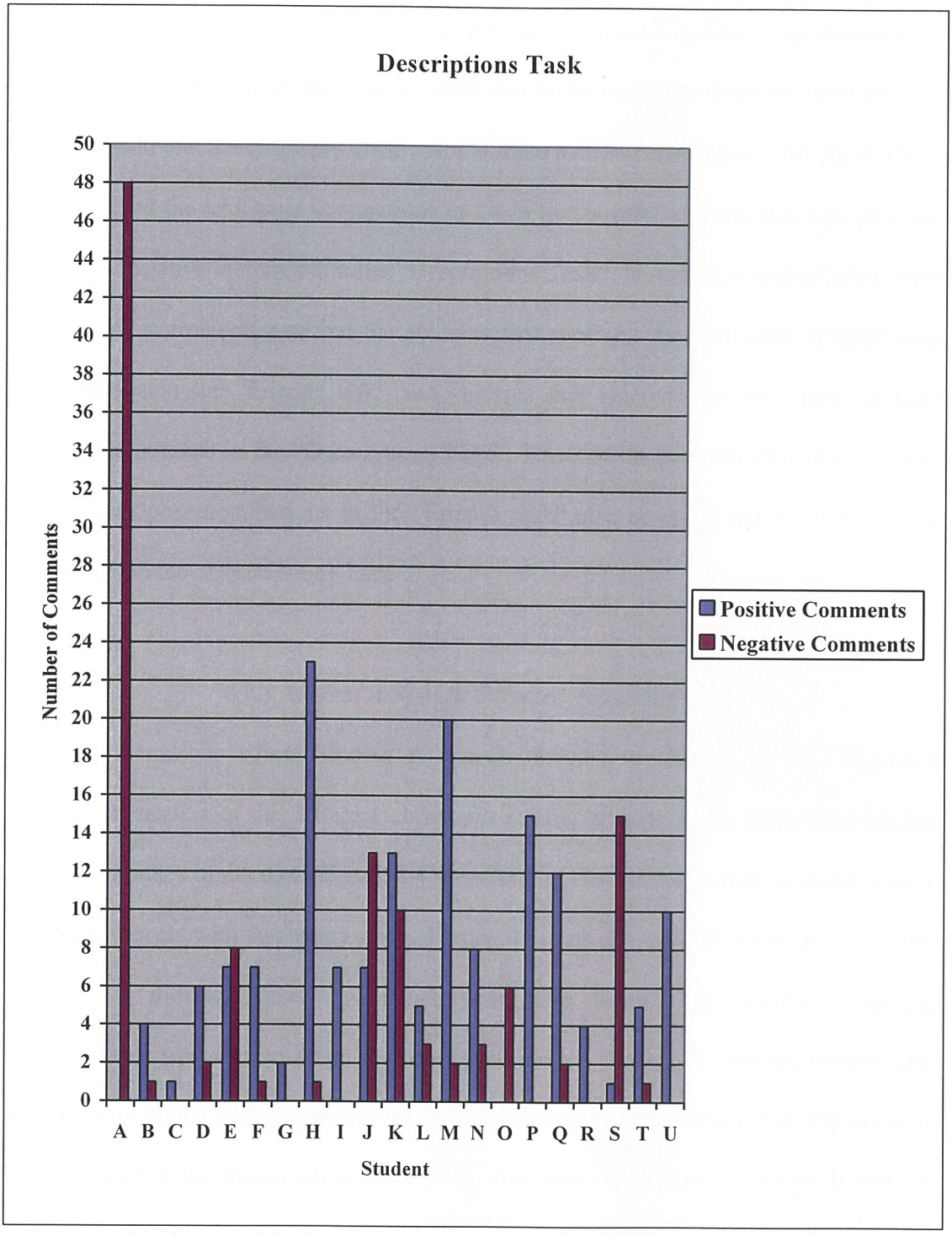


Figure 4.3 – Results of the "Descriptions task"

It would appear that there is not a strong correlation between students who received the most peer nominations in the "Friends task" and students that received the most positive comments in the "Descriptions Task". Nor is there a strong correlation between students that received the least peer nominations in the "Friends task" and students that received the most negative comments in the "Descriptions Task". However, it appears that there is a strong correlation between the students that received the least (one or less) peer nominations in the "Friends task" and students that received the least (one or less) positive comments in the "Descriptions Task". Three of the four students that received one or less peer nominations in the "Friends task" also received one or less positive comments in the "Descriptions Task".

4.2.3 Student A Speech Directed Towards Peers

The two occasions where Student A speech directed towards peers was observed differed in respect of the different classroom seating arrangements. Both observations were 45 minutes in duration. Figure 4.4 was the first observation, where Student A only initiated speech with her peers once. Figure 4.5 was the second observation, where Student A initiated speech with her peers five times. The classroom seating arrangements was seen to affect the amount of speech Student A directed towards her peers. In the initial observation the class was seated in rows and Student A was isolated as compared to the second observation when the class was seated in groups. It may be inferred that group seating positively correlated with Student A speech toward her peers.

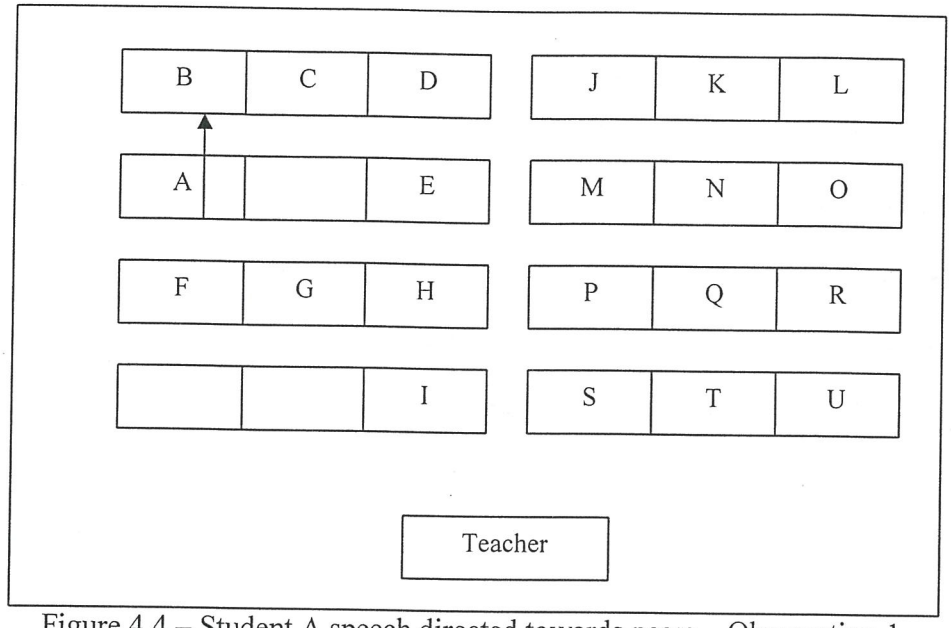


Figure 4.4 – Student A speech directed towards peers – Observation 1

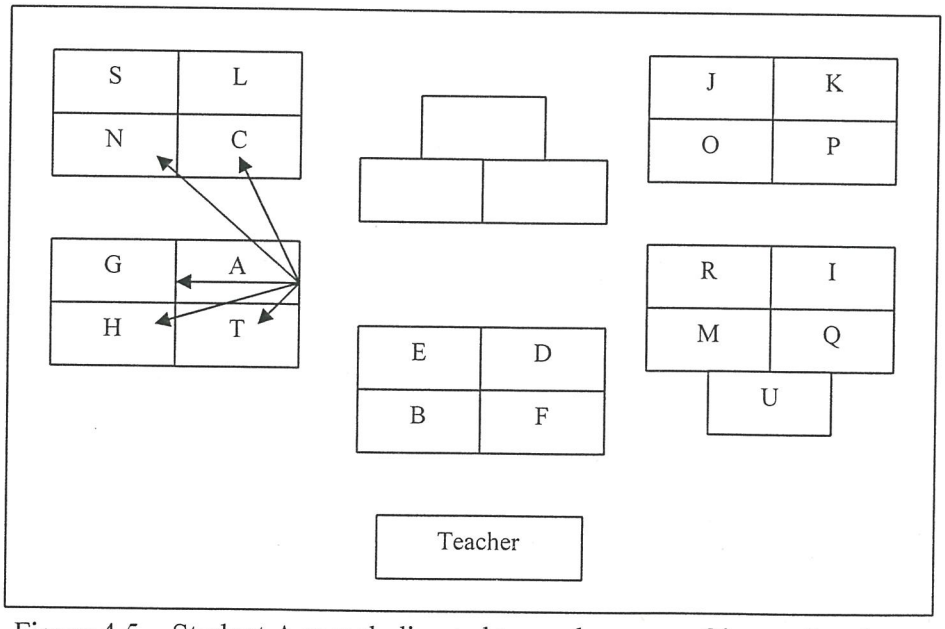


Figure 4.5 – Student A speech directed towards peers – Observation 2

4.2.4 Peer Speech Directed Towards Student A

The two occasions where peer speech directed towards Student A was observed also differed in respect of the different classroom seating arrangements. Both observations were 45 minutes in duration. Figure 4.6 was the first observation where Student A's peers initiated speech with Student A once. Figure 4.7 was the second observation where Student A's peers initiated speech with Student A four times. Similar to Student A's observed speech the seating arrangement affected the amount of peer speech directed towards Student A. It was observed that observed peer speech was initiated by the peer, not Student A. From this data it may be inferred that group seating is positively correlated with peer speech directed towards Student A.

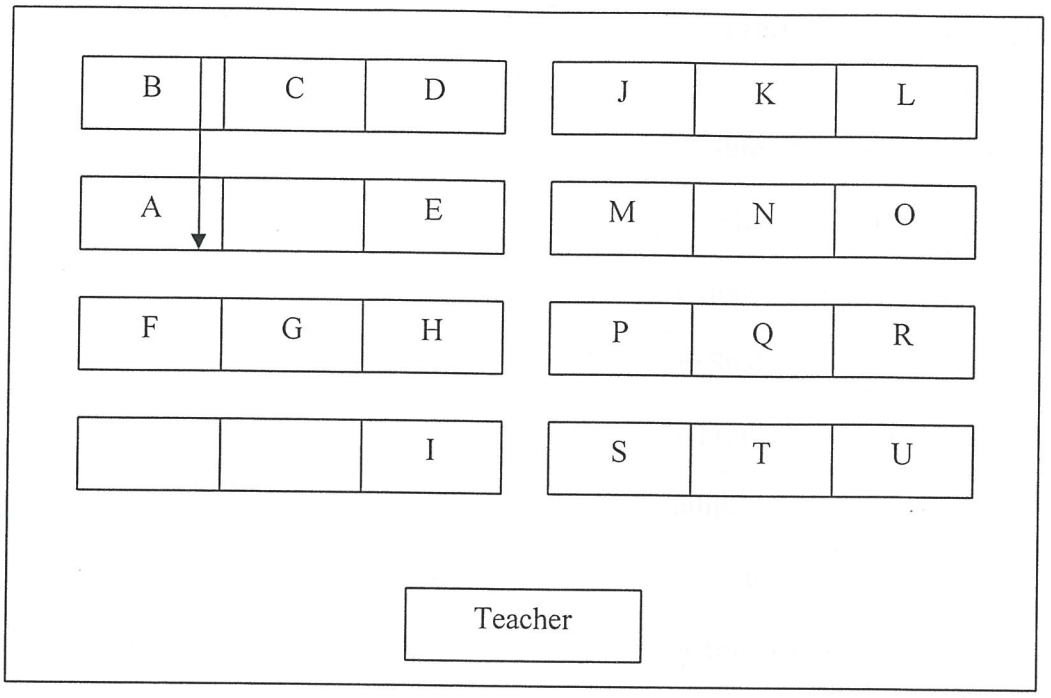


Figure 4.6 – Peer speech directed towards Student A – Observation 1

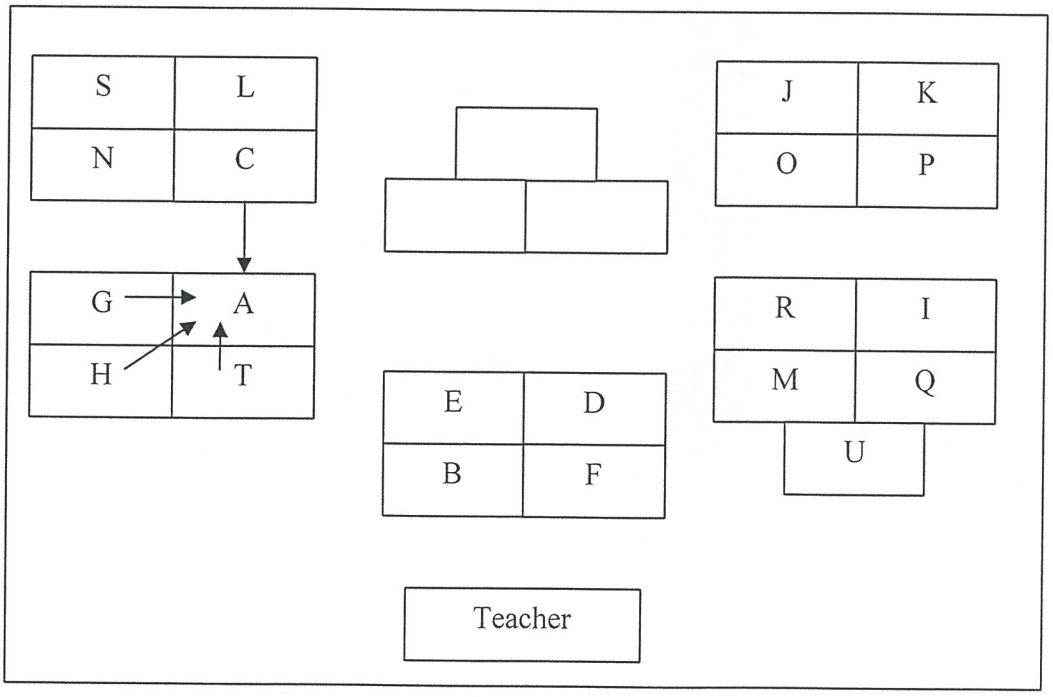


Figure 4.7 – Peer speech directed towards Student A – Observation 2

4.3 Does the Child Spend Unstructured Times Engaged with Peers?

Student A's lunch time behaviours were recorded as a measure of her social interaction with her peers in unstructured times. Figure 4.8 shows the lunch time behaviours categorized into two time frames – eating time and play time. Student A spent almost half (5/11) of the observed eating periods alone. Further, Student A spent over 80 per cent (9/11) of the observed playing periods alone. Attwood (2006) described individuals with Asperger's Syndrome as lacking the innate ability of their peers to form friendships. Social rejection and isolation may be a result of this inability. Student A's lunch time behaviours are evidence of her inability to form friendships.

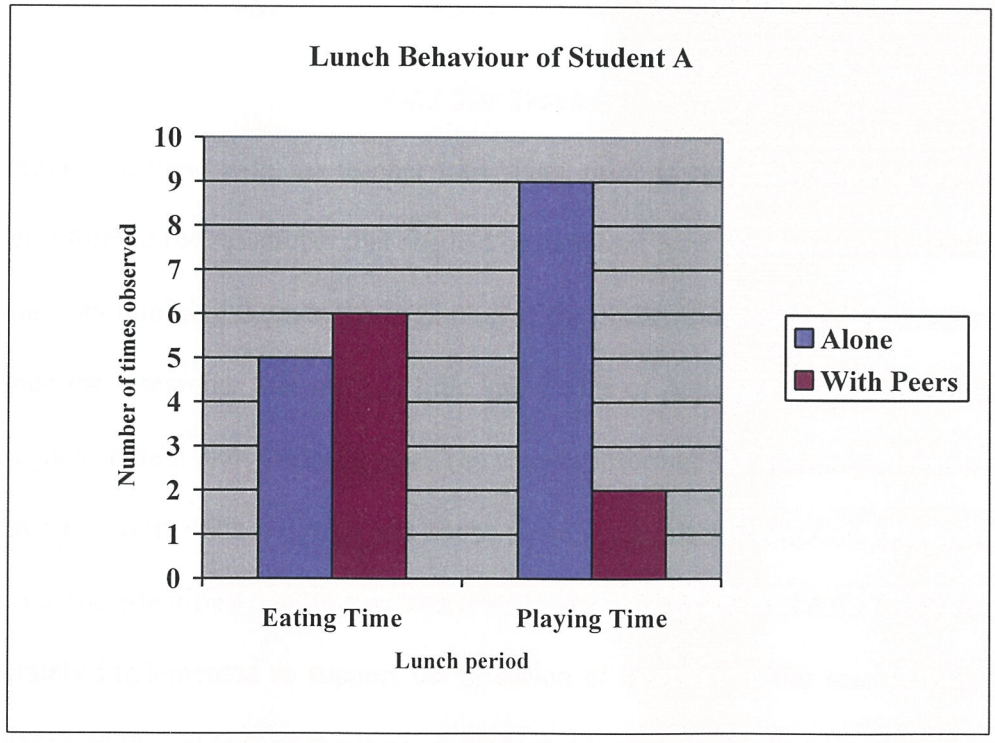


Figure 4.8 – Student A lunchtime behaviours

4.4 What are the Social and Communication Skills Strategies Currently Being Used? Are These Strategies from a Commercial Program and are they Specifically Targeted at Including the Child with Asperger's Syndrome?

The researcher gathered data through informal interviews with the teacher and support teacher, as well as observations to address this question. The researcher found that the teacher did not use an established program, as recommended in the clinical psychologist's report, to teach social and communication skills. This was due to the teacher's recent rejoining with the class, as well as her limited knowledge of Asperger's Syndrome. The researcher was able to identify both social and communication skills strategies being implemented within the class by the teacher and peers, as well as observe a withdrawal support program that Student A participated in.

4.4.1 The Teacher

The initial interview with the teacher took place prior to the observation period. The teacher informed the researcher that she had been absent from her class for the first term and was only rejoining them at the beginning of the observation period. The teacher also informed the researcher that she had little knowledge of Asperger's Syndrome and had not taught a student with the syndrome. The teacher informed the researcher that a social or communication skills program was not in place in the class. Therefore, the strategies observed and identified by the researcher were not part of an established program or deliberately implemented to support the inclusion of Student A. The teacher had little knowledge of the content or structure of Student A's support class and reported having limited contact with Student A's parents.

4.4.1.1 Social Skills Strategies

The researcher developed a social skills strategy checklist using the teacher and parent questionnaire responses, and own observations. Questions that both the teacher and the parents deemed *sometimes, seldom* or *almost never* were used as a guide for social skill deficits that needed to be addressed by teacher implemented strategies. For the strategy to be classified as identified it had to be observed at least three times. The social skills included in the checklist were:-

Trying when it's hard, joining in, waiting your turn, sharing, playing a game, feeling left out, dealing with fear, showing affection, dealing with teasing, deciding if it's fair, solving a problem, accepting consequences, relaxing, dealing with mistakes, being honest, knowing when to tell, dealing with losing and accepting no.

The identified social skills strategies were:

Trying when it's hard

Student A demonstrated a capacity to give up on or not attempt activities that she perceived as too difficult for her. The teacher demonstrated an understanding of Student A's attitude and circumvented the attitude by working through the activity with Student A to demonstrate Student A's capabilities. This strategy was observed across a range of Key Learning Areas (KLA) including Physical Education and Mathematics.

Joining in

Student A was continually encouraged by the teacher to join her peers at lunch and play time. This was reinforced within the classroom by the implementation of small group

cooperative learning activities and games. On several occasions the teacher made direct reference to her expectation that classmates would play with each other during break times and not exclude any students. From discussion with the teacher she reported that she had noticed that Student A does not play with her classmates and that it was hoped that this strategy would encourage her to do so.

Playing a game and dealing with losing

The teacher was observed encouraging Student A during daily Physical Education (PE) lessons. Student A was reluctant to participate in PE lessons and remained on the outer of the group. Student A's parents report that this may be due to her physical disabilities and discomfort. However, the teacher's continual encouragement and directions made Student A participate. The teacher continually reinforced the concepts of being part of team, the importance of participating, showing good sportsmanship, and trying your best. The teacher also modeled correct behaviours for dealing with winning and losing.

Dealing with mistakes

Student A was observed several times questioning the correctness of others' answers that differed from her own. In several instances Student A directly questioned the correctness of the teacher's answers. Student A would display absolute certainty regarding the correctness of her answer and would not accept her mistakes until the teacher would work through the problem or activity with her. The teacher did so in a calm and authoritative manner until Student A could see her mistake. The teacher would then counsel Student A regarding the correct manner and process to use if she thinks the

teacher has made a mistake. The teacher then counseled Student A regarding her behaviour when she makes a mistake, particularly in not becoming upset or agitated.

4.4.1.2 Communication Strategies

From the parent and teacher responses to the questionnaire a communication strategies checklist was developed. The checklist included strategies that addressed both verbal and non-verbal communication. The researcher would refer to the developed communication checklist while observing, and record an overview of the context of the use of each strategy. A strategy was deemed as identified if it was observed three or more times.

Verbal Prompts

Verbal prompts were used by the teacher to re-engage Student A with assigned tasks or to verbally guide the students through the task. This strategy catered for Student A's deficit in following directions. The teacher would often approach Student A after giving an instruction or direction and check Student A's comprehension of the instruction, questioning Student A as to what the process for completing the task would be.

Teacher directed speech was explicitly observed on two occasions. On both occasions the teacher was directing the class as a whole and then students began to complete their work independently. Student A received more teacher directed speech than other students. On the first occasion Student A received four instances of teacher directed speech while on average other students received less than one instance. On the second occasion Student A received two instances of teacher directed speech while on average

other students received less than one instance. In comparison, Student T received no instances of teacher directed speech on both occasions. The teacher was observed verbally prompting Student A to approach her peers during lunch time.

Physical Prompts

Physical prompts were observed in the form of a hand being placed on Student A's shoulder or physical guidance of the task. The teacher was observed physically guiding Student A out of the classroom at lunchtime, combined with a verbal prompt to go and eat lunch with her peers.

Conversational Skills

This conversational skill was modeled through the teacher's conversations with the class or with Student A on an individual basis. Conversational skills such as listening, interrupting, turn taking and eye contact were constantly modeled by the teacher. The modeling catered for Student A's skill deficits in areas such as listening, interrupting, staying on topic, asking others for help, etc and following directions.

Visual Supports

Within the classroom posters were used to support listening and emotion recognition skills. The teacher was observed using a five point guide for students to ready themselves for instructions from the teacher. When the teacher used this technique she would also hold her hand in the air showing the five fingers providing further visual stimulation and reinforcement. In addition, a poster showing a range of thirty emotions

was displayed on the wall. No reference was made to this poster during the observational period. However Student A was observed referring to the poster during a lesson.

The teacher used a visual timetable on the whiteboard, which enable Student A to have control over her day and to know what was planned. The timetable showed when the students would be moving to another room (therefore taught by another teacher) and when break times (recess and lunch) would be.

Using Gestures

The use of gestures was a regular aspect of the teacher's teaching style. Gestures were used to convey size, importance, pace, or mood. The teacher would also use gestures when giving directions.

Modeling Body Language and Facial Expression

This strategy dealt with Student A's identified deficit of reading others. The teacher modeled the use of facial expression and body language to reflect different emotions and contexts. In conjunction, voice and tone were modeled for each emotion and context.

It should be noted that the communication strategies employed by the teacher were general strategies used for all students and were not specifically aimed at Student A, nor did the strategies specifically consider the characteristics or requirements of Asperger's Syndrome.

4.4.2 Peer Strategies

Due to Student A's mainly solitary lunch time behaviours most of the peer strategies were observed during class time, in group or pair activities. Student A's peers (particularly the female peers) naturally modeled correct behaviours, redirected behaviours or made allowances for Student A. For example, Student A constantly touches other students and invades personal space boundaries. On several occasions, Student A was observed invading Student T personal space. Student T would firstly accept the touch for a period of time, possibly to not offend Student A, then step away and say "That's enough" or "Too close". This was observed by Students K & M and they implemented the same technique.

Similarly, in a mixed gender cooperative group activity Student A was observed to be very excited and began to talk loudly. Male members of the group were heard to say "Shut up" or "Be quiet" to Student A. Student T quietly spoke to Student A saying that her voice was too loud and that they all (the group) had to work together quietly so everyone could be heard. Student A responded to this, and began talking at an appropriate level. This demonstrates Student A's ability to learn through modeling and peer interaction, as well as her positive response to the explanation approach which appeals to her cognitive ability. This may also demonstrate Student A's response to pressure to conform to expected behaviours. Mixed ability friendships would provide Student A with role models and skilled interactional partners (Chamberlain, Kasari & Rotheram-Fuller, 2006).

4.4.3 Withdrawal Support Program

The interview with the support teacher took place after the researcher observed Student A's withdrawal support lesson. The support teacher reported that Student A was on an individual education plan (IEP) for the support class but this was not shared with the regular class teacher. Kluth (2003) stated that students with Asperger's Syndrome need an Individualized Education Plan (IEP) which should contain a variety of strategies where skills are taught in both structured and incidental settings. Currently skills are taught in isolation, in structured support class not in incidental settings. Without practice and reinforcement of the social and communication skills taught in the support class, the skills will not be transferred or generalised.

The support teacher explained that the support class is conducted with two students for half an hour a week. The social skills program used is Jed Baker's *Social Skills Training: For children and adolescents with Asperger Syndrome and Social-Communication Problems*, recommended by the clinical psychologist. (Appendix 8 shows a list of the social and communication skills in the program).

At the commencement of the program, a checklist (from the program) was completed by the support teacher and parents, in order to establish the target skills. One skill is introduced each week, with that skill being modeled and practiced during the support class. Student A is then required to write where and when she can practice the skill outside of support class. No information about the skill, or strategies to practice the skill, is passed to the regular teacher.

The support class that the researcher observed introduced the skill "giving compliments". During the support class Student A successfully described several social skills related to conversations, and approaching others. Student A also gave examples of how she could demonstrate these skills, implying that she does have the theoretical knowledge of some social skills. Student A and the other student practiced giving each other, the support teacher and the researcher compliments, and then identified where they could practice the skill outside of support class, both naming their regular classroom. During the week following, the researcher attempted to implement duration recording to observe the practice of this social skill, however the researcher did not observe Student A using this skill.

A communication book between the support teacher and (casual) class teacher had been introduced, but was not used on a regular basis. The support teacher signified a desire for more communication and collaboration with Student A's parents, and regular class teacher. McKenzie & Porter (2000) found that programs that involve parents are more successful than programs that do not involve parents. The support teacher also signified a desire to hold the support class as a group, not as a pair, synonymous with the clinical psychologist's recommendation of social skills to be taught in a small group setting with Student A's peers.

In a communication (Appendix 7) to the (casual) teacher Student A's parents noted a wish to work collaboratively with the support teacher to further develop Student A's skills. In the initial interview, Student A's parents reported that they are happy with the

social skills program that Student A is participating in at school. However, they could only provide the researcher with limited information regarding the program.

4.5 How does the Child Respond to the Inclusion Strategies?

When observed Student A responded to the teacher's social and communication skills (inclusion) strategies in the same manner as her peers. Mostly Student A listened to the teacher and responded as required. In particular, Student A would respond very well to encouragement she received for the social skills "trying when it's hard", "playing a game" and "dealing with losing". This illuminates Student A's need for emotional and social support when doing activities that she feels she is not good at or may fail to do correctly. Student A was observed using the visual supports within the classroom on several occasions, in particular the emotions poster and the visual timetable. These two strategies address two well-known skill deficit areas for individuals with Asperger's Syndrome (Attwood, 1998).

Student A reacted positively to the guidance (strategies) implemented by her female peers. Most female peers implemented the explanation approach which appealed to Student A's cognitive ability. When guidance was offered in a considerate manner Student A was observed to respond almost immediately with the peer desired behaviour. If the guidance was offered in an inconsiderate manner (such as "shut up") Student A's undesired behaviour became more pronounced.

In addition, Student A enthusiastically participated in support class, chatting freely with the support teacher and completing all activities willingly. When Student A was observed in support class she was able to list social skills, and how to implement these skills. Contrary to this knowledge, Student A did not practice the targeted skill(s) from support class in her regular class, or at lunch time. This infers that support for the practice of skills outside of support class, and the generalisation of skills, is lacking.

4.6 Conclusions

This chapter has addressed each of the research questions, outlined the methods used and the main findings associated with each question. To conclude this chapter the major findings for each data source – the student, parents, teacher, support teacher and peers, - will be summarised.

4.6.1 The Student

The research identified and confirmed Student A's development of basic social and communication skills, as well as her numerous skill deficits. The research has demonstrated the effect of these deficits on Student A's school experience, such as her inability to interact with her peers in unstructured times, and her low social standing within the class. Observations revealed that while Student A actively participated in the support class, she did not make an effort to practice the target skills outside of the support class.

4.6.2 Parents

Student A's parents have highlighted the need for proactive social skills support for Student A. It has been shown that Student A's social deficits are affecting her quality of life, and educational experiences. Student A's parents have shown concern for their daughter and have intimated a desire to work collaboratively with the school, a desire mirrored by the support teacher.

4.6.3 Teacher

The teacher demonstrated concern for Student A and intimated a desire to learn how to better cater for her. It was found that the teacher was implementing both social and communication skills strategies within the classroom. However, these were not developed with the needs or characteristics of Asperger's Syndrome in mind, or specifically targeted at the student.

4.6.4 Support Teacher

The support teacher has expressed her understanding of Student A's skill deficits and the characteristics of Asperger's Syndrome by noting her preference for group social skill lessons / training. However, there is a lack of support for, and communication with the regular teacher that is required for the reinforcement and practice of targeted social skills across the school environment. Currently, the social skills program is taught in isolation with little or no, communication and collaboration with the regular teacher and parents.

4.6.5 Peers

The results have shown that Student A is not socially included with her peers and that her skill deficits are hindering peer social interactions. Further, the research indicated the need for social skills training on a whole class level. Some of student A's female peers were observed employing modeling and guidance strategies without teacher instruction. This indicates the possibility of successfully employing these techniques in a social skills program.

The following chapter will discuss the results and implications of the findings of the study. The discussion will substantiate researcher inferences and conclusions using research fro the literature. In addition, recommendations to strengthen the current strategies, as well as the recommendation of new strategies will be outlined.

CHAPTER 5

DISCUSSION & RECOMMENDATIONS

To further support the findings of the research study, the discussion and recommendations have been developed within the framework of the clinical psychologist's report (Appendix 5). The report contains information regarding Student A's presentation (language, social, and behavioural) and history used for the diagnosis of Asperger's Syndrome, and outlines recommendations for training / education. The discussion will use the research findings to confirm the behaviours used for diagnosis by the clinical psychologist, and compare the clinical psychologist's recommendations to the strategies currently in use by the teacher, and support teacher.

Recommendations will be made in response to research findings ,in light of current literature, and the clinical psychologist's report recommendations. It is anticipated that the implementation of the recommendations will improve Student A's educational experience.

5.1 Discussion

According to the DSM-IV there are seven criteria that need to be satisfied to obtain a diagnosis of Asperger's Syndrome. Two of these are directly related to social interaction impairment. The DSM-IV criteria for social impairment reads:-

"A. Qualitative impairment in social interaction, as manifested by at least two of the following:

5) marked impairment in the use of multiple nonverbal behaviours such as eye-to-eye gaze, facial expression, body postures, gestures to regulate social interaction
6) failure to develop peer relationships appropriate to developmental level
7) a lack of spontaneous seeking to share enjoyment, interests or achievements with other people (e.g. by a lack of showing, bringing or pointing out objects of interest to other people)
8) lack of social or emotional reciprocity" (Attwood, 1998, p. 198).

When the clinical psychologist assessed Student A many of the social behaviours required for diagnosis were reported by Student A's parents, not observed directly by the psychologist. Therefore, from the research observations and results, the reported social behaviours used in the clinical psychologist's assessment can be confirmed. The researcher observed Student A displaying all four social impairment manifestations from the DSM-IV. These impairments were observed to be seriously hindering her social interaction with peers and her inclusion within the class. These skill deficits, and resulting social rejection, places Student A at risk of developing poor self-esteem, and depression. This possibility is magnified due to the documented risk of developing anxiety disorders and depression that individuals with Asperger's Syndrome carry (Tsai, 2007).

Inclusion is dependent on the ability to successfully interact with peers, and observations revealed that Student A spent minimal time engaged with her peers, highlighting her inability to interact with peers (Boutout, 2007; Goodman & Williams, 2007). In addition, the results from the sociometric measures (Friends Task and the Descriptions Task) highlight Student A's lack of social of engagement with her peers, and her skill deficits. These measures illuminated Student A's ostracism from her peers. This has serious ramifications for Student A's independent involvement in the wider community, as well as her well being as she moves into adolescence. It has already been noted that Student A participates in community organisations (Girl Brigades and church), but does not interact with others in these settings in socially appropriate ways. It may be concluded that the researcher's observations of the social impairment manifestations demonstrate that Student A has made minimal progress since her diagnosis in July 2007. Further, the research demonstrates that the current strategies in use are not supporting Student A's needs. The currents strategies in use by the teacher are not specifically targeted to the characteristics or needs of an individual with Asperger's Syndrome, nor are they specifically targeted at Student A. The literature has shown that placement in an inclusive class alone, will not facilitate the inclusion of a student with Asperger's Syndrome, instead specific strategies need to be in place to support the placement (Harrington & Taylor, 2003).

The clinical psychologist recommended that Student A participate in a social skills program (specifically Jed Baker *Social Skills Training* or Jeanette McAfee's *Navigating the Social World*) in a group setting, and strongly recommended frequent and open communication between the services and Student A's family. Currently, Jed Baker's

program *Social Skills Training* is being used in the support class and is implemented in a pair setting (with a younger student not a peer), not a group setting as recommended by both the clinical psychologist and the program's creator (Baker, 2003).

The clinical psychologist recommended that the group setting should consist of Student A's peers who would benefit from the exposure to social skill curriculum. The data from the sociometric techniques, used to ascertain the class social interactions and Student A's social standing in the class, concluded that many of Student A's peers would benefit from social skills instruction. Further, Baker (2003, p1) states that students that tease, bully or ignore individuals with Asperger's Syndrome require social skills training. The benefit of instruction in a peer group setting include the individual with Asperger's Syndrome being exposed to typical peers as role models, the provision of behavioral expectations, and the possibility of the formation of mixed-ability friendships (Chamberlain, Kasari & Rotheram-Fuller, 2006). By limiting Student A to participating in a pair setting (rather than a group setting), she may be missing out on the role models and supported friendships that she needs.

The support class offers Student A the social and communication skill support that she requires. However, the skills taught in support class are taught in isolation, without collaboration from the regular teacher and with no practice or reinforcement in the regular classroom, minimizing any chance of generalization and further restricting Student A's development of required skills.

According to Smith Myles (2005) successful social skills lessons have a distinct structure – direct teaching and modeling, explanation of each skill, guided and independent practice, and review and generalization of skills. Currently, the support class offers the first three steps of the structure. However, the third step – guided and independent practice, is only carried out for a short span of time in the support class and not carried over to the regular class, stopping the development of the fourth step (generalisation) and the success of the lessons. Baker (2003) found that the classroom setting better enables the development and generalisation of social skills, yet Student A is not guided in practicing the targeted social skills within the regular classroom. Without continual practice and reinforcement of the skills being targeted, it is not possible for an individual with Asperger's Syndrome (therefore Student A) to internalize or generalise the skills (Painter, 1998). A key factor in evaluating the success of the current strategies would be the generalisation of targeted social and communication skills to other environments / settings such as Girls Brigade and church. Student A's parents reported that no generalisation of skills had occurred, and that Student A does not have friendships in those settings. Therefore, the structure of the current program and its implementation has been found to be flawed and requires review.

Currently, there is a lack of communication between the support teacher and the regular teacher and this is negatively impacting on the success of the internalization and generalisation of the skills being taught. Further, there is minimal and infrequent communication between the school (both the support teacher and the regular teacher) and Student A's parents. For skills to be internalized and generalized they need to be reinforced and practiced across all settings. However, the lack of communication has

resulted in the skills being taught in isolation. The clinical psychologist recommended frequent communication between the home and services, so that skills taught in one setting are reinforced across all other settings. This recommendation included the parents being informed what skills are being targeted within the support class, and needs to be extended to the regular teacher as well. This communication could be begun by the collaborative development of an individual education plan (IEP) for Student A that extends across both school settings and can be referenced by Student A's parents for the home and community settings. For any program to be effective all settings need to be in constant communication and agreement regarding the skills being taught, practiced and reinforced (Smith et al, 2004).

The implementation of the current social skills program, as well as the strategies used by the regular teacher, is not implemented within the recommendations of the clinical psychologist. Student A's observed skill deficits, as well as the data collected from the sociometric measures highlights the urgent need for her social skills to be improved.

5.2 Recommendations

Based on the data gathered and analysed, the recommendations made by the clinical psychologist and current literature the researcher has developed six recommendations that if implemented have the potential to improve Student A's social and communication skills, and overall educational experience.

5.2.1 Collaboration and Communication

Parental involvement in the planning and implementation of programs and strategies results in the programs and strategies being tailored to suit the child and long-term behaviour change (Marshall & Mirenda, 2002). Further, for generalisation of skills, skills need to be practiced and reinforced in all settings. If the teacher, support teacher and parents collaboratively plan and implement strategies consistency can be achieved, increasing the chance of skills being internalized and generalized.

The researcher recommends that the teacher, support teacher and Student A's parents collaboratively plan and implement the current social skills program (Jed Baker's *Social Skills Training*). The planning could take the form of an afternoon where all parties meet and discuss concerns, expectations and aspirations. The plan should take the form of an IEP where short and long term goals are listed, naming those parties responsible for the implementation and reinforcement. The IEP may be directly related to the skills being taught through the social skills program. For each skill (one / week) the strategies for teaching the skill, strategies and times for practicing the skill, tips for reinforcing the skill and a proforma for monitoring the skill should be listed (much of this may be directly taken from the program). In addition, strategies for encouraging the generalisation of the skill in other settings (such as church or Girl's Brigade) should be included. The IEP should be shared between the support teacher, regular teacher and parents to ensure consistent application.

Further, communication channels between the parties (including the clinical psychologist) should be opened up. This may be done using a communication book

traveling between home and school on a daily or weekly basis, or phone calls between home and school on a daily basis. Opening communication channels will enable the social skills program to be implemented consistently across all settings. In addition, communication between home and school will allow for monitoring Student A for signs of anxiety or depression, comorbid disorders that individuals with Asperger's Syndrome are at high risk of developing (Tsai, 2007).

5.2.2 Implementation of the Social Skills Program

In accordance with the clinical psychologist's recommendations the researcher recommends that the social skills program be implemented in a group setting of Student A's peers. Social skills groups provide an opportunity to learn and practice social skills in a structured non-confronting environment (Attwood, 1998). Baker (2003) recommends a group size of four to seven students, and data from the sociometric measures suggests that many of Student A's peers would benefit from participation in a social skills program. Further, the support teacher signified a desire for the social skills lessons to be held in a group setting rather than a pair.

The researcher also recommends in agreement with Johns, Crowley & Guetzloe (2005) that Student A be made responsible for monitoring her own behaviours, including recording the number of times she has practiced or used the targeted skill. This could take the form of a tally board or a journal. The self-monitoring should be extended across the school, home and community settings to ensure internalization and generalisation of skills and all parties (teacher, support teacher and parents) should review the journal / tally board. A rewards incentive scheme such as reaching a target

number of successful implementation of the skill, will offer Student A further incentive for practicing the targeted skills across a range of settings.

5.2.3 Class Social Skills Program

The researcher recommends that a whole class social skills program (mirroring the skills being taught in support class and based on the developed IEP) be implemented. Baker (2003) advises for instruction in a classroom setting one skill should be targeted each week consisting of one formally structured 30 to 40 minute lesson at the beginning of the week, followed up by less structured practice times later in the week. Due to the moral basis of social interactions the class program could take place during worship times. The implementation of a class program would provide Student A (as well as others) with the reinforcement and practice that she requires. The use of the same program would provide the regular teacher with a resource of strategies and a social skills curriculum.

In addition, the researcher recommends sensitivity training of Student A's peers. The sensitivity training does not have to be explicit to Student A (in keeping with the confidentiality of her diagnosis) but should target student differences in general. Jed Baker's *Social Skills Training* (2003) includes a chapter on peer acceptance and how to teach sensitivity training. Through sensitivity training Student A's peers can be encouraged to include her during unstructured times such as recess and lunch. The researcher further recommends that Student A be paired with a peer that displays sensitivity and understanding of her impairments for extra support during lunch and

recess times. Full sensitivity training (following Jed Baker's program) should be implemented once Student A has been told of her diagnosis.

5.2.4 Social Stories

A proven method for teaching and reinforcing social skills is through Gray's Social Stories (Sansosti & Powell-Smith, 2006). These stories have an explicit structure and would provide Student A with a reference point for understanding social situations, and appropriate actions and responses to the situations. Social Stories are another strategy that Student A may take with her to different settings, and will provide her with support in the social situations across the different settings. In accordance with Sansosti & Powell-Smith's (2006) findings Social Stories should be developed collaboratively on agreed topics and both the parents and the teacher should be aware of what stories are being used so that they can be supported and reinforced in all settings.

5.2.5 Information / Training for Regular Teacher and Other Staff

One of the problems with the current strategies being implemented, is the lack of knowledge of the regular teacher regarding Asperger's Syndrome (although the teacher had expresses an interest in learning more about Asperger's Syndrome and the results of the study). This could be rectified by the support teacher and regular teacher meeting and having an information session. It is vital that the teacher has an understanding of the characteristics and requirements of Asperger's Syndrome.

Further, other staff that come into contact with the student should also be trained in the characteristics and requirements of Asperger's Syndrome. This will enable Student A to

be supported during classes where the regular teacher is not present. This would also provide Student A with more support during unstructured times such as lunch and recess as supervising teachers would be aware of her needs. Further, the training of staff would enable a greater awareness of Asperger's Syndrome within the school and support other diagnosed and undiagnosed students with Asperger's Syndrome. Jed Baker's (2003) *Social Skills Training* outlines a sample training program for school personnel (Appendix 6).

5.2.6 Classroom Arrangement

During the period of observation where Student A was seated in a group, rather than in rows, the interaction between Student A and her peers (measured by speech) was higher on both occasions when it was measured. The researcher believes that this demonstrates the value of group seating and recommends that the classroom be arranged in groups. Student A should be seated with peers (such as Student T) who have demonstrated empathy and understanding of Student A. Further, seating Student A close to the front of the classroom allows for greater eye contact, direct questioning monitoring by the teacher. If group seating is deemed an unviable option then Student A should be seated in a pair with a sympathetic peer. This will encourage mixed ability friendships that will provide Student A with role models and skilled interactional partners (Chamberlain, Kasari & Rotheram-Fuller, 2006). The student chosen to be paired with Student A should be encouraged to seek out Student A during unstructured times such as recess and lunch.

5.2.7 Summary of Recommendations

Table 5.1 summarizes the recommendations made from analysis of the results of the research.

Table 5.1 Summary of Recommendations

Recommendation	Responsibility
Collaboration and communication The key to successful generalisation and internalization of skills is the reinforcement across all settings. The program and strategies should be collaboratively developed and implemented across all settings. Communication channels need to be opened between all parties (including service professionals) possibly through regular meetings and a communication book.	Parents, teacher and support teacher
Implementation of social skills program The social skills program would be more beneficial if implemented in a group setting, rather than a pair as recommended by the program's creator and Student A's clinical psychologist. Further, Student A should be made responsible for monitoring her own behaviours.	Support teacher and teacher
Class social skills program A class social skills program would benefit all students in the class, as well as provide reinforcement and practice opportunities for the student. The program should mirror the program being implemented for the student and as such would not require additional planning. In addition, sensitivity training would better prepare peers for interactions with Student A.	Teacher and support teacher
Social Stories Social Stories should be implemented in order to reinforce target social and communication skills strategies. Social Stories may be taken with the student and used across a range of environments. They should be developed collaboratively by the teacher and support teacher.	Teacher, support teacher and parents
Information / training for the teacher and other staff Information sessions for the regular teacher and other staff (possibly held by the support teacher) would enhance the knowledge of teachers regarding Asperger's Syndrome and how to cater for students with the syndrome.	School administration, possibly support teacher
Classroom arrangement Student A should be seated at the front of the classroom, with a sympathetic peer, preferably in a group arrangement.	Teacher

CHAPTER 6

CONCLUSION

This study has identified and delineated the communication and social skills strategies used to promote the inclusion of a student with Asperger's Syndrome. The abilities and skill deficits of the student were identified through interviews and questionnaires completed by the student's parents and teacher. This information was then used to guide the researcher's observations in identifying the communication and social skills strategies in use by the teacher and the student's peers. Further, the student's social standing, as well as the social interactions within the class, was illuminated using sociometric measures.

The analysis of observations, sociometric measures, and secondary data, found that although there were communication and social skills strategies in operation within the classroom, the strategies were not specifically targeted at the student or towards the needs and characteristics of Asperger's Syndrome. The sociometric measures demonstrated the student's social skill deficits and her lack of social interaction with peers, thus revealing the inefficiency of the current strategies and program being implemented within the classroom.

The study revealed that the program being used for the support class was not implemented in the manner recommended by the program's developer or the student's clinical psychologist. From the results, it was inferred that this variation may have

contributed to the student's lack of communication and social skill development since her diagnosis the previous year. As recommended, implementation in a group setting would enhance the student's social interactions by providing skilled role models and behavioural expectations.

Further, the observations and interviews revealed a lack of communication and collaboration between the educational partners (teacher, support teacher and parents) resulting in the communication and social skills being taught in isolation within the support class without practice or reinforcement in the regular classroom, home or community settings. This drastically reduced the possibility of internalization and generalization of the skills, the foundation aim of any social skills program. The results indicated that this may be having an adverse effect on the student, her social interactions and educational experience.

The study has set out recommendations for the restructured implementation of the current social skills program, as well as new strategies that may rectify the problems identified. The recommendations were made in consideration of the identified skill deficits, literature regarding Asperger's Syndrome and the student's clinical psychologist's recommendations. It is anticipated that the implementation of the recommendations will further develop the student's communication and social skills and enhance her educational experience.

6.1 Limitations of the Study

This study faced a number of limitations which must be addressed. Firstly, the most serious limitation of this study was the confidentiality of the Asperger's Syndrome diagnosis from both the student and her peers. The continued confidentiality was a condition of parental consent for the study and limited researcher interactions with the student and her peers as well as the observation techniques implemented. The researcher was not able to directly interview the student or her peers regarding their understanding of Asperger's Syndrome and its characteristics or their feelings toward other classmates. In addition, the use of video or audio recording was not permitted.

Secondly, the time spent conducting observations was limited due to the time frame of the overall project, the consent process and the busy class schedule. Once the study proposal was granted ethical clearance, the proposal had to be submitted to the appropriate Education Department for approval. Once this approval was gained it was submitted to the school where the School Board granted approval. Finally, the proposal was submitted to the class teacher and parents for approval and consent. The length of this process resulted in the researcher conducting observations over a two week period, rather than a three week period.

Thirdly, the research design and individual nature of Asperger's Syndrome resulted in caution of any generalizability of the results. The research findings directly relate to the skill deficits and needs of one student with Asperger's Syndrome and may not be transferable to another student with Asperger's Syndrome.

6.2 Delimitations of the Study

The study was delimited by focusing on a single student with Asperger's Syndrome within the context of an inclusive educational setting, her teacher and peers. The study extended to the additional support that the student was provided in a weekly support class. Due to time constraints, it was not feasible to observe the student in other social environments that required the use of social skills.

The study focused on the identification and delineation of communication and social skills strategies that were used to support the inclusion of the student with Asperger's Syndrome, by addressing the characteristics and needs of individuals with Asperger's Syndrome. Communication and social skills were chosen as the focus of the study due to the triad of impairments associated with Asperger's Syndrome and the social requirements of successful inclusion as noted in the literature (Foreman, 2005; Harrington & Taylor, 2003).

Due to the individual nature of Asperger's Syndrome, the study does not aim to provide data or generalizations relevant to other individuals with Asperger's Syndrome. Instead the study aimed to provide recommendations for consolidation of the current program in use, as well as recommendations for new strategies that may improve the student's educational experience.

6.3 Qualification of Study Findings

The findings should not be interpreted as a lack of concern or support by the participants. Indeed, the opposite is true. The study revealed the constant care and compassion that the teacher displayed in regard to her students, particularly the student with Asperger's Syndrome. Too common in all schools is the heavy workload of teachers. The teacher in this study exhibited an extensive workload, as well as coordinating many extra-curricular activities. Further, the teacher's recent rejoining with the class may have attributed to a lack of time for implementation of strategies targeted specifically at the student with Asperger's Syndrome.

The student's participation in the withdrawal support class demonstrated the school's commitment to supporting the needs of students with disabilities. In particular, the implementation of a social skills program designed specifically for students with Asperger's Syndrome exemplified the school's recognition of, and response to, the unique characteristics and needs of Asperger's Syndrome.

6.4 Implications for Further Research

The results of this study have implications for further research in the area of students with Asperger's Syndrome and their inclusion within inclusive educational settings. This study focused particularly on one student with Asperger's Syndrome but within the educational setting there are many other instances of students with Asperger's Syndrome (both diagnosed and undiagnosed) within the school. All of the research questions were answered in relation to the student in this study; however the same or similar process

could be undertaken for each student in order to evaluate the strategies and programs in place and their effectiveness.

It was discovered that the regular teacher had limited knowledge regarding Asperger's Syndrome, its characteristics, and the needs that a student with Asperger's Syndrome may have (although she expressed a desire to expand her knowledge of Asperger's Syndrome, and an interest in the results of the study). Further investigation into the knowledge base of the school staff may be warranted to ascertain what support mechanisms could be implemented in the school. A lack of knowledge may hinder the support and progress of students with Asperger's Syndrome. This investigation could be followed up with training / retraining for the staff.

An area for further research that was illuminated from the review of the literature is the discrepancy between male and female prevalence rates of Asperger's Syndrome. There have been several theories proposed for the discrepancy including the difference in presentation and personality, but none has been proven. This area would expand the understanding of Asperger's Syndrome and would possibly aid in the diagnosis of females.

Finally, Asperger's Syndrome itself offers countless research opportunities. The individual nature of Asperger's Syndrome and the unknown cause present a multitude of opportunities for research. Further, the trend of Asperger's Syndrome students being included in regular classrooms presents opportunities for research regarding methods for ensuring that successful inclusion takes place.

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Appendix 1 – Parent / Caregiver Information Sheet

Information letter for parents

PARENT/CAREGIVER INFORMATION SHEET

Research Project:
"Programming for success: The development of a program based on the identification and analysis of social and communication skills strategies used to facilitate the inclusion of a primary school aged autistic child."

Thank you for considering your child's participation in my research project. My name is Alana Ragan Johnstone and I am currently a fourth year Bachelor of Education (Primary) Honours student at Avondale College. My project is being supervised by Elva Fitzgibbon.

The purpose of the study is to observe, identify and delineate what supportive social and communication skills strategies are used to facilitate inclusiveness for your child. This includes both conscious and unconscious strategies used by the teacher/s and peers. The project aims to provide data to support the development of a program for your child that contains both identified strategies and recommended strategies. Once completed, the program will be distributed to you, your child's teacher/s, Avondale School and to the North NSW Conference Office. Your child will not be identified by name in the research or program to maintain confidentiality.

It is anticipated that, following the completion of the research study, the implementation of the program by the teacher will significantly improve your child's educational experiences or may be used as a reference for the child's current and future teachers. Additionally, pre-service teachers should be exposed to the program during their course of study to raise awareness of strategies that facilitate the inclusion of an autistic child.

The research will be done through intensive observation over a three week period, as well as consultation and collaboration with you and the teacher/s through interviews. Interviews will take place outside of regular school hours and will be required at the beginning and end of the observation period. These can be conducted at the school or in your home whichever is convenient for you. Observations and interviews will be video, audio or photographically recorded (or a combination of the three).

Participation is voluntary and your child will only take part if both you and your child agree. If you do decide not to take part, it will not affect your child's results or progress at school. If you or your child decide not to take part, even after the study has started, just let the researcher know and any information already collected about your child will be destroyed. You have the right to withdraw from the study at any time if you decide you no longer wish to participate, without any detriment.
No-one will be able to identify you or your child from the results of the study. Only the researcher and supervisor will have access to this information, except when students are identified as being at risk of harm from themselves or others. In this case, the names of these students will be given to the school principal. Data will be kept in a locked filing cabinet in my home. Video recordings and photographs will be destroyed once the research is complete and data will be kept for five years.

I give consent for Video/audio/photographic recordings to be made as part of this study. These recordings will be
- Collected during normal class time.
- Stored in a locked filing cabinet in my home until the completion of the project, and then they will be destroyed.
- Only my supervisor and myself will be able to see/hear the recordings.
- I will use the recordings to identify social and communication strategies currently being used.

If you would like to check that you are OK with the information or recordings from the study, you need to contact me by phone or email and we will arrange a time to review information and video recordings relevant to your child. Recordings will not be made public after the study.

When you have read this information Alana Ragan Johnstone will be available to answer any questions you may have. If you would like to know more at any stage, please feel free to contact:
RESEARCHER: Alana Ragan Johnstone
MOBILE: 0401194130
EMAIL: s051449@avondale.edu.au

Appendix 1 – Parent / Caregiver Information Sheet (continued)

Supervisor- Elva Fitzgibbon Elva.Fitzgibbon@avondale.edu.au

This project has been approved by the Avondale College Human Research Ethics Committee (HREC). Avondale College requires that all participants are informed if they have any complaint concerning the manner in which a research project is conducted it may be given to the researcher, or if an independent person is preferred, to the College's HREC Secretary, Avondale College, PO Box 19, Cooranbong, NSW, 2265, by phone (02) 4980 2121 or by fax (02) 4980 2117.

This information sheet is for you to keep.

Alana Ragan Johnstone

AVONDALE COLLEGE LIBRARY

Appendix 2 –Parent and Teacher Questionnaire

Parent Skillstreaming Checklist

Based on your observations in various situations, rate your child's use of the following skills.

Circle 1 if the child is *almost never* good at using the skill.
Circle 2 if the child is *seldom* good at using the skill.
Circle 3 if the child is *sometimes* good at using the skill.
Circle 4 if the child is *often* good at using the skill.
Circle 5 if the child is *almost always* good at using the skill.

	Almost never	Seldom	Sometimes	Often	Almost Always
1. **Listening:** Does your child listen and understand when you or others talk to her?	1	2	3	4	5
Comments:					
2. **Using nice talk:** Does your child speak to others in a friendly manner?	1	2	3	4	5
Comments:					
3. **Using brave talk:** Does your child use a brave or assertive tone of voice in a conflict with another child?	1	2	3	4	5
Comments:					
4. **Saying thank you:** Does your child say thank you or in another way show thanks when someone does something nice for her?	1	2	3	4	5
Comments:					
5. **Rewarding yourself:** Does your child tell you when she has done a good job?	1	2	3	4	5
Comments:					
6. **Asking for help:** Does your child ask in a friendly way when she needs help?	1	2	3	4	5

Appendix 2 –Parent and Teacher Questionnaire (continued)

Comments:					
7. **Asking a favour:** Does your child ask favours of others in an acceptable way?	1	2	3	4	5
Comments:					
8. **Ignoring:** Does your child ignore other children or situations when it is desirable to ignore them?	1	2	3	4	5
Comments:					
9. **Asking a question:** Does your child ask questions about something she doesn't understand?	1	2	3	4	5
Comments:					
10. **Following directions:** Does your child seem to understand and follow directions that you give?	1	2	3	4	5
Comments:					
11. **Trying when it's hard:** Does your child continue to try when something is difficult instead of giving up?	1	2	3	4	5
Comments:					
12. **Interrupting:** Does your child know when and how to interrupt when she needs something?	1	2	3	4	5
Comments:					
13. **Greeting others:** Does your child acknowledge acquaintances when it is appropriate to do so?	1	2	3	4	5
Comments:					
14. **Reading others:** Does your child pay attention to a person's nonverbal language and seem to understand what is being communicated?	1	2	3	4	5
Comments:					

Appendix 2 –Parent and Teacher Questionnaire (continued)

15. **Joining in:** Does your child use acceptable ways of joining in an activity with friends or family?	1	2	3	4	5
Comments:					
16. **Waiting your turn:** Does your child wait her turn when playing a game with others?	1	2	3	4	5
Comments:					
17. **Sharing:** Does your child share most materials and toys with her friends?	1	2	3	4	5
Comments:					
18. **Offering help:** Does your child recognize when someone needs or wants help and offers this help?	1	2	3	4	5
Comments:					
19. **Asking someone to play:** Does your child ask other children to play or join in her activity?	1	2	3	4	5
Comments:					
20. **Playing a game:** Does your child play games with friends in a fair manner?	1	2	3	4	5
Comments:					
21. **Knowing your feelings:** Does your child identify her feelings?	1	2	3	4	5
Comments:					
22. **Feeling left out:** Does your child deal with being left out of an activity without losing control or becoming upset?	1	2	3	4	5
Comments:					
23. **Asking to talk:** Does your child talk about her problems when	1	2	3	4	5

Appendix 2 –Parent and Teacher Questionnaire (continued)

upset?					
Comments:					
24. **Dealing with fear:** Does your child know why she is afraid and deal with it in an acceptable way (eg talking about it)?	1	2	3	4	5
Comments:					
26. **Showing affection:** Does your child show that she likes someone in an acceptable way?	1	2	3	4	5
Comments:					
27. **Dealing with teasing:** Does your child deal with being teased in acceptable ways?	1	2	3	4	5
Comments:					
28. **Dealing with feeling:** Does your child use acceptable ways to express her anger?	1	2	3	4	5
Comments:					
29. **Deciding if it's fair:** Does your child accurately assess what is fair and unfair?	1	2	3	4	5
Comments:					
30. **Solving a problem:** When a problem occurs does your child state alternative, acceptable ways to solve the problem?	1	2	3	4	5
Comments:					
31. **Accepting consequences:** Does your child accept the consequences for her behaviour without becoming angry or upset?	1	2	3	4	5
Comments:					
32. **Relaxing:** Is your child able to relax when tense or upset?	1	2	3	4	5
Comments:					

Appendix 2 –Parent and Teacher Questionnaire (continued)

33. **Dealing with mistakes:** Does your child accept making mistakes without becoming upset?	1	2	3	4	5
Comments:					
34. **Being honest:** Does your child admit that she has done something wrong when confronted?	1	2	3	4	5
Comments:					
35. **Knowing when to tell:** Does your child refrain from telling on others about small problems?	1	2	3	4	5
Comments:					
36. **Dealing with losing:** Does your child accept losing at a game or activity without becoming upset or angry?	1	2	3	4	5
Comments:					
37. **Waiting to be first:** Does your child accept not being first at a game or activity?	1	2	3	4	5
Comments:					
38. **Saying no:** Does your child say no in an acceptable way to things she doesn't want to do or things that may get her into trouble?	1	2	3	4	5
Comments:					
39. **Accepting no:** Does your child accept being told no without becoming upset?	1	2	3	4	5
Comments:					
40. **Deciding what to do:** Does your child choose acceptable activities on his/her own when feeling bored?	1	2	3	4	5
Comments:					

Appendix 3 – Friends Task (Francey & McGrath, 1991, p14)

Friends Task



Your name .....

Write down the names of 3 students in your class that you most like to play with at recess and lunch.

- You can write the names in any order
- It's okay to write only one or two names if that's all you want to write, but only write 3 names
- Don't write names of students in other classes, or your own name.

1 .....

2 .....

3 .....

Friends Task



Your name .....

Write down the names of 3 students in your class that you most like to play with at recess and lunch.

- You can write the names in any order
- It's okay to write only one or two names if that's all you want to write, but only write 3 names
- Don't write names of students in other classes, or your own name.

1 .....

2 .....

3 .....

Friends Task



Your name .....

Write down the names of 3 students in your class that you most like to play with at recess and lunch.

- You can write the names in any order
- It's okay to write only one or two names if that's all you want to write, but only write 3 names
- Don't write names of students in other classes, or your own name

1 .....

2 .....

3 .....

Appendix 4 – Descriptions Task (Francey & McGrath, 1991, p16 & 17)

DESCRIPTIONS TASK

On these two pages are some descriptions of different ways some kids behave. Read them through, and then write the names of the two kids in your class who best fit each description. Don't write more than two names, but you can just write one name, or none, if you can't think of two people who are like that.

This person is really good to play with.

1 _____

2 _____

This person often plays alone in the playground.

1 _____

2 _____

This person hits or punches others.

1 _____

2 _____

This person often says kind things to other kids.

1 _____

2 _____

This person tries to boss other kids around a lot.

1 _____

2 _____

This person often looks sad.

1 _____

2 _____

This person never says very much to other kids.

1 _____

2 _____

This person gets into fights a lot.

1 _____

2 _____

This person is good looking.

1 _____

2 _____

This person thinks no-one likes them.

1 _____

2 _____

This person often says mean things to other kids.

1 _____

2 _____

This person is very good at sport.

1 _____

2 _____

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Appendix 4 – Descriptions Task (continued)

This person is a poor loser.

1 _____

2 _____

This person will help you if you need help.

1 _____

2 _____

This person is very quiet and doesn't take part in things much.

1 _____

2 _____

This person gets teased a lot by other kids.

1 _____

2 _____

This person doesn't share.

1 _____

2 _____

This person often won't play by the rules.

1 _____

2 _____

This person does good work and works hard at school.

1 _____

2 _____

This person is not very good at sport.

1 _____

2 _____

Appendix 5 – Clinical Psychologist's Report

[redacted]
Clinical Psychologist
D.Psyc (Clinical), M.A.P.S., M.C.C.Ps.
HIC Provider No: [redacted]
ABN: [redacted]

[redacted]
Tel: [redacted]

13 July, 2007

Psychological Report

Name: [redacted]

Date of Birth: 22.1.98

Address: [redacted]

[redacted] was referred by her parents for diagnostic clarification, with consideration of Asperger's Syndrome.

[redacted] is the eldest of two daughters to [redacted] and [redacted]. She currently attends Year 4 at [redacted]

During this assessment, the following information was obtained.

Language:

- There has been no concerns regarding [redacted] language development;
- [redacted] was described as having "verbal diarrhoea". Her parents stated that she cannot stop talking and will talk when it is not appropriate to do so;
- There is not history of verbal rituals or echolalic speech;
- She is often noted to correct the language of others, regardless of whether it is appropriate to do so.
- [redacted] uses few gestures in communication.

Social:

- [redacted] has always experienced social difficulties;
- She did have one close friend when she lived in Sydney. When her family moved away from Sydney [redacted] did not keep in touch with her only friend;
- It was reported that [redacted] is on the fringe of her peer groups. She does not have any close friends. She reports interacting with some peers at school but did not report any close or meaningful friendships with any. Her family note that she does not interact closely with peers at school or out of school;
- She attends girls brigade, church and plays basketball, but does not have any social networks of friends in any of these domains.
- She has poor social boundaries. [redacted] can be overly familiar with strangers and may hug and talk to them at length. She can also be overly familiar with new peers and can be too confronting, which then drives peers away;
- [redacted] is noted to typically" take over a conversation"
- Her parents note an inability to relate to peers her own age. [redacted] prefers to interact with adults or younger peers;
- She loves animals and "always prefers animals to people". When talking about her interest in animals [redacted] was more descriptive and animated, when compared to conversations about her peers;
- In sum, [redacted] is interested in her peers, but does not appear to have the social skills to build and sustain friendships.

Behaviour:

- [redacted] has poor concentration and is easily distracted;
- She spends the bulk of her time at home reading Saddle Club books. On some occasions she will read the same book repeatedly. Her parents note that she is "obsessed" with Saddle Club and horses. She will talk about them frequently, even if this is not the topic of conversation, [redacted] will direct the conversation to this topic. [redacted] was able to tell me about the books she had read in detail, how many she had read and how many were in the series etc. She attempted to describe the contents of the book in detail. When I asked [redacted] to tell me about it briefly she was unable to do so and began to tell me about stories as if I had also read similar books. It took three attempts by [redacted] to ask [redacted] to stop talking and she appeared puzzled as to why she had been asked to stop.
- [redacted] also has a strong attachment to soft toys;

- If upset of frustrated [redacted] will flap her hands;
- [redacted] has a range of poor fine and gross motor issues.

Diagnosis:
Given [redacted] presentation and the above noted history, [redacted] **does satisfy the diagnostic criteria for Asperger's Syndrome**, as noted in DSM-IV TR.

Recommendations:

- [redacted] school could investigate means of obtaining funding to facilitate social skills training in the school setting. This is often more beneficial than undertaking training outside of school, as the school environment is the most social arena for [redacted] and she needs to improve skills in this domain. An emphasis should be placed on [redacted] improving her socialisation skills at school and then generalise these more widely (eg. Girls Brigade).
- Examples of proven social skills programs for children with Asperger's Syndrome are 'Social Skills Training' by Jed Baker and 'Navigating the Social World: a Curriculum for Individuals with Asperger's Syndrome and High Functioning autism' by Jeanette McAfee. Ideally these should be completed in a small group setting with peers who would benefit from social supports (they do not have to have a diagnosis of Asperger's Syndrome). The focus of these groups should also be reported to parents, so that skills can be generalised and encouraged beyond school. With [redacted] specifically, the social skills training interventions should focus on higher-level skills as she does have an understanding of basic social skills and requirements now.
- An effective means of teaching children social skills is through Social Stories, developed by Carol Gray. Social stories provide a visual method to teach children social rules, social perspectives, socially appropriate behaviours and how to engage in two-way conversations. Further information can be obtained from Carol Gray's books or from www.thegraycenter.org/Social_Stories.htm or www.polyxo.com .
- Focus on the positives. Children with Asperger's Syndrome will often focus on the negative aspects of their day, and/or develop a fatalistic attitude where they will not try anything, for fear of failure and thus will misbehave or distract others to avoid tasks. It is therefore important that much focus is placed on the positive aspects of [redacted] behaviour and that any positive behaviours are noted and reinforced with her. Many children learn that their only means of obtaining attention is through negative behaviours, it is important that this not be the case. Focus on positive behaviours at home and school as much as possible.
- If explaining consequences or disciplining [redacted], attempt to avoid complicating the issue with emotion. Attempt to keep the tone of voice neutral.
- As a guide for practical educational strategies, "The essential guide to successful secondary school: a guide for teachers and families of students with autism spectrum disorders" by Anna Tullemans is very useful.
- Regardless of the basis of the education program, it is critical that there is frequent communication between the services and [redacted] family. This is important to ensure that skills being taught in one environment are also taught in the second situation; that obtained skills are not re-taught and this also assists with generalisation of skills.
- Monitor [redacted] for increasing levels of anxiety over time. Research suggests that children with Asperger's Syndrome are at a heightened risk of developing anxiety disorders in adolescence. If this were to occur, consideration should be given to completing an anxiety management course with [redacted] such as "Exploring Feeling" by Tony Attwood.
- Consideration may be given to a psychometric assessment to obtain her cognitive profile. With children with autism spectrum disorders, it is likely that there are significant differences between assessment results. It is essential that these differences are both acknowledged and more importantly addressed in any educational setting.
- Texts noted above can be obtained from www.bookinhand.com.au
- Further information on Asperger's Syndrome can be obtained from www.aspect.org.au or www.tonyattwood.com.au
- [redacted] and [redacted] may consider applying for the Carer's Allowance through Centrelink.

Yours faithfully

[redacted]
Consultant Clinical Psychologist
D.Psych (Clinical), M.A.P.S., M.C.C.Ps.

Appendix 6 – Sample Training Program for School Personnel (Baker, 2003)

Sample Training for All Lunch/Recess Personnel

I have conducted this kind of training with the lunch staff to gain their cooperation in a schoolwide incentive program for kind behaviors. The training can also be conducted by the school principal or special education staff. Typically, the lesson is conducted on a half day of school when the lunch staff is available. It is crucial to get approval from the principal or other administrator to make sure staff are paid for attending the training since most lunch staff are already underpaid for a very demanding job.

Rationale

Lunch/recess time is the most social and least structured time of the school day. For many children that means they can relax and get a break from the demands of the day. The lack of structure and social nature of recess also makes it the prime time for social conflicts and possible behavioral problems. We want to implement a program that we expect will reduce behavioral problems and foster a kind and caring atmosphere during recess.

Structure of Program

A. All children in the school were taught by their teachers to demonstrate three "kind" and "responsible" behaviors during lunch and recess. These behaviors are:
   1. **Include** others in conversation and play if they appear to be by themselves.
   2. **Stand up** for others who are teased by telling the teaser to stop or by getting help.
   3. **Offer help** to others who look upset or hurt.

B. We ask that all teachers and staff at lunch and recess:
   1. Look for and coach children to engage in these "kind" behaviors. Direct them to include others, stand up for those who are teased, and to offer help.
   2. Praise them if they demonstrate one of the "kind" behaviors listed above.
   3. Give out a ticket/token to any student you observe demonstrating one of the kind behaviors listed above.
   4. Try to praise or give out at least two tickets/tokens each lunch and recess period.

C. Students will take the tickets/tokens back to their classroom teachers who will praise them for their kind behavior. The tickets/tokens will be accumulated in the classrooms and may be exchanged for classroom rewards as determined by the individual classroom teachers.

Coaching and Praising Kind Behaviors (Modeling and role-plays)

A. **Including others** (need three people, two to play and one who sits out):
   1. Notice the loner.
   2. Coach the others to ask the loner to play.
   3. Come up with your own game to include the loner and other kids.
   4. Praise and give out the tickets.

B. **Standing up for others who are teased or put down** (need three people, teaser, victim of teasing, and a bystander):
   1. Notice slight putdowns, even if told to you after the fact.
   2. Coach the bystander: "He needs your help, can you stand up for him?"

Appendix 6 – Sample Training Program for School Personnel (Baker, 2003) (continued)

3. Help the victim: "Don't attend to that, you know it's not true."
4. Address the teaser: "Can you apologize for saying those things. I do not want anyone to tease you and I do not want you to tease anyone."
5. Praise and give tickets for standing up for the other person.

C. **Helping Others**
1. Look for these situations: Someone comes to the aid of someone who is hurt, someone encourages or compliments someone who is having trouble with something (e.g., "Good throw" or you played well).
2. Coach the students to help.
3. Praise and give tickets for helping fellow students.

When Will the Program Start?

As soon as you get the word from your building principal and he/she gives you the special tokens/tickets.

Exercise to Understand the Power of Watching Others Be Rewarded

Tell all staff that they can leave the training early when they get three tickets. Then tell all staff to talk among themselves about their week or their weekend plans. Once most staff members are talking, go around the room giving out tickets to anyone who is quiet and say, "I like how quiet you are. Here is a ticket." Keep giving out tickets to those who are quiet until most staff have caught on that being quiet results in a ticket. Then explain how watching others being rewarded is often an incentive to behave well. This is what we want at lunch and recess time – for children to behave positively because they see other children being rewarded for such behavior.

What to Do with Negative Behaviors?

A. Prevent negative behaviors by telling children ahead of time what is expected:
1. Remind them to compromise before they argue.
2. Remind them to include everyone, and encourage each other.

B. Attend to those who do the positive (e.g., the bystanders, etc.).

C. Instead of criticizing them about what they should not have done, educate them about what they can do.
1. Suggest a compromise for those who cannot agree on what to play.
2. Explain how to express anger in words ("I" message) rather than fighting:

I feel _____

When you _____

Because _____

What I want you to do is _____.

3. Explain how to deal with losing, "If you lose a game, you can still win a friend if you do not get mad."

D. When all else fails and the problem continues, take it to the _____ (class teacher, building principal).

Appendix 7 – Parent Communication with the Teacher

18th March 2008

Dear M[redacted]

Please find enclosed a copy of [redacted]'s initial physio and OT report. You will notice that it was done in 2004 and she has been receiving OT and Physiotherapy since, but her improvement has only been slight and I have been told that her feet and hips will not correct themselves at this stage, but that she will need to have continued treatment and to wear her orthotics for most of her life. This does make physical activity difficult for her particularly running which causes pain in her hips. Whilst I do not want her excluded from PE as I think it is important for her to participate, it will mean that with things like the cross country she will not be able to run the entire distance. Sometimes her lack of skill and the fact that she has been teased in the past for it will make her reluctant to join in PE but as discussed she needs to work through this and be encouraged to try.

I have also included on the last page a copy of the school plan that one of her psychologists put together to help her deal with issues that arise with other kids teasing her or when things upset her and I thought it may be helpful to see what she has been asked to do. Maybe the social skills teacher could see it as well as I would really like her with work with us on some self control strategies and for [redacted] to think about what she says before just reacting and "exploding" if possible.

Thanks for your time yesterday and your continued encouragement of [redacted] she loves being in your class.

God Bless

[redacted]

Appendix 8 – Social and Communication Skills List from Baker's Program (2003)

Social Skills Menu

Student: _____ Date: _____

Person Completing Form: _____

(Check Items Relevant to Student)

Communication Skills

Conversational Skills

___ 1. Maintaining Appropriate Physical Distance from Others ("Don't Be a Space Invader")
___ 2. Listening Position
___ 3. Tone of Voice
___ 4. Greetings
___ 5. How and When to Interrupt
___ 6. Staying on Topic
___ 7. Maintaining a Conversation
___ 8. Taking Turns Talking
___ 9. Starting a Conversation
___10. Joining a Conversation
___11. Ending a Conversation
___12. Asking a Question When You Don't Understand
___13. Saying "I Don't Know"
___14. Introducing Yourself
___15. Getting to Know Someone New
___16. Introducing Topics of Interest to Others
___17. Giving Background Information about What You Are Saying
___18. Shifting Topics
___19. Don't Talk Too Long
___20. Sensitive Topics
___21. Complimenting Others
___22. Use Your H.E.A.D. (Happy Voice, Eye Contact, Alternating Turns, Distance)
___23. T.G.I.F. (Timing, Greeting, Initial Question, Follow-Up Questions)

Appendix 8 – Social and Communication Skills List from Baker's Program (2003) (continued)

Cooperative Play Skills

___24. Asking Someone to Play
___25. Joining Others in Play
___26. Compromising
___27. Sharing
___28. Taking Turns
___29. Playing a Game
___30. Dealing with Losing
___31. Dealing with Winning
___32. Ending a Play Activity

Friendship Management

___33. Informal Versus Formal Behavior
___34. Respecting Personal Boundaries
___35. Facts Versus Opinions (Respecting Others' Opinions)
___36. Sharing a Friend
___37. Getting Attention in Positive Ways
___38. Don't Be the "Rule Police"
___39. Offering Help
___40. When to Tell on Someone
___41. Modesty
___42. Asking Someone Out on a Date
___43. Appropriate Touch
___44. Dealing with Peer Pressure
___45. Dealing with Rumors
___46. Calling a Friend on the Telephone
___47. Answering the Telephone

Appendix 8 – Social and Communication Skills List from Baker's Program (2003) (continued)

Emotion Management Skills

Self-Regulation

___48. Recognizing Feelings
___49. Feelings Thermometer
___50. Keeping Calm
___51. Problem Solving
___52. Talking to Others When Upset
___53. Dealing with Family Problems
___54. Understanding Anger
___55. Dealing with Making a Mistake
___56. Trying When Work Is Hard
___57. Trying Something New

Empathy

___58. Showing Understanding for Others' Feelings: Preschool-Elementary
___59. Showing Understanding for Others' Feelings: Preadolescent-Adulthood
___60. Cheering up a Friend

Conflict Management

___61. Asserting Yourself
___62. Accepting No for an Answer
___63. Dealing with Teasing – K-4th Grade
___64. Dealing with Teasing – 5th Grade and Up
___65. More Words to Deal with Teasing
___66. Dealing with Being Left Out
___67. Avoiding Being "Set Up"
___68. Giving Criticism in a Positive Way
___69. Accepting Criticism
___70. Having a Respectful Attitude

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