

**Segregation and Inclusion: A comparative analysis of
three different educational settings for students with
Autism Spectrum Disorders in the United Arab
Emirates**

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Abstract

With the increase in the number of mainstream schools providing education for students with Autism Spectrum Disorders (ASDs) in the United Arab Emirates (UAE), it is important to study the benefits of such settings in comparison to a segregated setting. The purpose of this study was to carry out a comparative analysis of three different educational settings for students with ASDs in the UAE, in order to ascertain the benefits and drawbacks of each setting, and to discuss what can be learned from each setting to benefit the others. Teachers and staff were interviewed about their attitudes and experiences regarding the inclusion and segregation of students with ASDs in the UAE. The settings investigated were: a specialised private centre in Dubai providing a holistic approach; a specialised private centre in Dubai providing an ABA approach; and, a private mainstream international school in Sharjah including students with ASDs. Findings showed that the specialist provisions available were following international recommendations for educating students with ASDs. Mainstream settings in the UAE were found to be struggling to include students with ASDs effectively, with there being much scope for improvement. Recommendations were made to improve the inclusive services available to students with ASDs in the UAE.

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List of Abbreviations

ASD – Autism Spectrum Disorders

UAE – United Arab Emirates

PDD – Pervasive Developmental Disorder

APA – American Psychiatric Association

ABA – Applied Behaviour Analysis

TEACCH – Treatment and Education of Autistic and Related
Communication Handicapped Children

SIT – Sensory Integration Therapy

IEP – Individualised Education Plan

DSM – Diagnostic and Statistical Manual

PECS – Picture Exchange Communication System

SEN – Special Educational Needs

LSC – Learning Support Centre

ST – Speech Therapy

OT – Occupational Therapy

CARD – Centre for Autism and Related Disorders

1. Introduction

Autism was provided its first clinical description over 50 years ago (Kanner, 1943), and still remains a “complex and puzzling disability” (Dempsey & Foreman, 2001). The disorder is considered to be puzzling because it cannot be described as a single condition, but rather a spectrum of Pervasive Developmental Disorders (PDD), which can manifest in three areas of development: reciprocal social interaction skills, communication skills, and the presence of stereotyped behaviour, interests and activities (American Psychiatric Association [APA], 1994). Individuals with autism can display a range of deficits in these areas of development, and the degree of impairment associated with autism varies widely (APA, 1994). Sartawi (1999) has reported that research into autism in the Arab world is insufficient or even unavailable, showing a growing need to research the characteristics and needs of individuals with autism in the UAE, which will in turn lead to a better understanding of autism in this part of the world.

A number of behavioural, educational and pharmacological interventions have been demonstrated to be helpful in treating individuals with autism. Herbert et. al. (2002) have reported that autism is “fertile ground for pseudoscience”, with many intervention approaches claiming to be “cures” for autism without any scientific basis, and with a lack of sound research principles being applied. “The effects of autism are pervasive and generally affect most domains of functioning. Parents are typically highly motivated to attempt any promising treatment, rendering them vulnerable to promising ‘cures’” (Herbert et. al., 2002). Individuals with autism have the appearance of a typically-developing person, and this may lead parents and teachers to believe that there is a “normal” and “intact” child lurking beneath the surface, and this would further lead to the desperation of parents to try any treatment which promises results (Herbert et. al., 2002). In addition to these factors, autism comprises of a heterogeneous spectrum of disorders, with a wide variety of symptoms being displayed among afflicted individuals, and the course of treatment can vary greatly between two people with autism. Among the most popular treatments for children with autism are: Applied Behaviour Analysis (ABA); Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH); and, Sensory Integration Therapy (SIT). The details of these treatments, as well as

evidence of their effectiveness in treating children with autism, will be discussed in the next section.

In addition to specialist services for students with autism, the trend toward the inclusion of students with disabilities into mainstream educational settings has shown an increase in the number of children with autism being educated in regular schools. With an increasing emphasis on inclusion and a growing awareness of ASDs among society, Jordan & Jones (1999) argue that it should become more common for a child with an ASD to spend at least some of their educational life in an inclusive setting.

The number of students with disabilities being included into mainstream educational settings has increased over the last few years in the UAE (Alghazo & Gaad, 2004), with an emphasis being placed on inclusive and equal education for all. Although there are no official statistics on the number of students with ASDs being included into mainstream schools in the UAE, it is undoubtedly a number that will keep increasing as inclusion continues to be implemented and advocated in this part of the world. The attitudes of teachers and principals towards the inclusion of students with disabilities into mainstream schools are an important predictor of the success of the inclusion of these students (Semmel et. al., 1991; Horrocks et. al., 2008). More research needs to be carried out regarding the attitudes of mainstream teachers and principals towards the inclusion of students with ASDs in the UAE, to determine whether the mainstream education system is accepting of students with ASDs in their schools.

The following study has been designed to explore the various educational settings available for a student with ASDs in the UAE. This study will focus on two specialist educational settings and one mainstream setting. A case study approach has been adopted in an effort to get an in-depth analysis of how each setting educates students with autism. The study will also focus on what each setting can learn from the other settings, in terms of effective ways to educate students with ASDs. The study will also highlight the attitudes of teachers and principals towards the inclusion of students with ASDs in the UAE. The rationale for this study is that it will help to shed some light on the educational services available for students with ASDs in the UAE, and the prevailing attitudes towards inclusion of students with ASDs, in the hope of helping

parents to make informed decisions of which setting will be most effective for their child with an ASD. This is much needed research in the UAE, and it is hoped that educationalists will also benefit from such an analysis in understanding how to better provide for students with ASDs.

2. Research Questions

- 1) What are the educational services available to students with ASDs in the UAE?
- 2) What are the benefits and the drawbacks of segregated and inclusive settings for students with ASDs in the UAE?
- 3) What are the prevailing attitudes and experiences of school staff towards the inclusion of students with ASDs in the UAE?
- 4) What recommendations can be made to improve the services offered to students with ASDs in the UAE?

3. Organisation of Chapters

The chapters are organised as follows:

- The methodology describes the way in which the research was carried out to assess the services offered by the centres and school selected for participation in the study. The methods used for data collection are explained, in addition to the methodological issues relating to this study
- The literature review present some of the literature relevant to the present study in the following sequence: Information about ASDs; Prevalence rates; Autism interventions; Special Education in the UAE; and, Inclusion in the UAE
- The results of this study are then presented, and the data collected from each educational setting are organised into the following themes: General information; Tuition fees; Intervention strategy or curriculum used; Professional development and training; and, the attitudes and experiences towards segregation and inclusion of students with ASDs in the UAE
- The results are then discussed in the discussion and conclusion, where the main findings are presented regarding the segregated and inclusive settings investigated, and the attitudes of school staff towards educational placement for students with ASDs. Recommendations for improving the services on offer, and ideas for future research are also given.

4. Methodology

4.1 Introduction

The present study was carried out to assess the services available for students with ASDs in the UAE, by providing a comparative analysis of three different educational settings. Attitudes of teachers and principals towards the inclusion of students with ASDs in the UAE were also analysed. Although there are several schools and centres offering services for students with ASDs in the UAE, it was impossible to study all the schools and centres in the UAE due to limitations of time constraints. Therefore, it was decided that three centres would be chosen, which represented the use of different types of intervention strategies and educational setting. It was decided that two centres would be focused on educating only students with ASDs, and both centres would use different intervention strategies to highlight the various specialist options available for children with ASDs, and that one mainstream school practicing the inclusion of students with ASDs would be studied, to show if, and in what ways, a child with an ASD can benefit from an inclusive environment as opposed to a segregated environment in the UAE.

A case study approach was adopted, where the three educational settings are studied in depth. “Case studies strive to portray what it is like to be in a particular situation, to catch the close-up reality and ‘thick description’ of participants’ lived experiences, thoughts about, and feelings for, a situation” (Cohen et. al., 2000). By using a case study methodology, the details and actual experience of a child with an ASD can be described in more detail, and then a fuller understanding of that educational setting can be reached.

The method used for collecting data were primarily observations, interviews and qualitative analysis of documental evidence, which are all forms of empirical research (Bassey, 1999). The focus of empirical research is primarily on collecting data, and for this study it was most appropriate to use qualitative data to understand the way in which each setting was providing for students with ASDs, through observations of classrooms, and interviews with teachers. Documents were assessed to further substantiate the ways in which students were taught in each setting. Qualitative data

has the advantage of being rich in terms of the information you can draw out of participants, but Bassey (1999) warns that the dangers of using qualitative data primarily can lead to “fuzzy generalisations”, which is one disadvantage of using this form of data collection. All conclusions drawn in this study will be based on actual evidence provided in the appendices in order to avoid this pitfall.

4.2 Research Strategy

Schools and centres providing for students with ASDs were researched via the Internet, and through the researchers own knowledge of special education services available in the UAE. The researcher then contacted the schools and centres which were suitable for participation in this study via email. The email explained the nature of the study, and asked for permission to observe classes for two days to get a better understanding of the intervention strategies used, as well as an interview with the class teacher or director of the school or centre. Access to some documents were also requested, and an official letter from the university verifying the nature of the study was also sent to each school or centre. This was done in order to adhere to ethical practices, which make it necessary for the participants to be fully aware of the nature of the study they are participating in. Two mainstream schools and four special education centres were contacted, out of which one mainstream school and two specialised centres replied with permission to participate in the study. One private centre provided a holistic intervention model for educating students with ASDs in Dubai; one private centre primarily focused on providing ABA services for children with ASDs in Dubai; and, one private mainstream school provided inclusion of several students with ASDs in Sharjah.

4.3 Method of Data Collection

4.3.1 Observations

The researcher was given permission to observe classrooms in each of the educational settings for two days. Observations were made of students in the classroom over a variety of subjects, and also during play or break times. The researcher was allowed to take notes during these observations, and notes were taken regarding the ways in

which students with ASDs were educated in each of the settings, and the types of strategies used. As Bell (1999) points out, “direct observation may be more reliable than what people say in many instances. It can be particularly useful to discover whether people do what they say they do, or behave in the way they claim to behave”. Through direct observation, the researcher was able to see how students are taught in each setting directly, and did not have to solely rely on what the teachers, principals, and directors had to say. One disadvantage of using observations is the potential bias that may occur, even when observations are structured (Bell, 1999). This is something the researcher had to take into account, and make an effort to avoid her own views creeping in when interpreting notes taken during observations.

4.3.2 Interviews

Interviews were conducted in each setting to get an insight into the views of educators, directors and learning support coordinators. Interviews were semi-structured, with a pre-set list of important topics, but with some deviation on the final questions asked based on the respondents’ replies. Questions also varied slightly based on the type of educational setting the respondent was working in. Cohen et. al. (2000) state that in a semi-structured interview, “the interviewer decides the sequence and working of questions in the course of the interview”. This was the approach that was adopted. One disadvantage of this method is that it can result in substantially different responses, thus reducing the comparability of responses. This was avoided by focusing on a list of pre-set topics during the interview. The interview topics for each setting are shown in Appendix 1.

4.3.3 Documents

There was permission given to access some documents which the researcher felt were necessary for the study. All three settings requested that the names of the school or any students be removed from documents appearing in the dissertation, due to confidentiality considerations. These requests were met. There were direct quotations from websites given in the results chapter. For confidentiality purposes, when websites from schools are quoted from, the website address will not be given in the references section. Instead, the relevant page from the website will be printed and

added to the Appendices with school or centre name deleted. The following is a list of documents provided by each setting:

Setting 1: Class timetable, Sample of an IEP, Sample of a Skill Tracking Sheet, Sample of a Probe Data Sheet

Setting 2: Mission Statement, Brochure for the Centre, Sample of Acquisition Skills for a student, a Sample Data Sheet, a Sample Data Graphing Sheet, Sample Targeted Skills for Individuals of 0-7 years, Sample of School Shadow Training Lecture Slides

Setting 3: Tuition Fee Structure, Learning Support Referral Form, Student Observational Checklist, Sample of Emotions Worksheet

4.3.4 Data Analysis

The data collected was mainly qualitative, in the form of interviews, observations and documents. This data was analysed thematically, where major themes were: curriculum and intervention strategy used; tuition fees in each setting; professional development and training of staff; and, the attitudes and experiences of educators, directors and learning support coordinators towards the segregation and inclusion of students with ASDs in the UAE. The data was presented in a descriptive format, where direct quotations, observation notes, and documental evidence were included for each theme.

4.4 Methodological Issues

4.4.1 Access

A major challenge in conducting this research was gaining access to schools and centres for students with ASDs. Only three of the six schools or centres contacted were able to provide permission to participate in the study. Although the researcher assured confidentiality and anonymity, two of the centres declined to participate in the study because of the privacy of their students; they did not want to have an outsider observing the classes. One centre declined to participate in the study because it was

the final term before the summer holidays, and they said staff were too busy completing end of year reports for the students.

4.4.2 Ethical Considerations

Ethical protocols were considered during the planning and execution of this study. Participants were informed about the nature of the study, and the names of participant schools and individuals were not included in the study. This was to ensure confidentiality to participating schools. It was also important whilst doing observations, particularly in a mainstream setting, not to single out any particular students who were being observed, so as to not draw any undue attention to them. The researcher was sitting behind the classroom and was careful not to pay any particular attention to any student, so that the student with ASD and their peers would not be aware that she was there to observe them in the classroom.

4.4.3 Validity

The validity of the study was taken into consideration as well, and validity is a measure of whether the item used is measuring what it is supposed to be measuring (Bell, 1999). In other words, whether the data collected is actually measuring what it is supposed to be, in this case it would be to provide a description of the ways in which students with ASDs are being educated in various settings. In order to improve the validity of the study, a method called triangulation was used, where more than one method of collecting data is used in order to 'cross-check' findings (Bell, 1999). When using triangulation, a number of sources are used to collect the data and these results are compared in order to get a well-rounded picture of what is actually happening. In this study, interviews, observations, and documents were all used so that a multi-method approach could be used to verify data.

4.4.4 Researcher Bias

One major factor in considering the use of qualitative research, such as interviews and observations, like the methods used in this study, is that they are open to researcher bias. The researcher has spent two years as an ABA therapist for children with autism,

and it is possible for bias to creep in since there may be favouritism towards the use of ABA practices in educating students with autism. In order to combat this problem, a review of the literature about effective intervention strategies has been provided, and criticisms of ABA have also been reviewed. This should help the researcher in maintaining objectivity during the analysis of data.

4.4.5 Generalisability

Since a case study methodology was used, it is important to consider the issue of generalisability of these findings to the general population of the UAE. The study is only focusing on three private centres in the UAE, and may not be generalisable to the entire population of students with ASDs being educated in the UAE. However, as Bell (1999) points out, “the study may be relatable in a way that will enable members of similar groups to recognise problems and, possibly, to see ways of solving similar problems in their own group”. Educators of children with ASDs may still benefit from the approaches highlighted from this study.

5. Literature Review

5.1 Autism Spectrum Disorders

Autism was given its first clinical description by Kanner in 1943 as an inborn disorder of “affective contact”. Delays in diagnosis were common at that time and a diagnosis was often not made until 4 years old (Siegel et. al., 1988). With public awareness increasing in the last 20 years, it has become more common for children to be diagnosed earlier and the importance of early diagnosis have increased (National Research Council, 2001). By 1980, autism was officially recognised and included in a new class of disorder – Pervasive Developmental Disorder (PDD) (Volkmar et. al., 2004). The Diagnostic Criteria for Pervasive Developmental Disorders uses the following criteria to diagnose Autistic Disorder (Autism Network International, 2002a):

- 1) Qualitative impairments in social interaction
- 2) Qualitative impairments in communication
- 3) Restricted repetitive and stereotyped patterns of behaviour, interests and activities.

For a detailed version of the diagnostic criteria for autistic disorder, see Appendix 2. In order for a child to be diagnosed with autistic disorder, the onset must be prior to age 3 years. PDD is an umbrella term used to describe individuals with affiliated disorders, such as Rett’s Disorder, Asperger’s Disorder, PDD-Not Otherwise Specified, and Childhood Disintegrative Disorder. For the purpose of the study, individuals with Asperger’s syndrome will also be described. According to the diagnostic criteria for Asperger’s Disorder, individuals should display (Autism Network International, 2002b):

- 1) Qualitative impairment in social interaction
- 2) Restricted repetitive and stereotyped patterns of behaviour, interests and activities

The disturbance causes clinically significant impairment in social, occupational or other important areas of functioning. There must also be no clinically significant delay in language, cognitive development, or in the development of age-appropriate self-help skills or adaptive behaviour. For a detailed version of the diagnostic criteria for Asperger's disorder, see Appendix 3.

Autism may be noticed in babies as impaired attachment to significant others. However, it is a delay or lack of speech development in early infancy, and a lack of normal interest in others that are more likely to lead to a diagnosis (Rapin, 1997). Many individuals with autism display marked impairments in communication, daily living skills, and social skills (Volkmar et. al., 2005). The most powerful indicator of diagnosis of autism is difficulty with social skills (Siegel et. al., 1989), and eye contact and social engagement is limited in these individuals (Dawson et. al., 2000). Another factor compounding the social difficulties faced by individuals with autism is their poor imitation skills (Hobson & Lee, 1999), which in turn affects their ability to learn social skills through imitation. Individuals with autism also have difficulties with the expression and production of affective responses, showing an atypical use of affective displays (Snow et. al., 1987). Children with autism are less likely to pay attention to a distressed adult (Sigman et. al., 1992), and have difficulties recognising and displaying emotions (Loveland et. al., 1994). Temper tantrums and aggression are also commonly displayed in individuals with autism, and are thought to occur as a result of poor ability to communicate with others (Lovaas, 2003). Individuals with autism have been found to have a poor theory of mind, which is the ability to attribute mental states to others, and to understand that other people have different mental states from our own (Baron-Cohen, 1993). This will impact their ability to empathise with others, engage in pretend play, and also socialise with others, since they cannot understand that other people have emotions, beliefs, perceptions, and realities that are different from their own.

For a majority of individuals with autism, a frequent or constant engagement in self-stimulating behaviours, such as hand flapping, and verbal stereotypical behaviours, such as repeating phrases over and over, can also prevent them from being socially accepted and positively interacting with their peers (Robertson et. al., 2003).

Approximately 75% of individuals with autism have intellectual disability, and their cognitive ability is closely associated with their level of autism (Waterhouse et. al., 1996). Rates of autism in boys are three to four times higher than in girls (Fombonne, 1999).

Sartawi (1999) assessed 35 children diagnosed with autism in the UAE, and revealed the major traits of individuals with autism in the UAE are hyperactivity, social withdrawal, stereotyping, distraction and communication problems. This indicates that children with autism in the UAE suffer from the same symptoms as children with autism worldwide; distraction and impaired communication skills, which will in turn affect students' level of attention, concentration and their ability to communicate positively and effectively with others (Klin, 1991).

5.2 Prevalence Rates

The prevalence rate of autism has increased over the last few decades, and autism was once thought to be very rare, with early prevalence rates of 4 in 10,000 reported (Dempsey & Foreman, 2001). The explicit diagnostic criteria has resulted in a greater number of individuals being identified with autism or PDD, and the prevalence rates are thought to be up to 60 per 10,000 (Kadesjo et. al., 1999; Fombonne, 2003), although there are variations in the prevalence reported among various studies, which could be due to the differences in the diagnostic criteria used (Wing & Potter, 2002).

Although there are no official statistics on the prevalence rates of PDD in the UAE, Eapen et. al. (2007) have screened a random sample of 694 three-year-old UAE national children using the Autism Screening Questionnaire and clinical interviews by independent paediatricians and child psychiatrists in order to ascertain the prevalence rate of PDD in the UAE. They found that 2 children were found to have PDD as per the DSM-IV criteria, and concluded the prevalence rate of PDD to be 29 per 10,000 in the UAE. This study is important because it shows us that autism is as prevalent in the UAE as in other parts of the world, and that there is a need to therefore accommodate for the treatment and education of these individuals. The study was done on a small scale, with only 694 children being screened for autism, and calls for further research to be carried out to more accurately determine the prevalence rates of PDD in this part

of the world. This study also highlights the need for better screening procedures being implemented in the UAE, since the children identified as having PDD from the sample were not previously diagnosed and slipped through the available paediatric screening. It is also important to note that there was no difference found in the occurrence of PDD according to geographical location or social class, showing that PDD is not predicted by economic background.

5.3 Autism Interventions

Jordan and Jones (1999) argue that it is not possible to say that one form of intervention is the best for all students with ASDs. The characteristics of the child have to be taken into account, as well as the provisions of the school and parental wishes should help determine the best setting for each individual child with autism. With increasing emphasis on inclusion in current educational debate, it is important to consider the benefits that a segregated setting may provide for a child with an ASD. A number of educational interventions for the treatment of individuals with autism have been introduced in the last 50 years, which many argue should be the foundation of treating children with autism instead of, or in addition to, mainstream education. In this section we will look at some of the prevailing interventions for children with ASDs, and will refer to the literature to assess the effectiveness of these practices. This is relevant to this study because we will then assess to what extent these interventions are accessible in the UAE, and we can have a better understanding of what constitutes an 'effective intervention strategy'.

At present, there is no cure for autism, and the word treatment should be used carefully to reflect an intervention that is used to help individuals with autism adjust better to their environment (Francis, 2005). Parents should not be misled to believe that any intervention could cure their child with autism, because there is no undisputed evidence verifying this (Francis, 2005). Siegel (1996) argues that children with autism have specific problems that require specific remedies, and that they would benefit from specialised, one-on-one interventions, particularly for the first few years of life, when social imitation is poor and they may have difficulties in learning from a classroom environment. Furthermore, children with autism function best in a highly structured environment (Siegel, 1996), which can be best achieved in

segregated settings, although eventually children with autism should be exposed to more unstructured environments, where they will need to learn to be flexible, such as in an inclusive setting (Siegel, 1996).

Applied Behaviour Analysis (ABA) is one of the leading interventions for individuals with autism today. It is based on the principles of behavioural learning, which were first applied to the education of students with autism by O. Ivar Lovaas, 30 years ago at the University of California, Los Angeles, USA (Francis, 2005). The ABA approach focuses on the use of rewards or reinforcement to encourage desired behaviours, and the elimination of undesirable or unwanted behaviours by removing positive consequences for these behaviours, using strategies such as ‘time out’, extinction, or punishment. After a detailed initial assessment, children follow a comprehensive curriculum, tailored to their individual needs, and new skills are taught in a graduated, step-by-step manner, working one-on-one with a behaviour therapist. Behavioural gains are believed to be greater if children start treatment before four years of age (Eikeseth et. al., 2007).

ABA gained popularity in the treatment of autism after a seminal study published by Lovaas in 1987. In the study 19 children received at least 40 hours per week of ABA, relative to 19 others who received less than 10 hours, and 21 others who received no specialised ABA intervention. The results showed dramatic gains for those children who received 40 hours or more of therapy a week. After two years on the program, almost half of the 19 children achieved normal IQ scores, and were functioning in regular education settings; only one child from the other two groups achieved this level of functioning (Lovaas, 1987). Lovaas described these children as “recovered” from autism (Herbert & Brandsma, 2002). These results were maintained as the children got older, and they remained in their regular education settings (McEachin et. al., 1993).

This study has been criticised by scholars concerned about the methodological flaws in the study (Herbert & Brandsma, 2002). They argue that the IQ measures may not truly reflect an improvement in functioning, but rather an improvement in compliance to testing. Also school placement could have more to do with parent advocacy and an increase in inclusive policies, rather than an improvement in functioning. Certain

domains of functioning were not assessed, such as social skills, and there are indications that the sample chosen to be in the experimental group were handpicked by Lovaas to be the most promising students. Participants were not randomly assigned to groups.

In spite of these criticisms of the study, ABA has gained in popularity, and is now considered to be “the standard approach” to intervention in autism (Cowley, 2000). Parents have been cautioned not to fall for false hopes and promises claimed by ABA proponents, who state that children with autism can recover, as this would be irresponsible and unsubstantiated (Herbert & Brandsma, 2002). Eikeseth et. al. (2007) have found that ABA is effective, even for children who start ABA after four years of age, with behavioural treatment groups showing larger increases in IQ and functioning, and better social functioning.

The program for the Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) incorporates behavioural principles in treating children with autism, but differs from ABA in some fundamental ways. The program focuses on drawing out the strengths of individuals with autism, instead of focusing on a recovery. It provides highly structured environments, where daily schedules are fixed and represented as visual schedules for children to have a better understanding. Visual cues are provided to assist children to complete individual and group activities. Teachers establish individual workstations for children to work on various activities, such as practicing visual-motor tasks, like sorting objects by colour. Visual cues are often provided in order to compensate for auditory processing deficits common in children with autism.

Two studies have found project TEACCH to be effective in the treatment of children with autism. Schopler, Mesibov and Baker (1982) collected data using questionnaires administered to parents whose children were currently taking part in a TEACCH program. They found that the majority of the parents reported that the program was effective in helping their children with autism, but this study had several methodological flaws, like a non-random selection, and no control group. Panerai, Ferrante and Caputo (1997) reported significant improvements over a twelve-month period for children and adolescents with autism following project TEACCH. The

participants showed improvements in adaptive behaviour, perception, motor and cognitive performances, as well as independence skills. Again, the study did not use a control group. Further research is needed to evaluate the effectiveness of TEACCH, but the results from the above studies show promising results. Herbert & Brandsma (2002) state that there have been no controlled studies comparing an ABA program with other programs, such as project TEACCH, and unless convincing data from methodologically sound studies become available, it is not possible to state that one program is more effective than another.

The vast majority of persons with autism are visual thinkers and learners (Francis, 2005), therefore visual support can help them to make sense of the process of communication, which is often impaired with individuals with autism. Visual support can be used to encourage persons with autism to effectively communicate through the use of sign language, picture symbols and written words. The Picture Exchange Communication System (PECS), developed by Andrew Bondy and Lori Frost, is based on behavioural principles of learning, and teaches children with communication difficulties to use pictures of desired objects as an exchange for those objects. It allows individuals to be able to communicate even if they are not able to speak, and is used frequently for pre-verbal and nonverbal children with autism (Francis, 2005).

A number of sensory programs have also been recommended to be effective in the treatment of individuals with autism. The prevalence of sensory-processing deficits in autism is relatively high (Francis, 2005), so the use of Sensory Integration Training (SIT) would benefit children with autism who are over or under responsive to environmental stimuli. SIT aims to provide the child with sensory information, which helps organise the central nervous system. It can also assist the child to inhibit and/or modulate sensory information, and assist the child in providing a more organised response to sensory stimuli (Francis, 2005). It involves activities such as swinging, pressure-touch, and exposure to lights and music, although the efficacy of such treatments have been largely unresearched (Dawson & Watling, 2000). Music therapy can also be used with children with autism, and music therapy uses music to achieve non-musical goals (Daveson & Edwards, 1998), such as improving physiological and psychological functioning through relaxing music of various frequencies. Very few studies have examined the effectiveness of music therapy for individuals with autism.

It is difficult to appropriately evaluate the different treatments and education approaches for children with autism due to methodological flaws in studies done. There is also a variability in the behavioural characteristics of children diagnosed with ASDs, and a difficulty in measuring small but important changes in behaviour. Even if a particular treatment is found to be effective for some children with autism, it may not be effective for all children because of the heterogeneity of symptoms (Dempsey & Foreman, 2001). The Autism Society of America (1998; cited in Dempsey & Foreman, 2001) suggests that the most effective current treatments for autism include early intervention, low student-to-teacher ratio, individualised instruction and family involvement. These are the factors that will be considered when analysing the educational services available for children with ASDs in the UAE, to determine whether the services are in concordance with international standards of treatment.

5.4 Special Education in the UAE

The United Arab Emirates comprises of seven emirates. Islam is the major religion of the country, and Islamic teachings emphasise the right to equality, the right to social welfare and the basic necessities of life, the right to dignity, and the right of education (Bradshaw et. al., 2004), which is warranted by the fact that the UAE government has invested much money into developing the public education system for its citizens.

The education system in the UAE, like the economy of the UAE, is relatively new. Primary education is compulsory in the UAE. With 80% of the population being expatriates from all over the world, many private schools were developed to meet the cultural needs of these different nationalities and backgrounds, and now private and public schools exist in equal numbers in the UAE (Gaad, 2001). Expatriates are not able to enrol in the public school system, and the private school system has a variety of curricula available, from the British and Indian curriculum, to the American and Australian curriculum being available for students.

For the 20% of the population who are citizens of the UAE, also referred to as UAE Nationals or Emiratis, health care and education up to the tertiary level are provided

free of charge from the government. Expatriates have to pay the fees determined by each school, and tuition fees for private schools can vary greatly.

Evidence suggests that the prevalence of disabilities in the UAE is 8-10% of the population (Bradshaw et. al., 2004), which is similar to other parts of the world. The Ministry for Education and Youth is drafting guidelines for private schools to provide the requirements for accepting and supporting students with special needs, as well as educating schools about effective intervention strategies for including students with special needs (Bradshaw et. al., 2004). Many private schools in the UAE will not accept students with disabilities because of a lack of funding and expertise to appropriately educate these students, and public schools will only provide extra support for students with learning difficulties up to Grade four (Bradshaw et. al., 2004). There are a number of special needs centres sponsored by the government to provide facilities and services for people with disabilities in the UAE, and these centres are only open to UAE Nationals (Gaad, 2001). There are also a number of private centres, which are open to all nationalities.

5.5 Inclusion in the UAE

The inclusion of students with special educational needs (SEN) has been a growing trend worldwide, including the UAE (Alghazo & Gaad, 2004). It has been recognised that it is the right of all students with disabilities to be educated in mainstream schools in the UAE. In the year 2006, a new Federal Law was introduced, aiming to protect the rights of individuals with disabilities: “This law aims at protecting the rights of the person with special needs and providing him with all needed services appropriate to his capacities and abilities. His special needs shall not be a reason to refrain the person with special needs from obtaining the said rights and services, especially those related to the special care, social, economical, health, educational, professional, cultural and entertaining services” (The Federal Law no. 29/2006: Article 2). There are no official statistics regarding the number of students with ASDs currently being mainstreamed in the UAE. Although the legal framework has been put in place to allow students with ASDs to be included in mainstream schools, there are no laws mandating schools to provide appropriate education for students with SEN. If schools

feel they are not able to provide for a student with SENs, they have the right to refuse enrolment (Bradshaw et. al., 2004).

Mittler (1995) defines inclusion as: “Education in an ordinary class, in a neighbourhood school which a child would normally attend, with support as needed by the individual”. Here, inclusion is viewed as children with disabilities being educated in a mainstream classroom with extra support given if required. Gaad (2001) has reported that a senior official at the department of Special Education, Ministry of Education, Abu Dhabi (December, 1999) stated that: “Inclusion here means including children with various special educational needs in regular school settings. There are, however, limitations on such special needs, such as children with obvious mental disabilities.” Inclusion is defined in the same terms, but there seems to be a limitation placed on the severity of the disability that schools can cater for.

Arif and Gaad (2008) have studied the special needs education system in the UAE, and have found that within mainstream public schools there are no special curricula being used for students with special educational needs. The curriculum being used for students with special needs is called the ‘para-curriculum’, which is the omission of difficult material from the general curriculum, to suit the needs of students with special needs. They also found that teachers do not have the appropriate training to cater for students with special needs, and that there was a lack of training or funding for teachers. Staff lacked confidence to assess these students, and showed a reluctance to adopt new intervention strategies. The inclusion of students with disabilities is also present in private schools in the UAE, although little research has been done to study the effectiveness of these settings.

The attitudes of individuals in a society are an important factor in determining the success of inclusive practices in that society. Crabtree (2007) has studied the social stigma surrounding disabilities in the UAE. Fifteen mothers of children with developmental disabilities were interviewed regarding their experiences with raising their children in the UAE, and it was found that there are significant social stigma facing children and families with disabilities. Mothers stated that they felt victimised and blacklisted from medical professionals as unable to give birth to healthy children. It is noted that for non-Emirati women, the challenges of raising a child with a

disability is even harder because they are not eligible for the same benefits as Emirati families, and therefore do not get the same support from the government in terms of gaining access to services for their child. The Islamic religion plays a big part of their attitude toward acceptance towards children with disabilities, and 'for the most part religious interpretations by parents were positive forces that worked towards acceptance of disability in a child' (Crabtree, 2007). Sometimes also the birth of a child with a disability was interpreted as a curse or punishment from Allah, showing the impact of religion on the attitudes towards disability in the UAE.

Alghazo & Gaad (2004) have studied the attitudes of public school teachers in the UAE towards the inclusion of students with disabilities. They found that teachers generally had a negative attitude towards the inclusion of students with disabilities into mainstream classrooms, and that teachers with more years of experience were generally more in favour of including students with disabilities. This finding is important because it shows that when teachers have more experience they are more confident in teaching students with disabilities, highlighting the importance of adequate training being provided for mainstream teachers in the area of disabilities. It was also found that teachers in the UAE were less accepting of students with more severe disabilities, such as severe behavioural difficulties, which students with autism would more likely display, and this may have been due to the perception that accommodating for these students would involve more planning and preparation of teaching aids and intervention strategies. This negative attitude may also be due to inadequate support being provided to teachers who have students with severe disabilities in their classrooms, and if adequate support were provided then perhaps teachers would have a more positive attitude towards these students.

There is a lack of research available regarding specifically the inclusion of children with ASDs in the UAE. Despite the trend towards inclusion worldwide, there are few models and procedures to facilitate the successful inclusion of students with autism; therefore educators are in charge of designing programs in the absence of clear guidelines and procedures (Simpson et. al., 2003). Children with autism may pose particular challenges to mainstream teachers, because of the specific nature of the disability. Robertson, Chamberlain & Kasari (2003) have studied the relationship between general education teachers and grade 3 students with autism in a sample of

24 students and teachers in America. They found that teachers reported generally positive relationships with included students with autism, but a higher rating of behavioural problems did lessen the quality of the teacher-student relationship. They also found that the relationships children form with their teachers are associated with their peer relationships and their level of social inclusion. There existed no significant difference between the included students with autism and the rest of their classmates on their overall levels of social inclusion as perceived by their peers. This suggests that these students are being successfully included into their general education classrooms.

The principal's attitude towards including students with autism is another important factor in promoting successful inclusive practices. Gaining an understanding of the principal's perspective is necessary in providing training and support to teachers and students. Praisner (2003) has found that preparation programs for principals provided them with only minimal training and education into how to implement inclusion in schools. The support and leadership of principals are documented as integral components for successful inclusion (Simpson, 1995). They "convey messages of acceptance or disapproval through their own actions or symbolic gestures which represent powerful influence on school-wide acceptance of differences" (Horrocks et. al., 2008). The principal must coordinate resources for curriculum in a way that will support inclusion, and provide support to students and teachers to continually reinforce an inclusive atmosphere. Horrocks et. al. (2008) have found that principals with more professional experience with children with disabilities held a more positive attitude towards inclusion and also made higher placement recommendations for students with autism.

This study investigated the attitudes and experiences of teachers in the UAE towards the inclusion of children with ASDs into mainstream private schools, to get a better understanding of whether teachers in private schools are willing, and in favour, of mainstreaming children with autism, as well as the ways in which students with autism are being prepared for entry into inclusive settings, and the mainstream school's ability to accommodate for these students.

6. Results

The following section will present the data collected. Two centres and one school participated in this study, and the data collected was largely qualitative; there are observation notes, interviews of staff members, and documents provided by the schools or centres. The interviews and observations collected in each setting are as follows:

Setting One:

- Interviews with School Director and Class Teacher
- Observation notes of one class over the course of two days

Setting Two:

- Interview with School Director
- Observation notes of one ABA session

Setting Three:

- Two Interviews with Learning Support Centre (LSC) coordinator
- Interviews with two Class Teachers
- Observation notes of two classes over the course of two days

The data will be organised thematically, where information about each school will be organised into the following sections: General Information, Intervention Strategy or Curriculum, Professional Development, Tuition Fees, Attitudes and Experiences towards Segregation and Inclusion.

6.1 General Information

6.1.1 Setting 1

Setting one is a centre in Dubai catering solely for students diagnosed with ASDs. It was founded in November 2001, and is “targeted towards encouraging a better understanding of Autism and providing specialist services for people with Autism and those who care for them” (Appendix 4). For an organisation chart of the centre, see Appendix 5. The Director General is in charge of managing the various sections of the centre’s organisation, such as the administrative staff. This centre provides auxiliary

services for their students, which are; speech and language therapy, occupational therapy, music therapy, art therapy, movement and play therapy, and computer therapy, as well as diagnostic services provided by a clinical and educational psychologist. These services are incorporated into the daily schedule of the child.

There are 43 students attending the centre, with 50 staff from 17 different nationalities teaching at the centre. Students aged 2 years to 18 years are catered for at this centre. Students are divided into 11 classes, and students are placed in classes depending on three criteria: age; the severity of their ASD; and, their language level (Appendix 6, lines 8-9). Students are paired with similar age peers and ability levels as much as possible. Students must have a diagnosis of autism in order to attend the centre (Appendix 6, line 13), and they give priority to young children, depending on the availability of places at that time (Appendix 6, lines 13-14). Each class has on average 4 students, with one class teacher and two teaching assistants, providing an almost one-to-one ratio of teacher and student.

See Appendix 7 for an example of a class timetable at this centre. Students start classes at 8:00 am, and finish at 1:30 pm. The day is divided into half hour sessions, with 9 sessions of various subjects and activities being taught in a day. Each day students are given anywhere from one to two hours of one-on-one time during individuals sessions, and the rest of the sessions take place in pairs or with the rest of the class.

6.1.2 Setting 2

Setting 2 is a private centre in Dubai, catering solely for children with ASDs. Their mission is to “provide state of the field early intervention services based on the most effective research-based educational programs for children and families with special needs” (Appendix 13). They “strive to help each child by developing an individualised behavioural program based on his or her strengths and weaknesses” (Appendix 13). They have been open for one year (Appendix 14, line 43), and cater for around 40 children (Appendix 14, line 47). The students at the centre range from two years old to fifteen years old (Appendix 14, line 58). The centre provides one-on-one services for children diagnosed with ASDs, and is not a full-time centre. Students

come in for as many hours as is recommended by the supervisor, which can range from ten to fifty hours per week (Appendix 14, lines 51-54). The centre has two full-time qualified speech therapists and occupational therapists, and one of the goals for the centre is to provide auxiliary services to students with ASDs (Appendix 14, lines 98-103).

6.1.3 Setting 3

This educational setting is a private international school in Sharjah, following the Australian curriculum. The school has approximately 600 students, catering for nursery, primary and secondary ages. The school's purpose, as stated on their website, is "To ensure a quality international/intercultural education which prepares students for their futures in a global economy" (Appendix 22). One of their key values is "Diversity and Inclusiveness – encouraging all members of our community to participate actively in our development" (Appendix 22), showing the school has an inclusive policy. Each class has 25 students on average, and there is one class teacher and one teaching assistant per class. The school also has a Learning Support Centre (LSC), which was established one year ago to support students with learning difficulties. According to the LSC coordinator, there are officially four students with ASDs at the school (Appendix 24, lines 9-10). The policy of the school in accepting students with ASDs and other learning disabilities is that they must be high functioning. Students go through a pre-enrolment process, where they are assessed to see if they have any learning difficulties, and if they have high learning needs the school cannot offer them a place because they don't have the financial and staff resources to cater for them (Appendix 24, lines 23-28). The LSC coordinator states that "We don't not accept kids with ASD but we do require that they are high-functioning kids... By that I mean that they function in a mainstream class and they adapt to our school and class rules with intervention and learning-predictable behaviours" (Appendix 24, lines 15-19).

The LSC is responsible for doing assessments of each student at the school to identify if they have special learning needs (Appendix 25, lines 6-7). There are currently five staff member working in this department. The LSC coordinator states that it is important to assess all the students in the school because so many students with

learning difficulties can display good behaviour and therefore do not get identified by teachers (Appendix 25, lines 73-74). Teachers are given a referral form if they suspect a student to have a special educational need (Appendix 26), where teachers can indicate their areas of concern and can rate how the student performs in various domains in relation to the rest of the class. Teachers are also asked to fill in a Student Observational Checklist (Appendix 27) to specify what the problem areas are for the student. The LSC coordinator is then responsible for meeting with the parents to make them aware of the specific learning needs of their child, and if the parents agree to the child receiving learning support services, then the LSC coordinator will design pull-out sessions for the student. The LSC coordinator is also responsible for educating the class teacher about the learning difficulties any of her students may have and effective intervention strategies, so the teacher is informed about how to manage this child (Appendix 24, lines 382-383).

6.2 Tuition Fees

6.2.1 Setting 1

The tuition fees for this specialised centre for children with autism is 20,000 Dirhams in a year (Appendix 6, line 18), and this fee includes services provided by the speech therapist, occupational therapist and music therapist.

6.2.2 Setting 2

The centre charges for the services provided for each child per hour, depending on what services they have received. For ABA therapy, a junior therapist rate is 125 Dirhams per hour, a lead therapist rate is 150 Dirhams per hour, and a senior therapist rate is 200 Dirhams per hour. A case manager will charge 300 Dirhams per hour. For speech therapy and occupational therapy, the rate is 360 Dirhams per hour. (Appendix 14, lines 129-132).

6.2.3 Setting 3

The annual tuition fees for this school range from 24,996 Dirhams for nursery, to 45,000 Dirhams for Grade 10 (see Appendix 23 for a full breakdown of the fee structure). Students who require support from the LSC pay extra 10,000 Dirhams for one year (Appendix 24, line 403).

6.3 Intervention Strategy or Curriculum

6.3.1 Setting 1

This setting offers an individualised education for all the students attending the centre, and each child has an Individualised Education Plan (IEP) from which a daily lesson plan is made (Appendix 6, lines 22-23). Each therapist for the child carries out their own assessment of the child, and then they collaborate at the beginning of the year to formulate the IEP (Appendix 6, lines 136-138). The IEP contains the goals for that student for the whole year, and provides the goals in a sequence, and cuts it down into smaller objectives (Appendix 6, lines 143-144). The centre follows the ABLES curriculum to sequence the child's objectives, and then they are broken down step-by-step. ABLES provides them with the development of the child in different domains, and it is a whole sequence of objectives, where you can assess the gross motor skills, the fine motor skills and the cognitive and social skills (Appendix 6, lines 128-132). For an example of a part of an IEP of a student at the centre, see Appendix 8. This shows us the annual goals of the child divided into different domains, such as pre-requisite skills, cognitive skills, such as matching and sorting, and imitation skills. The short-term objectives for each annual goal are also presented, and given in detail.

The class teacher concurs with the information provided by the director. She states that: "We use some of the ABLES objectives for the students. ABLES has more functional skills so we have to evaluate them on a daily basis. We have the Annual IEPs, and there are various domains in the IEP, and under each domain we have the skill tracking sheets, so we mark the date it was introduced and mastered. So we take skills out from this [the IEP] and make a fortnightly plan" (Appendix 9, lines 99, 106-108). For an example of a skill-tracking sheet, see Appendix 10. This document

shows us the target for Imitation for this particular student, where the student has to, for example, be able to stretch his arms and entwine his fingers. In order to ascertain if the skill has been mastered, a probe data sheet is filled out, as seen in Appendix 11. This sheet is filled in to take data on whether the student is able to meet the criteria set. For example, in this case one skill the child has mastered is to respond to “Tell me something about a bicycle”, and the child has mastered this because he got the answer correct on three consecutive trials.

The centre follows a holistic approach to educating students with ASDs. The director states that “we use a holistic approach, we don’t use only one approach. It is based on the methods used universally” (Appendix 6, lines 64-68). This was evident during the observations made. The classroom was divided into four different workstations, and students took part in certain activities designated for each workstation (Appendix 12, lines 13-15), which is part of the TEACCH methodology. Visual schedules for the lessons for that day for each individual student were posted on the board (Appendix 12, lines 15-16). There was evidence of the principles of ABA used during individual work time, when students were consistently rewarded for each correct response (Appendix 12, lines 25-31), and data was taken relating to the responses of the students, in order to accurately decide if the criteria has been achieved. ABA was also evident in the ways in which bigger goals were divided into smaller tasks, in other words, task analysis. The principles of ABA are also used to manage the challenging behaviours of the students, where students are redirected back to their work, and ignored when challenging behaviours may reflect a call for attention (Appendix 12, lines 89-93).

Students were given sensory integration as well, in the form of music therapy (Appendix 12, lines 70-72) and art therapy, where students were making their own play dough (Appendix 12, lines 158-162). Students were also observed during an OT session, where they were practicing kicking a ball to each other (Appendix 12, lines 166-171).

The class teacher also uses social stories to teach students to communicate information about what they did at school and at home, by making picture books of students carrying out activities (Appendix 9, lines 75-78). Parents are encouraged to

read these books with their children at home, and these books are also used to teach social behaviours, such as following class rules (Appendix 9, lines 91-97) and following rules at home. Students are taught to communicate with each other appropriately during class time, which is done by giving students textual prompts of appropriate phrases they can use, and they practice these on each other during class time (Appendix 9, lines 121,127). Students are encouraged to make eye contact and communicate with each other with prompts given by the teacher (Appendix 12, 105-111). Students showed a lack of eye contact with each other during this session, and were looking mainly at the teacher for cues (Appendix 12, lines 108-109). Throughout the session a student remains distracted and the teacher redirects him back to his work (Appendix 12, lines 112-113).

During playtime, students were observed to be playing on their own, and no interaction was witnessed between students. Some students were also engaging in stereotypical behaviours, and the teachers would redirect them to an activity if they saw this happening (Appendix 12, lines 97-102).

6.3.2 Setting 2

This centre follows mainly an ABA approach to educating students with autism. The director says “the main philosophy is to give each child the opportunity at the school to reach their fullest potential” (Appendix 14, lines 18-19). “Behaviourally we follow the CARD curriculum, which ties the behavioural component with the educational component. So we don’t just teach, teach, teach, we have to have a behavioural intervention plan to address the behaviours, because a child will not learn if you haven’t addressed the behavioural issues” (Appendix 14, lines 35-39). There is a large emphasis placed on addressing the behaviours of students with autism in order for them to be effectively educated.

The Centre for Autism and Related Disorders (CARD) is a centre in America founded by Dr. Doreen Granpeesheh, who worked with Dr. Ivar Lovaas on the first major autism treatment study in 1987. The centre follows a curriculum based on ABA, and the main components of the curriculum are shown in Appendix 13. Students are first taught the foundation skills of language, play, self-help, and motor skills. They are

then taught further skills relating to executive functions, theory of mind, and social skills. The ultimate aim is for students to be taught school skills, so they can effectively be mainstreamed into schools, but students must first be taught the pre-requisite skills before this can be achieved.

When children are first referred to the centre, they go through an initial workshop where a CARD supervisor designs and implements an ABA program tailored individually to that child. As their program progresses, evaluation and program modifications are done regularly based on the child's needs (Centre Brochure, Appendix 15). An example of a student's program can be seen in Appendix 16. This is a program designed for a two-year-old child at the centre, and includes specific skills which they are teaching the child, such as identifying actions. Therapists take data for each trial presented to the student (see Appendix 17 for an example of a data sheet). This data is then graphed onto a data analysis graph (Appendix 18), so the child's progress can be seen. For most programs, the child must get 80% correct over two consecutive sessions and with two different therapists in order for that program to be considered mastered (Appendix 14, lines 187-189). This data collection and graphing procedure was witnessed during the observation at the centre of a therapist working with a student (Appendix 19, lines 19-20). During the observation, data was also taken for various behaviour and verbal programs (Appendix 19, line 30).

Teaching social skills is one of the major components of the CARD curriculum, and it is incorporated into each child's program, depending on their level. Students are also given opportunities to interact with typically developing peers so they can practice the social skills they have learned in a one-on-one situation. "Once a child gets to that level they incorporate it into the program. They call it play-date or mock circle, where they have to go on an outing with a therapist. We create situations all the time, like birthday parties or a sibling play-date... It all depends on what level the child is at, and what they need" (Appendix 14, lines 176-181).

6.3.3 Setting 3

This private mainstream international school follows the Queensland curriculum from the nursery to Grade 12 stage, preparing students for tertiary education. The UAE

Ministry of Education provides them with Curriculum Guidance in studies of Arabic, Social Studies, and Islamic Education. The LSC coordinator states that, “All student sit basically the same assessments within a particular class. The class teacher makes whatever adjustments are considered necessary based on their knowledge of the students” (Appendix 24, lines 408-410). Literacy and math classes are streamed based on ability levels, so that students of similar ability can work together in a group (Appendix 24, lines 410-411). The two class teachers interviewed did not report any curriculum modifications. One class teacher says with reference to a Grade 2 student with Asperger’s syndrome in her class: “The accommodations I have made are all to address his behavioural challenges, I haven’t needed to make any accommodations in terms of his academic understanding. He is fine academically and is keeping up with the rest of his class, sometimes even doing better than his peers.” (Appendix 28, lines 155-158). This was witnessed during the classroom observations, where the student worked independently on the same math workbook as the other students (Appendix 29, line 62), and also when he was able to answer a math question the other students were unable to answer (Appendix 29, lines 71-74).

One strategy that was witnessed in this classroom was to write the student’s name on the board when he was engaging in disruptive behaviour (Appendix 29, lines 51-54). The student makes a humming sound, and the teacher tells him to stop and that his name is going on the board for this behaviour. The teacher does not only single him out, but writes other students’ names on the board for bad behaviour as well (Appendix 29, lines 78-79). The teacher says “From day one, I established the rules in the classroom with all the students so there is no confusion... I believe in reducing anxiety for these students, so that there are no surprises. The rules are the same all the time and the consequences are also the same at all times, so they know exactly what to expect as a consequence to their behaviours.” (Appendix 28, lines 8-9 & 19-21).

The student also displayed non-compliant behaviours, where he did not go to sit on the floor with the rest of the class, and stayed at his table instead (Appendix 29, lines 57-58). The teacher does not ask him to come and sit down, but instead lets him stay there, because she believes in being non-confrontational with him as this can “set him off” (Appendix 28, lines 28-35). The teacher also praises the student for appropriate behaviour, which was witnessed when the student was working well (Appendix 29,

line 74). She also says, “I try to build a positive relationship with my students, I try to form a relationship where they feel comfortable and I can be supportive. I always ask [the student] ‘What did you do over the weekend?’ to try to get him to open up... I try to appeal to his intellect. Like I tell him you’re in this school because you’re smart. You can do this because you’re smart.” (Appendix 28, lines 15-17 & 47-50).

Another class teacher interviewed at the school who has a Grade 4 boy suspected of having autism, but was undiagnosed at the time of the interview, says “I cannot modify the curriculum for him at this point because we don’t have a diagnosis” (Appendix 30, lines 25-26). The student was observed during class, and it was evident that he did not engage independently in any of the tasks set by the teacher. He would walk around the classroom and actually leave the classroom unattended on several occasions throughout the day, when other students were working independently on their tasks (Appendix 31, lines 31, 34, 36, 41-44). The teacher says the student can do all the tasks required only if he is given one-on-one assistance from the teacher aide (Appendix 30, lines 20-21). There are two teacher aides present in this class, but neither of them had any interaction with this student. The teacher aides are seen spending time mainly on fixing the display board on the classroom and preparing the materials for an art class (Appendix 31, line 23). The teacher says that she “tries to step back a bit when teaching. We are supposed to be practicing guided learning, not telling them exactly what to do... I believe that if they can do what they can on their own, it’s the best” (Appendix 30, lines 7-8, 21-22), showing a reluctance to assist the student one-on-one. One strategy used by the teacher is peer assistance, by getting another student to help him with his work (Appendix 30, line 19). This was witnessed during the observation of the class, where the teacher asks another student to help him make a hat as part of an activity, when it becomes clear to her that he has not done this while the other students have already completed the activity. The girl takes him to a table and makes the hat for him, instead of assisting him, and he then shows the hat to the teacher, and she praises him for making the hat, even though the girl had made it for him (Appendix 31, lines 69-72).

The LSC takes on the role of advising class teachers of intervention strategies that can be effective in including students with ASDs in their classrooms. One strategy the LSC uses to help students with ASDs to label and express their emotions and moods

is a feelings barometer. Class teachers are asked to show this feelings barometer to assess how students are feeling that day, and then they talk to the student about why they are feeling upset if they indicate this (Appendix 24, lines 129-134). Students with ASDs are also given the opportunity to have a quiet place to go to if they need to, because of sensory over stimulation from being in a sometimes loud and chaotic classroom (Appendix 24, lines 135-139).

Teachers are also encouraged to use social scripts with students with ASDs to help them manage their behaviours and teach them to appropriately interact with their peers. When a student with an ASD is behaving inappropriately, the LSC coordinator says “[The class teacher] have discussions or ask why did this happen, how do you think they felt when you threw sand in their face, that’s what we’re going through with the little one, he throws sand in people’s faces... The teacher said, you’ve been doing this for the last two weeks, now you know what that feels like, how does it feel? Not good. So we have to sort of guide them and give them the social scripts for what is appropriate and what is not, because they can’t learn social behaviours, they’re not reflective” (Appendix 24, lines 142-149). Students are guided to reflect on their behaviours and think about how other students feel. Students are also given pictures of different emotions and are taught to label their feelings using these pictures. A copy of the pictures used can be seen in Appendix 33. The LSC coordinator or the teacher will talk to the students about an incident that happened and will teach them to identify and label their emotions using these pictures (Appendix 24, lines 234-238). These pictures were seen being used during a class discussion on how the characters felt in some stories (Appendix 29, lines 24-25).

Despite these interventions for helping students with ASDs behave socially appropriate with their peers, there was little evidence of appropriate interaction taking place between the two students with ASDs observed at this school and their peers. In the case of the student with Aspergers syndrome, the teacher says “He parallel plays rather than interactive plays... His group skills are not good, normally he doesn’t work well in a group, he usually goes off and does his own thing” (Appendix 28, lines 74, 82-83). During the class observation, the student was seen having difficulty doing pair work to solve a math problem (Appendix 29, lines 54-55). During break times on the playground, he was reprimanded by another teacher for punching and grabbing

other students, and was sent to the library (Appendix 29, lines 37-39). He was also shown playing with other boys during the next break, but the boys were punching and pushing each other onto the floor. There was little conversation going on between the boys, and they spent most of the break wrestling with each other behind some trees in a secluded location (Appendix 29, lines 98-114). This was in contrast to other groups of students who were playing football and engaging in other games. The student in Grade 4 who is suspected of having autism was seen to sit by himself during playtime, with no interaction with his peers. His teacher says “He wants to play with the others, but he doesn’t know how. He can do parallel play, but he doesn’t interact with the others” (Appendix 30, lines 34-35).

6.4 Professional Development and Training

6.4.1 Setting 1

Staff at the centre must have a teaching degree in special education, and many of the staff members also have Masters degrees in special education (Appendix 9, line 64). Professional development and training for the staff at this centre are viewed as an important aspect of providing an effective education for students with ASDs. The director of the centre states that: “This is something we believe in, training and upgrading all of the staff. It is our responsibility... [It’s] for the staff to have a broad idea of what’s being done in other places for kids with autism. So this is one of the visions we have for this place” (Appendix 6, lines 85-86 and lines 88-90). They have ongoing trainings for the staff at the centre, and trainings can be internal, meaning that specialists within the centre, for example, the speech therapist, will hold a training workshop for the other staff, or it can be external, where specialists are invited from outside the centre, and sometimes from overseas, to provide training for the staff (Appendix 6, lines 79-81). A teacher interviewed concurred that the teachers are provided with much training (Appendix 9, lines 63-70).

6.4.2 Setting 2

The staff at this centre hold mainly bachelor’s degrees in psychology or special education, and in order to become a supervisor, a master’s degree is required

(Appendix 14, lines 63-68). Experience in educating students with autism is not required to work here, because the centre provides training for all their staff. When therapists are hired, they start with observation hours of 20-40 hours, depending on their experience. Then they start working with students, but under the supervision of a senior therapist, who gives them feedback and recommendations. They attend a six-hour training lecture on ABA, and then have to sit a two-hour exam in order to be able to do therapy unsupervised. There are constant trainings taking place at the centre, with experienced junior therapists being evaluated and given senior therapist training, in order to go on to the next level. Each level has a different training manual and exam. The centre follows the CARD model of how to train staff, and CARD supervisors from America are constantly visiting the centre to provide training for the staff (Appendix 14, lines 70-89). Part of the vision for the centre is to “ensure an ever increasing level of qualified expert staff” (Appendix 13), showing the centre’s dedication to the professional development of their staff. The centre also organises trainings for teachers in mainstream schools to educate them about how to handle a child with an ASD in their classroom, and to give them a better understanding of the problem areas for a child with an ASD in a mainstream environment (Appendix 14, lines 9-13). Training is also given to therapists on how to be an effective shadow for students at the centre who are also attending mainstream schools (see Appendix 21 for an example of slides taken from the school shadow training recently held at the centre), where staff is briefed on the various intervention strategies and protocols used for school shadows.

6.4.3 Setting 3

The school has arranged a professional development training course for the teachers on how to differentiate the curriculum for students with learning difficulties (Appendix 32, lines 26-28), where an instructor from Australia will come to teach the course. The LSC also provides background information on the disability to class teachers, so they are aware of the child’s learning needs (Appendix 24, lines 382-383), and providing information about effective intervention strategies to those teachers.

6.5 Attitudes and Experiences towards Segregation and Inclusion

6.5.1 Setting 1

The director and a class teacher were interviewed about their attitudes and experiences regarding the segregation and inclusion of students with ASDs in the UAE. The director of the centre expressed mainly negative sentiments towards the inclusion of students with ASDs in the UAE. She states: “The students feel better here than in a mainstream school. One child with autism being in a class with 20 other students is too much and it may not be an effective environment for students with autism. They’re not getting enough individualised attention in a mainstream school, like they do over here. The school is very specific in meeting their needs. We prefer to focus on the specific needs of students with autism.” (Appendix 6, lines 31-36). She goes on to say, “In mainstream schools in the UAE, modifying the curriculum for individual students is not an option, they cannot provide this service for the students” (Appendix 6, lines 23-25). From the centre, there have been four or five students that have been taken out of the centre by the parents and included in a mainstream school. The director says that three of these students have been taken out of the mainstream school after one or two years, and the parents have reapplied to the centre.

The class teacher says, “I would say yes of course we have to get these children into the mainstream. But the mainstream is not ready for a student like ‘K’ and this is the best setting for him right now... they don’t have the qualified staff, and if they’re not ready the students will be lost in a big class... so much has to be done and they have to come a long way.” (Appendix 9, lines 44-50). She also says, “There are mainstream schools but they want a shadow teacher to be with [the students] all the time” (Appendix 9, lines 56-57).

The centre does liaise with mainstream schools to support them in mainstreaming their students. The director says, “We provided a list of recommendations to the school for what should be in the school to be available for him, like therapies, they need a place where they can take him out for one-on-one, because he will not be able to follow all the programs there, especially since he’s used to having one-on-one in this centre here. He has to start slowly and they should have shadow teacher to help him one-on-

one. And they should be able to fade out that shadow so that he can be integrated into that setting.” (Appendix 6, lines 41-50). She also states, “We do approach the schools, we give them resources they need. But they don’t really have good coordination with us. So for those particular schools, we ask them to give us the program and the books, to try to learn it, so we can train the child before he goes into the school. And this is not done, they didn’t do that. We opened up for the parents and the school but the schools are not being cooperative with us.” (Appendix 6, lines 111-116).

6.5.2 Setting 2

The emphasis of the CARD curriculum used in setting 2 is on facilitating mainstreaming into regular education classrooms for individuals with ASDs (Appendix 20). Students are taught pre-requisite skills needed to be successfully integrated into mainstream schools. There are currently two students at the centre attending a mainstream nursery school, and two students attending a mainstream primary school, and all of them are assisted by shadow teachers (Appendix 14, lines 136-137). The director has a child with an ASD who attends a mainstream school part-time, in addition to receiving services from the centre, and she talks about her experience: “So far they’ve been pretty supportive, [but] they’re not really proactive, I wish they would do more, like set up the IEP” (Appendix 14, lines 143-150). The director also talks about the fact that she has to pay full term fees at the mainstream school, even though her child attends the school only part-time, in addition to 4,000 Dirhams per month to the school shadow.

When asked if the attitude of mainstream schools have generally been positive in enrolling students with ASDs in the UAE, she says: “No, I consider myself very lucky, parents get turned down. Right away when they say the word autism, they raise their eyebrows, they don’t know what to tell parents. If you have a child with autism, they don’t say no immediately, but a lot of times the parents get led on to think that it’s going to work out and it doesn’t. At the end of the day, it’s a no.” (Appendix 14, lines 196-212). The director also indicates that there are issues regarding the social stigma of labelling a child with autism in this society: “[The parents] are so busy not wanting to get the label. I tell parents who cares about the label. As long as you get

the services for your kid... All they're trying to do is protect themselves, and they're hurting the child" (Appendix 14, lines 232-238).

When asked about her opinion on children with autism being educated in a segregated versus a mainstream environment, she says: "I think children with autism learn better when it's intensive and when it's one-on-one... The typical school could be where playground, PE, social, you bring the kids together. But at the times of learning, it's good to have an IEP and the child gets taken out to have him learn the way he needs to learn for that specific subject, and then he gets included again. That would be my ideal situation" (Appendix 14, lines 246-261). She says, "I do want full inclusion, however, maybe some subjects you can't fit. We're all working towards that, for a child [with autism] to sit in a classroom and learn from the teacher. And in the event they need that support, there should be that available, that they can get one-on-one and still be included" (Appendix 14, lines 266-269).

6.5.3 Setting 3

This school has an inclusive policy and the principal has experience with special education, and believes in including students with disabilities into the mainstream school (Appendix 24, lines 287-290). This has led to an increase in funding available to the LSC where students can receive additional support in the school. However, it is clear that there are some drawbacks to this inclusive setting. One student who was observed during the observation that was suspected of having autism but remained undiagnosed, will not be offered enrolment for the next academic year. The LSC coordinator says, "The parents [have to] accept that he has this, and they didn't. So in the last meeting we had we just said we are unable to offer ongoing enrolment next year because of these behaviours... we are unable to offer these resources and time and all the other things he needs... he's not really growing, he just walks into a classroom and doesn't know what to do. He's actually regressed by coming here" (Appendix 24, lines 33-66). The class teacher says "The parents have been reluctant to get him diagnosed even though there is clearly a learning disability" (Appendix 30, lines 3-4). This shows that the parents have not accepted their child's disability and also that the school cannot accommodate for a student with a high level of learning needs.

The parents of the other student observed with Aspergers syndrome have also been reluctant to accept their son's disability. The class teacher says, "His mom doesn't acknowledge his ASD, and she doesn't acknowledge to me that he has it... The parents couldn't get him into any other school so I think the attitude is they're just grateful that he's able to attend school here. He was rejected everywhere else... [His father] says there's nothing wrong with his son... The mom has excuses for his behaviour all the time, like he's not feeling well or he's just adjusting to this or that" (Appendix 28, lines 74-75, 118-127). This student was also the victim of bullying on one instance where someone had stolen his clothes after a swimming class, and the other students laughed him at when he was naked in the changing room (Appendix 28, lines 86-95), and the teacher notes that he was very embarrassed by this. The LSC coordinator acknowledges that bullying can take place in the school, and says "The teachers of these students in our school do specific information training sessions with their classes about acceptance of difference... it is also done by explaining why the behaviour of the student with ASD is like it is, and how they can support the student to fit in" (Appendix 24, lines 390-394), showing some effort has been made to combat bullying of students with ASDs in this school.

The class teacher also talks about the stigma attached to having a shadow teacher with the student, "He used to have a shadow teacher before, who used to follow him around in classes, but the parents stopped sending the shadow teacher in with him after a while because it would attract the other students' attention and they started treating him differently. He was aware that the shadow teacher was only there for him and I think it made him uncomfortable." (Appendix 28, lines 108-112).

The LSC coordinator has also commented on the fact that some parents will deny the diagnosis given to their child, and will refuse to show the school reports given to them by psychologists (Appendix 24, lines 104-108), because they don't want the school to know if their child has a disability. One parent of a child with ASD at the school who has accepted their son's diagnosis believes that this is a test from God, and she must face it (Appendix 24, lines 155-156).

The LSC coordinator believes that inclusion is possible for some children with ASDs, but that “one size does not fit all”, meaning that each child is different and they should be treated as individual cases and for some students inclusion is not an option (Appendix 24, lines 362-368). The teachers interviewed at the school commented on the fact that including students can be difficult if teachers are not given the proper support. One teacher commented that “We do not have the time to adapt the curriculum, and to adapt the whole class around him because we have 25 students” (Appendix 30, lines 27-29). Another teacher commented that “I believe in inclusive education, I believe students with disabilities can be educated in mainstream schools. However, I don’t think you can expect students with disabilities in their classes without providing them with appropriate support... I know some teachers might not feel fully supported in this school in terms of managing students with ASDs in their class. I know some students are charged extra for learning support services here at this school, but they are not provided with the appropriate learning support services from what I have seen” (Appendix 28, lines 131-134, 147-152).

7. Discussion

The purpose of this study was to assess the educational services available for students with ASDs in the UAE. Qualitative data was also collected regarding the attitudes and experiences of teachers and staff at school towards the segregation and inclusion of students with ASDs in the UAE, in order to gain an understanding of the current status. This section will discuss the findings of the study, as well as the implications of these findings to children with ASDs, parents of children with ASDs, and educators of students with ASDs. Recommendations will be made to improve the services offered to learners with ASDs in the UAE.

The study showed a range of services available for students with ASDs in the UAE. The Autism Society of America (1998; cited in Dempsey & Foreman, 2001) has identified four factors that are likely to make an intervention program for children with ASDs effective: early intervention, low student to teacher ratio, individualised instruction, and family involvement. Although family involvement was not investigated in the present study, the other three factors were considered.

7.1 Main Findings

7.1.1 Segregated Settings

The first setting is a specialised centre for students with ASDs, and this centre practices a holistic approach to educating students with ASDs. The principles of ABA are used, with students getting anywhere from one to two hours of individual instruction per day. TEACCH and sensory therapies are also used. The staff-to-student ratio is almost one-on-one, showing students are able to get individual attention in the classroom. The centre mixes an individualised approach of setting specific goals for each student, with the concept of group work, where students are encouraged to work in pairs and small groups in order to complete the activities set. Each student is given daily, bi-weekly, and annual goals, which they are considered to have mastered using data collected by staff. Early intervention is one of the services provided by this centre, with students as young as two years attending the early intervention classes. This institution is involved in training staff and providing

opportunities for professional development through ongoing workshops of staff. The centre provided a safe and constructive environment for students with ASDs, where students were provided with a range of auxiliary services to supplement teaching in the classroom, such as the availability of speech and occupational therapists.

The second centre investigated in this study was a private centre for students with ASDs, providing one-on-one ABA intervention services for students from two years of age. The centre follows the CARD curriculum, which is based on ABA and emphasises preparing students with ASDs for mainstream schools. A CARD supervisor carries out an assessment of the child, and an intervention program is designed for that child's individual needs. The supervisor then updates the program regularly, based on the child's progress. The therapists working with that child follow the program set by the supervisor, and the core of this program is rigorous data collection in order to ascertain the child's progress. The centre provides much training for the staff, with specialists from the CARD team in America making frequent visits to train staff at the centre. Therapists are also given training to assist students with ASDs in mainstream school as shadow teachers. This centre also provides access to speech and occupational therapists, who all work within the same premises.

7.1.2 Mainstream Setting

Setting three is a mainstream school practicing inclusive education for students with ASDs. Students with ASDs are supported in the school by the LSC, which also provides support and intervention strategies to teachers. Students with ASDs are enrolled into the school only if they are high functioning, meaning they can follow the curriculum with minimal modifications and can follow class and school rules.

Siegel (1996) comments when discussing the inclusion of students with ASDs in mainstream schools, "certainly there is considerable value in providing more normal role models for learning specific skills and for peer interaction. However, the autistic child needs to be *taught* how to join in these activities. It doesn't just happen to him naturally". The students with ASDs at this school have the advantage of being in a mainstream environment, where they are educated alongside typical peers everyday in the same classroom. This setting provides only minimal individualisation of

curriculum for students with special educational needs; instead they only accept students that can learn within the framework of the curriculum. Students are streamed for ability levels in math and literacy classes, and are required to sit the same assessment as their peers. The question then is are they benefiting socially from this environment? Two students with ASDs were observed during the observations made at the school. One student was suspected of having autism, although he was not diagnosed. This student was not able to cope with the curriculum and did not engage in activities independently like his peers. The LSC coordinator says that this student will not be offered enrolment for the next academic year because he has actually regressed by attending this school, and that he requires a more specialised environment, which the school cannot offer. During the observations the student was seen to sit alone at playtimes and there were no appropriate interactions observed between him and his peers.

The second student observed with ASD was a boy with Aspergers syndrome. This boy was academically thriving in this setting according to the LSC coordinator and his teacher, but showed some challenging behaviours. The student was non-compliant during some parts of his class. The student was seen at play times to be aggressive with his peers, and did not appropriately interact with his peers. The student was also a victim of bullying in one incident.

7.1.3 Inclusion of Students with ASDs in the UAE

Full inclusionists argue that all students with special educational needs should be placed in mainstream settings, and that mainstream schools should be facilitated with effective interventions for students with special needs. They argue that there are academic and social benefits for placing a student with special educational needs in a mainstream environment as opposed to a segregated setting (Daniel & King, 1998). In order for full inclusion to take place, mainstream schools must provide the same benefits to a student with an ASD as a specialist environment. From the findings, it is suggested that mainstream schools in the UAE are not well equipped to manage students with ASDs. The director of setting one says that some students from this centre have gone to mainstream schools and have had negative experiences and have eventually reapplied to the centre. She believes that a mainstream setting cannot

provide the benefits of a segregated setting because the services available at a segregated setting are more specialised towards catering for students with ASDs, and this is what the students need. Mainstream schools have not cooperated with their centre in easing the transition from the centre to a mainstream school, and this lack of cooperation has hindered their efforts to mainstream students with ASDs.

The director of setting two states that even though some of their students do attend mainstream schools part-time, that schools in the UAE are not proactive about setting up an IEP and providing other necessary services for students with ASDs. She believes that the ideal situation for a child with an ASD in the UAE at the moment would be to receive ABA services to teach the pre-requisite skills necessary to attend a mainstream school, and then students with ASDs can attend mainstream settings to enhance their social interaction skills with typical peers, but would still benefit from pull-out sessions for academic learning.

The one mainstream setting investigated for this study admitted to having difficulty in mainstreaming a student with autism who was unable to learn from the classroom environment, and they suggested that a specialist placement would be more beneficial for him. Another student mainstreamed at this centre with Aspergers syndrome was able to cope with the curriculum, but was observed to be having difficulty in appropriate social interactions with his peers. The school has put into place structures to support the students with ASDs at this school, but one teacher at the school suggests that not enough is being done by the LSC to support these students and their teachers. Even though students with ASDs are given social skills training in one form, they are not supported in terms of their social interactions with their peers at playtime. Harrower & Dunlap (2001) argue “for inclusive placements to be successful, educators must have knowledge of and access to empirically validated strategies that will assist them in this process”. The findings will now be further discussed, and recommendations for how to improve the services on offer for learners with ASDs in the UAE.

7.2 Discussion and Recommendations

7.2.1 Teaching Social Skills in a Segregated Setting

Unlike the first setting for students with ASDs, setting two does not provide a classroom environment for their students, where students can interact with each other in the classroom and on the playground. Instead, students are taught one-on-one by a behaviour therapist, and only attend the centre for their therapy sessions. The social benefits of having a classroom environment set up for students only with ASDs are subject to argument. Siegel (1996) states, “It is difficult to foster social interactive skills in an all-autistic class. For example, in a one-to-two language lesson, trying to get two autistic children to ask each other what each had for breakfast can be a real challenge”. This was evident during the observations of a session in setting one, where two students with autism were given textual prompts in order to have a conversation with each other. Both students were having difficulty making eye contact with each other, and were clearly not engaged in the conversation, and instead were just reading off the textual prompts. Lack of social interaction was also evident in setting one during playtime, where students were engaging in independent activities instead of interacting with each other.

In the second setting, students with ASDs are instead given one-on-one mock play dates with typically developing peers, which are structured by the therapist. When they have learned all the pre-requisite skills, students with ASDs have the opportunity to interact with their typically developing peers in a structured setting, with the therapist following specific goals set by the supervisor. This may be a more meaningful way to model appropriate social interaction for a child with autism, rather than having them model appropriate social behaviour on another child with autism, and this is one advantage in the provisions offered by the ABA centre. Segregated settings could improve their services by providing opportunities for children with ASDs to socially interact with typical peers in a structured play setting, in order to facilitate the teaching of social interaction skills.

7.2.2 ABA Services

Both the segregated settings studied placed an emphasis on individualised education for all the students with ASDs attending the centres. The ABA centre had an advantage, however, in providing only one-on-one ABA services by trained professionals. In setting one, although ABA was used for some one-on-one sessions, it was not the main focus of intervention; therefore staff may not be as proficient in carrying out ABA therapy as the staff in the ABA centre. Staff in setting one were trained in following a holistic approach, and students at this centre would have the advantage of having a number of intervention strategies available to them. However, if parents want to follow an ABA approach in educating their child with autism, then setting two would be more beneficial, since this is the main focus of the intervention. It is important to reiterate that autism is a highly heterogeneous disorder, and there is no one treatment that can benefit all children with ASDs. However, Cowley (2000) argues that ABA is now considered the ‘standard approach’ to autism intervention, and if parents are decided on following this method, then the ABA centre would be the most effective.

7.2.3 Preparing Students with ASDs for Inclusion

The ABA centre also has the advantage of focusing intervention strategies on preparing students with ASDs for a mainstream placement. Although setting one does teach students classroom skills, there does not appear to be a focus on mainstreaming students with ASDs, unlike in setting two. It is the decision of the parents whether they would want their child to be mainstreamed, and if they decide it would be beneficial, then the ABA centre would appear to be more effective in providing the skills necessary for placement in a mainstream school. The ABA centre would also provide the services of an ABA-trained school shadow to accompany their child to the mainstream school, and then eventually fade them out once the child is able to function in that environment independently. This shadow would be able to also educate the staff at the school on what intervention strategies would work best for this child, and this is one service that could ease the transition for a child with autism. It is recommended that segregated schools emphasise teaching pre-requisite skills to

learners with ASDs in order for the inclusion of these students to be effective in the future.

7.2.4 Tuition Fees in a Segregated Setting

These services do come at a cost. The tuition fees for setting one are 20,000 Dirhams for one year. In setting two, if a student were to receive approximately the same number of hours of teaching as setting one per month, which is 90 hours, the costs would be on average 13,500 Dirhams per month, and 162,000 Dirhams per year. This fee does not include extra expenses of speech and occupational therapy. If the child is attending a mainstream school, like in the case of the director of this centre, then they would have to pay the school fees, and school shadow fees, which are 4,000 Dirhams per month, in addition to the costs of ABA services. The cost of sending a child to the ABA centre is substantially more expensive than setting one, and parents will have to weigh out the benefits of providing ABA services for their child, with the large financial cost. Tuition fees for the mainstream school for a child in Grade 4 who receives learning support services are approximately 39,500 Dirhams. This is more expensive than sending a child to setting one, but still substantially cheaper than the ABA centre. It is recommended that more affordable ABA services should be provided to students with ASDs in the UAE, since not many families would be able to pay so much for these services.

7.2.5 Using Peer Tutoring to Facilitate Inclusion

One method of helping students with ASDs to interact more appropriately with their peers is through the use of peer tutoring. One teacher at the mainstream school was observed using peer assistance during a lesson where she asked a peer to help her student with autism complete a task. In this situation, the peer completed the task for the student instead of assisting him through it, and the teacher praised the boy with autism for completing the task when he did not do it himself. This is not an effective way of implementing peer tutoring to assist a student. In the case of the second student with Aspergers syndrome, peer tutoring would also be an effective strategy to use to help him learn how to more effectively interact with his peers, because the teacher comments that he used to have a shadow teacher help him in the class, but the

parents decided to stop sending her in because he was being treated differently by his peers.

Harrower & Dunlap (2001) state that “utilising typical peers to support the academic functioning of students with autism has the potential to reduce the need for continuous one-on-one adult attention, thus allowing students with autism to function with increased autonomy and in a manner that more closely matched that of their typical classmates”. Teachers at this school have 25 to 30 other students in their class, and it would be beneficial to encourage students to assist each other in order to facilitate inclusion and make it more manageable for the teachers. Teaching assistants were not observed to interact much with the students, and instead were fixing the display boards and preparing art equipment for the class. It is advisable that one teaching assistant could facilitate peer tutoring initially to ensure that it is being carried out effectively. Teaching assistants could supervise peers helping the students through activities, because these students are at a young age and it is unrealistic to expect any of the classmates to know how to help them without proper guidance. Odom & Strain (1986) found that when typical children initiated contact with their peers with autism, social responses by the students with autism increased, and that when teachers prompted the social interactions, both social responses and initiations increased. These findings suggest that peer tutoring could benefit students with autism in a mainstream setting, and that teacher involvement in setting up peer tutoring can make this strategy more effective.

The student with Aspergers syndrome was observed to spend his playtime taking part in aggressive activities with other boys in his class. Peer tutoring can help him to engage in more constructive activities, like joining in a football game with other students, or making conversation with his peers during playtime. The student would benefit from having an assigned peer to lead him through these activities until he can initiate contact with others on his own. It is necessary to train peers on how to facilitate interaction, and this will require extra time to be spent by teachers and students, but studies suggest it would be a worthwhile strategy in improving the social interaction skills of students with ASDs in mainstream schools.

7.2.6 Using Visual Schedules to Facilitate Inclusion

One way in which this mainstream setting could implement a strategy used in setting one is the use of visual schedules. Adaptations for students with autism involve creating a structured and predictable environment (Clark & Smith, 1999), and the students with ASDs at this school would benefit from having a clear schedule of the day's activities. This visual schedule was used in setting one, where students were referring to their visual schedule to see the day's activities. This will help the students with ASDs at this school by providing them with a visual representation for understanding the subjects and classrooms they have to visit that day, and it would also include the names of teachers they will be seeing.

7.2.7 Teach Pre-requisite Skills for Inclusion

One way in which this mainstream setting could help students to be included in the classroom is by teaching them the pre-requisite skills needed to interact appropriately with their peers. The LSC has made some efforts to teach these skills to the students, by talking to them about appropriate social behaviour and by teaching them to reflect on their own behaviours, but it would be beneficial to arrange pull-out one-on-one sessions, where students are given extra social skills training. At a later stage, these training sessions could include their typical peers in an after school activity, where they could practice these social skills in a structured setting, and where their peers are also given training on how to interact with students with ASDs. This type of intervention may make it more meaningful for students with ASDs to be educated in a mainstream setting.

7.2.8 Labelling

The findings showed a stigma attached to the labelling of children with disabilities in the UAE. In the mainstream school, students who were suspected of having an ASD were not diagnosed by the parents, despite efforts by the school to have them confirm a diagnosis. The LSC coordinator says that parents are reluctant to get their children diagnosed, and sometimes will refuse to show the school any reports made by a psychologist. The director of the ABA centre concurs, saying that parents are more

concerned in this part of the world with avoiding attaching a label to their child than they are with getting the appropriate services for them. Jordan & Jones (1999) argue that a diagnosis is a necessary precursor to providing the support that a child needs. They say that, “A diagnostic label alerts us to the fact that there may be other less obvious reasons for the behaviour, which in turn will lead to more appropriate and helpful reactions”. Getting the correct diagnosis for a child with learning disabilities is the first step towards implementing effective intervention strategies for that child, which can in turn help that child to receive the appropriate services that are required. A stigma clearly exists in this society, but parents have to overlook the stigma and ensure their child receives a diagnosis. The Ministry of Education should raise awareness of the importance of appropriate and early diagnosis of children with ASDs in the UAE.

7.2.9 Staff Training

Arif & Gaad (2008) found that in public mainstream schools in the UAE, there is a lack of training given to teachers catering for students with disabilities in their classes, and that training for teachers is an essential component for providing effective educational provisions for children with disabilities. From the two private specialist centres taking part in the present study, staff training was paramount in both settings. Staff members were given good professional development opportunities, where training was provided for improving the intervention services at both centres. Staff showed satisfaction in the amount of training they had received, and the directors of both centres emphasised the importance of having qualified and proficient staff. In the mainstream setting, some training was provided to the staff on how to modify the curriculum for students with disabilities, although there was little modification that was actually observed. Staff at the LSC also provided training in the form of meetings and discussions with class teachers for how to cater for students with disabilities, showing that some effort was being made to improve the understanding of class teachers. However, from the observations of how students with ASDs are being supported in this school, it was clear that teachers are not implementing enough of these strategies in their classrooms to facilitate inclusion. Perhaps practical training sessions would benefit the teachers more, where they are taught how to apply these

intervention strategies directly to their classroom. Further trainings will be required if this mainstream setting can better provide for learners with ASDs.

7.3 Future Research

Further research is needed into the effectiveness of inclusion in mainstream schools in the UAE for students with ASDs. This study is limited because there was only one mainstream school investigated, and it would be beneficial to look at the ways in which mainstream schools in the UAE could better accommodate for students with ASDs. The findings of this study suggest that an improvement in the services for students with ASDs in a mainstream setting is required, and studies are needed to show the effectiveness of the implementation of the recommended strategies, to ascertain whether teachers are willing to make these changes to their teaching, and to validate that they can be effective.

8. Conclusion

Selecting and providing an appropriate educational setting for a child with an ASD can be a daunting task for parents and teachers, and the individual needs of the child should be taken into consideration. There is no single intervention method that has been undisputedly proven to “cure” autism, so parents must choose which setting they believe is best for their child. As Siegel (1996) points out, “measures of quality such as staff-to-child ratio, the teacher’s training, or the educational diagnoses of the other students are just ‘quick and dirty’ measures of the appropriateness of a class for a particular student”. A deeper understanding of the needs of the child needs to be fostered.

The findings of the present study showed there are appropriate specialist services for students with ASDs in the UAE. One setting provided a suitable educational environment for learners with ASDs, where learners with ASDs could benefit from several intervention strategies provided by trained teachers and teaching assistants. However, this environment was not found to be focusing on preparing students for being included in mainstream education, and they believed that this segregated environment was the best educational setting for children with ASDs. The second setting was a centre providing ABA services for students with ASDs, and staff were trained and well-qualified in providing these intervention services. This setting focused on preparing students with ASDs for a mainstream school, and provided good social skills training opportunities for their students. Tuition fees at this centre were very expensive, and it is hoped that such services will be offered in the future at a more affordable price.

The mainstream setting was found to be providing insufficient services for students with ASDs, with many areas of possible improvement. Although the support of the LSC was available, teachers at the centre appeared to be struggling to provide students with ASDs with a modified and individualised education, and students were also lacking in social interaction skills. The specialist services for children with ASDs in the UAE outshine the mainstream services available, and it appears that the benefits of a child with ASD attending a mainstream school does not outweigh the drawbacks at the present moment. There is much to be learned about more effective ways to

mainstream students with ASDs from the specialist settings, and it is hoped that improvements will be made to the services offered.

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Appendix 1: Preset Interview Topics

Pre-set Interview Topics

Setting One:

Interview with School Director-

Criteria for placing students in classes
Tuition fees
Main philosophies for teaching
Opinions on segregation versus inclusion for students with ASDs in UAE
Previous experiences of mainstreaming students with ASDs in UAE
Approach taken in education
Staff training and professional development
Preparation of students for mainstreaming
Assessment strategies

Interview with Class Teacher-

Effectiveness of teaching strategies used here
Opinions on segregation versus inclusion of students with ASDs in UAE
Mainstreaming programs used here
Professional development of staff
Intervention techniques used here
Social skills training
Academic progress

Setting Two:

Interview with School Director-

Main philosophy for educating students with ASDs
How long centre has been open
How many students?
Age range of students
Qualifications of staff
Staff training and professional development
Auxiliary services available
Tuition fees
How many students mainstreamed?
Experiences regarding mainstreaming students with ASDs in UAE
Social skills training and peer interaction programmes
Tracking academic progress
Opinion on segregation versus inclusion of students with ASDs in UAE
Opinion on other intervention strategies

Setting Three:

Interview with Learning Support Centre Coordinator-

How many students with ASDs in this school?

Are students diagnosed?

Academic performance of included students

Support services for students with ASDs

Support services for teachers

Social skills training

Opinion on segregation versus inclusion of students with ASDs in UAE

Staff training and professional development

Bullying in school of students with ASDs

Tuition fees

Assessment

Modifications of assessment/curriculum

Referral system

Interview with Class Teachers-

Adaptations made for student

Strategies for managing challenging behaviours

Social interaction and group work abilities of student

Views on inclusive education in this school

Level of support received to manage student

Appendix 2: Diagnostic Criteria for Autistic Disorder

Diagnostic Criteria for 299.00 Autistic Disorder

[The following is from *Diagnostic and Statistical Manual of Mental Disorders: DSM IV*]

(I) A total of six (or more) items from (A), (B), and (C), with at least two from (A), and one each from (B) and (C)

(A) qualitative impairment in social interaction, as manifested by at least two of the following:

1. marked impairments in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body posture, and 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 (note: in the description, it gives the following as examples: not actively participating in simple social play or games, preferring solitary activities, or involving others in activities only as tools or "mechanical" aids)

(B) qualitative impairments in communication as manifested by at least one of the following:

1. delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime)
2. in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others
3. stereotyped and repetitive use of language or idiosyncratic language
4. lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level

(C) restricted repetitive and stereotyped patterns of behavior, interests and activities, as manifested by at least two 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 of objects

(II) Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years:

- (A) social interaction
- (B) language as used in social communication
- (C) symbolic or imaginative play

(III) The disturbance is not better accounted for by Rett's Disorder or Childhood Disintegrative Disorder

Appendix 3: Diagnostic Criteria for Asperger's Disorder

Diagnostic Criteria for 299.80 Asperger's Disorder

[The following is from *Diagnostic and Statistical Manual of Mental Disorders: DSM IV*]

(I) Qualitative impairment in social interaction, as manifested by at least two of the following:

- (A) marked impairments in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body posture, and gestures to regulate social interaction
- (B) failure to develop peer relationships appropriate to developmental level
- (C) a lack of spontaneous seeking to share enjoyment, interest or achievements with other people, (e.g., by a lack of showing, bringing, or pointing out objects of interest to other people)
- (D) lack of social or emotional reciprocity

(II) Restricted repetitive & stereotyped patterns of behavior, interests and activities, as manifested by at least one of the following:

- (A) encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
- (B) apparently inflexible adherence to specific, nonfunctional routines or rituals
- (C) stereotyped and repetitive motor mannerisms (e.g. hand or finger flapping or twisting, or complex whole-body movements)
- (D) persistent preoccupation with parts of objects

(III) The disturbance causes clinically significant impairments in social, occupational, or other important areas of functioning.

(IV) There is no clinically significant general delay in language (E.G. single words used by age 2 years, communicative phrases used by age 3 years)

(V) 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.

(VI) Criteria are not met for another specific Pervasive Developmental Disorder or Schizophrenia."

Appendix 4: Setting 1- Centre's Mission and Aims

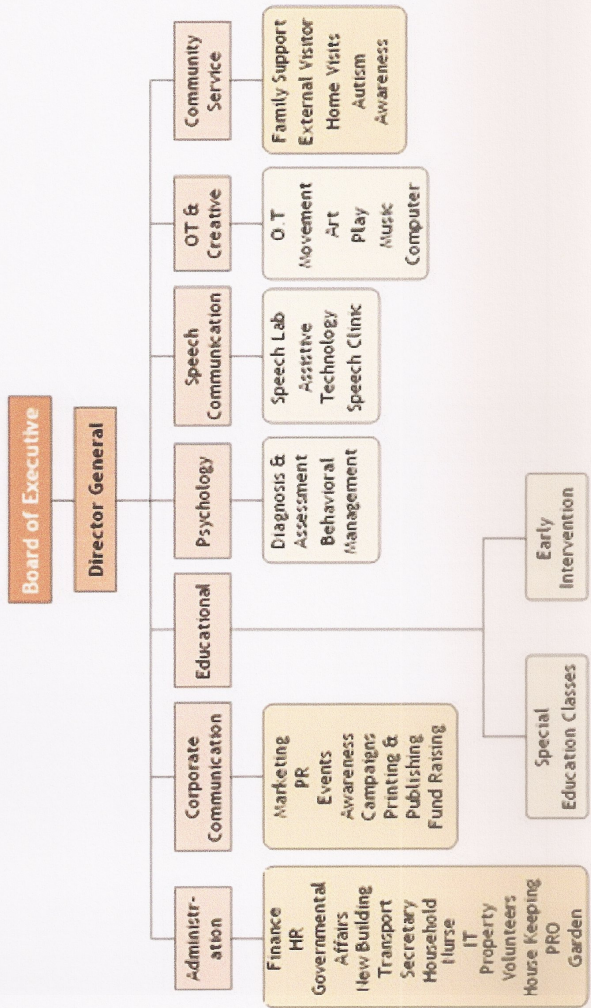
Our Mission

To successfully integrate children with Autism into the community through our holistic approach to intervention and therapies, together with our focused efforts to create social awareness about Autism.

Goals

- To run an educational center/school for children with Autism.
- To support local authorities in the development of their own specialist services toward Autism.
- To publish a range of books and leaflets about Autism to support families and professionals.
- To have a library that parents and researchers can use.
- To run an Autism helpline for parents and caregivers.
- To organize conferences and training programmes.
- To offer specialist assessments and diagnosis.
- To provide consultancy services to professionals and organizations working in the field of Autism.
- To encourage research in the field of Autism.
- To offer an accredited program for Autism-specific education.
- To support local groups and families around the country.
- To raise awareness and create a better understanding of Autism.

Appendix 5: Setting 1- Organisation Chart



Appendix 6: Setting 1- Interview with Centre Director

1 **Setting 1: Centre for Autism, Interview with Director**

2
3 **I: Interviewer**

4 **D: Director**

5
6 I: How are students placed in classes? Is it depending on age or ability level, or both?

7
8 D: Students are placed in the classes depending on three criteria: the age, the degree
9 of Autism and the language

10
11 I: What are the criteria for entrance at your school?

12
13 D: Students must have a diagnosis of autism. We give priority for young children, and
14 it also depends on availability of places here.

15
16 I: What are the tuition fees at your school?

17
18 D: Tuition for last year was 20 000 Dhs for the whole year

19
20 I: What are your main philosophies for educating students with autism at this centre?

21
22 D: We offer a very individualised curriculum for our students. Each child gets an
23 individual plan from which we make their daily lesson plans. In mainstream schools
24 in the UAE, modifying the curriculum for individual students is not an option, they
25 cannot provide this service for the students.

26
27 I: Why do you think parents would want to place their child here as opposed to a
28 mainstream school?

29
30 D: We have so many services available to the students here, such as speech therapy,
31 occupational therapy, music therapy. The students feel better here than in a
32 mainstream school. One child with autism being in a class with 20 other students is
33 too much and it may not be an effective environment for students with autism.
34 They're not getting enough individualised attention in a mainstream school, like they
35 do over here. The school is very specific in meeting their needs. We prefer to focus on
36 the specific needs of students with autism.

37
38 I: Have you had students being transferred to mainstream schools in the past?

39
40 D: Yes there have been a few. One mom removed her child from the centre and
41 placed him in a mainstream school, and what we did was we did an assessment to
42 assess the level of the child. And it's about one year below his age level, which is ok
43 in all areas, if he is one level lower. So we provided a list of recommendations to the
44 school for what should be in the centre or the school to be available for him, like
45 therapies, they need a place where they can take him out for one-on-one, because he
46 will not be able to follow all the programs there, especially since he's used to having
47 one-on-one in this centre here. So going out in an environment where it is so different
48 needs a transition. He has to start slowly and they should have shadow teacher to help
49 him one-on-one. And they should be able to fade out that shadow so that he can be
50 integrated into that setting. It depends on the kids. There are high-functioning kids

51 that can cope with that environment, and then you have others that have difficulty
52 coping in such an environment. And then when you have a child who has challenging
53 behaviours, like they have verbal behaviours or they throw tantrums, the teachers will
54 not be able to cope with this. This is not only because they don't have the
55 qualifications, or they don't have a background in special ed, but because they have
56 20 other kids in the classroom. As soon as they have this situation where the student is
57 screaming or tantruming in the classroom, they say, oh get them out of the school. So
58 this is sometimes risky. It's good to move them to an inclusive setting, but they need
59 to have that support there. This is the dilemma of the current situation. But we do give
60 them a list of all the needs the child will have there so they are included satisfactorily.

61

62 I: What's the approach you try to follow here in educating students with autism?

63

64 D: We use a holistic approach, we don't use only one approach. It is based on the
65 methods used universally. Like the TEACCH method, the ABA method, the Lovaas
66 method, the PECS method, using visuals. We use a lot of visual strategies with the
67 kids because most of them are visual learners, so we use visual cues for them to be
68 able to cope. When you use the visual strategies, the behaviours falls down. They
69 understand that know is the time to do that, so they know what to expect. It's the kind
70 of structure that they need. So these are the strategies we use, it's not one method.
71 Mainly when we assess the child and assess his needs we use ABLES. It's not about
72 having one method and applying it to everyone. It's on the contrary, it's going from a
73 child and what method system will help him. In all classes we do have learners and
74 visual strategies, but they vary a lot from one child to another.

75

76 I: Can you tell me about staff development at your centre, and professional
77 development programmes?

78

79 D: We have ongoing trainings. It can be internal within the unit, so for example the
80 speech therapists do training for the teachers, or we have external training, where
81 people come from abroad and provide training for the staff. Last year we had a
82 training for five months with an ABA therapist. She came in for two weeks intensive
83 training, and then she did hands-on training in the class with the therapists. It was
84 really good because they could see how to practically apply these strategies to their
85 class. This is some thing we believe in, training and upgrading all of the staff. It is our
86 responsibility. Even teaching them how they approach it. If there is someone with a
87 new method, we'll also invite them to have a meeting or a workshop, just so, even if
88 they're not going to apply it, just for the staff to have a broad idea of what's being
89 done in other places for kids with autism. So this is one of the visions we have for this
90 place.

91

92 I: Could you tell me how many of your students have gone into mainstream schools?

93

94 D: From the kids here it is about 4-5 kids taken out of the centre. Out of them three of
95 them have already been kicked out of the school after one or two years, and these
96 parents are again applying to the centre. They want to come back.

97

98 Because they don't have the support. The parents still want their kids to be normal, so
99 this is a normal thing, they do have that. So they try as much as possible to put them
100 in a normal environment. Sometimes this environment is not ready to accept these

101 kids. It's not the fault of our kids. It's the fault of the support, they don't know how to
102 deal with. This is why most of them go out, and soon they will be out of the school
103 again. It's a kind of vicious circle that is going on. Sometimes they can't really
104 modify the curriculum, it's not easy to do that if the school doesn't have the policy of
105 inclusion, it's hard to implement this from the classroom. It has to come from the top,
106 from the management. In a structural way, if they have a resource room and the
107 facilities, it will be easier to do this with our kids, but otherwise it's hard to do this.

108
109 I: Do you prepare students in any ways to be mainstreamed?

110

111 D: What we do is we do approach the schools, we give them resources they need. But
112 they don't really have good coordination with us. So for those particular schools, we
113 ask them to give us the program and the books, to try to learn it, so we can train the
114 child before he goes into the school. And this is not done, they didn't do that. We
115 opened up for the parents and the school but the schools are not being cooperative
116 with us. We are restricted on that. We have to train the child to be able to be
117 integrated into the schools.

118

119 I: How are students assessed in this school?

120

121 D: There's two types of assessment, there's assessment for the diagnosis of the child
122 as autism, and then there's assessment for education services or OT etc. so it is
123 different.

124

125 There is a team for doing diagnosis for autism, you have the educational psychologist
126 the OT, and special ed, and so on.

127

128 The assessment is more specialised, for the classroom we are using ABLES. It gives
129 you the development of the child in different domains. You can see where the child is
130 and what he can build on. So it's a whole sequence of objectives, of a curriculum, it's
131 a kind of curriculum. You can assess the gross motor skills, the fine motor skills, the
132 cognitive and social skills. Whatever is being worked on with the child is being
133 assessed during the beginning of the year, so it's kind of an assessment for the child.
134 This is the educational part.

135

136 So as we said they have their own assessment. ST and OT have their own assessment,
137 each therapist has their own assessment. Then we all sit together to make the whole
138 plan, the IEP at the beginning of the year.

139

140 I: How do you decide the next level of skills the child needs to learn after they have
141 mastered one set of skills?

142

143 D: It is in the IEP that we have, that IEP has a sequence. And we take the big
144 objectives and cut it down to smaller objectives. Following the ABLES we have the
145 sequence of the objectives. Now any activity has two kinds of objectives. There are
146 the objectives that for example are general objectives, like reading a three-word
147 sentence for example. The other task analysis, like if they're doing an activity, they'll
148 break down step by step what the child has to do. This is the ABA way of doing it. So
149 it's really structured and really specific. Most of the objectives are the behavioural
150 way of thinking because they assess the child's response, it's not that the child seems

151 to know this, no, it's if the child does this three times in a row across different
152 settings, across different therapists, he should have this particular response. It's
153 behaviour that you see. From that behaviour you can measure it and you can put it as
154 mastered or not mastered.

155

156 I: So would you say the school follows a more behavioural approach?

157

158 D: Yes, but mainly with kids with autism, you have to assess the behaviours. You
159 won't know if the child knows something unless he shows it to you. And he will show
160 it to you by doing it. Again the focus is on behaviour. Yes it is a holistic approach, the
161 visual strategies we are using across all the settings, it's very important. It's not just
162 behaviour, communication is another part. If you see between the areas that a child is
163 mainly assessed on, it's behaviour, communication and social interaction. These are
164 within all the IEPs.

165

166 But it's holistic, we're not doing purely ABA. The structure of the classroom is the
167 TEACCH way of doing it. We have four corners, with different subjects. We're not
168 using TEACCH 100% also. So we take as much as possible from different methods
169 what we can use in the classroom. So we have the ABA way of thinking, in terms of
170 task analysis and how to assess the child. TEACCH we took different corners, like
171 this corner is for this particular objective. Plus visual strategies and using the whole
172 communication system in the classroom. We try to take all the methods as much as
173 possible and put it in an environment where the child would benefit.

Appendix 7: Setting 1- Class Timetable

Class Schedule

Class: 8
Child's name:

Time	Teachers: Date: November			
	Sunday	Monday	Tuesday	Wednesday
8h- 8h30	Group session Gross motor	Circle time	Circle time	Group session Gross motor
8h30-9h	Circle Area	Individual session	Occupational Therapy Individual session	Circle time
9h-9h30	Individual Area	Music Therapy Group session	Group session Fine motor skills	Art Therapy Individual session
9h30-10h	Speech therapy Individual session	Individual session	Computer literacy Individual session	Occupational therapy Group session
10h-10h30	Snack	Snack	Snack	Snack
10h30-11h	Movement Therapy Group session	Group session Play and Leisure skills	Group session Diary/reading	Individual session Computer in classroom
11h-11h30	Group session Computer in classroom	Group session Fine-motor skills	Group session Gross motor skills	Group session Fine-motor skills
11h30-12h	Art Therapy Pair session	Speech therapy Individual session	Individual session	Individual session
12h-12h30	Recess	Recess	Recess	Recess
12h30-1h	Group session Diary/reading	Group session Diary/reading	Movement Therapy Individual session	Group session Diary/reading
1h00-1h30	Group session Playdough	Group session Art activities	Occupational Therapy Group session	Group session Circle area
				Circle time
				Individual session
				Computer literacy Individual session
				Occupational Therapy Individual session
				Snack
				Speech therapy Individual session
				Group session TV time
				Group session Art activities
				Recess
				Group session Diary/reading
				Art Teaching session Group session

OT and Creative Unit
Speech and Communication Unit
Special Education Unit

Appendix 8: Setting 1- Sample pages of a Student's IEP

**Individualized Education Plan
Education unit**

Domain	Annual Goal	Short-term objectives
<p>Pre-requisite skills</p>	<p><i>Cooperation</i> The student will improve his cooperation and to increase independence in a variety of activities as measured by mastery of all of the following objectives</p>	<ol style="list-style-type: none"> When materials are presented (at Individual/ Group sessions) will independently look at the instructor for instruction within two seconds of presentation. When instructions are presented will consistently respond within two seconds. When working at Individual and Group sessions, will independently keep his hands on the material he is working with. When seated at Individual and Group sessions, will independently keep his hands together either on his lap or on the table when not engaged in an activity.
<p>Cognitive skills</p>	<p><i>Matching</i> The student will match correctly pictures and/or objects to increase independence in a variety of activities as measured by mastery of all of the following objectives</p> <p><i>Sorting</i> The student will sort correctly items and/or pictures by class, function and feature to increase independence in a variety of activities as measured by mastery of all of the following objectives</p>	<ol style="list-style-type: none"> When given a complex picture together with 10 isolated cut outs from the latter and asked to 'match', will independently match the separate pictures to those on the larger picture (5) When given pictures of non identical items, 12 at a time and one sample of sorting in three piles will independently sort the remaining pictures. (Feature, Function and Category) (36) When given 12 pictures of non identical emotions and labels of three emotions/feelings at a time and requested to 'sort' will independently sort the pictures into the three categories. (calm, scared, feel pain)

Education unit	
Domain	Short-term objectives
<p>Annual Goal</p> <p><i>Sequencing:</i> The student will copy a sequence according to different variables to increase independence in a variety of activities as measured by mastery of all of the following objectives</p> <p><i>Mazes</i> The student will complete mazes of different difficulties to increase independence in a variety of activities as measured by mastery of all of the following objectives</p> <p><i>Puzzles</i> The student will complete puzzles of different difficulties as measured by mastery of all of the following objectives</p> <p><i>Motor imitation</i> The student will improve his motor imitation to increase independence in a variety of activities as measured by mastery of all of the following objectives</p>	<p>1. When given a set of picture cards up to 6 logical events, will independently arrange them in sequence. (10)</p> <p>1. When given an advance maze on A4 paper with two choice points along the path will independently draw a line from the start to the end. (10)</p> <p>1. When requested, will independently complete a standard jig saw puzzle of 50 pcs. (3)</p> <p>1. When given the material and requested, will independently imitate a sequence of actions using multiple objects. (3 sequence each.) (e.g. the student imitates a sequence of putting the blue block on top of the white block then places the red block in the box and the yellow block in the back of a toy truck) with the model in sight. (5)</p> <p>2. When requested, will independently imitate actions which he observed earlier in the day e.g Show me how the boy went through the thick forest. (2 actions weekly X12)</p> <p>3. When requested 'do this' will independently imitate fine motor movement that will be used in OT sessions and Circle Time. (12)</p> <p>4. When requested 'breathe' with modeling, will independently imitate deep breathing to the count of five.</p>
<p>Cognitive skills</p>	
<p>Imitation skills</p>	

Appendix 9: Setting 1- Interview with Class Teacher

1 **Setting1: Centre for Autism – Interview with teacher**

2
3 **I: Interviewer**

4 **T: Teacher**

5
6 I: How long have the students been at the centre?

7
8 T: K is 11 years old and he has been at the centre for 5 years, and M is 10 years old
9 and he has been at the centre for 4 years.

10
11 I: K has some challenging behaviours, like he tries to hit and pinch teachers and other
12 students. What are the strategies you use to tackle those behaviours?

13
14 T: We have to try to redirect him when he does this. We use a lot of non-contingent
15 reinforcement pairing. We also use differential reinforcement, where we praise his
16 good and appropriate behaviours.

17
18 I: Have you found it to be quite effective?

19
20 T: It is effective. We also keep a report on a daily basis between home and school just
21 to see a pattern, when we feel he becomes disturbed, then we find in the book it says
22 he has had very poor sleep or something or the other, that is the process. So we feel
23 sometimes he carries it from home to school, the challenging behaviour, so we
24 reinforce him appropriately and we give him different tasks that day.

25
26 I: What about M, he doesn't seem to display any challenging behaviours?

27
28 T: He doesn't have what we call challenging behaviours but he can display self-
29 stimulatory behaviour like writing in the air, he writes words all the time. So we have
30 to redirect him, we use writing as a reinforcer using the magic board. Still I still have
31 control over it, I give him the chance to write what he likes to write but also I work on
32 academics, because he does a lot of academic work so if he writes I tell him to write
33 his name for me or what's written on the board, like dictation. So I still have control
34 of it. But he also likes writing, like digital writing, so we use it as a reinforcer. Also
35 fast-paced work is good for him, we do very fast-paced work. Every activity is very
36 structured, we get him to do things and he's not left alone for long periods. He always
37 has something to do. And then he gets free play time, like outdoors. And also in class
38 they get some time for free play. We tend to pair him and another student together
39 who is at the same level, and he gets time to interact with him which he really likes.

40
41 I: Do you think this is a good setting for K to be in as opposed to be in a mainstream
42 school?

43
44 T: Anytime if you use the word mainstream, I would say yes of course we have to get
45 these children into the mainstream. But the mainstream is not ready for a student like
46 K and this is the best setting for him right now because I feel the mainstream is not
47 ready to accept these students. They don't have the qualified staff, and if they're not
48 ready the students will be lost in a big class, or their self-stimulatory behaviours might
49 come up, and you have to educate the other children about it, and the parents of other

50 children. So much has to be done and they have to come a long way. If the
51 mainstream is not ready then a place like this will be fine for them.

52

53 I: Do you have any mainstreaming programs for students like M who might be able to
54 be mainstreamed?

55

56 T: There are mainstream schools but they want a shadow teacher to be with [the
57 students] all the time, so that would be another thing. But it would be nice if we can
58 have them for limited hours in a mainstream, I don't know how that would be done in
59 terms of how to set that up.

60

61 I: How is the professional development here for the staff?

62

63 T: They give you so much training. I've done training in special needs, and I've been
64 teaching for 31 years, I've done a Masters in special education, and the Montessori
65 special needs course. That's a mainstream course. They have ongoing training
66 programmes on behaviour, we just had a workshop on ABA, speech and
67 communication needs workshops. Also therapies, like art therapy workshops. There
68 are people running workshops from within our clinic, and also people coming in from
69 outside. Sometimes we are also sponsored by the centre to go for workshops outside
70 as well, the centre provides a lot of opportunities for professional development.

71

72 I: What are some of the techniques used over here?

73

74 T: We use lots of techniques here. Whatever activities we do with the students are
75 supported by books. We do a lot of social stories for the students. Whenever we go on
76 an outdoor trip, we take a lot of photographs so that they can go home and talk about
77 the trips with their parents. We have been successful in using the book and making
78 social stories to overcome some of the challenging behaviours of the students. We do
79 diaries with the students, and the parents are encouraged to read the diaries with them
80 over the weekends. It has been very nice for them. Through the diary, some of the
81 students find it very difficult to sit down for reading. The diary is all about them so
82 through the diary some of the students have picked up reading so fast. They'll come to
83 school and say "This weekend I went to the car wash with my daddy" or "this
84 weekend I went ice skating". And they have picked up a few words from the diary.
85 We use textual prompts because they can't write all the words them selves, so we give
86 them these prompts and then they are able to write in their diary. Now he can read all
87 the new words. They can support the text with pictures, like one of the students
88 moved to a new house so he drew a picture of the new house. They went for a walk
89 and S is drawing pictures of him taking long strides.

90

91 We use social stories for everything, like teaching them that when the bell rings it
92 means it's time to go back to class after snack time, and we taught them about this in
93 this way. We did a topic on helping out in school, we did something on the concept of
94 helping so we took pictures of them helping around in school and made a social story
95 out of that using the pictures. We also asked the parents to show pictures of how they
96 help at home, so the parents sent in pictures. So we get the parent as involved in
97 school.

98

99 Right now we follow ABLES, we use some of the ABLES objectives for the students.
100 ABLES has more functional skills so we have evaluate them on a daily basis. We look
101 at their functional behaviour, like their ability to wash their hands. It looks at their
102 functional skills and also behaviour management and behaviour modification, because
103 the psychologist tells us to adhere to a protocol. So that we teachers know what to do
104 when a behaviour comes up.

105

106 We have the Annual IEPs, and there are various domains in the IEP, and under each
107 domain we have the skill tracking sheets, so we mark the date it was introduced and
108 mastered. So we take skills out from this and make a fortnightly plan. This is the last
109 two weeks plan, and it's all monitored, and they have to get three yes's in a row for
110 achievement criteria. Still some skills need more than three. For certain students we
111 make it for three days but five trials in a day, on three consecutive days we consider it
112 mastered. And we have a daily lesson plan. We have all the material ready to make it
113 easy for the teachers to work with the child.

114

115 We also have sensory play periods for students who have sensory issues, we give
116 them shaving foam or making different kind of play dough. They like to do songs
117 with actions during circle time.

118

119 I: Do the students go through any social skills training?

120

121 T: We have the objectives in the IEP, we actually target two students at a time
122 because it's a little difficult to do all four, and we have social conversations with each
123 other. We have their strengths and weaknesses. We started getting them to ask each
124 other for help with work. They first say hello and how are you to each other and then
125 they ask each other. We see the eye contact and they've just started to do this. They
126 do take turns, they ask each other what is this. They've developed a rapport to work
127 with each other. Whenever visitors come, we get them to talk to the students as well,
128 so they meet different people. We have a train set and they play with this together,
129 taking turns. We always support this type of activity with textual prompts. Right now
130 we are still fading away the prompts. Whatever we do we always fade the prompts
131 away.

132

133 I: How has their academic progress been throughout this year?

134

135 T: Their academic progress has been good, we measure their progress more in terms
136 of functional skills, and this has been good. For these students, their communication
137 and comprehension work still needs a lot of work, so that is what we're focusing on.
138 In this school we have a lot of collaboration between the teachers, therapists, and
139 parents, so we are all involved. We also communicate through a communication book,
140 to keep each other updated on what the student is working on.

141

142 We do a baseline assessment at the beginning of the year. We are working on
143 functional toilet skills with some of the students, so we keep track of their progress.

Appendix 10: Setting 1- Example of Skill Tracking Sheet

Appendix 11: Setting 1- Example of Probe Data Sheet

PROBE DATA SHEET

Name of Learner: _____ Date: 19/4 - 30/4
 Enforcement Schedule: _____ Class: 8 Achievement Criteria: 3 Y in a row
 CRS / VR

DATE	19/4	20/	21/	22/	23/	26/	27/	28/	29/	30/	Date
RGETS											
INITIALS											
Show - Paste + brush imaginary)	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	29/3
A Mot - Show + tell me how u brush yr teeth	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	29/3
name what is missing.	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	23/4
In IEP discrimination of language.	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	23/4
When do u brush yr teeth?	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	29/3
what did u hv for snack?	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	25/4
hand- 'where is the...' when asked to get..	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	28/4
tell me something about bicycle *	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	28/4
call instructors name before manding	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	24/3
4 - 2 digit sums + carrying over.	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	26/4
long - short 4 items noun + adjs	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	29/3
tall - short 4 items	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	29/3
parts to a plant - roots	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	28/4
stem	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	28/4
(petals) flower	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	28/4
leaves	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	28/4
tree - roots	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	28/4
trunk	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	28/4
branches	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	28/4
leaves	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	28/4
same 7 emirates - Dubai	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	29/3
Abu Dhabi	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	29/3
Sharjah	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	29/3
Ajman	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	29/3
Fujairah	YN	YN	YN	YN	YN	YN	YN	YN	YN	YN	29/3

* u can ride on it.
 It has 2 wheels
 brakes, handles, seat

Appendix 12: Setting 1- Observation Notes

1 **Dissertation – Observation Notes 1**

2
3 **Setting 1: Centre for Autism**

4
5 The following observations took place on June 8th and 9th 2009, at a centre for
6 children with autism.

7
8 **Day 1**

9 A classroom with four students, three boys and one girl. Ten years old. The students
10 all have high-functioning autism. There is one teacher, and two teaching assistants
11 (TAs).

12
13 The classroom has a simple layout, with four main workstations in each corner and
14 not much on the walls (to reduce distraction). There is one main worktable in the
15 centre of the room. There are picture schedules for each student on one wall, for
16 students to see their lessons for that day.

17
18 **Lesson 1 – Individual work**

19
20 Student K sits opposite the TA at a small table. They start doing individual work. The
21 TA first shows Student K all the reinforcers he has in his basket, such as a colouring
22 book and coloured pegs on a board. He says “Remember, if you work well, you can
23 have these to play with”. The student looks up at him.

24
25 TA takes out some toy animals, and some pictures of animal. He takes out the cow,
26 and says “What does a cow say?”, Student says “Mooo”.

27
28 TA says “Good job!”. Then says, Match the cow, and the student matches the toy cow
29 with a picture of a cow among three choices. TA says, “Good working!”.

30
31 TA asks “How many legs does a cow have?”. Student says “4”. TA says “good job!”.

32
33 TA repeats this procedure of matching and asking questions about other animals, such
34 as a duck, a dog, and an elephant.

35
36 After this series, the TA prompts the student to ask for the colouring book by holding
37 it up. Student says, “can I have the colouring book please” and TA gives the student
38 the colouring book for a few minutes, and the student colours.

39
40 TA tells the student to put the colouring book away, and takes out some small
41 flashcards of words. He holds up the words and student reads each word. Correction is
42 given for the mispronounced words, such as “help” and “brown”. TA verbally praises
43 correct responses. They review all seven words twice.

44
45 The TA says “good job” and gives student the colouring book again for two minutes.

46
47 TA takes out a number chart, says “Point to 12”, student responds incorrectly and TA
48 corrects him by pointing to the correct number. TA asks again and student makes
49 correct response, TA says, “Good job”. TA asks student to underline the number,

50 student responds correctly. TA asks student to cross out the number, student responds
51 correctly, TA says “good job”.

52

53 TA repeats instruction for a few more numbers.

54

55 TA takes out some pictures, and asks student to arrange the pictures in order of
56 sequence. Asks student what is happening in the pictures? Can you tell me what they
57 are doing? Student responds correctly, and TA says “Great, give me a five!”. Student
58 is given coloured pegs as a reinforcer.

59

60 When this session is over, the students go to their daily schedule and put ‘Individual
61 Work’ in the ‘Finished’ envelope, and moves up ‘Music Therapy’. They all do it
62 independently, without prompting, except for one student who requires a verbal
63 prompt.

64

65 As they leave the classroom, the TA asks Student K, “It’s so hot, what can we wear?”
66 Student responds, “A hat”. He goes to put on a hat.

67

68 **Lesson 2 – Music Therapy**

69

70 The students sit in the classroom in a circle with the music therapist and one teacher
71 and two TAs. They sing a welcome song together with the therapist playing on a
72 guitar.

73

74 Student tries to grab TAs hair, TA holds students hands down and ignores him.
75 Student tries to do this again after a few minutes, and TA does the same thing. After
76 the student does this a third time, the TA moves away to the other side of the room.
77 He comes back to sit next to him to prompt him to play his instrument, and student
78 tries to grab his hair again. TA puts student’s hands down and ignores him, trying to
79 redirect him to his work.

80

81 The music therapist asks the students to take turns choosing their own instrument.
82 “What instrument would you like to play? A drum or a tambourine?” Each student in
83 guided to choose their musical instrument. They then form pairs and they play music
84 instruments together, taking turns. The music therapist plays on her guitar, and she
85 asks one member from each pair to play their instrument along with the beat of the
86 guitar. Each student is prompted to do so. They are given prompts such as, “Work
87 together” and “Good taking turns”.

88

89 Later when the TA prompts student to play instrument again, the student tries to hit
90 him, and the TA moves student’s hands down and ignores him again. He redirects him
91 to playing his instrument. Student eventually throws the instrument down on the floor.
92 Other students continue playing instruments. The music therapist tells student to pick
93 up the instrument and continue playing and he listens and does this.

94

95 **Outdoor Play**

96

97 Some students are sitting on their own on the steps. The teachers occasionally ask
98 them to go over to the play area. One student plays on the seesaw alone. One student
99 stays on the stairs, engaging in stereotyped behaviours. One student from the class is

100 jumping on the trampoline with some other boys for the whole break time. Students
101 don't talk to each other, or interact with each other much. If they don't look engaged
102 in an activity, a teacher comes over and tells them to play around.

103

104 **Lesson 3 – Group time**

105 Two students do group time with the class teacher. The teacher provides a textual
106 prompt saying “Good morning”. They are prompted to shake hands and say good
107 morning to each other. They are given more textual prompts, and say “How are you?”
108 and “I am fine” to each other. There is a lack of eye contact between each other, and
109 they look mainly at the teacher. Textual prompt, “Who brought you to school today?”
110 and “Do you like coming to school?”. They practice asking and answering these
111 questions with each other. They look through a series of pictures of the teacher and
112 students carrying out activities. One of the students keeps laughing, and the teacher
113 redirects him back to his work. They are asked to describe the pictures. “Teacher is
114 wearing a red sweater”. The teacher then moves on to receptive commands. “Can you
115 give me the fish?” The student passes it to her. The student take turns answering
116 commands, and the teacher praises them for waiting for their turn.

117

118 **Day 2**

119

120 **Lesson 1 – Computer Time**

121

122 Students sit around the computer and take turns matching pictures and letters. They
123 also sequence words. No reinforcers used, and students work independently, with
124 some supervision to ensure turn-taking.

125

126 **Lesson 2 - Speech therapy with Student M**

127

128 Student M sits opposite the speech therapist (ST) at a small table. The ST gives her
129 some pictures of the students themselves carrying out various activities. The ST then
130 takes out two cubes, one which has the words He, She and They written on different
131 sides and the other cube has the words Is and Are written on different sides. The ST
132 asks the student to describe what is happening in each picture, using the cubes as
133 prompts to encourage her to use full sentences. For example, student says, “making a
134 salad”. And ST points to the blocks individually, and student says “They are making a
135 salad”. This continues for a few pictures. ST continuously provides verbal praising for
136 each correct response.

137

138 **Lesson 3 – Individual work**

139

140 Student works individually with the TA. They work on the following activities:
141 Sequencing pictures, describing pictures, describing objects, labelling the parts of a
142 flower, folding paper along a dotted line, saying the names of all 7 emirates, and
143 saying the date using a calendar. The TA keeps praising the student for every correct
144 answer.

145

146 **Lesson 4 – Gross motor skills**

147

148 The students do the wheelbarrow exercise. First they stand in a line and follow the TA
149 who is doing various stretching and warm up exercises. They also march around the

150 room in a line, and lift their arms up and down. The they take turns doing the
151 wheelbarrow exercise, with the TA holding their legs up, and their arms are meant to
152 walk across the room on sheets of paper put on the floor as prompts. Then they do
153 relaxation at the end of the activity, where they close their eyes and practice
154 breathing.

155

156 **Lesson 5 – Art**

157

158 Making flour play dough. The students sit together around a table and make
159 playdough from water and flour. The instructions are written on a piece of paper and
160 they take turns reading it individually. They mix the water and flour in a bowl using
161 their hands, and the TA says this is also a form of sensory stimulation for them. They
162 then use the cutter to make various shapes from the play dough.

163

164 **Lesson 6 – OT group**

165

166 The OT has placed four circles on the floor and each student is asked to sit on one
167 circle. They sing the hello song together, but two of the students don't sing and need
168 some prompting to say a few words. They each say hi to the OT individually. They
169 then sit on a line across the floor and take turns kicking a ball to the wall. They are
170 continually praised by the OT and the TA's for doing a good job. They then make a
171 circle and practice kicking the ball to each other.

Appendix 13: Setting 2- Mission Statement

Our Mission

* strives to provide the best early intervention services based on the most effective research-based, educational programs for children and families with ASD needs.

Appendix 14: Setting 2- Interview with Centre Director

1 **Setting 2: ABA Centre – Interview with Director**

2
3 **I: Interviewer**

4 **D: Director**

5
6 I: I attended the conference recently, which was organised by your centre, and thought
7 it was very interesting.

8
9 D: We're having a training for teachers at the end of June, about how to have a child
10 with an ASD in a mainstream school, and what the role of the teacher in the classroom
11 is, and the learning support assistant, so that they understand what are the problem
12 areas for a child with an ASD in a mainstream school environment, and how inclusion
13 would benefit them.

14
15 I: Could you describe your main philosophy in educating students with autism at this
16 centre?

17
18 D: The main philosophy is to give each child the opportunity at the school to reach
19 their fullest potential. For every parent it's the word recovery which is big. Some
20 people say there is no cure from autism, other people say a child can recover from
21 autism, but everybody's definition of recovered is different. For a child who's a non-
22 speaker, maybe recovery means that they're able to communicate using the picture
23 exchange communication system, to address their needs, and tell you their wants,
24 sometimes using textual prompts. There are so many different ways, as long as that
25 child is communicating, recovery could mean that to them. Or if you have a child
26 who's got autism and "asphaxia", the fact that they could learn to articulate and their
27 speech could be intelligible, is also another form of recovery.

28
29 So our goal is to get the children learning, to be able to be accepted into the
30 mainstream schools, meaning in one way also behaviourally, because you don't want
31 them disrupting other people in class. You don't want them drawing attention to
32 themselves. The behaviours are really what set the kids in the mainstream apart. Like
33 with the noises and verbal stims, or with the awkward things that they do. With the
34 repetitive walking around, tapping, repeating certain terms or words, or not sitting. A
35 lot of these kids constantly get up. So behaviourally we follow the CARD curriculum,
36 which ties in the behavioural component with the educational component. So we don't
37 just teach, teach, teach, we have to have a behavioural intervention plan to address the
38 behaviours, because a child will not learn if you haven't addressed the behavioural
39 issues.

40
41 I: How long has the centre been open?

42
43 D: September is when we opened last year.

44
45 I: How many students attend the centre right now?

46
47 D: We have about 40 clients.

48
49 I: Is it a full-time or part-time centre?

50

51 D: It depends, some clients are here anywhere from 10-50 hours a week. Some clients
52 get average 25 hours a week, some are on 40-48 hours a week, or in between. The
53 normal range is about 20-35 hours a week for the ones who want more intensive ABA
54 therapy.

55

56 I: What is the age range of your clients?

57

58 D: About 2 years old to 15 years old.

59

60 I: What are the qualifications of the staff? And do you provide training for the staff
61 and professional development opportunities?

62

63 D: We have staff holding a bachelor's in psychology or a Master in Special
64 Education, so we take staff with this background. A lot of them are psychology
65 majors or special education teachers, some of them do have, or are working on, a
66 masters in that area. In order to become a higher level, like a supervisor, you have to
67 hold a masters in any psychology or special education degree, to be able to get to the
68 top.

69

70 In terms of training, we start off with observation hours, anywhere between 20-40
71 hours, depending on the employee. We have them shadow senior level therapists, and
72 try to get a feel for what they're doing. Then we have two training manuals that
73 therapists study. Then we start introducing practical exercises where they start
74 working on a client, but they're overlapped with a senior therapist, and they're
75 constantly getting feedback and recommendations on how to do better. They also
76 attend an initial six-hour training lecture on ABA. And then they have to sit a written
77 therapists exam, which takes about two hours, with 40 questions. And they have to
78 pass that in order to continue to do therapy. After that you're given overlaps and
79 evaluations, and then once you're in a different category you go into senior therapists
80 training, where there will also be a different exam. Each level has a different exam to
81 see how you're doing. And then from there you go into case manager training. We
82 follow the whole CARD model, so we train staff in the same way that they train them
83 in the United States. We're working to be an official CARD site, a branch of card, the
84 goal is to be recognised as an official CARD site, even though we're not in the United
85 States. So here it's no different from the US, the CARD supervisors come in, Jason's
86 here June 2nd, Katherine was just here, every eight weeks, Jason's in town for 12-13
87 days, and then Katherine comes in for 12 days every three months, so we always have
88 a CARD supervisor come in and out, making sure the programs are updated, to
89 provide training and supervising staff. Because when they come in they want to
90 clinically meet with the team and the parents and the child, and everything gets
91 updated. Now we have Peter who is a CARD supervisor, who's going to come and
92 live in Dubai for six months. So that we can train more and to oversee the programs.
93 You know we need to keep training people so we have more qualified people doing
94 checks. You have to, it's the only way it's going to work.

95

96 I: What is your position in the school?

97

98 D: I'm a parent, the director, and the owners, co-founder. The centre was started by
99 two moms, and we both had with children on the spectrum. There was a need, there
100 was nobody providing this, where everything was provided under one roof, where a

101 child could go for occupational therapy, speech therapy, and intensive ABA by
102 competent qualified people who knew how to probe around and supervise the
103 children's programs. I've been in Dubai for two and a half years, and trying to hire
104 your own therapist and someone to supervise this, it's a nightmare. People come and
105 go, and they think it's a hobby. So there were a lot of disadvantages when you're on
106 your own to do it. You need a place where people will feel like they can come, and
107 they want to see growth, and they want to grow in this area. Because it is a profession.
108 You can go and supervise, it's a long-term career, there are a lot of opportunities in
109 this field.

110
111 We're thinking of running a structure where we have ABA classrooms, where kids
112 can go to an ABA-type school. Where it's not just one-to-one, but it's a classroom
113 setting. That's the next project we're talking about doing, it just takes time and
114 energy. And plus you want qualified staff and that's the hardest thing.

115
116 I: How are the students supported here in terms of auxiliary services?

117
118 D: Speech and language therapy and occupational therapy. We have two full-time
119 OT's and ST's.

120
121 I: So the children pay extra to have access to those services here?

122
123 D: Everything here is paid per hour. It's not like a school, where there are termly fees.
124 The client pays for only what services they receive. They pay per hour, what they take
125 is what they pay for and we invoice on a monthly basis.

126
127 I: How much do you charge per hour for the services?

128
129 D: For ABA therapy the junior rate is Dhs. 125 per hour, lead therapists rate would be
130 150 and the senior therapists rate would be 200. Our case manager charges 300. To
131 see a CARD supervisor directly it would be US\$125. for ST and OT, the individual
132 hourly rate is 360.

133
134 I: Are many of your students mainstreamed or partially mainstreamed?

135
136 D: We've got two in nursery, two in mainstream schools, and they're assisted by
137 shadow teachers.

138
139 I: How has the experience been going for them?

140
141 D: I can tell you from my personal experience, my son attends GEMS Wellington
142 primary school. He goes to school four days a week, for three hours a day, so twelve
143 hours a week. From 7:30 to 10:30. So far they've been pretty supportive. They're not
144 really proactive, I wish they would do more. Like set up the IEP. At the end of the
145 day, we do pay normal school term fees, even though they're only half-time, and plus
146 we have to pay the assistant, somewhere around 4,000 dhs per month years round, for
147 this person to assist your child while he's there. I do wish they would be a little more
148 proactive, instead of reacting when I say hey where's the IEP, where's this and
149 where's that? I think in my situation they see me having the centre they kind of sit
150 back and they wait to see what training we give the assistant. It's different, because

151 our shadow has access to all the training and stuff like that. Like when we organise
152 conferences I wish more teachers would come out, you can't push them to come out.
153 And it's sad because there are so many kids in the schools that have all kinds of
154 learning disabilities and learning needs and teachers ought to attend the training. They
155 don't come! It's all the parents who come. For whatever reason, because it's their
156 weekend, or they don't want to pay, for whatever reason they don't come. So the
157 audience you need to tap into with these training sessions you don't, so it's
158 frustrating. How are we going to work together to make this happen when you're not
159 going to show up to hear what the problem is, or how we can help create this into a
160 more mainstream and have these kids accepted. Hopefully in June, when we do this
161 training we'll have to look into how we can advertise this better to get the right kind
162 of people to show up.

163

164 I: Do you provide any types of social skills training for your students, or programmes
165 where they can practice peer interaction?

166

167 D: Every child's program is individualised for his or her needs. So we have some
168 clients with Asperger's where they do a lot of comic strips and social stories, their
169 program is completely different. So it's included in the programming, the supervisor
170 has created programs for that child to work on these skills. So they would have these
171 programs within their therapies, in the areas they need.

172

173 I: Are there any programs for students to have peer interactions with typically
174 developing peers?

175

176 D: Once a child gets to that level they incorporate that into the program. They call it
177 play-date or mock circle. Where they have to go on an outing with a therapist. We
178 create situations all the time, like birthday parties or a sibling play-date. I use my
179 daughter sometimes, she's a typically-developing child so sometimes therapists do use
180 her when they need someone to come in. It all depends on what level each child is at,
181 and what they need.

182

183 I: How do you track academic progress?

184

185 D: Everything is scored, for every trial of the instruction we take data on, the
186 therapists has to mark each response correct or incorrect, if there was no response
187 given, or we prompted the child through it. We tally the score and graph it to monitor
188 the child's progress. And you consider it mastered if the child has 80% correct
189 answers over two consecutive sessions with two different therapists. All our therapies
190 are individualised. You can't just go by a textbook. Every child's program is so
191 different.

192

193 I: What has been your general experience with getting kids with autism into the
194 mainstream school? Has the attitude been positive?

195

196 D: No, I consider myself very lucky, parents get turned down. Right away when they
197 say the word autism, they raise their eyebrows, they don't know what to tell parents.
198 If you have a child with autism, they don't say no immediately, but a lot of times the
199 parents get led on to think that it's going to work out. And it doesn't at the end of the
200 day it's a no, I don't know what's worse, if they're just honest from the beginning, or

201 if they say yeah yeah and then at the end of the day it's still a no. Compared to the
202 other clients, I think my case was a little odd. I didn't know until the end of last year
203 in June, I knew that the school was fairly a new one, and they had a lot of
204 availabilities. I used the sibling card, I have two kids and I wanted them both to go to
205 the same school. I think that has a lot to do with it too. It's two versus one, and there's
206 two seats being filled. A lot of it is political, it's a game. I know from other clients
207 that it's not easy, they get turned down, but I also think schools will work with parents
208 who are very open and put all the cards on the table. I have seen parents who do hide
209 more, and they don't come up with all the reports, and just say this is what it is. Even
210 though there's an assessment report that says that the child has verbal stims and flaps,
211 and this and that, it's all on paper. The worst that can happen, they know about it.
212 There are no hidden surprises and they know exactly what they're getting. I think if
213 you go into that, I took all the paperwork and I told them everything, everything was
214 on the table. And the ball was in their court, do they do it or do they not? But there
215 were no surprises. They'll know that my son has verbal stims. The good thing was
216 there is no aggression or anything like that. They knew that he's nonverbal. There's
217 knew everything going in, they're not going to be surprised or freak out when he does
218 this or that. They've prepared the teacher and they know what's going to happen. But
219 when you don't go in with your reports and you say there's nothing wrong, and then
220 they find it out, that's where the problem is. I really think that schools will work with
221 parents who will work with them. Who are honest and tell them everything. There's a
222 lot of times where that's the hardest thing. You don't want to say it because you want
223 to get accepted but then... or they know something's going on. And then they don't
224 trust you, and so they don't let you in. There's two cases we have where I don't think
225 it's the child not being accepted, I think it's the parents.

226

227 Schools don't want to deal with it, you know. I really do feel like it is really
228 important, and the more honest you are, the more chances there are that they will help
229 you out. But if you're hiding stuff and not being honest then they're not going to let
230 you in.

231

232 The parents should work with the school. There's so busy not wanting to get the
233 label, I tell parents who cares about the label. As long as you get the services for your
234 kid? I don't care if they say my son has MR, who cares what they call it but if you're
235 going to get the services.... At the end of the day, treat the symptoms. Forget about
236 what it's called, treat the symptoms because they need the help! If you treat the
237 symptoms, who cares what it's called? Help them! All they're trying to do is protect
238 themselves, and they're hurting the child.

239

240 Also schools don't know what to do, what do they do? So they do things like not
241 accept them into schools, and then you don't have anywhere to go.

242

243 I: What is your opinion about educating students with autism in a centre specifically
244 for students with autism?

245

246 D: My thing about ***** is I think it should be one-to-one. I think children with
247 autism learn better when it's intensive and when it's one-to-one. I think or if you're
248 going to do it in a classroom setting, it should have a lot more structure. You've got to
249 have it more like the way that an ABA school needs to be run. there needs to be more
250 ABA being done in a classroom environment. Teachers should be qualified to run the

251 classroom environment. Autism has been shown, it will improve with intensive one-
252 to-one ABA. If you move it on to a classroom setting and you still do ABA that's
253 fine, but you have to have the qualified staff to do it. The model has to be right.
254 Because what's happening is maybe the behaviour's aren't being addressed, and also
255 the education. You've got to prepare the kids behaviour-appropriately, age-
256 appropriately, developmentally-appropriately. So I think it's good if you can run a
257 classroom, but there has to be times for inclusion and times for separation. The typical
258 school could be where playground, PE, social, you bring the kids together. But at the
259 times of learning, it's good to have an IEP and the child gets taken out to have him
260 learn the way he needs to learn for that specific subject, and then he gets included
261 again. That would be my ideal situation. Where you could do ABA separately on the
262 side to teach subjects, and still have the child in a mainstream setting.

263

264 I: So you're not necessarily in favour of full inclusion?

265

266 D: I do want full inclusion, however, maybe some subjects you can't fit. We're all
267 working towards that, for a child to sit in a classroom and learn from the teacher. And
268 in the event they need that support, there should be that available, that they can get
269 one-to-one and still be included. Because you need it for social and for circle time.
270 There are so many valuable things they can learn, they need to model typically-
271 developing peers. They can't model all the other kids that are doing all the
272 behaviours, you know?

273

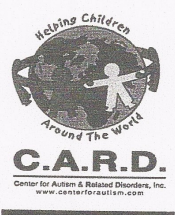
274 I: What's your opinion about TEACCH and other methods of teaching students with
275 autism?

276

277 D: I don't really know that much about TEACCH. But I think we follow a very
278 mixture-type approach. We take verbal behaviour and ABA the Lovaas style, and
279 other techniques. We don't really follow TEACCH very much because TEACCH is
280 more open in you follow the child around. We're more focused on we know what we
281 want to teach and the child follows our instructions. I think it all goes back to what the
282 research shows. What has shown to help the kids more? If you do the research,
283 TEACCH doesn't help much and also other methods, auditory integration training.
284 There are so many things you can do to help autism. but the data and the research isn't
285 there. So we want to follow the things that are proven to be the best method, the
286 things that work. There are so many things you can do. The biggest thing is that when
287 you start something, you have to be consistent and follow through with it and give it a
288 try. You can't just do things for three weeks, and say oh well ABA didn't work. ABA
289 doesn't work after only three weeks. It has to be long-term, a few years. ABA is
290 changing your lifestyle, it's a different way of living, not only what the therapist does
291 at the table. It's your whole way you handle the child, the reinforcement, the follow-
292 through behaviours. The child needs it, they need the routine. It's not that easy, you
293 have to do what you can.

Appendix 15: Setting 2- Centre Brochure

provides comprehensive developmental assessments, individual and group therapy in Speech and Language and Occupational Therapy, developmentally based play and social groups, parent training and consultation, direct one-on-one home-based ABA therapy and center-based ABA therapy, ABA therapist supervision, parent consultation, educator and parent workshops, and teacher training and consultation. The above listed services shall be provided in consultation and consistent with the practices and procedures implemented by C.A.R.D.



Who is C.A.R.D.?

The Center for Autism and Related Disorders, Inc. (CARD) is among the world's largest and most experienced organizations effectively treating children with autism and related disorders. Following the principles of Applied Behavior Analysis (ABA), a treatment for autism that has been thoroughly researched and empirically validated by the scientific community, CARD develops individualized treatment plans.



CARD was established in 1990 by Dr. Doreen Granpeesheh, Founder and Executive Director of the Center for Autism and Related Disorders. Dr. Granpeesheh has dedicated over 25 years to the study and treatment of Autism Spectrum Disorders (ASDs).

CARD provides a variety of services by developing unique and individualized behavior therapies, including ABA. The goal is to develop a program designed to teach the particular child the functional skills necessary to live an independent and productive life.

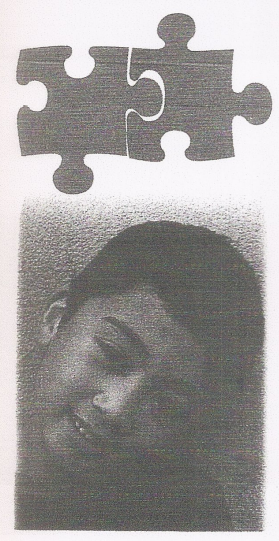
How Can a Child and Family Become Involved?

The process is simple. Anyone (a parent, doctor, caregiver, teacher, or friend) can make a referral by calling [redacted]. Early Intervention services do not require a prescription. Referrals are made directly to our program.

What Happens After a Referral?

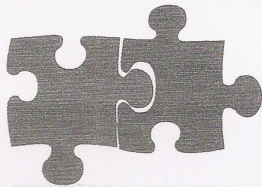
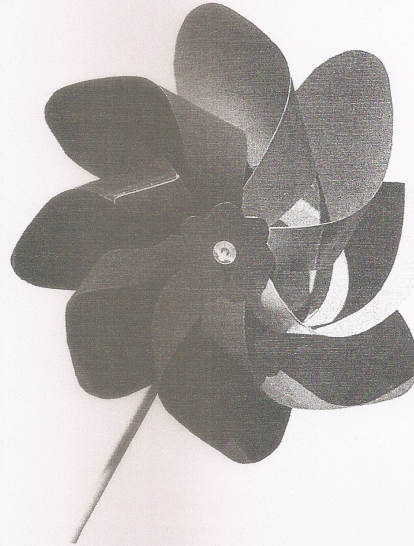
The steps are as follows:

1. Parents complete an intake questionnaire including background information and medical and educational history.
2. The early intervention team consisting of a psychologist, speech and language therapist and occupational therapist will conduct a developmental assessment of the child. This assessment will focus on specific areas of child development, including areas related to cognitive, language, motor, social, emotional, behavioural, and self-help skills.
3. After the assessment, a report is given to the parents explaining all the assessment tests and results, as well as recommendations.
4. The parents are then scheduled to meet with the [redacted] Director



where treatment options and services are discussed.

5. The child is then referred to a CARD Supervisor who is to design and implement an ABA program tailored individually to the child.
6. The Case Manager in the meantime may begin parent training and consultation to prepare the family for the start of an ABA program.
7. CARD Supervisor and therapy team will conduct an initial workshop and the CARD Supervisor will prepare a workshop summary report and ABA program.
8. Once the ABA program and report is ready, the child commences ABA therapy.
9. The child's progress is monitored via the CARD Supervisor, Case Manager and/or a Senior Therapist. Evaluation and program modifications are done regularly based on the child's progress and needs.
10. The Case Manager may also assist the parents by conducting regular school visits and designing an Individualized Education Plan (IEP) for the child to follow in a mainstream setting.



What is the Assessment?

Psychologists will provide developmental evaluations for families suspecting that their child may be demonstrating delays in development or families who have children with a known disability or disorder. The psychologist will conduct a review of a child's progress every six months in order to measure the objectives and goals initially set for the child.



What is the Intake Questionnaire?

The Intake Questionnaire is the form that must be filled out in order to provide the Psychologist and CARD Supervisor with background information pertaining to your child. The CARD Supervisor is responsible for completing your child's intake.

Who Does the Assessment?

The Assessments are conducted by either the CARD Assessment Center or by the Clinical Psychologist.

Appendix 16: Setting 2- Example of Acquisition Skills

Acquisition Skills

1. **Actions:** Child will begin this program by learning to receptively identify present tense verbs. Trainers should present child with a stimulus for the present tense verb.
 - SD: "Give me (action)"
 2. **Block Imitations:** Child will begin this program by learning to imitate simple block structures.
 - SD1: "Build this"
 3. **Body Parts:** Child will begin to learn his body parts by receptive identification.
 - SD1: "touch (body part)"
 4. **Choral Activities:** Child will learn to imitate songs with motions and then learn to sing age appropriate songs.
 5. **Colors:** Child will begin this program by working on the receptive identification of colors.
 - SD: "give me (color)." Using color swatches.
 6. **Compliance:** Child will begin this program by learning to respond to simple compliance commands.
 7. **Eye Contact:** Child will begin this program by learning to respond to his name and learning to respond to SD: "look at me."
 8. **Fine Motor:** Child will begin to target various areas of deficit within the fine motor area.
 - Copy simple lines, scribble on page with appropriate grip
 - Scissors-holding and open and closing scissors
 - Lacing cards
 9. **Functional Pretend Play:** Child will begin this program by learning to use familiar objects in conventional ways for the purposes of play. In other words, using real objects in a pretend, yet functional way, needing objects that look like reality in order to pretend. Examples include pretending to drink from a cup or feeding a doll with a bottle. The purpose of this program is to teach the child to participate in and initiate Functional Pretend Play, in order to:
 - Increase repertoire of possible appropriate play activities for socialization.
 - Introduce child to the notion of pretense, which lays the foundation for further development of play skills, abstract thought, and eventually, Theory of Mind development.
 10. **Greetings:** Child will begin this program by learning to respond to greetings.
SD: "Hi".
-

11. **Gross Motor:** Child will begin to target improving in the areas of his gross motor deficits.

Age 2 years	intro	master	Age 2 years, 6 months	intro	Master
Walk up and down stairs with one hand held, alternate feet			Broad jumps 5cm		
Throws a ball with hands over head			Jumps		
Roll ball			Hops on one foot holding hand for balance		
Kicks with a back swing, without arm opposition					
Jumps lifting both feet off ground					
Jumps over small object					
Jumps off small step					
Stand on one foot momentarily					
Walks backward 1.5-2m					
Walks on a line					

12. **Independent Play:** Child will begin to learn how to structure his down time by engaging in appropriate play activities. Present child with mastered play activities and require him to sustain appropriate play with the toys for a specified duration.

13. **Interactive Play:** Child will learn simple interactive play skills.
SD: 'Let's play.'

14. **Non-verbal Imitation:** Child will learn object, gross, and fine motor imitation. Non-verbal imitation is a necessary prerequisite to learning speech, play, self-help, fine motor, gross motor, and social skills.

15. **Object Receptive Labels:** Child will learn to receptively identify unknown object labels within his environment and unknown labels identified in other programs.

- SD1-"give me (item)."

16. **Object Manding:** Child will learn to improve his manding abilities across people, activities, and settings.

17. **Object Matching:** Child will learn to match various identical and similar 2D and 3D stimuli.

18. **People:** Child will begin this program learning to receptively identify the people in his environment.

- SD: "Give me (person)."

19. **Receptive Commands:** Child will learn to respond to simple receptive commands.

20. **Self-Help:** Child will begin to improve his adaptive living skills.

- Using a fork and spoon to self-feed
- Washing hands.
- Undressing-target taking off shoes, pants and socks
- Blow on hot food
- Need potty party for toilet training
- See check list for ideas.

Age 2 years	intro	master	Age 2 years, 6 months	intro	master
		er			er

Drink from cup			Put on pants with help for correct leg		
Eat with spoon with minimal spilling			Shorts on		
Unzip			Pants on		
Unbutton			Shoes on		
Use fork			Wipes nose when requested		
Pants off			Bladder control with rare accidents		
Button down shirt off					
Socks off					
Shoes off					

21. **Sound Discrimination:** Child will strengthen his basic auditory discrimination skills which will help establish the foundation for more complex auditory discrimination. In the Sound Recall portion of this program, Child will learn to identify sounds that occur in the environment.
 - Start with familiar animals and present picture cards and the SD: "Which one?"
 22. **Verbal Imitation:** Child will learn to imitate oral motor movement, sounds, and words.
 23. **Yes / No:** Child will learn to respond to yes and no questions based on his desires.
 - SD1-No with desires with visuals present
 24. PECS
-

Appendix 17: Setting 2- Example of Data Sheet



C.A.R.D., Inc.

Child's Name: _____ Mo/Yr: _____

Program: _____

SD:	T1	T2	T3	T4	T5	T6	Initials:	
Response:								Date:
Child's Response	Trial Data	Trial Data	Trial Data	Trial Data	Trial Data	Trial Data	Prompt Used	Comments
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Target 1
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Target 2
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Target ?
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Target 4
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Target 5
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Target 6
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Overall
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		

SD:	T1	T2	T3	T4	T5	T6	Initials:	
Response:								Date:
Child's Response	Trial Data	Trial Data	Trial Data	Trial Data	Trial Data	Trial Data	Prompt Used	Comments
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Target 1
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Target 2
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Target 3
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Target 4
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Target 5
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Target 6
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		Overall
	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P	C I NR P		

Appendix 18: Setting 2- Example of Data Graphing Sheet



Center for Autism and Related Disorders, Inc.

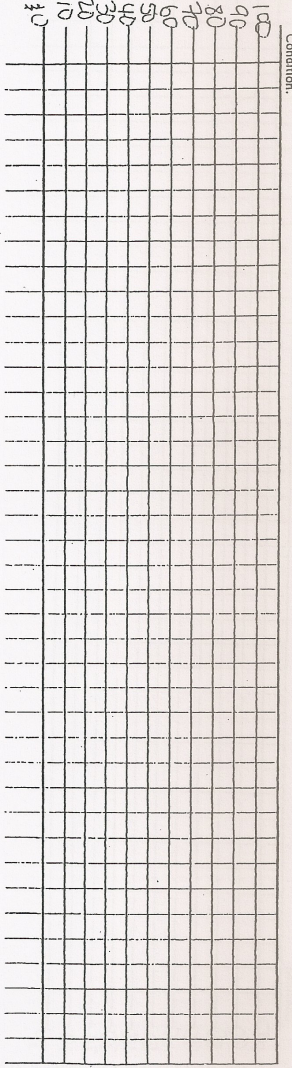
Data Analysis Graph

Name of Child: _____

Month/Year: _____

Program: _____

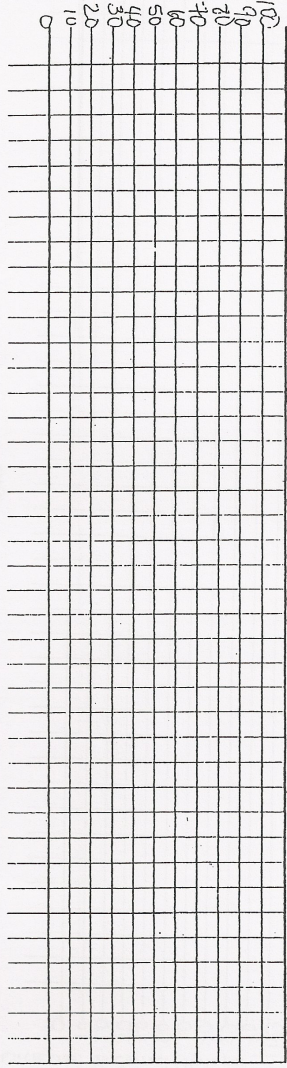
SD
Circle One: % Correct / Rate per _____



Date _____

Target/Behavior _____
○ _____
● _____

SD
Circle One: % Correct / Rate per _____



Date _____

Target/Behavior _____
○ _____
● _____

Appendix 19: Setting 2- Observation Notes

1 **Setting 2 – ABA centre**

2
3 The following observation took place on June 10th 2009, for two hours during a one-
4 on-one ABA session. The student is an 8-year-old girl.

5
6 The student sits at a table individually with the therapist, although there are other
7 students and therapists in the room working.

8
9 The therapist takes out pictures of common places, for example supermarket, post
10 office.

11
12 She asks the student “What is it?” and the student replies, “Supermarket”, therapist
13 says “Good girl!”. They continue this for a few more flashcards. The therapist asks
14 “What’s this?” (it’s a shop) the student says “Beach” the therapist says “No” She asks
15 again and the student gives an incorrect answer, and she says no again. In the third
16 trial, the therapist gives a correction; she holds up the flashcard and says, “Beach” and
17 the student echoes her. She praises her and moves on to the next trial.

18
19 The therapist is taking data for each response on a data sheet, and marking it as either
20 correct, incorrect, no response, or prompted.

21
22 The therapist provides a reinforcer in the form of squeezing and rubbing her arms.

23
24 They move onto the Social ID program, where there are visual prompts of words.
25 Therapist asks, “Where do you live?” and provides the textual prompt. Other
26 questions include what is your brother’s name, what colour is your hair, who is your
27 mother. Corrections follow the no, no, prompt procedure. The therapist also graphs
28 the number of correct responses for each program.

29
30 The therapist also records various behaviour and manding and tacting programs.

31
32 They work on occupations, with the student labelling pictures of different professions.
33 They also work on emotions, where the student is meant to tact pictures of various
34 emotions. The therapist puts two choices on the table and says, give me happy/sad etc.

35
36 They go on to work on actions, stating what people are doing in pictures. The verbal
37 prompt is He is or She is, and the student has to finish the statement for each picture.
38 For example, “he is in bed sleeping” “Good job!”

Appendix 20: Setting 2- Lesson Areas and Sample Targeted Skill for Individuals 0-7

CARD I

Lesson Areas and Sample Targeted Skills for Individuals 0-7



LANGUAGE

Mands
Echoics
Matching
Receptive
Tacts
Intraverbals

EXECUTIVE FUNCTIONS

Attention
Memory
Inhibition
Planning
Flexibility
Problem Solving
Metacognition

ADAPTIVE SKILLS

Personal
Domestic
Community
Safety

CARD I: Program Goals

- Extinguish challenging behaviors
- Teach new skills
- Facilitate mainstreaming into regular education classroom
- Train parents and caregivers to effectively interact with the child
- Maximize independence across all areas of daily life

MOTOR SKILLS

Visual
Fine
Gross
Oral

PLAY SKILLS

Independent
Pretend
Interactive
Constructive
Electronic

ACADEMIC SKILLS

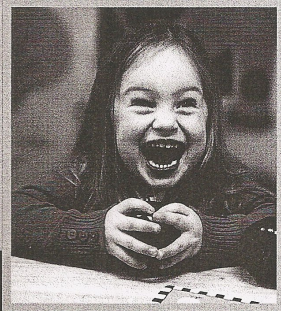
Language Arts
Math

SOCIAL SKILLS


Social Language
Social Interaction
Self-Esteem
Social Context
Social Rules
Group Skills
Absurdities
Nonvocal Social Behavior

COGNITION

Desires
Intentions
Emotions
Senses
Sensory Perspective Taking
Knowing
Cause and Effect
Preferences
Physical States
Thinking
Beliefs
Deception
Sarcasm




Appendix 21: Setting 2- Sample of School Shadow Training Lecture Slides

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General Techniques

❖ **Physical placement of the shadow**


- Behind or beside the child
 - Initially the shadow may need to be directly behind or beside the child
 - Shadow should be in a position to identify any cues a typical child would be aware of
 - Shadow should be able to see what child sees and hears to facilitate prompting
- Close proximity of shadow to the child provides an opportunity for the shadow to prompt the child in the least intrusive manner possible (the shadow's physical proximity & prompts should always be performed in the least disruptive manner possible)

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General Techniques (Cont.)

❖ **Physical placement of the shadow (cont.)**


- In front of the child/next to the teacher
 - If a child becomes distracted by the shadow being behind or beside (i.e. talking to shadow, frequently turning around, etc.) or has difficulty focusing attention on the front of the room/teacher, it may be necessary for the shadow to be in the front of the room
 - Easier to prompt the child (gestures, focus of gaze, etc.) to look at or attend to the teacher

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General Techniques (Cont.)

❖ **Fading the physical placement of the shadow**


- When the child is less dependent on prompts from the shadow, and progresses in level of skills, the close proximity of the shadow can be faded
 - Gradually extend the distance between the shadow and the child
 - Intervene only when the child experiences difficulty or if the child cannot resolve a situation independently
 - As the shadow physically moves away from the child, it is important that the child remains successful throughout the fading process
 - Continual assessment of the child's performance is necessary to determine how quickly the placement of the shadow can be faded (Be aware that the placement of the shadow may vary with each activity)

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General Techniques (Cont.)


❖ **Transferring the control from the shadow to the teacher**

- Goal is to have the child attend to instructions from the teacher rather than be reliant on prompts from the shadow
 - The teacher can become reliant on the shadow to prompt the child to follow through with given instructions
 - The shadow can remind the teacher that once an instruction is given either to the child or to the whole class, it then becomes the teacher's responsibility to ensure the child's response to the given instruction

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Prompting

- Prompting should be done to assist the child in areas in which the child is unable to perform a skill independently.
- Prompts can be used to define the desired behavior as well as to help the child be successful.
- Use the least intrusive prompt in all situations.
- The prompts used with a child will vary with the activity your child is engaged in.
- The child's level of independent skill performance must be known in order for the appropriate prompt to be given.
- The ultimate goal is for the teacher to prompt the child which in turn will reduce the child's dependence on the shadow.

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Prompting


- **Prompting Procedures should be consistent across home and school**
- **Mastered skills**
 - Prompt after 2 incorrect responses then fade the prompt until the child performs the task independently
 - Do not let the child move on to a different activity until the original task has been completed without prompts



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Mastered Skills Prompting Example

➤ The teacher tells James "give me the scissors," and James ignores her. The teacher consequences James by shaking her head and saying "uh-uh." She asks James once more, "give me the scissors," and James whines. Again the teacher consequences James by saying "no." She asks James once more to "give me the scissors," and physically guides James to gently place the scissors in her hand. She reinforces him by saying "Thanks for giving me the scissors James!" She gives the scissors back to James to practice the skill and tells James to give her the scissors while holding out her hand. James puts the scissors in her hand and she reinforces him by tickling him and saying "good job!" In order to assess James' independence with this task she gives him the scissors and gives the SD once more without a prompt. James put the scissors in her hand and she reinforces him by giving him a hug and saying "Yah, you did it all by yourself!"



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Prompting


➤ Prompting Procedures should be consistent across home and school

➤ Skills on Acquisition

➤ Begin with a prompt and start the fading process when the child becomes more independent with the skill

➤ This process may be completed within a short time period or may take several weeks depending on the complexity of the task

➤ Continual assessment is crucial in determining the speed with which a prompt should be faded



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Types of Prompts Commonly Used in the Classroom


➤ Physical prompts

➤ Fully physically guiding the child to comply with a given task or instruction

➤ Using hand over hand prompts to help the child complete various fine motor tasks and/or play activities

➤ Partially physically guiding the child to begin an activity or to transition between activities

➤ Tapping the child on the shoulder to remind them to attend to the teacher or activity



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Types of Prompts Commonly Used in the Classroom


➤ Verbal Prompts

➤ Verbal imitation to initiate and reciprocate language

➤ Verbal reminders to attend or stay on task

➤ Verbal instructions from the shadow to the child

➤ Individualized verbal instructions from the teacher to the child




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Types of Prompts Commonly Used in the Classroom

➤ Modeling Prompts

➤ Physically, verbally, or using gestures to guide the child to attend to or imitate the actions of his or her peers

➤ Indirectly using the actions of peers to prompt the child to engage in an activity (i.e. shadow asks another child "Peter, show me what you guys are supposed to be doing,") in order to cue the child to attend or engage in a task



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Types of Prompts Commonly Used in the Classroom

➤ Demonstration Prompts

➤ Shadow, teacher, or peer says "Do this," "Copy me," or "I like this," and the child imitates the action or sequence of actions

Appendix 22: Setting 3- Purpose and Key Values

Purpose:

To ensure a quality international/intercultural education which prepares students for their futures in a global economy.

Our School Motto:

Reach for the stars!

Our Key Values:**We are committed to:**

- Professionalism - committing to the highest standards of accountability and performance
- Respect - treating all people with respect and dignity
- Innovation and creativity - fostering an environment that supports innovative, safe and creative practice
- Diversity and Inclusiveness - encouraging all members of our community to participate actively in our development
- Excellence - supporting the pursuit of excellence

Appendix 23: Setting 3- Tuition Fees

FEE STRUCTURE 2009-2010 ACADEMIC YEAR

All places offered are subject to the required documentation being both produced and correct prior to admission e.g. birth certificate.

- An assessment is a pre-requisite to your child being offered a place.
- Once your child has been offered a place by the Business Manager or Enrolment Officer at and accepted, a non refundable Registration fee of AED 1150 is requested to reserve your child's place.
- In addition, full terms fees are to be paid (in full) at time of confirmation of placement.

Grade	Term 1 Fee	Term 2 Fee	Term 3 Fee	ANNUAL FEE
	Due 01 June	Due 01 September	Due 01 January	
ELC	AED 8332	AED 8332	AED 8332	AED 24 996
PREP	AED 8332	AED 8332	AED 8332	AED 24 996
Grade 1	AED 8332	AED 8332	AED 8332	AED 24 996
Grade 2	AED 9166	AED 9166	AED 9166	AED 27 498
Grade 3	AED 9166	AED 9166	AED 9166	AED 27 498
Grade 4	AED 9832	AED 9832	AED 9832	AED 29 496
Grade 5	AED 9832	AED 9832	AED 9832	AED 29 496
Grade 6	AED 11 166	AED 11 166	AED 11 166	AED 33 498
Grade 7	AED 11 166	AED 11 166	AED 11 166	AED 33 498
Grade 8	AED 11 998	AED 11 998	AED 11 998	AED 35 994
Grade 9	AED 11 998	AED 11 998	AED 11 998	AED 35 994
Grade 10	AED 15 000	AED 15 000	AED 15 000	AED 45 000

Appendix 24: Setting 3- Interview with LSC Coordinator 1

1 **Setting 3: Mainstream School – Interview with Learning Support Centre**
2 **Coordinator**

3
4 **I: Interviewer**

5 **L: Learning Support Centre Coordinator**
6

7 I: How many students with ASDs are in this school?
8

9 L: The statistics say there are 1 in 100 children who have some form of ASD. In our
10 school, the identified ones are currently about 4 on our book. We know there are
11 more, B is one of them, but the ones that are identified are only four. The rest we
12 know about we can predict their behaviours and manage them. B's unusual because
13 he's got the high behaviours, and we've got classroom documentation, but not official
14 documentation because the parents don't acknowledge it. I guess the other thing I just
15 need to say is we don't not accept kids with ASD but we do require that they are high-
16 functioning kids. So for example B and another little boy in prep and another one that
17 we have are all high functioning. By that I mean that they function in a mainstream
18 class and they adapt to our school and class rules with intervention and with learning-
19 predictable behaviours, and the teachers make appropriate adjustments to keep their
20 routines steady and regular. There is a case in the school of a little boy who
21 enrolled...
22

23 If I just go back one step before I discuss him, our school has a pre-enrolment process,
24 an assessment and evaluation process, whereby the children for every year level that
25 they're entering have to go through an assessment criteria test where we look at any
26 potential learning needs they may have. And if they are too great we do not offer them
27 enrolment because we do not have the resources, either financial, physical or human
28 resources to cater for those numbers. And the case in point I'm thinking of is a little
29 boy who was enrolled, at the time of enrolment, he was enrolled, they looked at his
30 play and interaction with others. So they observe them doing certain task and play
31 situations, and this little boy who was very non-animated etc. but the mother said oh
32 he hasn't been well or whatever. And anyway the person who assessed somehow let
33 him through, but it was very obvious within 5 or 6 weeks of school that he had high
34 learning needs. He wasn't a high-functioning kid with autism, however, we could see
35 the behaviours but we can't put that label on him because it's not fair to the family for
36 us to make that diagnosis because we're not professionals to make that diagnosis. His
37 behaviours were so repetitive, his language was all echolalic, he can't engage in
38 conversations, he just repeats what you say, no sharing, and no interaction with others.
39 Parallel play rather than interactive play. When he sits down to eat with other children
40 he's facing the wall, very obvious behaviours. So then we had to start the process of
41 calling the parents in and saying, based on developmental milestones this little boy is
42 no where near showing these milestones. Even though there's a range of the achieving
43 these milestones, he wasn't meeting any of them. So we enlisted outside referral.
44 They went to one place in Dubai, and they wouldn't make the diagnosis, they were
45 uncomfortable, obviously it shows in his behaviour... Then we went to a second
46 psychologist and they say we are not able... there were some behaviours on the bus,
47 parents on the bus were complaining so as a school we had to take action. So the
48 parents agreed to go to a second psychologist, and he showed very high levels of
49 behaviour of high-level autism. But they didn't want to give the label. But then again
50 in this part of the world you don't have developed identification processes that we do

51 back in Australia, the only other option was to send this boy to an autism centre. But
52 by doing that you first have to have the parents accept that he has this, and they didn't.
53 So in the last meeting we had we just said we are unable to offer ongoing enrolment
54 next year because of these behaviours we have we are unable to offer these resources
55 and time and all the other things he needs. The child is not growing so they are
56 enrolling him in a special program at the school next door. They are advertising now
57 for special facilities for special needs. So they obviously will have the numbers and
58 money to set up that sort of thing. I told you that story so you would have a notion of
59 how our school operates. So we do have kids with ASDs but they have to be high
60 functioning. By that we don't necessarily mean high-functioning academically, but
61 that they can learn classroom and school protocols to a certain degree. Because if they
62 can't do that they become victims of other children or they stand out. And that's not
63 going to make any difference. So in B's case and with the other one, the other three
64 do, but the other one, who I gave you the story about, he's not really growing, he just
65 walks into a classroom and doesn't know what to do. He's actually regressed by
66 coming here, regressed in a lot of ways, and made some progress in others. But I said
67 to the mom and dad, it's almost unfair for him to be here, because we can't give him
68 that very structured routine that he needs, and that sensory input. Because there's so
69 much variation between classes and between teachers. So when we say high-
70 functioning, it doesn't mean academic high-functioning, it means that they can
71 function and learn to be independent, maybe at lesser rates than their peers, but still
72 that they can learn something with their peers. And with the other case I was talking
73 about, that wasn't happening. The others they grow, and with him he was growing
74 virtually flat, and with B and the other two, they're growing with their class, and
75 they're just below their class, again not academically but in terms of social
76 performance.

77
78 It is our social responsibility. schools are about helping children to become
79 responsible and rounded adults. If we don't help develop the whole child then we're
80 being irresponsible, because every human being has the right to develop to their
81 potential and we deny that to those children that don't say it how it is. We don't ban
82 them. We say these are their strengths, and with the boy I was telling you about, we
83 say in fairness to him, we cannot offer what he needs. But we went through a long
84 process. I guess I told you that story because, we consider that right back from the
85 beginning, as soon as you meet him you know that there's something not quite right,
86 compared with the other two students, which is great for them, that proves they're
87 high-functioning.

88
89 I: I couldn't actually tell who was the student with Asperger's in the class.

90
91 L: Melanie is an excellent teacher, and she's set up parameters for when they leave
92 the class, so he knows what to expect in library when he goes, he knows what to
93 expect. But we had a meeting in term one because he was playing up, everytime he
94 would leave the class he would drive other teacher's nuts, but he's learned those
95 behaviours within tight parameters, whereas the other boy just no matter what we put
96 in place it just wasn't happening for him. So this wasn't the place like he needs, with a
97 much tighter routine, where the same thing happens everytime everyday and lots of
98 tactile input, he needs lots of sensory.

99
100 I: Is B diagnosed?

101

102 L: If he is we haven't seen it. The parents must have shared something with Annette,
103 but it's not in our books, and they don't acknowledge it. So he must have had because
104 they shared that with Melanie, but they don't believe that it is so, so but I can't
105 confirm that because none of us have seen the reports to say that. Usually what
106 happens when parents say that this is happened but they don't agree with it, they
107 usually destroy the report or they refuse to show anybody, and that is their right, but
108 we don't have any... we're not supposed to know about it. That's why when we've
109 had meetings with teachers about the interplay with him, we've had them sign that the
110 parents don't know we met. Not that we can't, in any school we meet to develop the
111 right appropriate responses to children. So we could argue that he has these problems
112 so that's why we meet. So with the parents we don't have a meeting to say he's a kid
113 with special learning needs, because he's quite bright.

114

115 I: So academically B is on the same level as the other children?

116

117 L: Yes, he's performing well.

118

119 I: How are students with ASDs supported in this school? Are there any support
120 services they receive or that the teacher receives?

121

122 L: What happens is that he's on my radar, and we've done the background support
123 with him, and I provide materials and things, and I did a short talk with all the
124 teachers he interacts with, just to give them the information. I don't interact directly
125 with B because his parents don't want that. And there's teacher aid support that each
126 class teacher gets and I guess it's up to the discretion of the teacher to use that time
127 how they will. In terms of his academic support, it's probably not much. One of the
128 things we use to help him help himself is to use... We've got three students with
129 ASD, so to help them responsible, we use this feelings barometer for when they're
130 feeling, green is where they're feeling good and calm, and they point to how they're
131 feeling, and you don't ever want them to get to red area. At that point is where they
132 have meltdowns or a complete blowout... so apparently Bradley started using that
133 quite well, so when he used to shut down Melanie would ask him how he's feeling
134 and he would indicate it. So he at one stage I know the little boy in Prep two, they
135 have a quiet time area where they go, because kids with ASD often they're overly
136 sensitive to noise or to light, so they need to go to a quiet area where they have less
137 stimulation and lots of hanging things and lots of pictures and less noisy. So we create
138 a little place for them that they can just crawl into and read a book, and this calms
139 them down. So we put those sorts of structures into place. So we don't pull them out
140 one-on-one because they don't need it academically. If there's a social blow out,
141 because with ASD kids it's usually related to their poor social interaction skills, what
142 we do is, or the class teacher, because that's the trusted relationship, they have
143 discussions or ask why did this happen, how do you think they felt when you threw
144 sand in their face, that's what we're going through with the little one, he throws sand
145 in people's faces, and when it was thrown back in his face, he went off his tree. The
146 teacher said, you've been doing this for the last two weeks, now you know what that
147 feels like, how does it feel? Not good. So we have to sort of guide them and give them
148 the social scripts for what is appropriate and what is not because they can't learn
149 social behaviours, they're not reflective, that's one of the aspects of ASDs, they have
150 no ability to reflect because they have a very flat affect, they have no feeling, they

151 don't understand or cannot show the feelings of anybody. So I guess my role in cases
152 like this is to have meetings with the people who support them, the teachers, and
153 suggest strategies. We're giving the little one in prep, we have a lot of meetings, in
154 fact we're meeting with the parents tomorrow, because they're emotionally needy,
155 because they're still at the grieving stage, I mean she says this is the test that God has
156 sent me, that's how she sees it. And they're doing so much effort with his diet and all
157 this. She's well read, she's read so much about it and gives us the latest research about
158 it. All of that, on one level she understand all this information, intellectually she
159 understands what autism is, but on another level she's still a parent, who says this is
160 not really happening to my child, if I just change his diet, if I just do this or that.
161 There's that sort of interaction and support, through meetings. We just have to listen
162 to them and guide them through, to make them come to the understanding that this is a
163 condition for life, he's not going to change and the best we can do is be very
164 supportive of the family, and to help other people understand the condition, to help
165 him to minimise his meltdowns, and give him the strategies to cope with this
166 condition for life. Because it is a condition for life. Because it's the saddest for me, to
167 have worked in the district office in Australia and have managed 72 schools, we had a
168 system where school with high-end students are given extra money from the district
169 office where kids play up. The saddest meetings I've always had with parents was to
170 help them understand this because it's the one condition where they can't really form
171 a close relationship with their child because they're not touchy-feely kids, they live in
172 their own space. Their brains are wired differently so they don't think or empathise.
173 And parents always feel outside of their own child. They live in their own world, and
174 it's a really sad condition.

175

176 I: Do you provide any social skills training to teach them how to interact with their
177 peers?

178

179 L: The best way to do that with Aspergers kids, is if you note something, like say you
180 were the class teacher and you saw that they did this this and this, but you didn't get
181 the time because you have visitors in the school, you would say B yesterday when
182 Gauri was here, you did this and this, and I wasn't very happy with that, so we have
183 time out for these sorts of situations, you're going to be in time out. That's probably
184 the worst thing you can do for an Aspergers kid, or even one on ASD. Because they
185 don't understand. The best way to teach social skills to those kids is to first give them
186 the response as much as possible as near to the event as you can, so if he mucks up or
187 does something really socially inappropriate, or breaks class or school rules,
188 obviously like any other child they have to be dealt with whether they have the
189 condition or not. The parents say oh they have this condition, and we do have to
190 understand it, but the kid has to be dealt with straight away, and you just explain to
191 them we don't do this, we don't break the rules at school etc. and then like with the
192 experience of the child who kept throwing sand in children's eyes in the sand pit, he
193 would run away. So on one level knew it was wrong because he would run away, and
194 he would be hauled up by different teachers on duty and that wasn't working because
195 the behaviour just continued, and he would just blow up because these other teachers
196 were yelling at him so then how they responded was that the teacher on duty would
197 report that to the class teacher, and she would follow-up at the end of that break. To
198 ask them why they did it, they say they don't know because they can't reason, because
199 one characteristic of autism is that they're impulsive, whatever they feel like doing
200 they will, they see that object there and they just throw it. Probably the hardest thing

201 is to ask them why because they don't know. They say tell me, tell me, like one
202 teacher did, and it just set the kid into melt down. So instead you don't ask them, you
203 just say no, that was wrong, that hurts people and it's dangerous, and for that you go
204 to time out or the negotiated thing for that situation. That is the procedure for when
205 they do something wrong. So one thing is to deal with the situation as quickly as
206 possible related to the event, and that's the first level of response. The second level of
207 response in terms of skilling them up, is to if there's a behaviour that's presented, we
208 actually try to create social stories. So you say, I've got a little boy at the minute that I
209 was dealing with, we think he's on the spectrum but the parents are not yet ready to
210 listen or go off on a referral, but everyday he says I'm not happy here, I've got no one
211 to play with and no one likes me, but his way of trying to get into a group is totally
212 inappropriate, he'll push and shove, he'll snatch things from them, he won't share,
213 and then they don't want to play with him, and he doesn't understand why because he
214 can't empathise. One of the things I did with him today, because we had the parents in
215 for the third time yesterday, is we agreed that I would pull him in just twice a week,
216 not during lesson time, but during eating time, and I asked him if he'd like to eat with
217 me, and he said ok that would be nice. And what I did was draw his name in the
218 middle, and drew three or four circles. And I said you told me you don't have any
219 friends, but if you really think about it, which four friends do you like? And
220 immediately he wrote those and then he said can I write more, and I said of course. So
221 he added all these other circles and he kept going, and I said oh you've got a lot of
222 friends. And it was sixteen. And I said next year when you move into another class,
223 let's try to find one or two of your particular friends who we can try to place with you,
224 just so it will be nice when you move to a new teacher and a new classroom etc. and I
225 said but you realise we can't put all sixteen with you because some of them other
226 children would like to be with so we have to share them around. You've chosen
227 sixteen friends, if I asked you to choose your five best, which ones would you choose?
228 And so he got to five very quickly, he was very clear, and he said can I choose nine?
229 So he got to nine in that order, then looks back and says but I really want number one
230 and two. So we will try and accommodate that. So the next stage of skill streaming
231 with him, is that we negotiated what we're going to talk about on Wednesday and that
232 is how he approaches someone in play time, and we will discuss his responses, he's at
233 year three level and he's quite intelligent so we can do that with him. But with
234 someone in prep, Jen has to use a lot of happy smily faces, a lot of pictures, and visual
235 clues, because he hasn't got the language to say I'm feeling sad, or I'm feeling like
236 this. She'll say you're feeling sad, and she'll give him the language to grow his
237 language. Because one of the other things with ASD kids is they don't have the
238 feelings language. They don't have the subtleties because they don't have the
239 empathy, so one of the social scripts we teach them, you first have to give them the
240 language of feelings, so that they can say. Like I is still expressing his feelings by
241 pointing to pictures, although he's starting to point to pictures and say I'm feeling sad,
242 at this stage, this boy has the language to say I feel sad because no one wants to play
243 with me, so I don't need the visual clues with him. But now I'm extending him by
244 teaching him about the ways you can approach kids and the ways he can respond,
245 when they say no I don't want to play with you, instead of kicking and hitting out.
246 He's attention seeking and creating a further situation where no one wants to play
247 with him. Teachers do this, because the first point of call is the teacher because they
248 spend the most time with their teacher, in this case because he's not yet diagnosed. I
249 will come in after every break time and say such and such doesn't want to play with
250 me and I feel sad, he's using up all this time. And she just says, I, and he just keeps

251 talking over her, so he needs an outlet, so I said to him, because today's my first
252 session with him, so I said I met your daddy yesterday and we had a lovely talk, and
253 daddy said you spend a lot of time talking about how your school day went. Would
254 you like someone at school to do that with? I know you spend a lot of time sharing
255 with Ms. Mary Anne but she has to think of all the other children in the class too. So
256 how would you feel about coming to talk to me, just you and I, you know making him
257 feel special because it's one-to-one. So I'm going to do a model, helping him put the
258 mirror up to his face. Because they don't show empathy, they find it very hard, so
259 what you have to do is at least in a clinical way teach them to reflect on their
260 behaviours, if they can't in an emotional way, so they'll never feel our pain, or why it
261 was wrong to hurt you, but in a clinical way you can show them that it's not
262 appropriate to do these behaviours. We can watch an emotional movie and cry even
263 though we don't know those actors, because we can put ourselves in someone else's
264 shoes and feel what they feel. A movie or book can invoke that in us. In a ASD kid
265 they can't even feel it if they're the best friend, and in fact a teacher can be reading a
266 poignant part of a book and have other kids in tears and they'll laugh, or a kid will fall
267 over and hurt themselves, and the teacher will say poor Jack he hurt himself, and an
268 ASD kid would laugh. Because they see situations differently and their brains are
269 wired differently, and that's where they lose other people. People who don't
270 understand the condition would say what unfeeling bastards, or what horrible kids,
271 I've heard teachers say that. But it's an ignorance and lack of understanding.

272
273 The tragedy is that there's still so much ignorance in our society about a condition that
274 they can't do anything about. No one can intervene and drugs can't help. Sadly, this
275 happened in Australia, where disabilities are talked about, we have a law about any
276 discrimination against them, everything is so open, it's discussed in papers in the
277 media, we've travelled a long way in acceptance, and discrimination and ignorance
278 still happens. And then you come to this part of the world, with the shame factor,
279 where they still keep a lot of kids locked away at home. There's a move happening,
280 because I went to a disability meeting called by the Ministry of Education here and
281 they asked all schools to come, and not too many came, but enough came to give
282 input to the law that has been passed about discrimination against people with
283 disabilities. They're trying to get those children who they know are not attending
284 school into schools, and it's really sad to hear other schools say we can't do this and
285 that, it was all a very deficit model, they said we can't, we can't, we can't, and I
286 thought you're at the stage where you are the educators and principals of these
287 schools but you're ignorant in terms of understanding what these kids need. And they
288 asked us around the table, what do we do, and we stood out in that group in terms of
289 what we're offering. But that's because of Annette, the principal, who has a
290 background in special education too. So she understands that in any school
291 population, even if you deliberately screen students, because we have a screening
292 process where we can't take any kids with high needs disabilities, but even if you
293 screen out everybody and took the brighter ones, even in that population, there will
294 always be 12 to 16% of the population of students who will have some type of
295 learning need, whether it's giftedness, or whether it's Asperger's, because Asperger's
296 students usually are bright, it's just that they don't have any social skills, therefore,
297 their lack of social interaction causes problems, which then impacts on their learning
298 because they're not happy. So that becomes a learning difficulty. So it's about
299 growing people's understanding in this part of the world is vital. It will be a long
300 process.

301

302 I remember when I did my third degree in university. It was on Inclusion versus
303 Integration. There's a big difference between the two. Can I just clarify that for you?
304 You can include someone in your classroom, a kid in a wheelchair, or someone with
305 ASD etc., you can include them, and inclusion means that you're physically allowing
306 them into your class, but they may have their shadow teacher or someone helping
307 them do what they can, and they are included and it looks good because they are in a
308 mainstream class. The difference between integration is that when you have that same
309 student come in and they are included in your class, what we see happen is that they
310 are intermixing with the other kids in the class. The curriculum the others are doing is
311 in some way accessible to this child, and even if they only come in for half a day, as
312 long as they're interacting in some way with the group, that is integration. But
313 inclusion would be, this is the class, yes they come in your class, but they're still on
314 the outside. Whereas integration would be they are truly a part of that class and
315 mixing with some of the other kids, and doing some of the same curriculum that they
316 do, and this is the difference. So you should make that distinction, people interchange
317 the words, because the words inclusion and integration are used in the same way, but
318 they're not the same. Inclusion can be a parallel, the kid can be there but they can be
319 doing a parallel program just on the fringes of the classroom program. Integration is
320 where they are part of that classroom program, even if it's for half time. So make that
321 distinction because that's important.

322

323 I: What is your opinion of students with ASDs being included in mainstream schools
324 versus them being in special education centres?

325

326 L: For me the criteria is always, every case is different for a start, and I would base
327 each case individually on how well they function, or how able are they to function. So
328 each case is individual and you respond to it individually. For example, let's talk
329 about B. At the minute he's functioning really well, but there may come a time, and
330 there may not, where further down the track the interactions that are happening for
331 him are causing him so much stress or the demands of higher level schooling cause
332 him so much stress that he could act out in so many ways that he may be at that point
333 in time, that the parents decide through meetings with the school, that he's better off
334 in a much tighter environment with more clear parameters because the aim of
335 education is to make children independent and think for themselves, and be able to be
336 guided to work independently. If he can never do that without, if he can never do that
337 without teachers watching him and him playing up with others then maybe he needs
338 to be in a different environment. I take each case individually. I think as a general rule
339 a lot of Aspergers kids can be mainstreamed, and mainstreamed quite well. But I
340 know one that happened back in Australia, where this kid was quite high-functioning,
341 in terms of his language and his ability, but every time he came to school there was
342 huge problems and fights, he would say I don't want to sit there!, he would set off this
343 kid. There were always meetings and he was disrupting the learning of others. So the
344 way we managed that was he needed to go to school, and he needed access to
345 everything, and he needed to socialise with kids in some way. In the yard and in class
346 it didn't seem to happen, so what we did, we came in and they set up a class. In terms
347 of individualising it, each child was judged on their merit, and in this particular case
348 we judged him on. if you had one-on-one conversations with him, he was a
349 manipulator, when you had conversations with him, you could see he was playing
350 with his mother. She believed everything he said. And I guess at that stage it was

351 about impinging her life with him. So in the end we decided he had to be in school
352 because he was only 14 and he was bright, what happened he used to come to school,
353 but he would work away from the classroom, because he was an independent worker.
354 He would be given the assignments and he would go to the library to do research, at
355 times different from his own peer group. That's how we managed his behaviours.
356 That was an extreme case, and that is just another way we responded. In this part of
357 the world people will take a long time to get there. Again it's about have an
358 understanding.

359

360 I: So generally you think kids with Aspergers can be successfully mainstreamed?

361

362 L: In the most part, yes. But I always adhere to the rule that one size doesn't fit all. So
363 one size fits all response to any students needs is a very poor response. Even as a
364 parent I've had children with the same man, we could have twelve children and it
365 would be like raising a different child each time because they're all individual and I
366 think we need to remember that as teachers because it's too easy to do a one size fits
367 all. You need to think well how is this child unique or different, and you can treat
368 them. It's not hard, it'll take a lot more effort, but the rewards are great. Just to give
369 them their eye contact and say no, and listen to them, and let them know that you are
370 listening to learn about them and what they're telling you. Those one minute
371 interactions during the day can make that child feel so special and feel that someone
372 cares.

373

374 I: Could you tell me about the qualifications of the staff and the professional
375 development of the staff?

376

377 L: Apart from people that have got special education training, like myself, and two
378 other staff, and Annette, but she's totally in administration now, there are two other
379 staff who back in Australia were working in special education at their school, those
380 roles evolved, they did not do special ed degrees like I did, but they learned a lot of
381 skills on the job. And they're coming on to my team next year, which will be great.
382 One of the things I do, is I create a list of information about Aspergers and autism. in
383 meetings I have with staff I show it to them for reference.

384

385 I: Have there been any instances of bullying against students with ASDs at this
386 school, and if so, then what is done to tackle the bullying?

387

388 L: Bullying of students who are perceived to be different can occur in any
389 school around the world at any time. To minimise the possibility of this
390 occurring the teachers of these students in our school do specific
391 information training sessions with their classes about acceptance of
392 difference. This is from the point of view that everyone is individual and we all have
393 individual strengths and weaknesses. It is also done by explaining why the behaviour
394 of the student with ASD is like it is, and how they can support the student to fit in.
395 This part is usually done without the ASD student being present. Children are very
396 forgiving and helpful if they are given the information at a level they can comprehend.
397 It helps grow other students' tolerance.

398

399 Teachers re-visit the explanations around the ASD student as issues present.

400

401 I: Do students pay extra for learning support services?

402

403 L: Yes they pay 10,000 AED extra per year on top of the regular school fees.

404

405 I: How are students assessed at the school? Are they given exams at the end
406 of the year?

407

408 L: All students sit basically the same assessments within a particular class. The class
409 teacher makes whatever adjustments are considered necessary based on their
410 knowledge of the students. The literacy classes are streamed based on ability levels -
411 this is one way we ensure that students work at levels appropriate to ability. The
412 school has pre-entry assessments which students have to sit before acceptance into the
413 school - this means that students with very high special education needs are generally
414 precluded from entry into our school – for example, students with intellectual
415 disability, high needs autism and physical disability. But basically, any students with
416 a disability has to be able to function fairly well with minimal help to gain
417 entry to the school. We do offer support which is in-class teacher aide support and
418 from having smaller classes for literacy by having an extra teacher programmed
419 during literacy blocks

420

421 I: Are there any modifications to the assessment being made for your
422 students with disabilities?

423

424 L: Language is modified to suit the level of student ability and the types of questions
425 asked are also modified. For example, a lower ability student may be asked to answer
426 questions which require a lesser response than a more able student would give.

Appendix 25: Setting 3- Interview with LSC Coordinator 2

1 **Setting 3: Mainstream School, Interview with Learning Support Centre**
2 **Coordinator**

3
4 If a student has a significant disability in this part of the world, they tend to be
5 separated from the mainstream. At our school, we have a learning support center
6 (LSC), and this is the first year for the LSC. We now do assessments of each student
7 to identify their learning needs, and assessments show that there are many students
8 who are below their age group. We now have streams according to students' abilities
9 in Maths and Literacy so they can get extra support. After the assessment, we assess
10 the needs of each student, and then decide what to do.

11
12 We have four students here with Asperger's syndrome.

13
14 Why do you think inclusion is important?

15
16 The term 'disability' is broad. In Australia we have all students with disabilities
17 included in the mainstream. Here they don't have wheelchair access. And here they
18 don't accept students with high learning needs. The principal has said that they are not
19 set up as a SEN school, they are set up as a mainstream school.

20
21 There are now 5 LSC staff to support learning, and this is the first time here in this
22 school this much funding has been given for LSC. This isn't common here in UAE.

23
24 What kind of training does the staff go through?

25
26 In terms of learning how to differentiate the curriculum, we have a Professional
27 Development course coming up. An instructor from Australia will be coming here to
28 show teachers how to differentiate the curriculum for students with disabilities.

29
30 The school is only 3 years old, so it will take time to establish such a practice.

31
32 The parents here don't identify with the term 'learning needs'. They want help for
33 their child, but not publicly.

34
35 The principal here has argued for three extra wages for the learning support staff so
36 they have been able to hire more people. The LSC has made many advancements, we
37 are now collecting data on students' learning by doing assessments and this has never
38 been done before at this school. We want to see each child's own abilities.

39
40 What are some adaptations made at this school to accommodate for students with
41 disabilities?

42
43 We encourage teachers to make accommodations in the seating arrangements in their
44 class so that included students can sit closer to the teacher, and also can sit closer to
45 their peers.

46
47 Students with Asperger's syndrome are given graphic organizers to help them
48 organize their homework and notes. There is also a checklist for lower range students,
49 to make sure they have a good idea of what is required of them each day. We also
50 have a "feelings barometer" to help students to recognize their emotions. We sit

51 together in the LSC classroom and discuss how they are feeling that day and they
52 point out their emotion on the barometer, and we discuss this. This helps students with
53 Asperger's syndrome to identify their emotions, and learn how to express this.

54
55 Acoustically the school is poor, so we've been working to adjust this. The noise level
56 and echoes around school can affect the students' listening skills when teachers are
57 instructing. They have learned to turn off the AC so they are not battling with the
58 noise, and students do this now too.

59
60 In terms of programming and curriculum modification, some teachers shine in this
61 area and some teachers don't get it. That's why we saw the need for Professional
62 Development in this area. It is clear that 'one size fits all' does not apply to education
63 anymore, but some teachers just don't understand that.

64
65 What is the referral system at this school?

66
67 The referral process is in the process of developing now. We now keep files of each
68 student at LSC, and this is an ongoing process. The management can see the need for
69 this now. It is important to keep records so we can track the progress of the students.
70 In the past, records were not kept properly and they kept getting misplaced because
71 teachers are always moving around and to different countries.

72
73 It is clear that many students with learning difficulties are not identified because of
74 good behaviour, but they still need help. This is why the assessments are so important.
75 We also provide teachers with forms to fill out about their students, so teachers can
76 verbalise what their students' needs are. If the teacher identifies a child as having
77 learning difficulties, then they do an assessment.

78
79 Is there a committee for inclusion?

80
81 On the committee there is one ESL teacher. At this school, there is a high turnover of
82 staff every year, and there is so much ongoing learning for the new staff that comes
83 in. The meetings have not been formalized yet because of this. When there is a student
84 with complex needs, the teacher will usually come to me and the principal.

85
86 What arrangements to you have for social inclusion?

87
88 For students with Asperger's syndrome, teachers have been taught to use social stories
89 when students have a behaviour meltdown. These are scripted, and the teachers go
90 through it with the students, to teach them how to understand their emotions. The
91 teachers also speak to other students about this, and let them know that even though
92 the included student may seem different, he is the same as all of you. "He may not be
93 good at this, but he is good at this" for example.

94
95 When there is a transition time in between lessons, some students find it hard to cope
96 with this, with the lack of structure. So they are given social stories. For one student,
97 we gave him a blanket that is used only for transition time, or when things go out of
98 routine he takes the blanket with him.

99

100 For some students, moving out of the classroom is a challenge, so we arranged for the
101 Arabic teacher to come to the classroom, instead of having the students move around.

102

103 These adjustments can all be made because of regular meetings between teachers and
104 support staff. We are trying to build awareness amongst the staff of these students and
105 their needs. We don't have an official policy on SEN at this school yet, but we are
106 working towards that.

Appendix 26: Setting 3- Referral Form

Student Support Referral Form

General Information	
Date of Referral	
Student's Name	
Date of Birth	
Referred By	
Contact Details	PH: Mobile:

Request: (e.g. Student support meeting, information, classroom strategies etc)

Area(s) of Concern					
Reading	<input type="checkbox"/>	Speech/Language	<input type="checkbox"/>	Social/Emotional	<input type="checkbox"/>
Writing	<input type="checkbox"/>	Spelling	<input type="checkbox"/>	Behaviour	<input type="checkbox"/>
Fine Motor	<input type="checkbox"/>	Hearing	<input type="checkbox"/>	Maths	<input type="checkbox"/>
Gross Motor	<input type="checkbox"/>	Vision	<input type="checkbox"/>	Concentration	<input type="checkbox"/>

Reason for Referral

Background Information			
			Dates and details
History of any previous support	Y	N	
Any Medical Issues	Y	N	
Previous Specialist Reports	Y	N	

Do you want to find out more about the student's cognitive ability?	Y	N
Does the student present as being significantly advanced in their development?	Y	N
Does the student present as being significantly delayed in their development?	Y	N
Are you concerned about the child's wellbeing; ie. Significant difficulties in social interaction, coping skills, understanding/expressing of emotions, compliance etc?	Y	N
Does the student present with challenging behaviours that are impacting on their ability to learn?	Y	N
Does the student have an identified/ diagnosed syndrome or disorder for which you are seeking additional information, knowledge, ideas and strategies?	Y	N
Are you seeking support with programming strategies to better cater for the student's needs?	Y	N

Student's skills, abilities and interests
•
•
•
•

Current Student Attainment in Academic Areas			
	Not coping at Year level	Coping at Year level	Coping above Year level!
Numeracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oral Language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spelling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Written Expression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Health and PE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

School Assessments Undertaken (if applicable)	Scores
• IAchieve Literacy	
• IAchieve Numeracy	
• SA Spelling Test	
• Reading Benchmark	
•	
•	

Where does the student stand in relationship to others in the class?			
	Below average	Average	Above average
Adhering to class protocols	←	-----	→
Ability to follow instructions	←	-----	→
Ability to communicate appropriately to context	←	-----	→
Ability to learn basic skills	←	-----	→
Ability to engage in set tasks	←	-----	→
Ability to organise self	←	-----	→
Ability to work independently	←	-----	→
Ability to work with others	←	-----	→
Ability to complete work	←	-----	→
Motivation / Effort	←	-----	→
Attitude to learning	←	-----	→
Maturity	←	-----	→
Social skills	←	-----	→
Friendships	←	-----	→
Self-esteem	←	-----	→
Risk taking in learning	←	-----	→
Active class participation	←	-----	→
Behaviour Issues	←	-----	→

List any accommodations you have made for the student. eg seating, visual aids, adaptations of lessons, adaptation of verbal or written instructions etc.

Contacted parent regarding concerns : yes Date: no

If yes, what was discussed and what was the outcome of the contact?

Follow-up – What Action	Who	When

Review Date

Appendix 27: Setting 3- Student Observation Checklist

Student Observational Checklist

Student Name:	Date:
Teacher undertaking observation:	

Observed behavioural characteristics	Mostly	Sometimes	Rarely
General			
• able to follow instructions			
• able to follow instructions with visual cues			
• able to learn basic skills			
• able to engage in set tasks			
• gets bored easily			
• able to sustain attention span appropriate to set task			
• able to participate in class discussions			
• able to work in groups when required			
• able to work alone when required			
• appears alert and observant			
• adheres to class protocols			
• requires teacher prompts before engaging with task			
• displays 'follower' behaviours			
• displays initiating behaviours			
• displays immature behaviours			
• displays risk-taking in learning			
• shows curiosity			
Other comments:			
Organisation			
• able to organise self			
• able to prepare appropriately for lesson			
• requires prompts before beginning task			
• watches others for prompts			
• able to work independently			
• anxious to please (hyper-vigilant)			
Other comments:			
Communication/Language			
• able to understand simple instructions			
• able to respond appropriately to given instruction/question			
• able to express own needs age-appropriately			
• misunderstands instructions			
• slow or delayed responses to questions			

<ul style="list-style-type: none"> needs extra time to process orally given information 			
Other comments:			
Listening/Speaking			
<ul style="list-style-type: none"> displays age-appropriate listening behaviours 			
<ul style="list-style-type: none"> able to do turn-taking 			
<ul style="list-style-type: none"> able to sustain focused attention on speaker 			
<ul style="list-style-type: none"> asks clarifying questions 			
<ul style="list-style-type: none"> responds at appropriate times 			
<ul style="list-style-type: none"> keen to respond to speaker's questions 			
<ul style="list-style-type: none"> seems confused when asked direct question 			
<ul style="list-style-type: none"> able to act appropriately within context of lesson 			
Other comments:			
Reading			
<ul style="list-style-type: none"> enjoys reading sessions 			
<ul style="list-style-type: none"> engages with book 			
<ul style="list-style-type: none"> able to decode words 			
<ul style="list-style-type: none"> reads with understanding 			
Other comments:			
Writing			
<ul style="list-style-type: none"> holds pencil appropriately 			
<ul style="list-style-type: none"> can write own name 			
<ul style="list-style-type: none"> can copy print 			
<ul style="list-style-type: none"> has left to right orientation 			
<ul style="list-style-type: none"> able to construct meaningful words 			
<ul style="list-style-type: none"> able to construct meaningful sentences 			
Other comments:			
Social			
<ul style="list-style-type: none"> interacts with peers appropriately 			
<ul style="list-style-type: none"> timid in group activity 			
<ul style="list-style-type: none"> 'parallel' plays rather than joining in peer group 			
<ul style="list-style-type: none"> displays immaturity in social interactions 			
<ul style="list-style-type: none"> disruptive of others 			

Appendix 28: Setting 3- Interview with Class Teacher 1

1 **Setting 3: Mainstream school – Interview with class teacher**

2
3 **I: Interviewer**

4 **T: Class Teacher**

5
6 I: How do you manage B's behaviours in the classroom?

7
8 T: From day one, I established the rules in the classroom with all the students so there
9 is no confusion. All the students have to follow the rules of the class. I also made sure
10 I enforced these rules from the beginning, I give a cross on the board to students who
11 do not follow the rules, and if they get three crosses in a day they are sent out of the
12 class. They have to make up the work they have missed in their own time. I think this
13 has worked for my class quite well, as well as for B.

14
15 I try to build a positive relationship with my students, I try to form a relationship
16 where they feel comfortable and I can be supportive. I always ask B "What did you do
17 over the weekend?" to try to get him to open up.

18
19 I believe in reducing anxiety for these students, so that there are no surprises. The
20 rules are the same all the time and the consequences are also the same at all times, so
21 they know exactly what to expect as a consequence to their behaviours.

22
23 When I have been away from the class, taking leave, like I just did recently, where I
24 had to take leave for two weeks and fly back to Australia for a family emergency, he
25 goes off and starts misbehaving. He can't handle that change, and his behaviours are
26 always very noncompliant when I'm away.

27
28 Sometimes during instruction time he does his own thing in class, like he doesn't like
29 to come and sit on the floor with the others when we're reading a book, and he stays
30 at his desk, and listens to me from there. I redirect him quietly instead of making a big
31 deal out of the situation. I'm not confrontational with him, I avoid confrontation
32 because I believe it sets him off if you do that. He tantrums with his mom a lot
33 because of this reason. I always ask him, "are you ok?" and "when you're ready then
34 come inside" if he's been tantruming outside the classroom. You have to take a soft
35 approach with him.

36
37 In Arabic class he really acts up, he runs around the classroom when other students
38 are sitting on the floor listening to the teacher. He even runs out the door sometimes.
39 The Arabic teacher is at her wit's end and she doesn't know what to do because he's
40 not complying with her during the class. She feels very insecure about how to handle
41 him.

42
43 When there are situations where he has to go to other classes with different teachers, it
44 takes him time to adjust. He needs to understand the situation, the reasons why he has
45 to go to another room or why the teacher has changed.

46
47 I try to appeal to his intellect. Like I tell him you're in this school because you're
48 smart. You can do this because you are smart. It is always important to think about
49 your techniques in handling students with Aspergers, you have to reflect on what did
50 you do, and what should you do in the future.

51

52 We had one incident where I accidentally left him behind in class alone, because the
53 whole class was going to another room for an activity, and B got left behind. When I
54 realised and I came back to the class to get him he was very distressed. He was sitting
55 at his desk and he looked up at me and his eyes were very strange, I've seen this with
56 other Asperger's kids, when they look at you in a very strange way. He was sort of
57 looking at me from the corners of his eyes, and I understood that he was very upset
58 that he had been left in the class alone and didn't know where the rest of the class
59 was.

60

61 His body movements are also uncontrolled, like he doesn't have good control of his
62 body movements. When he sits on the floor, he just flops around.

63

64 The other students in the school are good at ignoring him when he acts up, they talk to
65 the other kids instead. He likes to disrupt the class and other kids know they should
66 ignore him.

67

68 Socially he's become a little better, he's sitting with new students now, because I've
69 changed the seating arrangement in class to try something new to see how the students
70 respond.

71

72 I: Does he interact much with others or have any friends in school?

73

74 T: He parallel plays more with other students rather than interactive plays. His mom
75 doesn't acknowledge his ASD, she doesn't acknowledge to me that he has it. I know
76 from speaking to her that he sometimes goes off at home, he has tantrums and
77 displays some challenging behaviours, but the mom has told me she doesn't agree he
78 has an ASD. He has a friend in school from another class who goes over to his house
79 for play dates, I'm not sure if the kids arrange the play dates, or if his mom arranges it
80 for him.

81

82 His group skills are not good, normally he doesn't work well in a group, he usually
83 goes off and does his own thing. He's got some ability to relate to others that I've
84 seen.

85

86 There is no aggression or violent behaviour in the classroom. There was an incident
87 two weeks ago after they had finished swimming. Some of the students were taking
88 long to get changed and so I had to go into the changing room to see why, and I saw
89 him standing with his back to the wall completely naked. It turned out that one of the
90 students had taken his bag, I'm not sure if they did it on purpose or not. He was totally
91 humiliated by the others, they were pointing to him and laughing and making fun of
92 him. He was blushing and looked embarrassed. He didn't know what to do, so I had to
93 ask the others to leave and brought him his bag, and let him have some privacy to
94 change. When incidents like this happen, he takes it very badly and is very
95 embarrassed.

96

97 His behaviour is generally when teachers are around, he knows when he's being
98 supervised. He hits other students when he thinks he's being attacked, he doesn't hit
99 others to provoke them.

100

101 Sometimes as a punishment I will take his play time away, and this is quite an
102 effective strategy with him.

103

104 He's usually not noticeable in class, he tends to be quiet and doesn't get noticed. His
105 parents don't complain at all, they seem quite satisfied with the education he's
106 receiving here. This school is accommodating for students with SEN.

107

108 He used to have a shadow teacher before, who used to follow him around in classes,
109 but the parents stopped sending the shadow teacher in with him after a while because
110 it would attract the other students' attention and they started treating him differently.
111 He was aware that the shadow teacher was only there for him and I think it made him
112 uncomfortable. Like now I think he's aware that you're here to observe him, even
113 though you're not even observing him directly or sitting anywhere near him, and I can
114 feel that he's acting up because of it. I'm not sure if he's acting up because you're
115 here, or whether it's because of the new seating arrangement, but he definitely knows
116 you're here to observe him.

117

118 He's on medication at the moment for hyperactivity. The parents couldn't get him into
119 any other school so I think the attitude is they're just grateful that he's able to attend
120 school here. He was rejected everywhere else, and the parents just say they're happy
121 with the education here. The parents however don't appreciate that he's had a good
122 year this year compared to how he was performing in the previous years. They don't
123 show appreciation or acknowledgement of that.

124

125 His dad is in the military so he's a pretty strict father, and he says there's nothing
126 wrong with his son. There are no problems. The mom has excuses for his behaviour
127 all the time, like he's not feeling well or he's just adjusting to this or that.

128

129 I: What are your views on inclusive education for students with ASDs?

130

131 T: I believe in inclusive education, I believe students with disabilities can be educated
132 in mainstream schools. However, I don't think you can expect teachers to have
133 students with disabilities in their classes without providing them with appropriate
134 support. Teachers need the support in order to educate students with disabilities in
135 their classes. If you give teachers 32 students in a class, including students with LD
136 without the appropriate support, then you're asking for trouble.

137

138 I: Do you believe you are well-supported in this school in terms of how to manage a
139 student with an ASD in your class?

140

141 T: In this school, if you ask for help then you will receive it, but if you don't ask for
142 help then you can get lost. The Arabic teacher for example needed help managing B
143 because he was really acting up in her class. She got together with the Learning
144 Support Coordinator and they had a meeting about to get some strategies for how to
145 better manage B during Arabic class. In terms of the primary principal, she is doing
146 two jobs at the moment because of some understaffing issues, so she cannot provide
147 us with much support. For this reason, I know some teachers might not feel fully
148 supported in this school in terms of managing students with ASDs in their class.

149

150 I know some students are charged extra for learning support services here at this
151 school, but they are not provided with the appropriate learning support services from
152 what I have seen. Some teachers say we should get the parents more involved, so that
153 they can be more involved in their child's education, but that hasn't happened.

154

155 The accommodations I have made are all to address his behavioural challenges, I
156 haven't needed to make any accommodations in terms of his academic understanding.
157 He is fine academically and is keeping up with the rest of the class, sometimes even
158 doing better than his peers.

Appendix 29: Setting 3- Observation Notes 1

1 **Observation notes**

2

3 **Setting 3: A mainstream school**

4

5 The following notes were taken during an observation of a student with an ASD being
6 mainstreamed in Grade 2 in an International school in Sharjah. The observation took
7 place over two days, on May 25th and 26th 2009.

8

9 The tables in the classroom are arranged in a U shape, facing the teacher, so all the
10 students are sitting around the classroom. The teacher has put up the day's schedule
11 on the board, so all the students can see the schedule.

12

13 **Library**

14

15 The 25 students in the class sit around the teacher on the floor. The teacher reads a
16 storybook and asks questions about the book. After reading, the students line up to
17 take out the books they've chosen. The teacher says, "Remember, people with true
18 courage are honest. Go to the back of the line if you were running", and she thanks
19 those students who go to the back of the line.

20

21 Back in the classroom, they start doing enactments of a story they have read, each
22 group of two or three students take a turn. After each story, they talk about the moral
23 of the story, for example, "Slow and steady wins the race". They talk about how the
24 characters felt. They use feeling faces printed on a piece of paper to identify how the
25 characters felt.

26

27 Another three students do their enactment of a story. After this they brainstorm the
28 moral of the story. "If you help others, they will help you. Treat others how you
29 would want to be treated".

30

31 Another group comes up to perform, and they forget their lines. The teacher says,
32 "This is cause and effect. You were not working when you were supposed to be. Then
33 you become embarrassed when you don't remember your lines".

34

35 **Playtime**

36

37 The student cannot be found, another teacher tells me that she caught him punching
38 and grabbing other kids, so she had to ask him to stop and sent him to the library for
39 the rest of play time.

40

41 **Maths**

42

43 The students are all asked to sit by the teacher on the floor. Student B does not move
44 to the floor with the others, he stays at his desk. The teacher goes through a math
45 problem with them, and then all the students return to their desks. The students are
46 asked to work with the person sitting next to them, and they are given a number chart
47 and asked to point to a specific number.

48

49 B sits with his head on the table, and he looks around. He flops on the chair, and
50 keeps his legs on the chair and his body on the table. He doesn't sit still. He is

51 working with the girl sitting next to him. He starts making a humming noise, and the
52 teacher says “B, your name is going on the board because you’re humming”. She
53 writes his name on the board. He stops this behaviour. He keeps moving the blocks on
54 his table around. He doesn’t participate in the activity with his partner, and he calls
55 out the answers along with the others.

56

57 All the students are asked to sit back on the floor near the teacher. All the students go,
58 except for B who stays at his table looking at his math book. After they finish talking
59 about one math problem, the kids go back to their tables. Teacher says, “B you need
60 to stop it” (he is humming again).

61

62 They start working on their math workbooks individually. Ho is working
63 independently but working through the problems slower than the other students. He’s
64 halfway through the page while other students are almost finished with that page.

65

66 The teacher says to him, “This is not good enough for you. What have you been
67 doing?” He doesn’t respond, and keeps working. The other students are asked to put
68 their books away, and go sit on the floor. After 5 minutes, he goes to sit on the floor
69 with the others. He leaves his math book on the table.

70

71 The teacher works on a subtraction question. She asks the students, “If we had 45
72 cents, and used 20 cents, how much would we have left?” The other students answer
73 incorrectly, but B answers the question correctly. He comes on the board and writes
74 the correct answer, $45-20=25$. Teacher says, “Too easy, well done!”.

75

76 As he sits on the floor, he leans on the other students, unable to sit up straight, or sit
77 still. B mumbles and fidgets. Teacher says “There is too much talking. Do we have to
78 move you back to your old tables again?” Students say “No”. There are now 5
79 students names on the board for bad behaviour. They then do some more subtractions
80 and go back to the tables to do some more individual work.

81

82 As B sits on the table, he leans on the other students sitting next to him. He touches
83 them and pushes his head on to them, and he makes faces in their face (mouth wide
84 open). He pokes a girl sitting next to him on the shoulder with a pencil.

85

86 **Arabic Lesson (permission to observe for only ten minutes)**

87

88 The other students are sitting on the floor around the Arabic teacher, but he seems
89 disinterested, he starts running around the room. The teacher ignores him. He then
90 comes back to sit with the other students, but starts rolling around on the floor. He
91 plays around with another student, who seems to be disrupted. The teacher then tries
92 giving him another activity to do, away from the other students, on the table. But he
93 still continues with the walking around the classroom and making noises, and the
94 other students seem disturbed by this. They keep looking at him.

95

96 **Playtime**

97

98 There are students all playing together in the playground. The whole of the primary
99 section plays together on a big field. There are a few teachers supervising them. B is
100 playing with four boys from his class. The teacher seems unaware, but he is punching

101 other students. They throw him on the floor, and other students are punching him too.
102 They are rough playing. B gets up and pushes one of the boys down on the floor, then
103 the other boys all push him down. They grab him, swing at him, throw him on the
104 floor, they push each other around.

105

106 The other boys ask him to leave the group. They say “Stop fighting now!”. B walks
107 away to get some water, then returns to the boys again. The boys all move behind the
108 trees, out of sight to the teachers. He stands around them while the other kids are
109 playing together. The other students around the field are engaged in games with each
110 other, some are playing football, and catch. B and his group of boys are the only ones
111 not playing a game. He sits alone while other boys in his group play together. B is not
112 involved in any conversation with the others. He starts punching and kicking with
113 another boy in the group for a while. There is no constructive play going on. When
114 playtime is over, he walks back to the classroom alone.

Appendix 30: Setting 3- Interview with Class Teacher 2

1 **Setting 3: Mainstream School- Interview with Class Teacher**

2
3 He has been at this school for three months. The parents have been reluctant to get
4 him diagnosed even though there is clearly a learning disability. When he came here,
5 he couldn't even pick up a pair of scissors and cut, so he's improved a lot.

6
7 I try to step back a bit when teaching. We are supposed to be practicing guided
8 learning, not telling them exactly what to do.

9
10 In terms of his behaviours, he likes to pull other students' socks. He takes off his
11 socks in the afternoon, but all the students are allowed to do that. He used to take his
12 shoes and socks off all day, but now he keeps them on so that is an improvement. He
13 used to take his shirt off when he first came here as well, but he has stopped that now.

14
15 He can follow instructions when you tell him exactly what to do, step-by-step.

16
17 What kind of adaptations do you make for the student?

18
19 I try to use peer assistance to help him, by getting one student to help him with his
20 work. Sometimes I pre-cut the materials for him to make it easier. When he is
21 working one-on-one he can do everything. But I believe that if they can do what they
22 can on their own, it's the best.

23
24 He needs a routine and structure, he works better that way. He's undiagnosed now,
25 but when he gets diagnosed there is a chance he'll leave the school. I cannot modify
26 the curriculum for him at this point because we don't have a diagnosis. Another pupil
27 with Asperger's is also at this school but he is not coping well. We [teachers] do not
28 have the time to adapt the curriculum, and to adapt the whole class around him
29 because we have 25 students.

30
31 He used to cry in the morning when we would all say "Good morning". It was too
32 loud so we had to stop that.

33
34 He wants to play with the others but he doesn't know how. He can do parallel play,
35 but he doesn't interact with the others.

36
37 The students are supposed to be independent and guided – not ordered and told what
38 to do.

39
40 He dresses independently now, after the teacher insisted to the parents that he must
41 learn this.

Appendix 31: Setting 3- Observation Notes 2

1 **Setting 3: Mainstream School - Observation Notes**

2
3 **10:45 am 25th November 2008**

4 Grade 4 Primary Level. Undiagnosed boy has been identified with learning
5 difficulties.

6
7 Around 25 students in the class. One teacher and two teaching assistants.

8
9 **Playtime:**

10
11 15 minutes, on the playground. Student sits lone silently. At play time he sits on his
12 own and waits for the teacher to get him. No interaction with his peers.

13
14 **In classroom:**

15 Group time, in the play area.

16 Student sits with head in his hands and his back to the wall. Looks at other students
17 occasionally. Teacher gives him and others a sticker for sitting up straight. He stays
18 quiet.

19
20 Teacher asks “Are you listening?”. Class responds “Yes I am!”. Student does not
21 respond.

22
23 Both TA’s are doing other work around the classroom, art work and display board.

24
25 **First lesson: Art class**

26
27 Objective is to cut out a figure of a man and to decorate it with some materials.

28
29 Teacher asks class “What does this man need?” Class responds “Eyes, ears... etc”
30 Student has no response. He responds to instructions “Get up”. When others go to
31 tables to work, he wanders around and goes to the corner table alone. TA brings him
32 over to a table.

33
34 Other students start cutting, he doesn’t do anything while the others are working.
35 Teacher gives him instructions to cut, and he starts cutting randomly, not following
36 the pattern. Teacher says “Good cutting”. He stops after a while and looks around.

37
38 He says something, and puts his thumb down. Other students at the table look him but
39 ignore what he is saying. He shakes his head (repetitive movements).

40
41 He doesn’t do the task, he looks around. Teacher says “Do you want some sandals?
42 (to decorate with)”. He looks at her and gives her his hand and takes the sandals.
43 When the teacher leaves he walks away, out of the class. He comes back and walks
44 around the classroom. Nobody redirects him back to his work.

45
46 He sits in the corner. He keeps walking in and out of the classroom. He looks out of
47 the window. He paces. He touches another boy’s hair, he walks away, and goes back
48 and does it again. He does it a few times repetitively. Teacher keeps saying “Go do
49 your work”, he walks over and then stops. Makes some inaudible verbalizations.

50

51 Teacher says “show me your work”. He brings his work to the teacher and she says
52 “good boy” but the work has not been done. He walks away.

53

54 Another student gives her paper to him to show the teacher (she thinks he did it).
55 Teacher says “Good job”.

56 He talks with another disruptive student (makes some noises repetitively, “Wee-
57 oww”).

58

59 He touches another student, and that student complains to the teacher. The teacher
60 tells the boy to say “Stop it I don’t like it” and student repeats this (echoes). Teacher
61 says to say sorry, and he says “Sorry”.

62

63 **Second lesson: making hats for the school concert**

64

65 He responds to instruction of “Get the coloured paper”.

66

67 Sits again at the corner table and does nothing.

68

69 Teacher says “Go and get me your hat”, he walks around and comes back to the
70 teacher with nothing. Teacher tells another student to help him make a hat. She takes
71 him to the table and makes it for him. He shows this to the teacher and she says
72 “Good job”. Again she thinks he has made it.

73

74 When students finish, teacher says “Go and play in the play area”. He walks around.

75

76 **Third lesson: Gross motor activity**

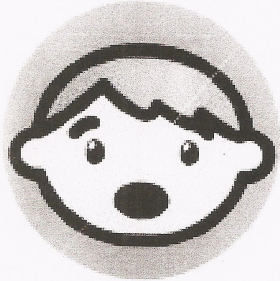
77

78 Objective: Students follow a sequence of gross motor activities on the playground,
79 and take turns doing it one at a time.

80

81 He doesn’t watch the demonstration. Teacher puts him at the end so he can watch the
82 others doing it first. When it’s his turn he doesn’t do it properly. The first part is
83 assisted so he’s okay, then the TA prompts him through the second part. He seems
84 scared. He doesn’t complete it, and then the teacher finally walks him through it.

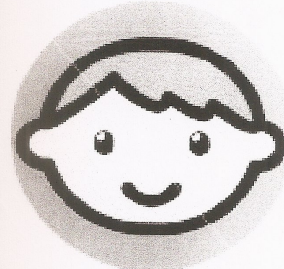
Appendix 32: Setting 3- Pictorial Representation of Emotions



SCARED



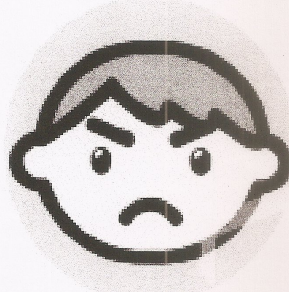
SAD



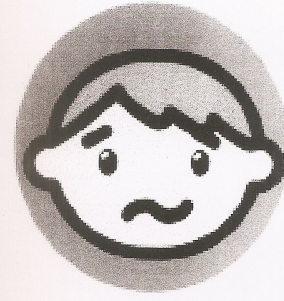
HAPPY



FUNNY



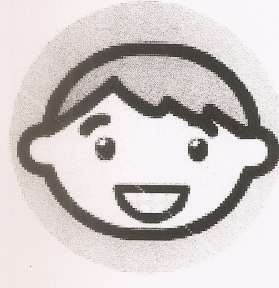
ANGRY



CONFUSED



LONELY



EMBARRASSED