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A Case Study of a Child with ASD in a Regular Preschool in the United Arab Emirates

By
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ABSTRACT

The case study examines the progress of a child with ASD who is included in a regular pre-school in a city in the UAE (United Arab Emirates) without specialized support. An insight into the context to this child's inclusion is also examined. It is hoped that this study answers the main research question: what are the effects of inclusion in a regular preschool in the UAE on a child with ASD? In order to answer such a question, a thorough follow up of the child's IEP (Individualised Educational Plan) is undertaken. Insights into the context are used to put forward research-based recommendations that may improve the effectiveness of inclusion in this situation. Qualitative research methods such as observations, interviews and document analysis were used for this investigation. However, a group of methodological issues and problems occurred and were acknowledged and dealt with accordingly. The study ends with research-based recommendations for future practice.

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1 INTRODUCTION

1.1. Introduction

Keys to determining how to help each individual with Autistic Spectrum Disorder (ASD) reach his or her potential are the ongoing identification of his or her needs and providing an individualized educational program designed specifically to meet those needs. In 1994, representatives of 92 governments and 25 international organisations met in Salamanca, Spain to form the 'UNESCO World Conference on Special Educational Needs'. A statement was agreed on which called for 'inclusion' to be the norm. The conference adopted a framework for action, which would require all children to be accommodated in ordinary schools, regardless of their physical, intellectual, social, emotional, linguistic or other conditions (UNESCO 1994, p.6). Ysseldyke and Algozzine (1995, p.53) point out that advocates of inclusion believe in it not only for legal reasons but they also believe that students with disabilities profit socially and academically from interactions with their peers without disabilities. Further, they believe that students without disabilities can benefit from interacting with students with disabilities. Inclusion helps all students develop an understanding and appreciation of diversity in society.

In many countries, including the UAE, there are no laws that are directly linked to rights of persons with disabilities (Alghazo, 2003). In other countries legislation for individuals with disabilities includes laws and acts that clearly define the eligibility of individuals to educational services but teachers who are qualified to serve the needs of such children, special resources and programmes for intervention are not always available before a child is accepted in a regular classroom (Batten 2005).

The case study examines the progress of a child with ASD who is included in a regular pre-school in a city in the UAE (the United Arab Emirates) without specialized support. An insight into the context to this child's inclusion is also examined. It is hoped that this study answers main research question: what are the effects of inclusion in a regular preschool in the UAE on a child with ASD? In order to answer such question, a thorough follow up of the child's IEP (Individualised Educational Plan) is undertaken. Insights into

the context are used to put forward research-based recommendations that may improve the effectiveness of inclusion in this situation. Qualitative research methods such as observations, interviews and document analysis were used for this investigation. However, a group of methodological issues and problems occurred and were acknowledged and dealt with accordingly. The study ends with research-based recommendations for future practice.

1.2. Background

In spite of multinational commitment and reports about progress in different countries, exclusion of children with special educational needs is still the norm in many places. This exclusion is sometimes covert where physical integration is achieved while curricular and emotional exclusion persist. In the last ten years progress towards inclusion in many countries has been hindered by legal, cultural and ethical issues.

1.2.1. Requirements for Successful Inclusion

Clough (1998, p.5) has drawn attention to the fact that in the urge for inclusion lies the danger of physical inclusion but curricular and emotional exclusion. Bricker (1995) described three factors that influence the success of inclusion: attitudes (views about inclusion), resources (access to specialists; collaborative planning), and curricula (activity-based; promoting interaction).

The special education phenomenon is not something confined to the developed world. Armstrong (1998, p.31) points out that in developing countries, too, access to educational opportunities for all children is increasingly being advocated and inclusive education raised in policy debates. Alghazo and Gaad (2004) indicated that in the United Arab Emirates there were changes in the way children with disabilities are receiving their education. They claim that there is a movement towards educating students with disabilities in the regular education classroom, and therefore, general education teachers face a new challenge in assuming new roles and responsibilities. To demonstrate the status of this movement, a review of current special education services in the UAE is shown in the following sections.

1.2.2. UAE Education System

U.A.E. society has witnessed major comprehensive developments in both structure and services driven by a notable economic growth. The Ministry of Education (MoE) has

spent more than three decades, since the establishment of the Federation in 1971, working on developing the county's education system. Due to the flourishing economy and social development, the UAE has welcomed tremendous numbers of expatriates from various countries. It is estimated that the total population consists of 19% nationals, 23% other Arab and Iranians, 50% South Asians, 8% other expatriates including Westerners and East Asians. Children of those incoming communities required a corresponding number of schools to accommodate them. The MoE licenses those private schools that follow the curricula and syllabi of their mother homeland, but those schools operate under the supervision of the MoE to ensure abiding by educational and teaching ethics and morals.

In 2000, the Ministry established a strategy to further develop the education system of the UAE. Vision 2020 has 23 declared goals none of which clearly mention special education but goal number 11 stressed on education as a basic right for all regardless of gender or geographic location. It also mentioned that educational services have to be flexible to respond to differences in abilities of each individual learner. In its first five-year plan (2000-2005) the ministry launched five programs for improving different areas of the educational system. One of these programs was dedicated to special education.

1.2.3. Special Education in the UAE

According to the UNESCO (1995), lack of adequate legislation for special education is evident in many developing countries. In the UAE, the absence of a special education act has not prevented establishing the Special Education Department of the Ministry of Education which was introduced in 1979 to cater for children with special educational needs. In the UAE, Special Education is concerned with two groups: the gifted and students with special needs.

1.2.3.1 Special Education Services in Government Schools

The Administration of Programs for Pupils with Special Abilities in the Ministry of Education runs a program for special education classes in regular primary schools. The provision of special needs facilities in the UAE includes free school placements, but only for national children (Gaad 2001). According to the MoE (2003), special education classrooms provide services to low achievers, slow learners and children with hearing/visual/speech impairments. Children with developmental, communication and

social disorders are not included in this program. In 2005, 226 such classes served 1574 pupils (MoE 2005).

The Ministry has set the general rules for placing learners in special education classrooms. These rules include; an IQ not less than 70, an appropriate level of emotional intelligence and motor skills, medical fitness, not suffering from multiple disabilities and registration in a public school. Additional rules apply to learners with hearing and visual impairments. This screening policy adopted by the MoE is based on observing the achievement of the child from the age of seven onwards. Children with disabilities, which can be diagnosed at a younger age, such as Autism or Down syndrome for example, are not admitted to government kindergarten or primary schools and are therefore not eligible for services provided by the Ministry at that age. As a result only 1574 pupils were registered in the Special Education Classroom Program in 2004-2005 (MoE 2005). This represents 0.55% of the pupil population in government schools or 0.33% of the total pupil population including pupils in private schools. These percentages are extremely low compared to percentages in some developed countries. For example, the percentage of pupils with SEN statements in England is 3% (National Statistics Bulletin, 2003). In the USA, disabled students as a percent of public school enrolment are 13.4% in 2001-02 (National Centre for Education Statistics NCES, 2002).

Colebatch (2002) points out that in the "policy cycle" model, policy culminates in implementation and is followed by evaluation. The special education department appears to lack a proper monitoring system for the performance of the program. For the purpose of this section, the researcher conducted a three-day visit in 2005 to observe teaching in one special education classroom. The observation revealed that nothing of the announced curriculum modifications was implemented in reality and the only benefit of such special education classrooms was a lower number of pupils in each class; six as compared to 30 pupils in the regular class. Neither Individualized Educational Plans nor reports about pupil progress were available. Observations undertaken by the researcher in a regular grade 1 class with six integrated children with special needs showed that benefits of attending such a class for children with special needs are questionable due to many reasons. The regular teacher was overwhelmed with 33 pupils and no assistants, not enough chairs and shortage of homework books. Classroom management was almost impossible. Children with special needs were labelled "children with SEN" instead of being called by their

names. They were grouped at the end of the class instead of intermingling with peers. Threats with physical punishment were used to keep discipline in class. The special needs group did not feel it belonged to the place and they were not welcomed by their peers in the regular class.

1.2.3.2. Special Education Services in Private Schools

In response to requests submitted by some private schools, the MoE (Ministry of Education and Youth at that time) in 2003 authorised primary private schools to conduct classes for children with special needs if they fulfil some requirements (Bibbo, 2003). The requirements include a minimum number of students requiring special classes, qualified and certified teachers appointed to the purpose, and specified facilities. The Special Needs programmes Department at the Ministry in co-operation with the Private Learning departments at the Educational Zones, is in charge of setting the specifications and programmes to be implemented by the schools and verify their competencies and fulfilment of all requirements. Such schools will be supported by specialists and psychologists at the Educational Zones to receive consultancy.

For the purpose of this section, the researcher conducted a series of interviews in 2004 with administrators in six leading private schools in Al-Ain City. The interviews revealed that these schools were not aware of the ministries decision opening the way for conducting such classes in private schools. It also revealed that each school had its own policy regarding placement of children with SEN. The first school had a SEN unit run by a qualified and experienced SEN coordinator who dealt only with cases of children with dyslexia and prepared individualized education plans to meet their needs. SEN classes were limited to 2-3 pupils in each session of 30 minutes. The SEN unit does not handle other learning disabilities due to lack of time and lack of resources. The second school did not accept children with SEN because they thought their classes are too big and that students with SEN would benefit more in schools with a smaller number of students per classroom. The third school accepted children with minor disabilities after certain procedures. The fourth school accepted children with SEN for a trial period to see if the child had any inappropriate behavioural activities that cannot be tolerated by peers or teachers. The fifth school did not accept children with SEN due to the lack of facilities, resources and lack of trained teachers. The sixth school accepted some cases of children

with Autism or Down syndrome but without providing services that meet their special needs.

1.2.3.3. Special Education Services in Special Rehabilitation Centres

The MoE (2004) has recently published a list of 23 private and public institutions specialized in providing services to individuals with learning difficulties. in Abu Dhabi, Dubai, Sharjah and Al Ain. No centres exist in the remaining UAE cities. The list contains eight institutions that provide services to children with autism in four different cities. These so called "Centres for Preparation and Rehabilitation for the Handicapped" offer children with an IQ less than 70, along with others with a range of mental disabilities some services. They are under the supervision of the Department of Special Needs in the Ministry of Labour and Social Affairs (MoLSA) not the Ministry of Education. Gaad (2001) points out that one of the Ministries aims for educating people with disabilities is to raise the child to become independent, and a good citizen who knows his duties, understands his rights, and works toward the continuous development of the nation. Following this aim, most centres concentrate on preparation and rehabilitation and do not consider academic development of the child as part of their duty. For the purpose of this section the researcher conducted a two-day observation in 2005 of one of these centres. The observation showed that psychologists and not teachers were responsible for the children and no educational curriculum was followed. As a result educational services provided in these centres are limited. The researcher believes that unless Rehabilitation Centres have high expectations of children with disabilities they can be damaging because they can get in the way of the child's growth and development.

1.3 Purpose of the Study

The review of special education services provided in the UAE has shown that there is a shortage of services meeting the needs of children with autism. Similar conditions could be found in many developed countries as well. According to Batten (2005) an estimated 90,000 children in the UK have an autistic spectrum disorder, and approximately 7500 specialist educational placements exist for this population.

As a result of the shortage in the UAE, children with autism are in many cases included in regular classrooms in private preschools but their opportunities in effective education remain questionable due to the shortage of teachers qualified to serve their needs and

absence of special resources and programmes for intervention. It is not clear whether children with autism benefit from this setting, whether it helps to extend their abilities or enrich their experience and whether this practice is worth continuing or expanding. There is, therefore, need for knowledge on what is actually happening in these classrooms, how inclusion in this context is working or not working and what teachers' views about the situation are.

The literature review shows that: a) research on inclusion in the UAE is still very scarce, b) research presenting the perspectives of regular education teachers working in inclusive settings is still needed (Smith and Smith, 2000; Mcconkey and Bhlirgri 2003), and c) research on inclusion in less structured environments where inclusion is seen as an independent variable is also needed (Harrower and Dunlap, 2001).

The chosen research topic tries to fill these research gaps but at the same time it draws on the researcher's own personal experience as a preschool teacher with a positive attitude toward inclusion, no previous training in dealing with children with special needs and responsible for a classroom with a child with autism. It is hoped that the findings of this research will be of great interest not only to parents of included children with ASD in the UAE but also to other teachers finding themselves in the same situation. It is also hoped that the results and findings can lead to research-based recommendations that could help fellow regular teachers and other participants in this special world and help to provide valuable understanding which can then guide later research which in turn can benefit more children in similar situations.

1.4. Research Questions

To achieve the purposes of the study the following research questions have been set:

- What are the effects of inclusion in a regular preschool in the UAE on a child with ASD?
- If inclusion in this case is found not to be effective, what are the recommendations needed that may improve the effectiveness of this inclusion?

1.5. Organization of the Chapters

This dissertation is divided into five chapters. This chapter (chapter one) is the introductory chapter. Chapter two presents a review of related literature. Chapter three describes the

conceptual framework of the study and the research design approach based on the case study strategy. It presents the methods of data collection such as observations, interviews, and document analysis. It also deals with the data analysis and methodological issues. Research findings are presented in Chapter four of this dissertation. While Chapter five offers discussion, recommendations and conclusions. The bibliography comes at the end of the dissertation followed by Appendices.

2 LITERATURE REVIEW

2.1. Introduction

In this chapter terms will be defined. Section 2.2 Section 2.3 describes the characteristics of children with ASD. Section 2.4 and 2.5 discuss some of the identification procedures of ASD and the role of early intervention. Sections 2.6 and 2.7 describe the role of individualized educational plans and discuss some intervention approaches for children with ASD. Sections 2.8 and 2.9 discuss inclusion as an alternative for educating children with ASD. Finally section 2.10 discusses requirements of a successful inclusion of children with ASD such as teacher support and appropriate classroom settings.

2.2. Autistic Spectrum Disorders

The term "pervasive developmental disorders" (PDD) is most accurately used to describe autistic spectrum disorders (ASD) in addition to an array of non-autistic PDDs. This array also includes Asperger's syndrome, fragile X syndrome, Rett syndrome, childhood disintegrative disorder and pervasive developmental disorders, not otherwise specified PDD,NOS (Siegel, 1996). These disorders are usually evident in the first years of life and are often associated with some degree of Mental Retardation (American Psychiatric Association, 1994). Pervasive Developmental Disorders (PDD) are characterized by severe and pervasive impairment in several areas of development: reciprocal social interaction skills, communication skills, or the presence of stereotyped behaviour, interests and activities.

Szatmari, et al. (1998 cited Coffey and Obringer, 2004, p.632) report that the incidence of autism spectrum disorder in the United States is reported to be approximately 4.8 per 10,000 with a consistent excess of males to females, up to a 4:1 ratio. Autism Society of America (2004) points out that the overall incidence of autism is consistent around the globe. Autism knows no racial, ethnic, or social boundaries. Family income, lifestyle, and educational levels do not affect the chance of autism's occurrence.

2.3. Characteristics of Autistic Spectrum Disorders (ASD)

Autistic spectrum disorders are a developmental disability that affects the way a person communicates and relates to people around them. People with autistic spectrum disorders

experience difficulties with social interaction, social communication and imagination – known as the 'triad of impairments' (Wing and Gould 1979 cited Batten).

The most important characteristic of autism as described by Bryson, et al. (2004, p.15) is a striking failure to engage in reciprocal social communication, whether through using eyes, facial expression, gestures or language. According to Sternberg and Grigorenko (1998 cited Bryson et al. 2004, p.15) people with autism lack what is referred to as social or practical intelligence regardless of measured intelligence, which can vary from severely mentally handicapped to superior. They also have difficulty in managing social situations such as understanding the purpose of a queue; they have difficulty understanding figurative language such as 'jump the queue' and have difficulty in managing escalating levels of anxiety (Batten 2005, p. 93-96). A study by Gena and Kymissis (2001) shows that preschoolers with ASD have low attending behavior; did not respond to their peer's comments, questions, and invitations; and did not initiate interactions with peers.

A high proportion of children with ASD experience sensory problems. Hyper-sensitivity to different sensory stimuli such as light, sound or touch can be very painful and have a significant impact on anxiety, behavior and communication (Batten 2005, p.93-96).

Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines and unusual responses to sensory experience. This adversely affects a student's educational performance and requires specially designed instruction.

2.4. Identification of ASD

Siegel (1996, p. 170) notes that most children with autism are first identified as eligible for developmental services between the ages of two and five. However, some children with autism who have relatively less cognitive impairment do not get signed up for developmental services at that stage.

Most countries use the International Classification of Disease, Tenth Edition (ICD-10), as their diagnostic manual of medical terms (please see appendix 2). The World Health Organization sponsors the ICD-10 ongoing revision process (Siegel 1996, p.19). In the

USA, The Diagnostic and Statistical Manual for Mental Disorders-Fourth Edition-Text Revision (DSM-IV-TR) (please see appendix 1) is the diagnostic manual used to classify disabilities. It provides refined definitions of Autistic spectrum disorders (Bergeson et al., 2003).

To test whether an individual meets any of the listed criteria in diagnostic manuals, special tests are needed which focus on determining the status of the infant or toddler in all of the developmental areas: cognitive, social/ emotional, physical (including vision and hearing), communication, and adaptive. There are various types of tests in the literature used to decide whether the child has ASD, PDD or closely related disorders. The Washington State Infant Toddler Early Intervention Program (ITEIP 2005) for example uses a list of nine different instruments for screening infants and toddlers and 18 instruments for determining eligibility (evaluation) for infants and toddlers early intervention services as shown in appendix 3. Appendix 3 also shows a comparison between all these instruments. Each of these instruments serves a special purpose depending on the age of the child and how far each of his skills has developed.

2.5. Early Intervention

With intervention soon after the diagnosis of a disability or developmental concern, a child has greater developmental gains and less chance of developing problems. Siegel (1996, p. 201) argues that if intervention starts early it will be easier because the child will not have to unlearn poor ways of coping with his disabilities that he will have developed on his own – like throwing tantrum as a way of getting things.

2.6. Individualized Educational Plan (IEP)

Successful intervention strategies look at the child's strengths and also identify existing areas of deficit. In the UK, the Code of Practice (DfE 1994a) specifies that an IEP should include attention to: the nature of the child's learning difficulties; the action to be taken, including specific targets for intervention; and procedures for monitoring, evaluation and review (Beveridge1999).

2.7. Intervention Approaches for Children with ASD

Many intervention approaches have been developed to address the range of social, language, sensory, and behavioural difficulties for children with ASD. The Autism society of America (2005) describes ten of these approaches:

- Applied Behavioural Analysis (ABA);
- Discrete Trial Training (discrete trials);
- Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH)
- Picture Exchange Communication Systems Picture Exchange Communication Systems (PECS);
- Floor Time;
- Social Stories;
- sensory integration;
- Facilitated Communication (FC)

This wide spectrum of approaches can be explained by the fact that no two children with autism have the exact same symptoms and behavioural patterns ie. an intervention approach that works for one child may not be successful with another. Within this wide range of approaches some may appear to be opposed. Taking the teaching environment as a variable for comparison, Francke and Geist (2003) put on one end of the spectrum the Lovaas methodology, which advocates teaching in a highly structured environment in a segregated setting. On the other end they put developmentally appropriate practice (DAP) which advocates a child-centred environment whereby the child's autonomy is nurtured by having multiple opportunities to make independent choices.

There is little comparative research between intervention approaches because there are too many variables that have to be controlled. On the other hand there is an expanding body of literature describing research which focuses on effectiveness of structured intervention methods, instructional techniques and strategies, intervention tools, prescribed protocols, instructional context and parental involvement. For example, Garfinkle and Schwartz (2002) found that peer imitation and peer mediation can increase social interactions in children with autism in inclusive preschool classrooms. Francke and Geist (2003) found that teaching play strategies had a positive effect on social interaction for a child with

autism. Agosta et al. (2004) described a teacher-researcher partnership that examined effective social story interventions for young children with autism that yielded positive behavioural changes. Dooley et al. (2001) demonstrated the use of functional assessment procedures to identify the appropriate use of Picture Exchange Communication System PECS as part of a behaviour support plan to resolve serious problems exhibited by a young boy with PDD.

2.8. Inclusion

Although the concept of "Inclusion" has a wide scope, it is often discussed as though it applies only to Special Educational Needs (SEN). Inclusion in mainstream facilities has two clear goals. The first is to honour the right of all members of a community to take full part in its day-to-day life. The second goal is to improve the quality of children's social interaction and academic development through daily contact with typically developing peers. One of the substantial calls for inclusion was provided by the Warnock Report (1978). One of the most important aspects of the report was the recommendation that provision for special education 'wherever possible' should occur within mainstream practice. In 1994 representatives of 92 governments and 25 international organisations met in Salamanca, Spain adopted a framework for action, which required that all children to be accommodated in ordinary schools, regardless of their physical, intellectual, social, emotional, linguistic or other conditions (UNESCO 1994, p.6). 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'* (p.105).

Ysseldyke & Algozzine (1995, p.53) point out that advocates of inclusion believe in it for more than legal reasons. Research identifies definite benefits to having children with disabilities in an inclusion setting with typical peers Myles et al. (1993 cited Francke and Geist 2003). Advocates of inclusion also believe that students with disabilities profit socially and academically from interactions with their peers without disabilities. Further, they believe that students without disabilities can benefit from interacting with disabilities. Inclusion helps all students develop an understanding and appreciation of diversity in society.

Other researchers argue that children with disabilities perform equally well in inclusive settings as in traditional special education settings or perform better in special education

settings due to the availability of appropriate services in such settings. Some researchers also argue that in inclusive settings children with disability can be socially rejected by their peers. Brown et al. (1999) indicated that children with disabilities were physically included but additional, focused intervention efforts was required to establish socially inclusive programs for young children with and without disabilities. Francke and Geist (2003) argues that integration of typical peers with autistic children alone will not bring about significant change and found that careful planning and appropriate intervention strategies must be employed to facilitate the desired changes.

Batten (2005) makes clear the importance of distinguishing inclusion from 'integration'. The term integration describes a situation where a child with SEN is placed in a mainstream school with no additional support and is expected to adapt to the curriculum and classroom environment.

Siegel (2003, p.378) distinguishes between two types of inclusion. While full inclusion means that the child spends all of his time in general education, and none in a special education class, mainstreaming, partial inclusion or selective inclusion is where the child is included only in academic activities or only in non-academic activities such as recess, physical education, assembly, music, or art. Siegel (2003, p.378) also describes another type of placement for children with autism usually referred to as an "integrated" placement. This includes a balanced mix of children with special needs and typical children in a small class with nine to twelve preschoolers and a staff-to-child ratio of about one-to-two or –three. By contrast, the term "inclusion" is more often used when there are not more one or two special-needs children in a classroom for typically developing children.

2.9. Inclusion of Children with ASD

Because of the characteristics of children with autism, they are thought to be among the most difficult to include effectively in educational, recreational, and community settings. The literature review shows a great debate over where early intervention for children with ASD should take place: in regular schools, special schools or at home?

Many studies support the notion that children with autism, in particular, can benefit from inclusion settings. Some researchers, however, argue that in cases of autism, inclusion is appropriate for older children or children who are higher functioning but not for preschoolers who may not be "behaviourally ready" to benefit from an inclusion environment (Stahmer, 2004).

2.10. Requirements for Successful Inclusion of Children with ASD

Bricker (1995) describes three factors that influence the practice of inclusion: attitudes (views about inclusion), resources (access to specialists; collaborative planning), and curricula (activity-based; promoting interaction). Placing a child in mainstream classrooms without adequate support places unfair pressure on teachers (Batten 2005). Inclusion is difficult unless children are included by teachers who are professionally to provide appropriate education for all. Coffey and Obringer (2004) reported in a case study about support involved in educating and socializing school-aged children with autism spectrum disorder in inclusive settings put forward suggestions for future research. Smith and Smith (2000) described pro-inclusion regular education early childhood teachers' perceptions of those factors that contributed to or hindered their success in inclusive classrooms. Their data indicated a strong need for more adequate and focused training, better consideration of classroom load factors, more reliable support, and help to find more time to meet the increased planning and collaborative demands of inclusive classrooms.

Francke and Geist (2003) stress that there is enough evidence to believe that children with autism tend to become overwhelmed in a setting where there is free choice and unstructured play. They also argue that because hypersensitivity to sight, sound, touch, or smell is a classic characteristic symptom of autism children with ADS may become distracted as they are bombarded by stimuli. A controlled and structured environment is therefore required to prevent the child with autism from getting distracted.

3 METHODOLOGY

3.1. Introduction

This chapter describes the conceptual framework of the study. Section 3.2 describes the reasons for adopting a flexible research design approach based on the case study strategy. Section 3.3 describes the rationale for case choice. Sections 3.4 and 3.5 describe the subject child as a phenomena and the setting as a context in which the case study took place. Sections 3.6 and 3.7 give full description to the procedures of data collection and data analysis. In section 3.8 methodological issues are discussed.

The conceptual framework for this study was designed to answer the research question as stated in the introductory chapter:

- What are the effects of inclusion in a regular preschool in the UAE on a child with ASD?
- If inclusion in this case is found not to be effective, what are the recommendations needed that may improve the effectiveness of this inclusion?

3.2. Research Strategy

With the researcher as a teacher and the subject child already in her class, data for this study was ready for collection even before engaging in this research. At that time, the research questions were still underdeveloped and tentative and a theoretical framework was not yet developed. A fixed design approach was therefore excluded. A flexible design strategy which emerged and evolved during data collection was adopted.

Initially, the researcher was inclined to evaluate the outcomes of inclusion as it appeared more straight forward, but later, it became clear that some achievements the subject child of the study had made were not linked to the school curriculum and that a broader focus was required in order to include efforts done by the parents at home for example. The researcher therefore decided to look at the outcomes as well as at the process of inclusion of the subject child. According to Robson (2002, p.87) evaluating a process requires a flexible strategy which focuses more on words than on numbers. In other words, it requires a qualitative rather than a quantitative strategy.

The researcher decided to take the opportunity to develop detailed and intensive knowledge about the child's progress (a phenomenon) within a certain school setting (its real life context) using multiple sources of evidence. Yin (1981; 1994 cited in Robson 2002, p.178) and Robson (2001, p.89) both described this design research strategy as a 'case study'. Since the researcher was immersed as a teacher in the setting and using participant observation over a long period of time to describe the case in detail, the case study has some features of an ethnographic design research strategy.

Yin (1981a, 1981b as cited in Yin 2003, p.3) identifies three types of case studies: exploratory, descriptive and explanatory. This study can serve both exploratory and explanatory purposes. It can be seen as exploratory if the purpose is to use the results to get some feeling as to what is going on in a similar situation or to decide whether to encourage or discourage children with ASD from joining regular pre-schools in the UAE. The study can be seen as explanatory if the purpose is to use the results to find how and why did the inclusion work or not work.

3.3. Rationale for Case Choice

Several reasons made this case ideal for this study: a) the subject was a child with ASD, b) placed in a regular preschool classroom, c) without the provision of additional services, d) where the researcher was working as a teacher. This allowed the researcher, with her knowledge base about the situation and all people involved, to get an 'insider' opportunity. According to the five rationales described by Yin (2003, p.42) for selecting a single-case design, this study falls under the type "revelatory cases".

3.4. Description of the Subject Child

Noah (Pseudonym) was a three year old boy in October 2004 when this study started. In October 2003, when he was 24 months and still living with his parents in the USA, he was referred for a multidisciplinary developmental evaluation with the local Parent Infant Education Program (PIE) due to concerns with his language development in order to determine his eligibility for Special Education services. The Hawaii Early Learning Profile was used to assess Noah's development. Observation of his skills and parental report were used to obtain information about his strengths and needs in all areas of development. The

results of this evaluation can be seen in Appendix 1. The evaluation report concluded that Noah has an educational diagnosis of Pervasive Developmental.

Having become eligible for special education, a draft of an individualized educational plan (IEP) was prepared for him by his previous school in the USA (please see sample of IEP in Appendix 2). The IEP Committee recommendations were as follows:

- Noah requires a small group structured preschool special education program with the use of supplementary aids and services. Therefore, he should not be educated in a general education setting.
- Noah should receive special education services in the regular school building.
- Noah should be educated with children of his age.
- Noah should participate in a physical education program with students with special needs.
- Noah's needs can best be met in a special education environment.

In June 2003, Noah was examined at a University Hospital Department of Paediatrics in the USA and a pattern of developmental abnormalities compatible with diagnosis of Autism or the Autism Spectrum Disorders was found.

In September 2004, Noah was admitted, without any further evaluation, to a regular private English-speaking preschool in a small city in the UAE (name of city withheld to ensure anonymity). Noah's mother revealed that they were shocked from lack of services available for children with disabilities in this city as compared to the services they were getting in the USA.

3.5. Description of the Context

3.5.1. School

After moving to the UAE, Noah was admitted without any evaluation to a regular preschool. The School occupies a small old villa consisting of four classrooms for Nursery I, Nursery II, Kindergarten I and Kindergarten II in addition to a playroom and a room for Arabic language and a playground. The school serves 75 children and has four English teachers, one Arabic teacher and six helpers. Although it may seem the school is too small

to have a special education needs unit, it has previously admitted a child known to be autistic who was always shadowed by a minder hired by the child's family.

3.5.2. Staff

Ghada was the class Teacher from September 2004 to February 2005 and researcher. She was a 38 year old Egyptian with a bachelor's degree. She has teaching experience of four years in KG and primary classes. She received no previous training in dealing with children with special needs but she had a child with ADHD in one of her previous classes. She had no previous experience working in integrated preschool classrooms but she was aware of the challenges of having a child with autism in her class and was willing to offer in-class support and to learn from this new challenge. In September 2004, one month before Noah joined her class, she registered for a postgraduate research degree in special needs education. She moved to the UAE six years ago.

Mary (Pseudonym) was the class teacher from March 2005 to June 2005. She was a 31 year old Persian with a High School Diploma and a Child Care and Development Certificate. She worked as a Nursery I teacher in 2004 in the same school and had a child in class whom she identified with special needs, but was too young to be diagnosed. She taught a Nursery II class for 2 terms in the year 2005. She moved to the UAE three years ago.

Mayleen (pseudonym) was an assistant helper and had been working in the same school for two years. She was a 50 year old Filipino who takes good care of children and enjoys singing and playing with them. She has no previous experience in working with children with special needs and she was present most of the time in class. She has been living in the UAE for seven years.

Merriam (pseudonym) was an assistant helper. She was a 20 year old Lebanese high school graduate. She was present most of the time in class. She worked as a volunteer in playschool for three summers during the holidays. Then she worked as a Nursery II, KGI and KGII assistant helper for two year in other schools. She had no previous experience working with children with special needs.

3.5.3. Peers

Noah joined a group of 22 children in a nursery II class. Most children in class were non-native English speakers with a ethnically diverse backgrounds and their command of the English language was still very limited.

3.5.4. Curriculum

The regular curriculum is designed around thematic units: School, Colour, Shape, Body Parts, Senses, My Family, Community Helpers, Transportation, Farm Animals, Insects, and Wild Animals. The intended aim of these thematic units is not only to introduce children to new knowledge, but also to develop their receptive and expressive communication skills as well as cognitive, social, self help and motor skills. Daily activities include nursery rhymes, finger play, songs, movement, art and crafts. The curriculum includes a set of daily routines as can be seen in Appendix 3.

3.5.5. Noah's Parents

Noah's mother was 28 years old with a college degree. She lived in the USA for three years before moving to the UAE in October 2004. The primary language spoken at home is Arabic. His mother stated that she has been trying to name commonly found objects in English as well so that Noah would have some level of understanding with the therapists who were working with him in the USA and also with the teachers and peers at the current school. She attended class with Noah for four weeks in October 2004. Noah's father was a 32 year old and holds a PhD degree. He has been living in the USA for seven years before moving to the UAE.

3.6. Methods of Data Collection

A case study requires collection of information using multiple methods of evidence or data collection (Robson 2002; Yin 2003). In this study, a range of data collection techniques was undertaken. In the first phase, from October 2004 to February 2005, participant observation and documents were the main sources of data. In the second phase of data collection, from March to June 2005, a series of direct observations supplemented and validated by a series of interviews was used to complement the data obtained in the first phase.

3.6.1. Observation

Observation can be used as a data collection technique in flexible as well as fixed design approaches. Its major advantage is its directness (Robson 2002, p.312).

In this study, semi-structured observations were used to allow some freedom in what information was gathered in order not to compromise complexity and completeness. The researcher had to attend to many aspects and everything was considered as potentially relevant for the purposes of the study. Observation data was recorded by note-taking and in one occasion video recorded. The resulting information was relatively unstructured and complex, and required much effort to organize the data and to address validity issues.

Spradley (1980 cited by Mertens *et al.* 2004, p.102) outlined five types of observation based on degree of participation of the observer: Non-participation, passive participation, moderate participation, active participation and complete participation. In this study the researcher adopted the two pure types of observation on both sides of Spradley's scale. From October 2004 to February 2005, the researcher worked as the class teacher. Being part of the group, she had the opportunity to play the role of a participant observer. This helped her know all people involved; understand their habits, use of language and non-verbal communication. It also helped her see their social interactions, actions and behaviours in specific contexts. In June 2005, the researcher, this time involved solely as a researcher, conducted two direct observations in the classroom and one video taped direct observation in the playroom.

3.6.2. Interviews

Semi-structured and unstructured interviews are widely used in flexible, qualitative designs. According to Robson (2002, p.272), face-to-face interviews offer the possibility of modifying the line of inquiry, follow up interesting responses and investigate underlying motives in a way that questionnaires cannot. Non-verbal cues may give messages which help understanding verbal response. Wengraf (2001, p.3) stated that a research interview is designed for the purpose of improving knowledge and getting a better understanding of reality.

In this study a series of interviews were designed and carried out in June 2005 with Mary, Noah's teacher at that time, and the classroom assistant helpers Mayleen and Merriam to

find out their perspective of what had taken place. In this study, semi-structured interviews were designed to have a number of interviewer questions prepared in advance but such prepared questions were designed to be sufficiently open that the subsequent questions were not planned in advance but were improvised.

Mary's and Mayleen's interviews were audio recorded which provided a record and allowed the researcher to concentrate on the interview and were transcribed later. Detailed notes were made after Merriam's interview. Being a previous colleague to the researcher made these interviews more like an intimate conversation rather than a formal interview. A series of informal interviews was conducted as the researcher took several opportunities that occurred between October 2004 and June 2005 to discuss Noah's progress with his mother. Detailed notes of the interaction were made afterwards. An email interview was conducted with the previous school principal to inquire about the school inclusion policy she has set and the previous experiences gained from cases of inclusion of children with special educational needs in the school.

3.6.3. Documents

In this study, Noah's medical and evaluation reports and his IEP provided by Noah's mother in November 2004, gave access to information that would have otherwise been unavailable.

3.7. Data Analysis

Due to the flexible design strategy and the semi-structured data collection techniques adopted in this study qualitative unstructured data cumulated. A systematic approach was needed to conduct the data analysis. This included developing categories, open coding and axial coding as described by Robson (2002, p.194) and the template approach as described by Robson (2002, p.458).

A set of categories was developed to bring order to the qualitative data. Some categories were taken directly from the IEP goals and aimed at monitoring Noah's progress. Other categories aimed at giving insights into the context and came from the interaction with the data. Within some categories, sub-categories were defined.

The following categories were used to monitor Noah's progress:

Cognitive skills (imitate motor skills-follow commands-complete activities)
Social/emotional skills (take turns-respond and Greeting-toy exchange)

- Self help skills
- Attending skills (attention to teacher-play appropriately-transition)
- Sensory regulation skills (sensory regulation-texture skills-oral skills-music and movement skills)
- Eye hand coordination skills (fine motor-visual motor)
- Gross motor skills
- Play skills (sitting close to a peer-holding peer's hand-pushing a ball to a peer)
- Speech and language skills (attention and sustained interaction with teacher-pointing to a person or object-understanding his own name, peers' names and teacher's name-use of modalities to communicate intent for social interaction, request or protest for objects or actions-use of functional words or word approximations).

The following categories were used to give insights into the context:

- Teachers' attitude
- Assistant helpers' attitude
- Peers' attitude
- Parents' attitude
- Administrative staff attitude
- Parent teacher relationship
- Staff training and support

Data from interview transcripts, observation notes, documents, etc. was then split into discrete parts each representing a unit in the data describing phases, patterns, themes, relationships, sequences, etc. A code was applied to label each unit of data. Some units were considered to fall within more than one category. Using axial coding the data which have been split apart into categories by open coding was retrieved and organized. All instances of a particular kind were collected together to represent the data in a different way. Within each category, data was summarized. Information from Noah's IEP was used as baseline data to measure Noah's progress. Evidence was in some categories presented in

chronological sequence and a logical chain was built to help understand trends and patterns. Targets from the IEP were used to judge his achievements.

3.8. Methodological Issues

3.8.1. Challenges

The main challenge in this study was time management. Being a full time teacher with a full schedule, a postgraduate student attending courses in another city, an individual with personal commitments and a researcher involved in participant observation proved to be made great demands and the researcher had to negotiate being released from her teaching duties in February 2004. Other challenges included the negative school administration attitude towards researching the case in spite of parents' approval, the flexible research approach which made great demands on the researcher while carrying out the study and the 'insider' research which required a firm grasp of research methods and experience which was not available in the early stages of data collection.

3.8.2. Ethical Issues

The researcher followed appropriate ethical principles to ensure that the rights of participants in the study are protected. All those in the setting were informed about what sort of research is being done for what purposes. Noah's mother was asked for permission to conduct the research which she supported. She also provided a copy of his history documents. In June 2005, the researcher got the mother's permission to videotape one observation session. The researcher also explained the purpose and nature of the study to all interviewees. When it was required to audiotape an interview, interviewees were asked for permission and the researcher explained that this was to make it easier to focus on the interview rather than on taking notes.

In the reporting phase of this study, pseudonyms were used for all persons involved in the research as a precaution to ensure their anonymity. Because this study took place in a small city, the researcher decided to withhold the name of the school and the name of the city. She also withheld all names of institutions that were involved in preparing Noah's evaluation reports and his IEP.

3.8.3. Validity

Validity refers to correctness or precision of a research reading (Ritchie and Lewis 2003, p.285). Robson (2002, p.172) described several types of threats to validity three of which are relevant to this study; reactivity, respondent bias and researcher bias. Reactivity refers to the way in which the researcher's presence may interfere with the setting which forms the focus of the study and in particular with the behaviour of the people involved. Respondent bias can take various forms when the respondent distorts and withholds information when the researcher is seen as a threat or when the respondent tries to give the answer or impression which they judge that the researcher wants. Researcher bias refers to what the researcher brings to the situation in terms of assumptions and preconceptions.

In this study the researcher spent a long time in the setting and became accepted by the subject child and by the group and any initial reactivity was reduced. Prolonged involvement also helped the development of a trusting relationship between the researcher and respondents and the latter were less likely to give biased information.

Being released from her role as a class teacher in February 2005 helped counter the threat of researcher bias during the remaining phase of data collection and the entire phase of data analysis which is usually an issue in studies with prolonged involvement. The researcher took further steps to reduce threats arising from the role of the researcher 'as-a-research-instrument'. The researcher was not selective and did not exclude any people involved from being interviewed or situations from being observed. The researcher returned to some interviewees presenting to them transcripts that were made. On some aspects related to interpreting data the researcher sought support of professionals such as a special education teacher with 19 years experience in dealing with children with ASD and more experienced people such as a mother of an adult with ASD.

In this study two types of data triangulation were used to reduce the threat to validity as suggested by Denzin (1988 cited Robson 2002, p.174). Multiple data collection methods (observation, interviews and documents) as well as multiple sources of data (teachers, assistant helpers and parents) were used.

To address the issue of reliability the researcher kept a full record of research activities while carrying out the study, took particular care regarding accuracy in collecting data and followed systematic approaches in data analysis. If the study was repeated with the same case and the same setting, it would give the same result obtained.

3.8.4. Limitations

Like most case studies, two issues limit the extent to which the findings of this inquiry can be more generally applicable outside the specifics of the situation studied. One issue is that Autism is a "spectrum disorder" meaning that it manifests itself differently in each child (Siegel 2003, p.1). It is certain that Noah is unlikely to represent a population. The second issue is that it is unlikely that identical circumstances can be re-created for the attempt to replicate the study. However, Bloor (1997 cited in Robson 2002, p.168) states that social life contains elements which are generalizable across settings and other elements that are particular to given settings. Accumulation of findings of several case studies can provide suggestive evidence and can be thought of as the development of a theory which helps in understanding other cases or situations (Ragin 1987; Yin 1994 cited in Robson 2002, p.177).

4 RESEARCH FINDINGS

4.1. Introduction

The findings of this study are presented in this chapter. As mentioned in chapter 3 the data was collected using different qualitative methods namely; observations, interviews and examination of related documents. Observations data included: a) a summary of general participant-observer-notes as teacher of that class which ran over five months from October 2004 to February 2005, b) two non-participant observations and a video observation in the playroom all observed in June 2005. Interviews included: a) an interview in June 2005 with Mary who took over the class in March 2005 after the researcher left the school, b) two interviews in June 2005 with Mayleen and Merriam who worked as assistant helpers, c) several interviews with Noah's mother from November 2004 to June 2005 and d) an interview with the previous school principal regarding the policy of inclusion in the school. Documents included previous evaluation reports and a draft of Noah's IEP which included annual goals. Instead of organizing the data in this chapter according to the data source it was decided to organize the data according to categories using open coding and axial coding so that cross referencing between pieces of data from different sources would be easier. These categories were organized into two main groups. The first group describes Noah's progress through the academic year categorized according to areas of development. The second group gives insights into the context of Noah's inclusion.

In this chapter extracts of observations and interviews with participants will be used in relation to IEP goals set for Noah and the context of inclusion. At the end of each section, data interpretation will be added to be drawn into discussion in the concluding part of the dissertation (chapter 5).

4.2. Noah's Progress by Areas of Development

The draft of Noah's IEP (please refer to IEP sample in appendix 2) developed by a Public School in the USA that he attended prior to joining his current school in the UAE

contained goals and objectives as well as evaluation procedures and an evaluation schedule. As the reader may notice, the IEP did not contain any information about curriculum design or teaching techniques. From October 2004 till February 2005, some modifications were made in the way the curriculum was introduced based on the researcher/teacher's readings on the topic. When Mary took over in March 2005, she decided to treat Noah just like any other child in the class. She ignored the whole concept of IEP and followed the school curriculum offered to all children.

4.2.1. Cognitive Skills

4.2.1.1. Imitate Motor Skills

Noah was a non-verbal child with Autism. He used to imitate actions during singing time. When Noah joined the class in October 2004, his mother who was acting as a shadow teacher used to see the action required for each song and used to hold his hands and position them the same way the children did. Although Noah never sang out the lyrics of any song he was happy in singing time and story time (evidence in one of the observations). When Noah's mother stopped attending the class in November 2004, he started imitating the big group of 23 peers and used to point to his body parts when they sang "Head, shoulders, knees and toes". He used to jump and copied all actions when they sang "Three Little Monkeys jumping on the bed". Mary reported that Noah sometimes likes to be with children when they do role play during singing time. He likes the "five little speckled frogs" song where children respond by hand movements and jumping. Mayleen, the assistant helper, however, reported that he did not like to sing but he listened and he did the action specially the "If you're happy and you know it clap your hands". He, according to her claims, was so happy clapping his hands and stamping his feet. In the non-participant observation in June 2005, Noah imitated the actions of four consecutive songs. Imitating peers was not limited to singing time. Merriam reported that on one occasion, Noah and Ali, who got along well together, were playing together. Ali went on top of the stage and jumped. Noah then imitated him and jumped after him. Noah fell on his arm and had a bad sprain.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate the ability to imitate at least 10 motor activities in 1:1 and 1:2 interactions in a familiar song,

finger play, play activity or music activity. The evidence discussed above is enough to claim that Noah has mastered this annual goal. He was able to imitate not only in 1:1 and 1:2 interactions but also in a group of 23 children.

4.2.1.2. Follow Commands

According to the evaluation report from his previous school in the USA in March 2004, Noah followed simple verbal commands as reported by his parents.

In September 2004, during the briefing time before each activity, the researcher/teacher demonstrated the work that had to be done in the following 45 minutes. Some times some children were curious and tried to come to the teacher to touch the material she was using. The researcher/teacher sent them back to their places so that everybody would be able to see. By November 2004, the attraction seemed to be too strong for Noah to resist. He had difficulty in going back to his place alone. When the assistant took him back to his place he resisted and a tantrum started. By February 2005, a verbal or gestural prompt such as pointing to his place and a determined face were sufficient to keep him in his place.

In October 2004, the teacher modified the daily roll-call to make use of Noah's love of music in teaching him following short instructions. The researcher/teacher picked a name tag with the name and photograph of one child after the other. The children recognized the child's name and started singing:

> *"Where is (child's name)? Where is (child's name)? There he is. There he is.*
> *Come and get your name tag. Put it in the pocket. Then sit down."*

By February 2005, Noah was able to follow these commands either by recognizing his name or responding to the teacher's or peers' verbal or gestural prompts. Mayleen reported that this routine was stopped after Mary took over the class due to her teaching plan. Clarifications were never made on this action during her interview.

Noah often threw tantrums when the researcher/teacher asked him to help to tidy up. On one occasion in January 2005, he was deprived from going to play outside for throwing toys after other children had tidied up. He was given time out. The teacher sat with him in the class explaining that throwing toys was wrong. Together, Noah and the teacher started

collecting the toys. She pointed to things he had to collect He collected all toys in the tray, put it on the shelf, completed the task alone and then completed the routine by walking to the orange line on the floor for lining up. He waited for permission to leave. In June 2005, Mary reported that he just continued to throw toys and step on them. She sat down with him for two minutes and explained to him what he should not do. She said she believed he understood at that moment, but either he, in spite of his good memory, forgot later on, or he wanted to manipulate again.

Because of his impatience while lining up the teacher often selected Noah to be the last child to be asked to join the line. In June 2005, Mary reported that she had difficulties with him because he never wanted to stand in the line. A few times, children went down and she stayed with him in the class and kept telling him he had to line up. She believes he just got it the very last week of school (end of June 2005).

During the non-participant observation in June 2005, the teacher gave a pencil to Noah and asked him seven times to give it to the researcher but he declined. He preferred to play with the pencil instead.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to follow at least 10 different commands and/or routine instruction, activities (to include but not limited to sit down, come to table, stop etc.) with no more than 3 verbal prompts. The evidence discussed above is enough to claim that Noah made some progress toward achieving this although in some commands he finds no difficulty following them.

4.2.1.3. Complete Activities

Noah's evaluation report done in March 2004 showed that he had difficulty sustaining attention to tasks. In class he was able to complete tasks he found interesting such as finishing puzzles, stacking blocks, looking at a book and placing pegs the in peg board, but his attention span for activities or tasks that were outside the range of his interests was much shorter and at times fleeting or non-existent. Given one-to-one supervision, his attention was held for longer but tended to cease once the guidance was withdrawn. While most children were able, with some guidance from the teacher or an assistant, to start working after the briefing of a task, Noah showed no interest in most class work that

required fine motor skills. One-to-one assistance was necessary for him to accomplish these tasks. On one occasion the task was to blow beans from a starting line to an end line using a straw. All peers managed to do the exercise which aimed at encouraging oral motor skills but Noah who used a harder straw each day to drink water, preferred to chew the soft straw than to blow the bean. On another occasion, the task was to use glue to stick objects on card. Noah enjoyed watching the glue dripping from a distance from the glue spatula and forgot about the sticking activity. In June 2005, Mary reported that while he was struggling with difficult tasks or while he was scribbling, he does not feel frustrated. He does not feel that he cannot achieve what his peers are doing. He does not compare himself to his peers. He was just anxious to sit down and do the task but he did not care about what came out.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to complete 10 different activities (place peg in peg board, stack 3-5 blocks, puzzles, looking at book) with no more than 3 prompts. The evidence discussed above is enough to claim that Noah made some progress toward achieving this goal. He was able to complete many tasks or activities but he did not complete activities or tasks that were outside the range of his interests or that required fine motor skills.

4.2.2. Social / Emotional Skills

4.2.2.1. Take Turns

At the beginning of the school year children were reluctant to share toys but quickly learned to share objects and wait for turns. Noah joined the class one month later. By the time he became attracted to the circle time, he noticed how peers were coming to the teacher and taking their name tags. He was not patient and tried to take any name tag as soon as the researcher/teacher held the name tag of one of the children. After a few days Noah recognized that there were rules to follow but he was not able to recognize his name tag and his mother used to push him whenever his turn came. After a few weeks Noah started recognizing his name tag alone. After his mother stopped attending the class Noah sometimes received help from other children who tried to remind him that it was his turn.

In singing time coloured posters were used to support the meaning of the lyrics of some morning songs. For each song one child was chosen to stand up and play the role of the

researcher/teacher by pointing to the relevant words or figures on the poster while all the other children sang with the cassette player. In many cases, Noah tried to stand beside the child playing the researcher/teacher's role and tried to imitate pointing though without understanding. This behaviour was tolerated not only because all the children appeared to be accepting but also to encourage his imitation and social skills. This behaviour continued till January 2005 then one of the assistants was asked to prevent him from leaving his place unless his name was called.

As the concept of taking turns became clear to Noah, the researcher/teacher observed that he was often patient waiting for his turn till it came but as soon as he finished his turn he did not wait for others to take their turns and he often left the activity being done. Having realized that everybody got only one turn, after it was over, he found no reason for waiting again. The researcher/teacher therefore had to leave his name until the last one, so he would stay patiently till the end. Mary reported in June 2005 that he was sitting patiently for his turn, but she had to make him wait until he was the last person because if he got his turn at the beginning, he would destroy the routine for everyone else.

In June 2005, Merriam reported that he enjoyed the slide in the playground and that he loved to take turns.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to take 2 out of 4 turns independently in play with a peer or an adult (i.e. Roll a ball, shape sorter, ball tracker or switch toy). The evidence discussed above is enough to claim that Noah mastered this annual goal.

4.2.2.2. Respond and Greeting

A daily routine was introduced to help Noah develop his social and communication skills. Morning greetings included the researcher/teacher shaking hands with each child saying "Good morning". The child would reply back "Good morning Miss Ghada". By November 2004, Noah was already shaking hands with the researcher/teacher, but still not replying verbally. He sometimes produced atypical tones of voice. By February 2005, he was hugging teachers and assistants and was responding to greetings by waving his hand bye bye. He also started shaking hands with other children when asked to. Mayleen

reported that he used to come all on his own and embrace and kiss her or the other assistants. In June 2005, as the researcher entered the classroom for the first time after leaving the school in February 2005, all the children came to greet her either hugging or shaking hands but Noah did not want to. He was shy looking and smiling from a distance. She waved to him and he waved back. The researcher asked him if he wanted to hug her. He stood in front of her and waited for her hug. He did not object to her hugging him.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to understand spoken words through gestures and vocalizations by responding to his name by head turn or eye contact and greet peers, teachers and therapist through switch, gestures and vocalizations. The evidence discussed above is enough to claim that Noah mastered this annual goal.

4.2.2.3. Toy Exchange

The evaluation done in March 2004 showed that he preferred to play alone and would play by himself for 30-45 minutes. As he joined the school Noah enjoyed pushing a car back and forth 30 cm on a specific table and put his eyes at wheel level and watch wheels rotate from a close distance. He used to throw a tantrum if someone shared the table with him, touched his favourite car or tried to make him change the activity. Some naughty peers tried to tease him by grabbing the car from him. In the same month he started increasing his field of play and started pushing the car around the table but he threw the same tantrums if someone interfered. Mary believed that his peers were not teasing him. They were only annoyed sometimes because he wanted to have the big car and he wanted it right now. He did not want to wait and he did not want to share. He just wanted it all for himself. So, they would get annoyed and they would be bothered but this did not stop them from coming back to play with him. She believed that this is the reason why he preferred to be with older people because with children he got into trouble for not being able to share and not being able to get their toys at once.

By June 2005, Noah became more tolerant if a peer took his favourite toys. In the non-participant observation a peer took Noah's car from him. Noah tried to take it back. When he failed, he went complaining to an assistant. The assistant tried to make the peer give the car back. When this did not work Noah left the car and played with letters from the

shelves. Mary and Mayleen confirmed this in their interviews, but Mayleen revealed that although this tolerance improved over time, tantrums did not totally disappear.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to exchange in play with adults and peers by exchanging toys at least once in a 10 minute period with no more than two adult prompts. The evidence discussed above is enough to claim that Noah made progress toward achieving this goal. His foremost motivation is to please himself.

4.2.2.4. Developing Behavioural Patterns

From October 2004 to February 2005, time-outs were used to give children an opportunity to calm down and a chance to reflect. In this period Noah received two time outs. In March 2005, Noah developed a new behavioural pattern. He used to do things he knew would not be accepted by the teacher. He started erasing letters she wrote on the board and continuously running in the classroom and opening the door and running outside. Mary had to repeat too many times that this was not acceptable and gave him time-outs. For one same reason he would receive time out five times a day.

Knowing that Noah often enjoys being by himself, the researcher asked Mary whether he was happy during time-outs and whether this could be his way of gaining a few minutes alone by himself in a corner. Mary believed he was not happy because he knew anyone who gets in trouble goes there. In Mayleen's interview she said that when asked to go for time out he would willingly go to the corner and sit between the window and the shelves with the fish tank on them. He sat till he was asked to return and sit on his name. She believed he was not sad or upset by time out because when they were singing the good Morning songs in circle Noah was doing the actions of the songs and laughing in the corner.

This behavioural pattern continued till the last day in school. In the non-participant observation in June 2005, Noah started throwing toys. Mary went to Noah and told him not to throw the blocks and not to sit on them. Noah tried to look away from Mary. Mary told him to look at her but he avoided looking at her. For that behaviour he received his first time out for that day.

The IEP did not include a section dealing with inappropriate behavioural patterns. The evidence above will not be evaluated in this chapter but will be used in the discussion in chapter 5.

4.2.2.5. Social Awareness

In the video observation in June 2005, Noah demonstrated some social awareness skills in dealing differently with different peer characters. The video shows Noah running towards a balloon which is falling to the ground. He grabbed it from the floor. He turned to see if the owner of the balloon saw him. He smiled when he saw no one around. A naughty boy came towards him looking for his balloon. He threw the balloon quickly before the boy touched the balloon as if he was trying to avoid a confrontation. He then searched for a new balloon with an unhappy face. He started to scream then stopped screaming after spotting another balloon falling to the ground which another peer had thrown up high. He ran towards it and quickly caught it before the peer. Noah ran with the balloon. The peer, this time a nice boy, ran after Noah. Noah did not stop. The peer caught Noah by his T shirt sleeve. Noah continued to run with the balloon and tried to release his T shirt sleeve from the peer's hand. After a few moments of struggle he finally let the balloon go and was given another balloon.

The IEP did not include a section dealing with social awareness probably because it was originally planned that Noah attend a small group structured preschool special education programme. The evidence above shows that in a regular setting he has developed social awareness skills.

4.2.3. Self Help Skills

Noah's mother used to feed him in class. After she left in November 2004, Merriam took over this responsibility. Some peers were sometimes jealous and asked for the same treatment. When the researcher/teacher got access to his IEP in December 2004, she read that he used to eat alone and therefore asked assistants to leave him to feed himself independently. He was monitored for one day to make sure he was able and was never fed again. He was able to uncover his straw and insert it in the juice box. He was able to use

the spoon to eat yogurt from a cup. In June 2005, Mayleen reported that he did not ask for water. He just went and got his water bottle from the tray but she reported that he was still so messy while eating.

When Noah joined the school he was the only child sent to class with diapers. The children were reminded twice a day to go to the bathroom with the help of an assistant which they did easily. Children were allowed to go to the bathroom after taking permission from an adult in the class. Noah resisted being taken to the bathroom and threw tantrums. In October 2004, he required assistance undressing and dressing like other peers. By February 2005, the assistance required was minimal assistance and some accidents happened by the end of the day. Mayleen and Merriam reported that by March 2005 he was sent to school without diapers although he still threw tantrums every now and then when he was taken to the bathroom. By June 2005, he was completely dry and able to undress and dress. Mayleen reported that if he wanted to go to the bathroom he would hold her hand, go directly to the bathroom, pull his pants down and sit down. He knew how to flush the bowl and how to wash his hands after he finished. Merriam reported that by June 2005 he did not want any one with him in the toilet. She used to wait outside until he was done. He then washed his hands and dried them.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to perform basic feeding and dressing skills independently needed in the preschool using picture symbols and/or manual and gestural cues. The evidence discussed above shows that that Noah has mastered this annual goal.

4.2.4. Attending Skills

4.2.4.1. Attention to Teacher

During October 2004, Noah was constantly under his mother's control. After she left he became out of control. In October and November 2004, he would sometimes flit from one activity to the other, or sometimes sweep the entire contents of the shelves or the table onto the floor. The more the staff appeared distressed and angry by his behaviour, the more amused he appeared to become. He used to open the classroom door and leave the class.

In her interview in June, Merriam described this period as ‘whole chaos’ which continued for two months before he started listening and sitting.

In October 2004, the children were often wandering around the class and showed little interest in stories read from English story books because most children were non-English speakers. Soon they understood the class routines and rules. During story time they were required to listen attentively. Noah used to wander in class. He seemed to be listening to the stories from a distance and he sometimes produced relevant sounds such as animal sounds or spoke out words like “apple” and “two” which were relevant to the story being told. By November 2004, Noah started to sit down in the circle. By January 2005, Noah was attending and cooperating during individual and group activities. He was able to remain in place for longer periods of time and attended to the presented activity during circle time or other group activities. Physical prompts such as pushing his shoulder down were used if he tried to stand up. In some cases verbal or gestural prompts were used to keep him from leaving the circle and remain sitting on the floor. But his attention always depended on the task. He paid more attention in singing time or when his favourite story books were read. He paid less attention in tasks with fine motor skills.

Mayleen reported that Noah would often stop doing something when Mary asked him to stop in a loud firm voice “NOAH”. She said that he did not listen to assistants because they whisper “Noah do not”. Merriam reports that Mary’s power was in raising her voice but not screaming and that Noah was afraid of the voice.

Mayleen reported that by June 2005 Noah had stopped opening and closing the classroom door. Merriam reported that he was not running away anymore. He would sit or move within one space and wait patiently for his father who used to come late some days.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to attend to circle time demonstrating attention to the teacher and therapist with eye gaze, vocalization and imitation for increasing amount of time. The evidence discussed above is enough to claim that Noah some made some progress toward achieving this goal.

4.2.4.2. Play Appropriately

As he joined the school Noah enjoyed pushing cars and trucks back and forth 30 cm on a specific table and put his eyes at wheel level and watched wheels rotate from a close distance. In the same month he started increasing his field of play and started pushing the car around the table. He had a set of favourite toys. In the activity room he chose a special car and a special alarm clock toy fascinated by sounds of the friction drive toys or the ringing of a bell. He also enjoyed playing with trains, trucks, puzzles, alarm clocks and beads on a fixed wire. He did not stop throwing toys in the air and stepping on them or turning the toy tray upside down to watch the toys fall. Mayleen reported that he liked only the train toy and he tried to make everything into a train. He used to connect the plastic blocks into a long train. In a video observation in June 2005, he pushed a car in his hand from one end of the theatre stage to the other not fixing his eye on the wheels and sometimes not even on the car. He pushed the car out of his hand for a distance and sometimes tossed another car. Mary reported that he some times pushed the car to a peer when asked to do so.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to attend to play appropriately with at least 5 different toys for ten minutes. The evidence discussed above is enough to claim that Noah made some progress toward achieving this goal. His choice of toys was limited to cars, trucks, trains and alarm clocks and he sometimes did not play with them appropriately.

4.2.5. Sensory Processing and Regulation Skills

4.2.5.1. Texture Skills

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to sit on the sensory table with minimal assistance for up to 10 minutes uncovering hidden objects, tracing bumpy lines with his fingers, pouring rice from one container to the next or rolling play dough.

Since the school did not posses a sensory table as described, and since most of these activities were not part of the regular curriculum, little time was given to such activities and not enough evidence can be withdrawn.

4.2.5.2. Oral Motor Skills

Morning songs included singing with the help of a cassette recorder. Most children were able to sing the lyrics. A few had difficulties due to limited English proficiency. Till February 2005, Noah was not able to sing with the class although he enjoyed all music and listening activities. Knowing how difficult it was for Noah to sing the lyrics, the researcher/teacher started imitating the sound of the cello in parts of the song where music was played without singing. "pow… pow … pow". All the children enjoyed the cello playing and Noah kept trying hard to produce the sound "pow" by pressing his lips together. He was eager to join the cello playing although he was not trying to sing the lyrics. This exercise appeared to be helpful in developing his delayed oral skills.

In another song children were required to imitate the teacher's movements including tongue movements. All peers were able to imitate these movements. Noah was able to imitate some of the movements but till February 2005 he still failed to imitate the tongue movements.

One of the class activities in January 2005 was to blow a bean from a starting line to an end line using a straw. All the children managed to do the exercise which aimed at improving oral motor skills but Noah who used a harder straw each day to drink water, preferred to chew the soft straw than to blow the bean.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to participate in oral motor activities designed to facilitate oral motor awareness, strength, and movement (e.g. rubbing his cheeks with a wash cloth, blowing bubbles) with occasional gestural and visual cues as needed. He would also imitate tongue and lip posture (e.g. elevate tongue tip, move tongue laterally) modelled by an adult. The evidence discussed above is enough to claim that Noah made no progress toward achieving this goal.

4.2.5.3. Music and Movement Skills

Noah enjoyed singing and music time which took place for 25 minutes twice a day. He loved dancing with the researcher/teacher or assistants and later with other peers holding hands and knowing the right steps that should be done such as changing hands then turning around.

Although the IEP did not set a measure for evaluating music and movement skills, the evidence discussed above is enough to claim that his progress is like his typical developing peers.

4.2.5.4. Self Regulation

In October 2004, Noah's mother was accompanying him in class and used to give him tiny crackers whenever he was hungry or when he started throwing a tantrum. Noah continued to throw tantrums after his mother stopped attending the class. After the morning songs and while the researcher/teacher briefing the class about the first activity, he would lose interest in the activity and would often wander in class, cry and go looking for food in his bag. Although the frequency of tantrums dropped through time, giving him his food continued to be used to calm him down.

Mary believed that Noah was manipulative. She believed he would just push for something till he got it. She believed that being strict with him would make him forget about what he wanted and that giving in to him would make it a habit. When she found out from the father that Noah had breakfast everyday before coming to school, she decided not to give him any food when all other children were sitting doing an activity. He cried for a few days and was fine after that. Mayleen reported that in the morning she used to hide his bag because he wanted to eat as soon as he entered the class while everybody was sitting down and listening to the good morning song. When he did not see the bag he did not ask for food.

Mary revealed that she knew that touch was very important to children with mild autism and that holding them and having contact with them would make them feel better more than just talking to them. She therefore asked assistants to sit down and hold him when he screamed or cried. Mayleen reported that by the end of the year the best way to calm him

down if he wanted something or if he was not happy and shouting or screaming was to hug him and ask him to sit on his name and cross his legs because he was a good boy. He would slow down, calm down, by himself. This would take sometime, however.

The IEP did not include a section dealing with self regulation but the data collected suggested adding this section. The evidence above shows that Noah has made inconsistent progress toward developing skills to self sooth/calm, regulate negative affects, monitor frustration and attend to stimulation in the environment.

4.2.5.5. Transition

Most children had no problem with changes in the daily routine. One week after Noah joined the class he threw one of his tantrums in the early morning. His mother gave him crackers to calm him down and she clarified that tantrums were due to changing daily routines such as singing before calling the children names and saying good morning to them. Noah also showed some difficulty moving between activities in the activity room and threw tantrums. His behavioural pattern gradually improved. The frequency of tantrums and time required to calm him down dropped. By February 2005, he was able to cope with simple routine changes and instead of throwing a tantrum he left the room trying to bring the name tag stand from the corridor so that this activity was done at the time he was used to. Mary and Mayleen reported that he returned to tantrums after Mary took over the class and introduced new routines. In June 2005, Mary reported that he accepted it well when they changed from one activity to the other. In the non-participant observation in June 2005, a peer took Noah's car from him. Noah tried to take it back. When he failed he took a balloon and went complaining to an assistant. The assistant tried to make the peer give the car back. When this did not work Noah Left the car and played with letters from the shelves.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to perform transition between activities throughout the day without resistance using a visual schedule. The evidence discussed above is enough to claim that Noah has mastered this annual goal although the use of a visual schedule could have made the transition easier.

4.2.6. Eye Hand Coordination Skills

4.2.6.1. Fine Motor Skills

The researcher/teacher introduced pre-writing fine motor skills as soon as the school year started. Rolling, making balls, cutting, moulding and squishing Play dough aimed at strengthening hand muscles before the children were asked to grasp a pen. Painting using a paint brush, crayon colouring, cutting paper using scissors and tracing shapes all aimed at improving eye hand coordination skills. All the children except Noah enjoyed the play dough exercises and managed to complete other tasks. In June 2005,, Mary reported that Noah was not interested in painting, colouring or writing. He just liked to scribble. She said some children had problems at the beginning with tracing, but they succeeded after a while. After one or two weeks they really knew how to trace even those with a very weak grip. But for Noah, to the very last day an assistant had to hold his hand, put the pencil in his hand and fix it and then hold his hand and help him to trace. He never got the grip of the pen right. Mayleen reported that Noah would come to trace if Mary called him but he would only scribble. She saw him trying to write on the white board but the result was only scribbling.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to imitate vertical, horizontal, vertical and circular strokes. The evidence discussed above is enough to claim that Noah made no progress toward achieving this goal.

4.2.6.2. Hand Use / Hand Strength Skills

According to Noah's IEP report he was able to manipulate blocks to build a 6-10 block tower in his previous school. When he joined this class Noah continued enjoying playing with wooden blocks and with plastic blocks with a notch to fix them together. He used to line blocks up or connect them as a train. Mayleen reported that he sometimes asked for her help to connect blocks for him to form a longer train. Most children were competing to connect as many plastic blocks together to form a long sword. They were competing to build the highest tower of blocks. Some children were forming their own designs such as aeroplanes. Some asked for assistants help with their designs. No time was available to

ask Noah to imitate simple designs and he always preferred to arrange the blocks in a straight line. Noah had no difficulty doing many eye/hand coordination tasks. He was able to sort shapes and feed himself with a spoon without turning the spoon. He also enjoyed playing, stopping, rewinding and forwarding the tape recorder. Removing tapes and CDs was a very easy task for him.

But there were other visual motor tasks he did not manage to achieve. By February 2005, all peers mastered threading beads onto a shoe lace. Noah enjoyed playing with wooden beads on a fixed spiral wire but he was never able to thread beads. He did not demonstrate scissor (snipping) skills.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to independently play with 5 toys that require eye hand coordination which may include, but not limited to peg board and pegs, cube block, simple puzzles simple shape sorter, large beads and string. He should demonstrate the ability to play with 5 toys that require two hand use/ hand strength which may include, but is not limited to pop beds, containers with twist top lids, tearing paper and beginning scissor (snipping) skills. The evidence discussed above is enough to claim that Noah made progress toward achieving this goal.

4.2.7. Gross Motor Skills

In his evaluation report done in March 2004, Noah demonstrated ability to walk up and down the stairs alternating his feet holding an adults hand. He demonstrated ability to throw a ball with the arm moving above the shoulder without falling. He was not able to jump with two feet off the ground but enjoyed jumping on his mattress.

At the beginning of the year some peers had difficulty climbing the stairs without holding an adult's hand but they were able to overcome the problem within a few weeks. By November 2004, Noah was able to walk up and down the stairs alone and follow the dancing steps during music time. He was able to push and pull the name tag stand. In June 2005, Mayleen reported that he enjoyed counting steps while climbing the stairs up and down by himself. In the video observation he is seen kicking a balloon with his foot several times. Merriam reported that he used to help her in pushing and pulling large objects and carrying large toys and he enjoyed playing catchers. By the end of the year he

used to carry his back pack himself and would not let his father carry it for him. Merriam also reported, however, that he could not stand the swing because it made him feel dizzy. On one occasion Noah tried to jump from the stage to the ground, imitating a peer but he fell on his arm and had a bad sprain.

The IEP did not include a section dealing with gross motor skills but the data collected suggested adding this section. The evidence discussed above is enough to claim that his progress is like his typical developing peers.

4.2.8. Play Skills

4.2.8.1. Sitting Close to a Peer

Noah joined the class one month after school had started. In his first days in class, during the daily roll-call, Noah was not able to sit or even look to what was going on in the circle. At that time he was sitting on his mother's lap or on the floor between her legs. He used to throw a tantrum if someone shared the table with him while playing with his favourite car. Some mischievous peers tried to tease him by grabbing the car from him. He gradually started to come closer to the circle and the mother would also sit on a chair close to him. In November 2004, Noah tolerated sitting close to peers for more than five minutes during the circle time. However, he often opened the classroom door and went out of the room for a moment. This happened under the supervision of an assistant and was tolerated as an escape-valve vent. The researcher/teacher explained to the rest of the class how difficult it was for Noah to sit for a long time and in this way normalized the treatment he received. By February 2005, he stopped leaving the classroom but went to get snacks from his bag instead. Mary revealed that after she took over in March 2005, she stopped tolerating this behaviour and asked assistants to hide his bag as soon as he arrived in the class. He threw tantrums for a few days and then stopped.

In June 2005, Noah's father told the researcher that Noah was now mingling with other children. At the end of the day he saw him with the group playing with three or four peers surrounding him as opposed to the beginning of the year when he used to come at the end of the day and find him playing all alone. Mary reported that she had been not only just

encouraging Noah to be with the other children, but also encouraging other children to be with Noah. In June 2005, Mayleen reported that he was really mingling with everybody.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to tolerate sitting close to a peer when given a facilitated play opportunity as evidenced by sustaining the group / peer activity for up to 5 minutes. The evidence discussed above shows that Noah has mastered this annual goal.

4.2.8.2. Holding peer's Hand

During music time most children preferred to have the researcher/teacher and assistants as dance partners. When they found them already engaged with other children they start dancing with a peer. Noah enjoyed dancing time and by November 2004 did not object to holding his peer's hands during dancing. He was popular among his peers and some of them preferred him to others as a dancing partner.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to tolerate holding peer's hands during game or music time. The evidence discussed above shows that Noah has mastered this annual goal.

4.2.8.3. Pushing a Ball to a Peer

By November 2004, Noah was already enjoying game time and had no difficulty with social interactive games. Every other day children were asked to form a circle. The researcher/teacher demonstrated with a child how to throw the ball to other peers. She would then withdraw from being the centre of the activity and would leave the group to continue the game alone. In January 2005, Noah was able to push a ball to the researcher/teacher back and forth several times. By June 2005, he was able to push the ball to other children but only when asked to.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to push a ball or toy back & forth to a peer for up to 5 times. The evidence discussed above is enough to claim that Noah has mastered this annual goal.

4.2.9. Speech and Language Goals

4.2.9.1 Pointing to a Person or Object

The evaluation report written in March 2004 showed that Noah briefly attended to a book and pointed to pictures. In October 2004, before he started attending to the circle Noah used to point to his body parts when children sang "Head and shoulders, knees and toes" and did the action. In February 2005, he pointed to characters while looking at books. In June 2005, Mayleen reported that he pointed out someone who hurt him in addition to saying the name of the other child. The evidence discussed above shows that Noah has mastered pointing to a person or object.

4.2.9.2. Demonstrating Understanding his own Name, Peers' Name and Teacher's Name

In October 2004, during the daily roll-call Noah was not able to recognize his name tag and his mother used to push him to get his name tag and put it on a special name stand whenever his turn came. After she stopped attending the class Noah sometimes received help from other children who tried to remind him it was his turn. In January 2005, he was able to recognize his own name tag but he still had difficulties recognizing some of the name tags of his peers. By February 2005, he was able to recognize the names of other children in the class by their name tags would know if the child was present or absent. He was able to say the name of one of the children who used to tease him. Mayleen heard him once saying "No Ghada" once after the researcher/teacher forced him to clean up and then line up. When the researcher/teacher asked him to hand name tags to peers he used to give the tag to the correct peer even if he was not able to say the peer's name. Mayleen and Merriam both reported that by June 2005 he knew the names of all 22 peers and used them when complaining. In the non-participant observation in June 2005, he repeated in a low voice the names of all peers as they were called out by Mary one at a time to go wash their hands. Mayleen revealed that in spite of the strong relation between her and Noah he never said her name although he recognized it. The evidence discussed above is enough to claim that Noah has mastered demonstrating understanding his own name, peers' name and teacher's name

4.2.9.3. Use of Modalities to Communicate Intent for Social Interaction

In November 2004, he started waving his hand bye bye and started shaking hands with the teacher and later with his peers when prompted.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to use one or more modalities (manual signs, photos/symbols or word approximations) to communicate intent for social interaction (e.g. social routines, greetings) with prompting as needed given minimum cues (environmental, gestural). The evidence above is enough to claim that Noah has mastered this goal.

4.2.9.4. Use of Modalities to Communicate Request or Protest for Objects or Actions

In October 2005, Noah tended to throw objects whenever he was frustrated. When he wanted something he could not get he used to scream or cry. By January 2005, he started to point at children who annoyed him. In the observation in June 2005, a child took Noah's car. Noah failed to take it back and went to Mayleen to complain. Mayleen reported that he used gestures to communicate with her. If he wanted to go to the bathroom he would hold her hand and go directly to the bathroom. If he could not connect plastic cubes to form a long train he would come to her and make the hand movement of fixing two cubes together. If a peer took his toy he would come to her and say the name of the peer and point to him or her. He never hit any body. Mayleen believed Noah was able to communicate easier with adults than with children.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to use one or more modalities (manual signs, photos/symbols or word approximations) to communicate request or protest for objects or actions with prompting as needed given minimum cues (environmental, gestural). The evidence discussed above shows that Noah made progress toward achieving this goal using pointing and pronouncing names although he did not use the means described in the IEP.

4.2.9.5. Consistently Say Functional Words or Word Approximations

His speech and language evaluation done in March 2004 showed that Noah spontaneously produced VCV and glottal sounds. His parents reported he produced some English words at home including "cup, daddy, car, open, go, and mo for more". He showed extremely limited spontaneous speech and perseverative behaviours including repetitive vocal play.

Short after joining the class in October 2004, Noah enjoyed producing relevant sounds such as such as animal sounds during story time. He also spoke out a few words such as "apple, two, circle, cow, cat and te for telephone".

In an observation in June 2005, Mary started calling the children's names to come and line up. Noah repeated calling each name after the teacher. Both Mayleen and Merriam reported that by June 2005 he was able to say the names of all peers.

Mayleen reported that he used to communicate with her using gestures because he was not able to talk. By June 2005, he was able to produce word approximations but he did not say any phrases. He would say sorry if asked to. However, Merriam reported he would name some things either by saying the whole word, or miss the last letter of the word, or only sound the first letter of it.

Noah's perseverative behaviours and repetitive vocal play continued till the end of the year. In an observation in June 2005, Mary asked the class why hands should be washed before eating. A child explained that hands became dirty if they touched their shoes. Noah repeated "shoes shoes shoes" several times.

In June 2005, the mother revealed to the researcher that she stopped using the Picture Exchange Communication System (PECS) in October 2004 because she believed that he had started talking.

The IEP goals set for Noah indicated that by the end of the year he should demonstrate ability to use one or more modalities (manual signs, photos/symbols or word approximations to communicate request or protest for objects or actions with prompting as

needed given minimum cues (environmental, gestural). The evidence discussed above shows that Noah made no progress toward achieving this goal.

4.3. Insights into the Context of Noah's Inclusion

4.3.1. Previous Teacher's Attitude towards Inclusion of Children with ASD.

The previous teacher (the researcher) is a preschool teacher with a positive attitude toward inclusion. She had no previous experience working in integrated classrooms but she had a child with ADHD in one of her previous classes. She was aware of the challenges of having a child with autism in her class and was willing to offer in-class support and to learn from this new challenge.

4.3.2. Current Teacher's Attitude towards Inclusion of Children with ASD.

In her interview Mary revealed that when she knew she would be having a class with a child with autism she felt uncomfortable because she had taught a child with severe autism a year before. Mary in a voice full of sorrow and distress explained that her previous experience was a disaster. She thought Noah would be just like the previous case and remind her of all those times that the other child did not sit down, did not concentrate, and did not even make eye contact. Since the other child was not shadowed, she had a hard time with him. When she saw Noah she felt his case was not as severe as the child she had had the year before. Mary revealed she just felt she had to be strict with him otherwise he would just push his way and get what he wanted.

After her experience with Noah she described him as a very smart child with good memory who understood what she said but liked to play stupid. She thought he was so manipulative. Based on a case of one of her friends with autism she was sure Noah would be fine in one or two years when his communication skills improve.

Although she thought that inclusion puts a lot of pressure on the teacher and is not fair to the other students she thought it was better for Noah in the regular school than it would have been in a special centre.

4.3.3. Parents' Attitude towards Noah's Inclusion.

For Noah, this long academic year started in class by sitting on his mothers lap or on the floor between her legs. She attended class with him for one month and was dealing with his tantrums as they happened or solved his problems even before they happened. The researcher/teacher learned from her how to deal with his tantrums using crackers.

The mother was also very supportive when she knew the researcher/teacher was considering Noah as a subject for her research case study and she gave her access to all documents she had including his previous reports and his IEP.

At home she used to teach Noah what she thought was important for him. As a result Noah was the only child in class who knew the entire alphabet which was not part of the curriculum for that year.

On the other hand, Noah's parents did not spend much effort and time taking him to sessions with a speech and an occupational therapist. In January 2005, the researcher/teacher asked Noah's mother to consider hiring someone as a shadow for Noah in class. The mother said that Noah was doing fine and that the researcher/teacher was over reacting because of the documents she had provided. In June 2005, the mother revealed that all she wanted from bringing Noah to a regular school was to provide him with an opportunity to play with different things and to change his playing styles and also to have a reason for going out of the house. This was an indicator she was not aware of her child's IEP goals. In June 2005, the mother revealed she stopped using the Picture Exchange Communication System (PECS) in October 2004 because she believed that he had started talking. She did that without consulting any therapist.

In June 2005, Noah's Mother revealed that she had seen a very famous herbalist on a TV talk. She contacted them and they said they helped cure people who were not talking with some herbs and honey and special spoken words which were thought to have power to cure

the child. She bought an expensive jar of the herb mix. Believing it would cure Noah if he had liked them and took them as frequently as prescribed. She did not seem to understand the researcher's argument that Noah was not ill and that all he needed was a lot of focused training.

In June 2005, she said she was taking Noah back to the USA where therapists used to knock their door to teach Noah after he was found eligible for the speech and occupational therapy sessions. She said that at that time she did not want to believe that Noah needed sessions and that the therapists were just exaggerating. She always prayed that God would cure him.

In June 2005, Noah's mother complained she felt isolated. She had no friends. She and her husband did not want to mingle with other families.

Merriam reported that before the researcher visited the school for the final observations in June 2005, she shot some videos of the children in class in order to have some good memories because it was her last day at the school. Noah's father was not comfortable and inquired about the reasons for filming in class. The father, in spite of being an academic and in spite of the permission the researcher got from the mother to photograph Noah, did not seem to be happy with the researcher's activity even after explaining that rules regarding research ethics such as anonymity were being followed.

4.3.4. Parent / Teacher Relationship and its Effect on the Success of Inclusion

In October 2004, the parent and the researcher/teacher started working together as a team in class trying to meet Noah's needs. The relationship grew stronger as the mother realized the researcher/teacher was making studies in special needs education. She gave the researcher/teacher access to all his documents hoping this would help her understand Noah better. After the mother stopped attending with Noah, the researcher/teacher used to phone her to report about new achievements such as Noah saying a new word. Knowing that Noah needed speech and occupational therapy the researcher/teacher tried liaising with special education centres and convincing her to drive him once or twice a week to such centres but the parents never realised the importance of these sessions. The

researcher/teacher also played a counselling role when the mother complained about feeling isolated, distressed and helpless. She introduced the mother to other families with children with similar cases so that she gets their experience.

But this relationship also had alternating periods of good and bad. In January 2005, the mother was upset when the researcher/teacher asked her to consider hiring someone as a shadow for Noah in class. The mother said that Noah was doing fine and that the researcher/teacher was over reacting because of the history documents she had provided.

In June 2005, Noah's mother complained that Mary always found their questions and inquiries about Noah strange and that she gave strange answers. The mother felt that Mary did not want to make any conversation and as a result there was no communication between them. Merriam reported that Mary was very strict with all parents and that some of the parents were not comfortable with their relationship with her. Mayleen reported that the father used to talk with Merriam not Mary about Noah's progress. Noah's mother reported that Merriam believed Noah was very good and he was exactly like every body else in class and there was nothing to worry about. In June 2005, when the researcher asked Merriam about Noah's parents she claimed she did not have enough time to talk to them and that she used to refer them to Mary for more details because she was the one responsible.

The parents seemed to be happy with the rosy picture Merriam was painting. The following segment of her interview shows that the information she was giving to the parents might not have been accurate.

Researcher: What about his writing, painting?
Merriam: He writes letters.
Researcher: What do you mean? On his own? Or while you're holding his hand?
Merriam: When I assist him and hold his hand he can trace the letters.
Researcher: What if you don't hold his hand?
Merriam: Irregular shapes will come out.

4.3.5. Assistants' Attitude towards Inclusion of Children with ASD.

Both assistants could be described as caring and loving assistants. They were flexible and willing to help. Mayleen reported that she and other assistants often rewrote the letters he erased from the white board because they felt sad when Mary put him on time out. Merriam believed she understood Noah. Mayleen considered her relation with Noah to be strong although he never said her name.

4.3.6. Peers' Attitudes towards Inclusion of Children with ASD.

It was clear from the observation that many children in class showed their understanding that Noah is special and often needs help. Noah had some peers with whom he got along well together. There were also peers who tried to tease him and watch his reaction.

4.3.7. School Administrative staff Attitude towards Inclusion of children with ASD.

The principal who established and ran the school for seven years left the country four months before Noah joined the school. In an email interview she said she believed the school was ready for accepting preschoolers with special needs and minor autism as long as the students had minor problems. She admitted that increasing teacher assistance would be needed to help these children adjust into a normal classroom setting. She thought the school curriculum was ready to accommodate or cater for the needs of all children as long as the administration was able to find the right educators in teaching young children. In the past the school accepted children with Down syndrome and children with severe disabilities but in some cases it did not work out because of the great demand the children needed. In these cases she referred the parents to a specialist and she also suggested to the parent to try to get their child into a Special Needs Centre.

After she left the school one of the teachers was appointed as temporary principal but the school secretary tried to claim some of the principal's responsibilities. She tried to interfere with the teaching of some teachers and she had conflicts with some of them as she tried to change curricula. When the researcher/teacher expressed her concerns about having Noah in her class without additional assistance, the secretary claimed Noah was not communicating because he had a hearing impairment. In June 2005, she tried to imply that the school had cured the case. When she was asked for permission to conduct observations

in June 2005, she claimed that Noah then had no problems. On the observation day she convinced Noah's father that the researcher, in spite of the mother's previous approval, should stop observation because she might show the results at the university.

The school administration did not make any arrangement to provide a chance for the researcher/teacher to show the new teacher the status Noah had reached. In some aspects Noah made Mary start with him from the very beginning instead of building upon what he learned previously.

4.3.8. Teacher/Assistant In-Service Training

The researcher/teacher, Mary, Merriam, Mayleen had different views regarding the need for training to deal with cases like Noah. The researcher believed there were many missed opportunities during this academic year to improve Noah's progress and that previous teacher training would have been very beneficial to Noah. Mary believed she did not have to be a special education teacher to deal with these children but she felt she needed to know more about the case otherwise it could be unnerving. This statement shows that she was concerned more about the teacher needs rather than about the child's needs. Merriam believed she understood Noah and did not mention she needed any additional training although in her interview she was not able to describe Noah's fine motor skills and said he was able to write while she meant he only scribbled. Mayleen believed that children with SEN needed more attention from assistants and that more understanding of how they act would help meeting their needs. But she believed assistants should not get into much detail because there are special teachers for that.

4.3.9. Teacher Support / Resources / Classroom size

Mary believed the school and parents had to do more to support teachers because a child with SEN in class puts a lot of pressure on the teacher. Because children with SEN need more time and the class already had 23 other children she suggested reducing the class size. She proposed that the parents had to compensate and enrol the child as two students. She disagreed that a shadow person who would be with the child all the time just for him is needed. She preferred to have extra help for the whole class and she believed the school

administration would not mind providing this extra help as long as the parents are paying for it.

4.4. Summary

These research findings presented in this chapter will be used in the discussion in chapter five to answer the research question and put forward research-based recommendation.

5 DISCUSSION AND CONCLUSION

5.1. Introduction

In this final chapter of the study, information from the research findings will be used to answer the research questions as stated in the introductory chapter:

- What are the effects of inclusion in a regular preschool in the UAE on a child with ASD?
- If inclusion in this case is found not to be effective, what are the recommendations needed that may improve the effectiveness of this inclusion?

5.2. Effects of Inclusion in a Regular Preschool in the UAE on a Child with ASD

To answer this question, information from the research findings were used to organize Noah's areas of development in three groups based on his achievement in each of these areas. These groups are: a) mastered, b) progress and c) no progress. A fourth group was added to cover areas of development not covered by the regular school curriculum. Table 1 shows Noah's achievements in each of his areas of development. It is clear from the findings that subcategories of some of the main categories fell in different achievement groups. For example "taking turns" and "responding and greeting" fell in group one (mastered) while "toy exchange" fell in group two (progress) although they all belong to the main category "social skills". It should be clear that while some achievements would not be considered "developmentally appropriate" for a normal child, they were individually appropriate for Noah.

Table 1. Indications of progress in Noah's areas of development based on research findings

	Mastered	Progress	No Progress	Not Introduced
Cognitive skills:				
Imitate motor skills	✔			
Follow commands		✔		
Complete activities		✔		
Social/emotional skills:				
Take turns	✔			
Respond and Greeting	✔			
Toy exchange		✔		
Social awareness	✔			
Self help skills	✔			
Attending skills:				
Attention to teacher		✔		
Play appropriately		✔		
Sensory processing and regulation skills:				
Texture skills				✔
Oral motor skills				✔
Music and movement skills	✔			
Self regulation		✔		
Transition	✔			
Eye hand coordination skills:				
Fine motor skills			✔	
Hand use/hand strength skills		✔		
Gross motor skills	✔			
Play skills:				
Sitting close to a peer	✔			
Holding peer's hand	✔			
Pushing a ball to a peer	✔			
Speech and language goals:				
Pointing to a person or object	✔			
Demonstrating understanding his own name, peers' name and teacher's name	✔			
Communicate intent for social interaction:				
Using word approximation			✔	
Using gesture	✔			
Using photos/picture symbols				✔
Communicate request or protest for objects or actions		✔		
Say functional words or word approximations			✔	

It should be noted that this is not a formal evaluation, but is rather designed to help identify areas of development where the inclusion context and the teaching strategies available in a regular setting were not sufficient to help him meet his full IEP goals. This was then used

to come forward with recommendations trying to fill in the gap between services that were provided and services that would have met his needs.

5.3. Recommendations Needed in the Setting that May Improve the Effectiveness of this Inclusion

Since inclusion in this context was found not to meet all Noah's needs the study will try to identify recommendations to improve the effectiveness of Noah's inclusion.

5.3.1. Areas of Development where Skills Have Been Mastered

The following sections try to explain why some of Noah's needs have been met in the regular school. This is necessary in order to document positive aspects of the setting which should be preserved if not improved.

5.3.1.1. Interaction with Typical Peers

Interaction with typical peers made a significant contribution to Noah's progress. He learned to take turns, sit close to a peer, hold peer's hands during game or music time and learned the names of all 23 peers in class. Noah learned to imitate in a group of 23 typical peers and developed social awareness skills through exposure to different social experiences. He also got support from peers in the form of prompting to take action. A number of studies have demonstrated that providing education for children with SEN in the same environment as their typically developing peers yields positive results. These results are supported by two main theories by Vigotsky and Piaget. Vigotsky (1978) stated that children learn best by interaction with their peers and adults around them. Piaget (1962) argued that children learn through interaction with their environment.
(Grandin, 1995 p.49) and Siegel (2003, p.378) argue that a key element to inclusive education is that placing a child with a disability alongside typically developing children will provide an opportunity for the child with disability to model or imitate the more appropriate, more adaptive behaviour of typical peers. Garfinkle and Schwartz (2002) reported that inclusive environments lead to increased peer imitations and social interactions in children with autism. These results are inline with results by Odom et al. (1985, p.4) who reported that peer imitation resulted in increased frequencies of positive social interactions of preschoolers with autistic-like symptoms.

5.3.1.2. Opportunities for Different Types of Play

The development in Noah's play behaviour in class was remarkable. When he joined the class he only engaged in what Piaget (1962 cited Francke and Geist 2003) called practice play, which is the repetitive use of an object in a similar manner. Inclusion in this class allowed Noah to develop more complex play and social behaviours. He engaged in what Smilansky (1968 cited Francke and Geist 2003) called constructive play such as engaging in self-regulated creation or construction of a train out of blocks. Playing around a toy with other children enabled him to have more social contact and experiences. He engaged in parallel play with similar objects beside other peers but not with them. And finally he engaged with other peers in what Parten (1932 cited Francke and Geist 2003) called associative play such as playing catchers where he was responding to interaction with peers.

5.3.1.3. Support from Parents

Strong parental support was an important factor that helped Noah and the researcher/teacher overcome the difficulties of the first month of his inclusion. It helped the researcher/teacher gain valuable knowledge about Noah's case. Both mother and researcher/teacher acted as members of an intervention team and helped to maintain an attitude of mutual problem solving and collaboration. This experience is in agreement with arguments by (Siegel 2003, p.450) and (Jordan et al. 1999, p.43) who point out that parents have excellent knowledge about their children. This is also in agreement with the results presented by McConkey and Bhlirgri (2003, p.445) which indicate that more teachers find advice or support from the child's parents more helpful than advice or support from other specialists.

5.3.1.4. Curriculum Routines

The goals of the regular school curriculum were not far from what Noah needed to achieve. Many of the teaching methods which were aiming at benefiting typical peers were also expected to meet Noah's needs. The regular curriculum was introduced in the form of structured routines. Meal times and the basic schedule of the day remained constant. Routines such as line up routine, circle time routine, roll-call routine, respond and greeting routine, taking turn routine, music time routine were practiced on a daily bases. These routines were found very helpful in helping Noah perform basic feeding and dressing skills independently, demonstrate

attention to teacher for increasing amount of time, sit close to a peer, hold peer's hands during game or music time, push a ball or toy back & forth to a peer, respond to his name and greet peers or teachers. Routines also helped Noah improve his skills to self sooth/calm, monitor frustration and attend to stimulation in the environment. Batten (2005, p.93) and Grandin (1995, p.49) explain that the impairments associated with autism make the world a very unpredictable and incomprehensible place, so individuals find reassurance in setting up routines and patterns that they can control. Disruption in structures and routines can therefore lead to high anxiety, which may have an impact on behaviour.

5.3.1.4. Teacher Awareness

From October 2004 till February 2005, the researcher/teacher made some modifications in the way the curriculum was introduced based on her readings on the topic. Knowing that children with ASD are visual learners she introduced the name tags with portraits in the daily roll-call routine. She modified songs to promote oral skills and she used verbal or gestural and physical prompts to help him attend to an activity. Based on Mary's previous knowledge she used touch to calm him down rather than talking to him whenever he was upset.

5.3.1.5. Support from Assistants

Both assistant helpers played an important role in making Noah feel comfortable in his new environment. They both believed they had very good relations with him. The importance of their role was always clear when he needed prompting to attend to activities and when he needed one-to-one instruction.

5.3.2. Areas of Development where Progress Has Been Made

5.3.2.1. Need for Teacher Awareness

Siegel (2003, p.308) argues that teacher excellence depends on excellent training, but also on excellent instincts and high motivation to get through to a child with autism. In the previous section it was demonstrated that previous basic knowledge both teachers had helped Noah make progress. The research findings, however, show that there were some missed opportunities during this academic year that could have been utilized if the teachers had more awareness about the topic. This awareness should develop in three consecutive

steps; a) Acknowledging the need for new knowledge, b) understanding the concept of individualized education and c) using easy to implement strategies to meet his needs.

Mary, Merriam, Mayleen had different views regarding the need for training to deal with cases like Noah. Mary believed she did not have to be a special education teacher to deal with him but she needed to know more about him in order to prevent him from being unnerving. This statement shows that she was concerned more about the teacher needs rather than about the child's needs. Merriam believed she did understand Noah and did not mention she needed any additional training although in her interview she was not able to describe Noah's fine motor skills. Mayleen believed that children with SEN needed more attention from assistants and that more understanding of how they act would help meeting their needs. But she believed assistants should not get into much detail because there are special teachers for that.

Previous negative experience Mary had with a child with ASD led her to adopting a strict approach to prevent Noah from pushing his way and getting what he wanted. She decided to treat Noah just like any other child in the class. She ignored the whole concept of IEP and followed whatever school curriculum offered to all children.
More awareness could have helped both teachers realize the importance of a visual schedule so that Noah independently "reads" the visual cues and know what needs to be done in a given activity or in a given day. More awareness would have helped both teachers understand that provision of opportunities for Noah to make choices, so that he has some control over his day would have increased his motivation and helped him finish activities that were outside the range of his interests. More awareness would have helped Mary understand that lack of communication between her and Noah's parents was definitely not in Noah's benefit. More awareness would have helped Merriam understand that painting a rosy picture of Noah's progress was also not in his benefit. More awareness would have helped both teachers break tasks Noah could not achieve into smaller and simpler steps. More awareness would have helped both teachers use the available resources to setup a sensory table where Noah could uncover hidden objects, trace bumpy lines with his fingers, pour rice from one container to the next, roll play dough, etc. More awareness would have helped Mary understand that time out was an opportunity to calm down and a chance to reflect and not a sort of punishment. And that for Noah, who sometimes enjoyed being by himself, repetitive time-outs have become a positive

reinforcement of negative behaviours. Siegel (2003, p.279) argues that accompanied time-outs are more effective with children with ASD because they do not add the positive aspect of isolation to time-outs. Egel (1989 cited Ysseldyke and Algozzine, 1995) also argues that strategies based on rewards for engaging in appropriate behaviour rather than punishment, should be used as the first line of intervention with students with autism

5.3.2.2. Need for Appropriate Environment

The classroom in which Noah was included was a typical pre-school classroom having all sorts of bulletin boards, calendar, posters of alphabets, numbers, colours, shapes, days and months hanging on the walls. Children's art work was also hanging from the ceiling and was changed every month. Siegel (1996, p.221) explains that the child with autism is easily distracted by extraneous stimuli around him. Francke and Geist (2003) explain that outside or extraneous stimuli in an autistic learning environment should be controlled or at least drastically reduced so that the autistic child may be ready to learn. The environment should have an area which is void of extraneous decor and only uses visual cues to denote work to be done independently. Lack of such area in class could be one of the reasons why Noah did not meet some of his IEP goals and why he found difficulty following commands, completing some of the tasks and attending to some of the activities.

5.3.2.3. Need for Parents Awareness

Noah's parents have been very supportive but this study shows that parental support is not enough. Parents need to be knowledgeable about their child's individual needs and goals and those parents need to help themselves first before they can help their children. The research findings show that there were some missed opportunities that could have been utilized if Noah's parents had more awareness about the Noah's IEP goals.

More awareness could have prevented Noah's mother from stopping using the Picture Exchange Communication System (PECS) without consulting a specialist and would have prevented her from getting upset when the researcher/teacher asked her to consider hiring someone as a shadow for Noah in class. More awareness could have helped her make use of her efforts with Noah at home to help him master required skills instead of teaching him the alphabet which was not on his IEP. More awareness would have helped the parents understand the importance of spending and effort taking Noah to sessions with speech and occupational therapists.

5.3.2.4. Need for Sufficient Staffing

Some of the skills Noah did not master were fine motor skills, hand use and hand strength skills, toys exchange, following commands, completing tasks and activities that were outside the range of his interests, attention to some activities and attention to teacher. Siegel (2003, p.309) argues that for children with ASD, it is necessary to have strategies for reducing behaviour that interferes with learning and to have approaches for increasing attention and motivation and reducing mental downtime. Siegel (1996) argues that not letting a child succeed in acting inappropriately during routine activities like lining up is crucial to his or her progress. She also argues that any trial should not be over until the student succeeds. And any command should not be left without being certain the child did as requested.

To achieve these goals continuous prompting, command follow-through, frequent and intensive intervention, and in many cases one-to-one instruction is needed. This case study proves that, with Noah in class, a teacher to child ratio of 1 to 7.5 was too high to implement those strategies if no time and attention was to be taking from his peers. McConkey and Bhlirgri (2003) point out that insufficient staffing was on top of the reasons given by staff in the Great Belfast area to refuse a placement of a child with ASD in their classes. McConkey and Bhlirgri (2003) argue, however, that recent research into the role of learning support assistants in mainstream classrooms suggests that close one-to-one attention can inhibit the children's social integration with their peers and that the extra staff might be better deployed in assisting the child to work in small groups.

5.3.2.5. Need for Teacher Access to Advice from Professionals

The study by McConkkey and Bhlirgri (2003) also showed that regular preschool teachers taking children with ASD in their classes in the Greater Belfast area received support from professionals such as speech and language therapists, psychologists, social workers and health visitors. The advice was in the form of feedback on what they were doing and advice with difficulties encountered such as problems with play, problems with language, difficulty in imitating, difficulty in relating to people, unusual interest in toys or objects, adaptation to change, unusual posture, unusual reaction to pleasant situations, unusual response to something new. Noah's inclusion took place in a location where involvement of such professionals on a regular basis was not possible for several reasons. Training opportunities for teachers were also not available. But this should not have hindered

getting access to advice and support from other professional either by communicating with remotely located professionals or by organizing weekly, biweekly or monthly visits from professionals.

5.3.2.6. Need for Staff Training

It is clear that teacher awareness alone would not qualify regular teachers to implement more advanced strategies in meeting all the needs of children with autism. The results of a study by Smith and Smith (2000, p.161) indicated that pro-inclusion regular preschool teachers have strong need for more adequate and focused training. Barnard et al. (2002, p.26) argues that the success or failure of inclusion relies greatly on teacher and support staff who have received sufficient high quality training in the educational and behavioural implications of autism. However, she points out that in UK schools identified as having pupils with ASD, only 22 per cent of teachers had received any autism training, the majority for between one to four hours.

Autism-specific training can provide different levels of expertise in dealing with different issues. Describing the whole spectrum of training options falls beyond the scope of this study. The following example is meant to demonstrate how training in using PECS and self-management strategies could have helped meeting the needs of Noah. The child with ASD is often very visually oriented, so visual strategies seem to be a particularly good way to convey a message that is otherwise likely to be lost in complex language the child may not fully comprehend (Siegel 2003, p.128). For this reason, most nonverbal children with autism use the Picture Exchange Communication System (PECS) for both leisure and work schedules, some with icons and some with words. A trained teacher would have been able to participate together with Noah's parents in using PECS to provide him with some continuity and opportunities to generalise his skills in this form of communication which provides a framework for more complex language. This could also facilitate using other advanced strategies such as self-management strategies for promoting independence in the classroom which aims at shifting some responsibility for behaviour management from the teacher to the student, increasing the teacher's ability to focus on instruction (Harrower and Dunlap 2001, 762).

5.3.2.7. Need for Administrative Staff Awareness.

This study showed that like staff and parents, administrative staff need more awareness.

The school should have procedures for identifying children with special needs so that a child like Noah arrives in class as a child with ASD not as child with hearing impairment. And when the child is identified as a child with ASD the school must have the courage to acknowledge this fact. This courage is needed because the society in the UAE has some set ideas, and beliefs about teaching children with special needs and people linked children with special needs, their schools, and their teachers (Gaad 2004). Gaad (1998 cited Gaad 2004) points out that labelling still occurs despite of media and parental groups.

Schools should protect teachers from unqualified administrative staff trying to modify well designed curricula. A well designed curriculum that shows sensitivity to developmental sequences and age appropriate skills should not be replaced by a curriculum which is not age appropriate. Gaad (2001) points out that teaching in Arab society is so connected to learning to read, write, and count.

Without administrative staff awareness it would be difficult to provide sufficient staffing, reduced classroom load factors, extra time for teachers to raise their awareness, access to advice from professional, training for teachers and support for parents. This study also shows that some administrative staff need to learn how to express appreciation for staff efforts in meeting the needs of children with special needs.

5.3.3. Areas of Development with no progress or Skills Not Introduced

This study shows that some of Noah's needs could not be met in a regular preschool. He either made no progress or was not trained to use word approximation, use manual signs, use functional words, use of photo symbols, imitate tongue and lip posture, imitate CV. VC. syllables. Noah's needs would have been better met using a complementary curriculum which addressed the remaining scope of his deficits. This would require one-to-one instruction, introducing structured teaching strategies and involvement of other professionals on regular bases such as a speech and language therapist, an occupational therapist, a psychologist or special education teacher with related services. It would also require using model programmes such as Applied behavioural analysis (ABA), Discrete Trial training (DTT) or Treatment and Education of Autistic and Related Communication Handicapped children (TEACCH).

Most private preschools in the UAE city where this case study took place were not yet ready to include children with special educational needs in regular classrooms. To change this situation legislation is needed to explicitly address the rights of individuals with special needs in education in government as well as in private schools. It is also required to provide facilities and resources and to train teachers to meet this challenge. The number of facilities providing services to children with autism has to increase to meet the community needs. More efforts are still needed towards developing a UAE legislation that plays a prescriptive rather than an enabling role. The "Education For All" slogan adopted by the Ministry of Education has to be understood in such a way that does not exclude any child based on the severity of his/her disability or his/her nationality.

5.4. Final Conclusion

Results from this study indicate that:

- Interaction with typical peers, opportunities for different types of play, strong parental support the structure of the regular curriculum, teacher awareness and support from assistant helpers were all important factors that helped Noah meet many of his IEP goals.

- Raising teacher awareness, raising parents' awareness, providing an appropriate teaching environment, providing sufficient staffing, providing access to advice from professionals, providing staff training and raising administrative staff awareness could have helped Noah meet more of his IEP goals.

- Some of Noah's needs could not be met in a regular preschool and a complementary curriculum provided by other specialists was needed for him to meet the remaining IEP goals.

- If inclusion is seen not as a means to an end but as the end itself the child's entitlement to an appropriate education may be compromised.

5.5. Future Research

Noah's progress, as documented here, would indicate that inclusion of children with ASD in regular preschools be further explored. Follow-up studies would add to the research on the best methods to teach children with autism in regular preschools. Three follow-up

studies can be recommended. First, a follow-up study may be possible with a verbal child with autism in a similar setting. Second, a study that involves a similar nonverbal child with autism in a similar setting but with trained staff may be possible. Third, a study that involves a similar nonverbal child with autism in a similar setting but in a classroom that is more appropriate for a child with autism.

It is hoped that this study provides valuable understanding and that the findings will be of great interest to parents of included children with ASD and to regular teachers and administrative staff taking children with ASD in their classes in the UAE. It is also hoped that other researchers find the results and findings of this study stimulating enough to conduct further studies aiming at putting forward research-based recommendations that could help meet the needs of children with ASD.

References

AGOSTA, C., GRAETZ, J., MASTOPIERI, M., SCRUGGS, T., 2004. Teacher-Researcher Partnerships to Improve Social Behaviour through Social Stories. Journal of Intervention in School & Clinic, 39(5), 276+

ALGHAZO, E., DODEEN, H., ALGARYOUTI, A., 2003. Attitudes of Pre-Service Teachers towards Persons with Disabilities: Predictions for the Success of Inclusion. College Student Journal, 37 (4), 515+.

AL NOWAIS, S., 2004a. Education system to get overhaul. http://www.gulfnews.com posted 25 November 2004, last visited April 2005.

AL NOWAIS, S., 2004b. Education poised for quantum leap. http://www.gulfnews.com posted 22 November 2004, last visited April 2005.

ALGHAZO, E.AND GAAD, E., 2004. General Education Teachers in the United Arab Emirates and Their Acceptance of the Inclusion of Students with Disabilities. *British Journal of Special Education*, 31 (2), 94-99.

BARNARD, J., Broach, S., Potter, D. & Prior, A. (2002) *Autism in Schools: Crisis or Challenge?* London: National Autistic Society.

BATTEN, A., 2005. Inclusion and the autism spectrum. *Improving Schools*, 8(1), 93–96.

BEVERIDGE, S., 1999. *Special educational Needs in Schools. 2nd ed.* London: Routledege, p 85

BIBBO, B., 2003. Private schools to cater to children with special needs. *Gulf News*[online] 03 February 2003. Available from: http://www.gulfnews.com [Accessed April 2005].

BRICKER, D., 1995. The challenge of inclusion. *Journal of Early Intervention*, 19,179-194.

BROWN, W., ODOM, S., LI, S., ZERCHER, C., 1999. Ecobehavioral Assessment in Early Childhood Programs: A Portrait of Preschool Inclusion. *Journal of Special Education*, 33(3), 138+

BRYSON, S., LANDRY, R. CZAPINSKI, P., McCONNEL, B., ROMBOUGH, V., WAINWRIGHT, A., 2004. Autistic Spectrum Disorders: Casual Mechanisms and Recent Findings on Attention and Emotion. *International Journal of Special Education*, 19(1), 14-37.

CLOUGH, P., ed.1998. *Managing Inclusive Education: from policy to experience*. London: Paul Chapman Publishing Ltd, 31-47.

COLEBATCH, H., 2002. *Policy*. Berkshire: McGraw-Hill.

COFFEY, K., OBRINGER, S., 2004. A Case Study on Autism: School Accommodations and Inclusive Settings. *Education*, 124(4), 632+.

DOOLEY, P., WILCZENSKI, F., TOREM, C., 2001. Using an Activity Schedule to Smooth School Transitions. *Journal of Positive Behavior Interventions*, 3(1), 57+

FRANCKE, J., GEIST, E., 2003. The Effects of Teaching Play Strategies on Social Interaction for a Child with Autism: A Case Study. *Journal of Research in Childhood Education*, 8(2), 125+

GAAD, E., 2001. Educating Children with Down Syndrome in the United Arab Emirates. *British Journal of Special Education*, 28 (4), 195-203.

GARFINKLE, A., SCHWARTZ, I., 2002. Peer Imitation: Increasing Social Interactions in Children with Autism and Other Developmental Disabilities in Inclusive Preschool Classrooms. *Topics in Early Childhood Special Education*, 22(1), 26+

GENA, A. AND KYMISSIS, E., 2001 Assessing and Setting Goals for the Attending and Communicative Behavior of Three Preschoolers with Autism in Inclusive Kindergarten Settings. *Journal of Developmental and Physical Disabilities*, 13(1),11-18.

GRANDIN, T., 1995. The Learning Style of People With Autism: An Autobiography. *In:* K. QUILL, ed. *Teaching Children with Autism: Strategies to Enhance Communication and Socialization.* New York: Delmar publishers Inc., 49.

HARROWER ,J .,AND DUNLAP, G., 2001. Including Children With Autism in General Education Classrooms A Review of Effective Strategies. *BEHAVIOR MODIFICATION*, 25(5),762-784.

JORDAN, R. AND JONES, G., 1999. *Meeting the Needs of Children with Autistic Spectrum Disorders.* London: David Fulton publishers Ltd.

MCCONKEY, R., AND BHLIRGRI, S., 2003. Children with Autism Attending Preschool Facilities: the experiences and perceptions of staff. *Early Child Development and Care*, 173 (4), 445-452.

MERTENS, D. AND MCLAUGHLIN, J., 2004. *Research and Evaluation Methods in Special Education.* London: Sage Publications.

MINISTRY OF EDUCATION, UAE, 2003. Guide of Special Education Classrooms and Resource Rooms. Fujairah: Al Fujairah National Press.

MINISTRY OF EDUCATION, UAE, 2004. Guide of Specialized Institutions Caring for Individuals with Learning Difficulties and Handicapped in the UAE.

MINISTRY OF EDUCATION, 2005. Annual Statistics 2004/2005 [online]. Available from: http://www.moe.gov.ae/pdf_statistics/34-35.pdf [Accessed 28 December 2005].

MITTLER, P., 1995. Special Needs Education: an international perspective. *British Journal of Special Education*. 22(2) 105-108.

ODOM, S.L., HOYSON, M.,JAMIESON, B.,AND STRAIN,P.S. 1985. Increasing handicapped preschoolers' peer social interactions: Cross-setting and component analysis. *Applied Behavior Analysis,* 18(1), 3-16.

PAPADOPOULOU, D., KOKARIDAS, D., PAPANIKOLAOU, Z., PATSIAOURAS, A., 2004. Attitudes of Greek Physical Education Teachers toward Inclusion of Students with Disabilities. *International Journal of Special Education,* 19(2), 104-111.

PIAGET, J., (1962). Play dreams and imitation in childhood. New York: Norton.

RITCHIE, J., AND LEWIS, J., 2003. Generalization from Qualitative Research. *In*: Qualitative Research Practice A guide for Social Science Students and Researchers. London: Sage, 263-286.

ROBSON, C., 2002. *Real World Research A Resource for Social Scientists and Practitioner-Researchers.* 2nd ed. Oxford: Blackwell Publishing.

SIEGEL, B., 1996. *The world of the autistic child. Understanding and Treating Autistic Spectrum Disorders.* New York Oxford: Oxford University Press.

SIEGEL, B.,2003. *Helping Children with Autism Learn treatment approaches for parents and professionals.* New York: Oxford University press.

SMITH, M., SMITH, K., 2000. Regular Education Early Childhood Teachers' Perceptions of Successful Inclusion. *Journal of Research in Childhood Education,* 14(2), 161+

UNESCO, 1994. The Salamanca Statement and Framework for Action on Special Needs Education. Spain: UNESCO.

UNESCO, 1995. Institute for Statistics. Review of the Present Situation in Special Needs Education.

VYGOTSKY, L. S. (1978). Mind in society: The development of psychological process. Cambridge, MA: Harvard University Press.

WING, L., 1996. *The Autistic Spectrum A guide for parents and professionals.* London: Constable.

WOLFBERG, P.1995. Enhancing Children's Play. *In:* K. Quill, ed. *Teaching Children with Autism: Strategies to Enhance Communication and Socialization.* New York: Delmar publishers Inc., 212.

YIN, R., 2003. *Case Study Research Design and Methods.* 3rd ed. London: Sage Publications Ltd.

YSSELDYKE, J., ALGOZZINE, B., 1995. *Special Education: A practical approach for teachers*, 3rd ed. Boston: Houghton Mifflin Company.

YSSELDYKE,J., THURLOW, M., O'SULLIVAN, P., 1987. The Impact of Screening and Referral Practices in Early Childhood Special Education: Policy Concideration and Research Directions. *The Journal of Special Education,* 21(2), p 85

THE AUTISM SOCIETY OF AMERICA,2004. *About PDD* [online]. Available from: http://www.autism-society.org/site/PageServer?pagename=whatisautism [Accessed 28 December 2005].

BERGESEN, T., HEUCHEL, M., HARMON, B., GILL, D. AND COLWELL, M., 2003. *The Educational Aspects of Autism spectrum Disorders* [online].Available from:www.k12.wa.us/SpecialEd/ [Accessed 28 December]

KOCHHAR, C., WEST, L.AND TAYMANS, J., 1996. *Handbook for Successful Inclusion* [online],4 (3) *Southwest Educational Development Laboratory SEDL*. Available from: http://www.sedl.org/change/issues/issues43.html [Accessed 9November 2004].

INFANT TODDLER EARLY INTERVENTION PROGRAM [online] Available from: www1.dshs.wa.gov/iteip/publications.htm [Accessed 28 December].

NATIONAL CENTRE FOR EDUCATION STATISTICS U.S. Department of Education, 2002. *Number and percent of children served under individuals with disabilities Education Act* [online]. Available from: http://nces.ed.gov/programs/digest/d03/tables/dt054.asp [Accessed 28 December 2005].

NATIONAL STATISTICS BULLETIN, 2003. *Statistics of Education: Special Educational Needs in England* [online].Available from: http://www.statistics.gov.uk/cci/nscl.asp?ID=6063 [Accessed 28 December 2005]

Appendix 1

International Classification of Diseases, 10th Edition (Siegel 1996)

Table 2 ICD-10 Criteria for Autistic Disorder

A. Presence of abnormal or impaired development in at least one of the following areas from before the age of three years (usually there is no prior period of unequivocally normal development, but when present, the period of normality does not extend beyond three years):
   1. Receptive or expressive language as used in communication.
   2. The development of selective social attachments and/or of reciprocal interaction.
   3. Functional and/or symbolic play.

B. Qualitative impairments in reciprocal social interaction:
   1. Failure adequately to use eye-to-eye gaze, facial expression, body posture and gesture to regulate social interaction.
   2. Failure to develop (in a manner appropriate to mental age and despite ample opportunity) peer relationships that involve mutual sharing of interests, activities, and emotions.
   3. Rarely seeking or using other people for comfort and affection at times of stress or distress and/or offering comfort and affection to others when they are showing distress or unhappiness.
   4. Lack of shared enjoyment in terms of vicarious pleasure in other people's happiness and/or a spontaneous seeking to share their own enjoyment through joint involvement with others.
   5. A lack of social-emotional reciprocity as shown by an impaired or deviant response to other people's emotions; and/or lack of modulation of behavior according to social context, and/or a weak integration of social, emotional, and communicative behaviors.

C. Qualitative impairments in communication:
   1. A delay in, or total lack of, spoken language that is not accompanied by an attempt to compensate through the use of gesture or mime as alternate modes of communication (often preceded by a lack of communicative babbling).

(*Continued*)

Table 2 ICD-10 Criteria for Autistic Disorder (*Continued*)

   2. Relative failure to initiate or sustain conversational interchange (at whatever level of language skills are present) in which there is no reciprocal to and from responsiveness to the communications of the other person.
   3. Stereotyped and repetitive use of language and/or idiosyncratic use of words or phrases.
   4. Abnormalities in pitch, stress, rate, rhythm, and intonation of speech.
   5. A lack of varied spontaneous make-believe play or (when young) in social imitative play.

D. Restricted, repetitive, and sterotyped patterns of behavior, interests, and activities:
   1. An encompassing preoccupation with stereotyped and restricted patterns of interests.
   2. Specific attachments to unusual objects.
   3. Apparently compulsive adherence to specific, nonfunctional routines or rituals.
   4. Stereotyped and repetitive motor mannerisms that involve either hand/finger flapping or twisting, or complex whole body movements.
   5. Preoccupations with part-objects or nonfunctional elements of play material (such as their odor, the feel of their surface, or the noise/vibration they generate).
   6. Distress over small, nonfunctional details of the environment.

E. The clinical picture is not attributable to other varieties of pervasive developmental disorder (Asperger's syndrome, Rett's syndrome, Childhood Disintegrative Disorder) nor to a specific developmental disorder of receptive language with specific socioemotional problems, reactive attachment disorder, mental retardation with some associated emotional/behavioral disorder, nor schizophrenia of unusually early onset.

Source: International Classification of Diseases, Tenth Edition, World Health Organization, 1994.

Appendix 2

The Diagnostic and Statistical Manual, 4th Edition (Siegel 1996)

Table 1 DSM-IV Criteria for Autistic Disorder and Pervasive Developmental Disorder, Not Otherwise Specified (PDD,NOS)

To be diagnosed with autistic disorder at least one sign (each) from parts A, B, and C must be present, plus at least six overall. Those meeting fewer criteria are diagnosable as PDD,NOS.

A. Qualitative impairments in reciprocal social interaction:

1. Marked impairment 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. Lack of spontaneous seeking to share enjoyment, interests, or achievements with others.
4. Lack of socioemotional reciprocity.

B. Qualitative impairments in communication:

1. A 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. Marked impairment in the ability to initiate or sustain a conversation with others despite adequate speech.
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 sterotyped patterns of behavior, interests, or activity:

1. Encompassing preoccupation with one or more stereotyped and restricted patterns of interest, abnormal either in intensity or focus.
2. An apparently compulsive 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.

Abnormal or impaired development prior to age three manifested by delays or abnormal functioning in at least one of the following areas: (1) social interaction, (2) language as used in social communication, or (3) symbolic or imaginative play.

Source: The Diagnostic and Statistical Manual, 4th Edition, American Psychiatric Association, 1994.

Appendix 3

Sample of Noah's IEP draft prepared by his previous school

Targets	Evaluation Procedures/ Schedules	Dates Initiated/ completed	Progress Notes	Comments/ Mastery/ Modifications
<u>Occupational Therapy: Play Skills</u> Goal: When given facilitated play opportunity, he will tolerate 5 min. of joined peer activities • sitting close to a peer in circle time • holding peer's hands during game or music time • pushing a ball or toy back & forth to peer up to 5 times				
<u>Speech</u> Goal: During facilitated play, demonstrating joint attention and sustained interaction with teachers • shared positive effect during play or structured activity • Following adult's gaze/point during activity				

Appendix 4

Regular Curriculum Daily Routines

Routine	Duration
Circle time: Greetings - Roll-call (Signing-in) – Morning Songs –Story time – game time - Briefing about the day's activities	45 minutes
Class work (worksheets + other tasks)	45 minutes
Playground	30 minutes
Washing hands	5 minutes
Lunch	45 minutes
Reading time	15 minutes
Activity room (using manipulatives, puzzles, threading, lego)	45 minutes
Class work (journal)	20 minutes
Children are required to line up before moving to other rooms (4 times daily)	