Chapter 2

Literature Review

2.1 Introduction

In the part of literature review some fundamental information about autistic spectrum disorders will be provided, such as their definition and their suggested etiology. The variety of educational interventions available to children with autism will be also examined. However, emphasis will be given on the challenging issue of transitions for individuals with autism and how this is related to the rationale of the present research project.

2.2 Theoretical Framework

This research project is 'situated' theoretically in the area where sociology and pedagogy overlap and more specifically in the area where microsociology and education overlap. In the science of sociology, people's networks are a traditional area of study. Microsociology studies individuals' interactions; microsociology in education studies peers' interactions and students' social networks (Fischer, 2006; Timasheff & Theodorson, 2005; Vrachliotis, 2004; Konstantinidis, 1997). Bronfenbrenner's work highlights the relation between social sciences. He also identifies in his ecological systems theory different levels of human interactions which become broader and broader starting from microsystem until macrosystem (Bronfenbrenner & Morris, 1998). These different levels of human interactions are studied by various social sciences. But they also represent the journey of individual's life where transition from each stage to the next one is inevitable. Vygotsky's work underlined the fact that individual's life is not only an unavoidable succession of stages; he argued that there is a 'zone of proximal development' and that the higher point of this zone can be achieved with the guidance and the support of appropriate adults or peers (Daniels, 2008; Paschos, 2007; Hedegaard, 2005; Lee, 2005). Therefore, what consists the main theoretical and research interest of this thesis is how the development of a person in a peer network can be achieved and how the

development of this peer network can be accomplished. In this case, the network under study is a peer network and more specifically a peer network where typically developing children and children with special needs coexist. Thus, the theoretical and research interest is 'located' in the part of social sciences' spectrum where microsociology and special education overlap. However, this research project is not only about observing peer relationships but it is also about supporting them in an energetic and discreet way. Therefore, this research project is orientated more in the field of special education where recently emphasis is given in 'real' inclusion of students with special needs; the most fundamental and challenging part of this 'true' inclusion is to support peer relationships of children with and without special needs in children's attitude and in practice. By the spectrum of special needs, this research project studies autism. There is a variety of approaches about autism, as this has been reported by Marwick et al (2005). In this report, there is reference to developmental interactive approaches, where the author believes that the present study belongs to. Hence, this is the area where this research project is 'located' in the 'spectrum' of educational approaches about autism, according to the author's opinion. In this way the theoretical framework and context of this research project, wider and narrower, the 'macro' and 'micro' framework, is being specified. Furthermore, it should be noted that this research study is focused on peer interactions and transitions of children with autism which are both the most challenging issues in a person's with autism life and education. Both of these issues are studied in both theory and practice. Because of all of these reasons this research project contributes in the existing recent knowledge about peer interactions and transitions of students with autism in both theory and practice; the combination of these topics is not found often in the existing literature. It is also not found studied in this depth in the published 'guides' about transitions of students with autism (Al-Ghani & Kenward, 2009). Finally, it could be highlighted that there were many difficulties in order to organize this research project which has made relevant professionals and academics to express the opinion that it could not be fulfilled at all. But as this did take place in the end, there are results and conclusions which are worthwhile of some attention by theoreticians and practitioners.

2.3 Introductory Information about ASD

2.3.1 Autistic Spectrum Disorders: Definition and Course

Autism is a pervasive developmental disorder (Volkmar, 1998), which is characterized by qualitative impairment in social interaction and communication and by restrictive, repetitive and stereotyped behavior, interests and activities. Developmental abnormalities must be evident before the age of 3 (American Psychiatric Association, 1994; World Health Organisation, 1992).

Qualitative impairments in social interaction may include failure to use nonverbal behaviors (such us eye gaze, facial expression, body posture and gestures), as well as failure to develop peer relationships appropriate to developmental age. Furthermore, qualitative impairment may become obvious as a lack of socio-emotional reciprocity and as a lack of spontaneous seeking to share enjoyment, interests or achievement with other people (American Psychiatric Association, 1994; World Health Organisation, 1992).

Qualitative impairments in communication may involve delay in, or total lack of, spoken language (American Psychiatric Association, 1994; World Health Organisation, 1992). It has been estimated that 20% to 50% of this population remain mute (Manos, 1997; Jordan & Powell, 1995). Even in children with adequate speech, however, the communicative functions of language are impaired: there is an intense difficulty in the ability to initiate or sustain a conversation with others. Moreover, the use of language is stereotyped and repetitive and it could also be characterized as idiosyncratic (American Psychiatric Association, 1994; World Health Organization, 1992; Frith, 1989), for example new words could be created, which are used in a specific context. Abnormalities could also be found in pitch, rhythm and intonation of speech (World Health Organisation, 1992). The use of gesture or mime as alternative ways of communication is notably restricted (Prior & Ozonoff, 1998; World Health Organization, 1992). Finally, there is a lack of varied spontaneous social imitative play appropriate to the developmental level (American Psychiatric Association, 1994; World Health Organisation, 1992).

Stereotyped behavior could be revealed by compulsive adherence to specific, non-functional routines and rituals, as well as by anxiety over changes in small details of the environment. Persistent preoccupation with restricted patterns of interest, such as

unusual objects or part of objects is apparent. What is more, stereotyped and repetitive motor mannerisms, for instance hand or finger twisting or complex whole body movement, can be observed (American Psychiatric Association, 1994; World Health Organisation, 1992).

Autism, as a pervasive developmental disorder, is characterized by patterns of both delay and deviance in multiple areas of development for the whole life of an individual (Rutter, 1990). The condition of some children with autism deteriorates (Manos, 1997), while the intense detachment of others is decreased (Frith, 1996). A positive prognostic indicator is the presence of at least simple communication language by the age of 5 or 6 years. Moreover, a factor of prognostic importance is the ability to score within the mildly retarded or above on nonverbal tests of ability (Howlin & Goode, 1998; Rutter, 1990).

Asperger Syndrome is diagnosed by criteria as qualitative impairments in social interaction and restricted repetitive and stereotyped patterns of behavior, interests and activities but there is no clinically significant delay in language and more generally there is no clinically important delay in cognitive development or in the development of age-appropriate self-help skills, adaptive behaviour (other than in social interaction), and curiosity about the environment in childhood, according to DSM IV (American Psychiatric Association, 1994). Gillberg & Gillberg (1989) consider as a diagnostic criterion of this syndrome the extreme egocentricity illustrated as inability to interact with peers, lack of desire to interact with peers, lack of appreciation of social cues and socially and emotionally inappropriate behaviour. They also mention, as characteristic of this Syndrome, individuals having narrow interests and repetitive routines. Speech and language peculiarities involve delayed development, superficially perfect expressive language, formal pedantic language, odd prosody, peculiar voice characteristics and impairment of comprehension including misinterpretations of literal/ implied meanings. As it is often in developmental disorders motor clumsiness can be noticed and some non-verbal communication problems, such as limited use of gestures, clumsy/gauche body language, limited facial expression, inappropriate expression and peculiar stiff gaze (Schnur, 2005; Gillberg & Gillberg, 1989). However, individuals with Asperger Syndrome may be less clumsy than those diagnosed with autism and this difference

may be the result of their higher level of intelligence (Ghaziuddin & Butler, 1998). Asperger syndrome is a life-long condition but there could be a temporary increase or decrease in its expression. For instance, during adolescence some diagnostic criteria may become more intense (Attwood, 1998).

According to a recent report (SEN Partnership South East Region et al, 2004), approximately, 1 in 200 pupils has an Autistic Spectrum Disorder including Asperger Syndrome. Studies based on both clinical and epidemiological samples find a higher incidence of autism in boys than in girls, with reported ratios averaging around 3.5 or 4.0 to 1, although this varies across the spectrum (Scottish Intercollegiate Guidelines Network, 2007; Fombonne, 2003). Ehlers & Gillberg (1993) who examined more specifically the epidemiology of Asperger Syndrome estimated the prevalence figure for Asperger Syndrome (definite, suspected and possible cases combined) in children aged 7-16 years is 0.71% (0.97% of all boys and 0.44% of all girls). Using fined case selection the minimum prevalence was 3.6 per 1.000 children with a male to female ratio of 4-1. Scott et al (2002) reported a prevalence of ASD in the age-group 5-11 years of almost 0.6 % (57 per 10.000). This was 11 times higher than the rate of classic autism but in line with other national rates in United Kingdom and international rates for the broader spectrum. Scott et al (2002) provided some additional data about the placement of students with autism; half the responding mainstream primary schools had at least 1 child with an ASD. In the responding mainstream schools the prevalence was 0.33%. In the responding special needs population it was 12.5%. In this study the overall sex ratio of children with ASD replicated findings of 4:1 (male: female), but in those children with autism being educated in mainstream schools the sex ration was 8:1 (male: female). According to Parner et al (2008), there seems to be an increase in autism in recent years, but this is attributable at least partially to decreases in the age at diagnosis over time. In a very recent article, Baron-Cohen et al (2009) reported that the prevalence estimates generated from the Special Educational Needs (SEN) register and a diagnosis survey were 94 per 10.000 and 99 per 10.000 respectively. These researchers studied the school-based population in United Kingdom taking as sample students with ASD in the area of Cambridgeshire. Recently the Public Health Institute of Scotland (PHIS) reviewed ASD prevalence studies and estimated that there were 7.714 children under

19 in Scotland with ASD. There is not any evidence of association between ASD and social class or ethnicity (Scottish Intercollegiate Guidelines Network, 2007).

2.3.2 Suggested Causes of Autistic Spectrum Disorders

Possible Organic Causes

Even though the cause of autism is still unknown, the general viewpoint regarding the etiology of autism is that this syndrome has an organic cause (Cumine et al, 2000). There has been a growing body of evidence which supports this notion, such as the identification of immune intolerance, prenatal or perinatal brain damage, faulty genes, chromosome abnormality and viral agents (Engstrom et al, 2003; Frith, 1989). There has also been a certain concern that viruses associated with vaccinations, such as the measles component of the MMR vaccine and the pertussis component of the DPT shot may cause autism (European Commission, 2005). As stated by Cumine et al. (2000), the etiological factors of autism could be divided into 4 categories: those correlated to birth and pregnancy, biological, neurological and neurochemical. With respect to biochemistry, many individuals with autism have elevated levels of serotonin in their blood and cerebral spinal fluid, whereas others have relatively low levels of serotonin (European Commission, 2005). In the past 20 years it is especially the area of the genetic basis of autism which has drawn the attention of researchers; the issue today is not whether autism is a genetic disorder but which specific genes are involved and how they act. It seems clear, however, that genetic factors operate in a "multifactorial context" (Rutter, 1999, p.174) and that at least two or more genes need to be considered (Szatmari & Jones, 1998).

Psychological Theories

Since the exact kind of abnormality responsible for the symptoms of autism has not been found, some approaches focus on the psychological processes and mechanisms which may give rise to these symptoms. In the view of Frith (1989), persons with autism lack the capacity of forming coherence over a wide range of stimuli; "their information-processing systems, like their very beings, are characterized by detachment", but this detachment is not considered to be deliberate.

Another interesting explanation of autistic behaviour, the "theory of mind", suggests that people with autism cannot "mind-read", which means that they cannot attribute mental states to themselves or to others, so as to interpret and predict behaviour (Happe, 1994). An interesting argument against the "theory of mind" is that, even though the "mind-reading" ability does not develop until the age of 3 or 4 years, the manifestations of autism may be apparent from the age of 12 to 18 months (Rutter, 1999). On the other hand, Baron-Cohen (2001) argued that mindreading deficits in ASD appear to be early occurring (from at least the end of the first year of life, if one includes joint attention deficits) and universal. Additionally, parents of children with ASD may show difficulties in attributing mental states, when just the eye region of the face is available (Baron-Cohen & Hammer, 1997). Therefore, Baron-Cohen (2001) has reached the conclusion that genetic reasons may underlie mindreading deficits in ASD; these influence the function of amygdala, orbito-frontal cortex and medial frontal cortex, which are the key neural regions for mindreading. Other researchers have adopted the view that autism involves delays and deficits not only in the development of a theory of mind but also in additional aspects of social-affective information processing which "extend beyond the traditional boundaries of theory of mind" (Tager-Flusberg, 2007, p. 311).

An alternative etiological theory refers to executive functions, which include planning, impulse control, inhibition of incorrect responses, organized search and flexibility of thought and action for achievement of a future goal; people with autism do not have the ability to disengage from the immediate environment and guide behaviour instead by mental models (Ozonoff, 1995). The two last theories seem to share the opinion that people with autism fail to form second order representations (Bishop, 1993), which are "representations of representations" (Leslie, 1987, p. 417).

2.3.3 Interventions for Autistic Spectrum Disorders

As stated by Temple Grandin (1986), who considered herself to be "an alive proof for this", "the characteristics of autism can become milder and can be controlled" (Grandin, 1986, p. 22); but these attainments can be carried out, if appropriate interventions are implemented in each case and this endeavor is indeed a challenging one.

Because of the space limitation, an analytical reference to the numerous interventions of autism cannot be made. Jordan et al. (1998) have tried to categorise these interventions in the following way: interactive approaches, approaches to communication, integration approaches, Division TEACCH, Daily Life Therapy and behavioural approaches. Interactive approaches emphasize the significance of developing a relationship between the child and their parents. This relationship between the members of the family and the child with autism might also be enriched through guided play interactions (Beyer & Gammeltoft, 2003; El-Ghoroury & Romanczyk, 1999; Taylor et al, 1999), as the development of play has many links with the development of communication (Beyer & Gammeltoft, 2003). Approaches to communication addressed to meet the needs of children with autism are designed to specifically enhance communication skills, while integration approaches focus on the participation of children with autistic spectrum disorders and normally developing children in common activities. As far as this integration is concerned, an issue discussed in the present study is the participation in common activities of children with autistic spectrum disorders with normally developing peers from the school environment. TEACCH and Daily Life Therapy differentiate from the above categories because of the fact that constitute specific teaching programmes and not a wider category (Trevarthen et al, 1996). TEACCH is an approach based on the visually facilitated learning and the structuring of the environment. Parental involvement is regarded to be an integral part of this method (Panerai et al, 2002; Schopler et al, 1983). On the other hand, this factor is not highlighted in Daily Life Therapy, which is a completely integrated 24 hour curriculum, influenced by the Japanese culture of group performance and obedience. However a common characteristic of these 2 approaches is that they are highly structured. This characteristic also connects TEACCH and Daily Life Therapy with behavioural approaches. These interventions, which have a long history in special education, utilize behavioural techniques, such as task analysis (Vlachou 2000; Smith & Belcher, 1985) and systematic use of rewards (Agalliotis, 2000; Koliadis, 1996) to reinforce appropriate behaviours or to discourage disruptive behaviours (Baron-Cohen & Bolton, 1993). Furthermore, during the development of behavioural strategies the interesting topic of training parents as autism therapists has been

studied leading to encouraging outcomes (Carr, 2001; Short, 1984). It is also worth noting that this notion is related with another challenging idea: the systems view of the autistic child family, where the whole family is perceived as one system and in this way the attention is not only given to the child with autism but to all members of the family (ICDL, 2002; McConachie, 2002; Freedman & Capobianco Boyer, 2000; Cooper 2000; Jones 2000; The Scottish Office Education and Industry Department, 1998; Harris, 1984). In the same way a mixed group of children can be perceived as one system where the interactions of all children with each other should be studied. This eco-systemic approach can also be discussed in the present study (Bruder, 2000; Upton & Cooper, 1990; Cooper, 1990). In the literature review reference is also made to cognitive education of children with autism (Butera & Heywood, 1995), where emphasis is placed in the development of the thought's flexibility. Finally, an interesting combination of behavioural and cognitive approaches is the development of cognitive behavioural strategies, which are considered more suitable for the more able children with autism and could probably help them cope with anxiety, fears or anger (Howlin, 1998). Unfortunately, it is not possible these approaches to be thoroughly criticized, however some summative comments can be made.

According to the evaluative review of all these approaches, the conclusion has been drawn that in all intervention strategies there is a lack of enough research data (Cumine et al, 2000; Trevarthen et al, 1996). A common goal of most of them is the improvement of adaptive competence of individuals with autism which will lead ultimately to greater indepedence (Preis, 2007). Even though most approaches have some evidence of effectiveness, "no approach has yet been entirely successful in producing a methodologically sound evaluation of its work" (Jordan et al, 1998, p. 119) and also no approach has proved to be better than the others, because of the limited comparative research and the numerous methodological difficulties (Jordan et al, 1998), such as the variation in treatment methodology, outcome and follow-up measures (Webster et al, 2003) or the simultaneous combination of different methods (Jordan, 2002). In any case, it could not be denied that individuals with autism may need to be supported through a systematic programme when facing the especially challenging for them issue of transitions.

2.4 Rationale of the Research Project

This research project focused on the preparation of students with autism and communication difficulties from primary to secondary school. The research idea was to create a mixed group of students with communication difficulties and mainstream peers. This group would be presented with issues about this transition. This would happen in a relaxing and pleasant way and programmed activities of the group would include a group discussion in the form of circle of friends and art activities. The goal was to support peer relationships of this group so that students with autism would have more emotional and practical help by their peers and perhaps would be protected by phenomena of bullying during this transition through the development of a social network of peer support.

Because of the combination of the above ideas this literature review should include references to a number of interesting topics which are related to individuals with autism, peer relationships of students with autism and commmunication difficulties, the role of art activities in inclusive education and last but not least the appealing topic of transitions for individuals for autism with emphasis on their transition from primary to secondary school.

These topics will be presented in the following order:

- Adolescents with ASD /Asperger Syndrome
- Peer interactions of students with autism
- Peer interactions and bullying
- Leisure activities for students with ASD with their peers
- The concept of transition

It should be noted from the beginning that many topics, which are presented in different subchapters, are strongly interrelated.

2.4.1 Adolescents with ASD - Asperger Syndrome

Adolescence is characterized by the "dramatic transformation" that occurs in children as a result of the unprecedented biological changes that puberty brings to them (Caissy, 1994, p.9) and these hormonal and bodily changes in turn are associated with psychological changes. A main concept of adolescence is the transition between childhood and adulthood (Hyland, 2005; Kimmel & Weiner,

1985). Adolescence is customarily defined as beginning at approximately 10 to 13 years of age and ending between 18 and 22 years of age. It is usually subdivided into early and late adolescence (Nicolson & Ayers, 2004). During this stage of development the social world of individuals 'expands' as there is an increasing engagement beyond the family environment to the school and the peer group. Adolescents strive to create their own personal identity and sense of autonomy which may lead to disagreements with their parents or other adults, such as their teachers. Cognitively adolescents should be able to reason logically and abstractly, consider hypothetical possibilities and engage in problem-solving activities. They should also be able to reflect on their own cognitive processes, acquiring in this way meta-cognitive skills. Furthermore, adolescents develop perspective-taking, so as to be able to understand the thoughts and feelings of others. On the other hand, they may become rather egocentric and they may have fears and doubts about what is normal development for their age or about their sex identity (Kappatou, 2007). Adolescents have the tendency to compare themselves with their peers and to what they perceive as ideal standards; this may have a negative effect on their self-esteem, particularly to their own perceived lack of physical attractiveness. Additionally, adolescents become idealistic and interested in religious, philosophical and political ideas and movements. Consequently, the adult world may seem to them hypocritical and immoral. It is also usual for adolescents to have fantasies about themselves and their futures. During this period psychological and psychiatric problems can have their onset or become more noticeable (Call & Mortimer, 2001; Muuss, 1996; Santrock, 1996). As Nicolson & Ayers (2004, p. 3) have stated: "the significance of adolescence lies in the fact that, along with childhood, it provides the foundation for adulthood".

Even though physical changes of adolescence are most likely to occur at the same time for individuals with autism as for their peers, the emotional changes of adolescence may be significantly delayed and prolonged. Young people with autism may feel more confused by all the involved changes and they may not turn their attention to the opposite sex or exhibit the desire to test the rules as their mainstream peers. On the contrary they could have strong moral values and they may have a strong aspiration to achieve high grades. However, especially adolescents with

Asperger Syndrome usually want to be accepted by their peer group and have friendships (Holliday Willey, 2003; Attwood, 1998). One other characteristic of high-functioning adolescents with autism spectrum disorders is the fact that they exhibit anxiety levels that are significantly higher than those of the general population (Tantam, 2000). They often suffer from social anxiety, which is an intense fear of social situations or performance situations where embarrassment may occur (Bellini, 2006). Attwood (2003, p. 39) has stated that "the interpersonal and inner world of emotions appears to be uncharted territory for people with Asperger Syndrome". They have considerable difficulty identifying and conceptualizing the thoughts and feelings of other people and themselves (Kleinman et al, 2001). Apart from difficulty understanding emotions and complex interpersonal relationships, they may feel also confused about their gender identity. Their frustration can be expressed through inappropriate or aggressive behaviours (Henault, 2003). Furthermore, they may exhibit low tolerance when they feel stressed or disappointed, which can lead to outbursts in their behaviour or meltdowns (Dubin, 2007). More specifically Bellini (2004) reported a low negative correlation between the social anxiety of high-functioning adolescents with autism and their assertive social skills; as assertion skills decreased, social anxiety increased. In relation to these findings, he suggested that the relationship between assertion skills and social anxiety may be reciprocal in nature. Individuals with poor assertion or initiation skills may be more likely to experience anxiety related to social interactions. On the other hand, individuals with high social anxiety may be less likely to initiate social interactions, thereby limiting their ability to develop and master assertion skills. Apart from assertion skills, his relevant analyses revealed that empathy skills were also related to social anxiety in this population; however more research is required to better understand this relationship between empathy and social anxiety.

Self-Reports of Students with Asperger Syndrome in Secondary Setting

Self-reports of students with autism attending a secondary setting are rather few in number. Connor (2000) has reported an article about self-reports of students with Asperger Syndrome in a Secondary mainstream setting. Interviews with these students brought to the surface consistently expressed concerns about peer

interactions or the use of break and lunchtimes. It was concluded that social difficulties of children with Asperger Syndrome in the mild end of the spectrum should never be underestimated. Another noteworthy remark of Connor (2000) is that relevantly little information exists concerning the experiences of young people with Asperger Syndrome elicited while at secondary-school level. And this is also the case about their experience of their transition from primary to secondary school. But in order to be able to self-report a necessary ability is to recognize and to be able to express their own feelings and thoughts.

As part of the abilities that the social art group aspires to develop is emotion recognition and understanding, as this is challenging for individuals with ASD (Georgiou, 2010; Rump et al, 2009; Wallace et al, 2008) and real life type problem solving. A similar effort was undertaken by Solomon et al (2004). They implemented a 20-week social adjustment in an enhanced curriculum for boys aged 8-12. The curriculum was designed to address the three areas mentioned above of persons with high functioning autism and pervasive developmental disorder no otherwise defined. Findings were positive as there were statistically significant improvements in facial recognition and problem solving and this intervention was also reported to be helpful for participants suffering from depression. But even if there are similarities between the present project and others in the past, its originality could be also argued.

2.4.2 Peer Interactions of Students with Autism

Peer interactions have a special significance in children's social, cognitive, and moral development. They influence children's understanding of others and their perception of themselves, their sense of self (Dunn & McGuire, 1992). Difficulties in social interaction are one of the diagnostic criteria of autistic spectrum disorders (American Psychiatric Association, 1994; Wing, 1996) and peer relationships of children with autism have elicited the research interest the last few decades (Coleman & Stedman, 1974). In the relevant literature it has been stressed that for children with autism social interactions are even more challenging to be achieved in a mutually pleasurable way with their peers rather than with adults; and this is the case even for the higher functioning children with autism (Bauminger et al., 2003; Connor, 2000). The social deficits of children with autism are more obvious during

interactions with peers and whereas relationships with adults often improve, as children with autism grow older, their interactions with age-mates remain significantly impaired. It has been suggested that a reason for this may be their lack of opportunity to interact with other children (Roeyers, 1995). For instance Eaves and Ho (1997) examined the school placement and achievement of 76 children with autistic spectrum disorders in view of recent opportunities for full inclusion. Half of the children had IQ above 50 and there was a range of severity of autism. Researchers reported that generally the social adjustment of children was poor but better with adults than peers. Because of this reason and of the very negative consequences that the absence of peer relationships may have on the cognitive and social development of children with autism, there are some very interesting interventions which have as their main goal to facilitate peer relationships, such as 'the integrated play groups' (Neufeld & Wolfberg, 2009; Yang et al., 2003; Zercher, 2001; Wolfberg, 1999) and 'the circle of friends' (Kalyva & Avramidis, 2005; Brozic et al, 2002; Greenway, 2000; Bliss & Tetley, 1993). These are based on findings suggesting that social involvement with peers improves adaptive bahaviour skills of pupils with autism (McGovern & Sigman, 2005).

Disalvo and Oswald (2002) have listed techniques used in peer-mediated interventions, such as arranging situations to promote optimal peer effort, teaching peers methods for reinforcing target skills in children with autism, teaching peers strategies for initiating interactions with them, and teaching social skills to children with autism. Attwood (2000) has highlighted some strategies to help children with Asperger Syndrome in their interaction with their peers. These include opportunities to interact with typically developing children (Owen- DeSchryver et al, 2008; Jordan, 2002), social stories (Alevra, 2004; Brownell, 2002), comic strip conversations (Broderick & Mason-Williams, 2005; Gray, 1994), encouraging friendship skills (Gutstein & Sheely, 2002), social skills groups (Knott & Dunlop, 2003), project on specific emotions, imitation and accommodate the child's cognitive skills. Disalvo and Oswald (2002) also noted the important factor of influencing peer expectations regarding their classmates with autism. This could indeed be a fundamental element of the process of supporting peer relationships, however it is also very sensitive and challenging to handle especially in a mainstream setting. There is also a number of

evidence that utilizing peer support improves spontaneous social interactions between students with autism and their peers, irrelevantly if the last are trained or untrained (Harrower & Dunlap, 2001). Koegel et al (2001) have also noted the importance of incorporating peers in social skill support programmes as a conclusion of their own research projects which was about identifying early intervention targets for children with autism to inclusive settings. Additionally Robertson et al (2003) found that when students with autism are more socially included in the class, teachers tend to perceive their relationship with them as more positive.

A more analytical reference will be made to the research project of Roeyers (1995), because there are interesting points to be mentioned in relation to the methodology and the conclusive remarks of the researcher. There are many common choices associated with methodological decisions, but there are also some differences due to the different context or research goals. Subjects were children with autism and PDD-NOS, whose ages ranged from 5 to 13 years. Mainstream peers were age-mates who participated voluntarily and had been initially selected by teachers. They were also of the same sex as their playmates with special needs. Attentional demands were deliberately minimized by the use of dyads; by asking mainstream children to initiate persistently and to be on the same level (lying, sitting, standing) as their peer with developmental disorder; by limiting the amount of adult intrusion; and by using play materials familiar to the children. The use of dyads ensured that mainstream peers did not start to play with other nondisabled children as has often been observed in mainstream settings (Beckman, 1983). There were 10 playing sessions of 30 minutes each. The general trend was to shift from little or no interaction, to more frequent interactions. A second trend, that could be observed, was a shift from negative interactions and/or inappropriate behaviours to more positive interactions and more socially acceptable behaviours. It should be stressed, however, that the children with communication difficulties still had difficulties in producing effective social initiations by the end of the programme. The researcher concluded that children with pervasive developmental disorders could benefit from opportunities to interact with a normally developing peer in a peer-mediated intervention. More specifically Roeyers (1995, p. 162-163) stated that

> *"children with autism or a related disorder can develop peer relations, if appropriate social contexts are made available for them. The findings suggest*

that the segregated educational programme of these children, which in our view is the most appropriate for the teaching of functional and academic skills, should include regular structured interactions with socially competent age-mates. We strongly advise teachers and caretakers to provide the children with such opportunities. We observed that the non-handicapped peers spontaneously adjusted their initially unstructured and cautious behaviour, and became increasingly successful in engaging their handicapped peers in social interactions".

Roeyers (1995) also argued that mainstream peers should not be taught how to provide more structure from the beginning, because they have the ability to adjust gradually their behaviour to the needs of children with special needs and because this may not be very motivating for mainstream peers. In his research project there were not difficulties in maintaining the enthusiasm of mainstream children, as it had been mentioned in other studies where peer support was recruited (Baron-Cohen & Howlin, 1993). Roeyers (1995) reaches the final conclusion that the ideal educational approach of students with communication difficulties would combine the direct teaching of more appropriate initiation techniques and the provision of regular opportunities to interact with mainstream untrained peers in a semi-structured context. In this report many crucial matters were discussed by the researcher, the level of structure of a suggested educational programme, the level of adult support, the issue of providing training to mainstream peers and of maintaining the enthusiasm of mainstream peers; all these factors are influenced by the specific circumstances of each case. For all these reasons this was considered to be an important written source for the present research project.

Educational Inclusion of Students with Autism

An on-going discussion is still the adequacy of provision of services for children with autism in mainstream settings (Stathis, 2010; Kishida & Kemp, 2009; Batsiou et al, 2008; Jordan, 2008). It cannot be denied that common activities between typically developing children and children with autism are necessary and valuable for all of them; in most cases non-autistic children can offer a more appropriate model of behaviour in terms of social interaction and additionally, this is an active way through which typically developing children can be taught to become sensitive and empathetic citizens, as this is considered to be a goal of the national curriculum

(Boyd, 2005). Moreover, helping another person who is in need of greater support in a specific area is also a way of acquiring deeper self-awareness and of increasing typically developing children's self-esteem.

But the real challenge as far as this effort is concerned is the fact, that, when communication difficulties are present, educating all children in the same environment may not bring positive results without careful planning of meeting the educational, emotional and social needs of all children (Jones, 2002; Wing, 1996). On the contrary, in some cases it can cause greater stress on the pupils who encounter communication difficulties, because of the greater personal realization of this fact especially by higher functioning children with autism and also because they may become victims of bullying (Cotton, 2002). Mesibov and Shea (1996) argued that inclusion enhances the self-worth of students with autism, however when children are bullied this could affect their self-esteem in a very negative way.

What is more, pupils with communication difficulties may need more specialized support, for instance specific educational interventions targeted on this area and these may be more difficult to be offered in a mainstream setting. However, the most fundamental question, which needs to be answered in relation to inclusion, is how children with autism could most benefit firstly when they have common activities with other children having communication disorders and secondly when they are participating in activities with typically developing peers. Of course, what makes things more complicated is the uniqueness of each person's character and of each interpersonal relationship; and especially in the area of autism one cannot but be amazed by the uniqueness of each individual's reactions. However, the present author considers that this should be a crucial inquiry kept in mind in the context of individualization and that there could be found some useful recommendations about the way that this question should be approached. Therefore, the answers may not be the same for each child, but there could be a systematic way for this issue to be examined which could be applicable in all cases. And this cannot be developed unless there is a detailed study about how relationships evolve of several individuals with autism with their peers, whether these have autistic spectrum disorders themselves or they are neurotypically developing. And of course this question is very interesting from the point of view of typically developing children, too; for example,

there are sources referring to the behaviour of pupils with emotional and behavioural difficulties having shown tremendous improvement, when they are called to help pupils with autism, because they seem to feel that their peers with autism are more defenseless in comparison with themselves (Cotton, 2002). Consequently, it is fundamental in each case for each unique child in each unique context to explore the factors which may have a positive or negative impact on peer relationships, especially when there is a systematic effort for them to be enhanced. Glashan et al (2004) pointed out that it is vital to consider classroom dynamics when implementing policies intended to promote educational inclusion. The presentation of a holistic picture about these factors may be useful for practitioners so as they could support peer relationships more effectively. In any case it should be taken into account that all schools should be perceived "as unique moments in space ad time to everyday practices of inclusion" (Holt, 2003, p. 119).

Impact on Mainstream Students by Participation in Inclusive Projects

According to the relevant literature review, mainstream pupils tend to find their experience of participating in inclusive projects as intrinsically rewarding. More specifically there are a few very encouraging sources describing cases where students with autism are involved. Gonzalez-Lopez and Kamps (1997) reported that during integrated social skills training groups, mainstream peers developed their communication skills as well. Wolfberg and Schuler (1999) argued that mainstream peers developed greater sensitivity, tolerance and acceptance of individual differences. They also reported that their programme was mutually enjoyed by all members of the integrated play groups. Yang et al. (2003) who also used the integrated playgroup model to support children on the autism spectrum confirmed that mainstream peers enjoyed and valued their participation in the play groups. According to this model, children with autism (novice players) engage in play experiences with more capable peer play partners (expert players) while guided by an adult (play guide). Play sessions should be tailored to the interests, the developmental capacities and the sociocultural experiences of all players. Emphasis is placed not only on guiding students with autism but also their mainstream peers so as to become more accepting, responsive and inclusive of children who have

communication difficulties. In this model all children are encouraged to mediate their own play activities with minimal adult guidance (Neufeld & Wolfberg, 2009; Wolfberg, 2003).

Whitaker et al (1998) imlpemented an integrated programme using a group discussion in the form of 'Circle of Friends' where focus children with autism were supported within mainstream peer groups in Year 6. The 'Circle of Friends' approach is a method designed to increase the socialization and inclusion of a child with special needs with his/her peers. A 'Circle of Friends' consists of a 'focus' child, for whom the group was established, 6 to 8 classroom peers and an adult facilitator who meet once weekly to socialize and work on specific goals. In most cases the 'Circle of Friends' approach is used with school-aged children with various difficulties (Frederickson & Turner, 2003). Whitaker et al (1998) reported a range of benefits for all the pupils and collected the views of the peer supporters on the good aspects of being in the circle and the difficulties they experienced. Staff identified a range of benefits for pupils in the circles, such as a sense of competence and pride from the circle, enhanced self-esteem, increased levels of empathy and understanding, improved group participation and personal benefits for individual group members. Mainstream students stated that they found the experience of helping others to be satisfying and they were concerned about how best to support the focus child. In a relevant subsequent research project, Whitaker (2004) reported that all 10 peer tutors of children with autism found the tutoring sessions enjoyable and expressed their enthusiasm for continuing their involvement. Parents of mainstream students also gave a very positive feedback about their children's participation in this study. There was a consencus that they would recommend the peer tutoring experience to parents of other mainstream students. According to a very recent study (Chatzizisi, 2009), Greek teachers reported that mainstream peers who are classmates of children with autism and Asperger syndrome in mainstream settings become more sensitive and accepting in most cases towards students with ASD. However, this is influenced by the level of learning difficulties and of behavioural problems of students with ASD. In this study the perspectives of 52 Greek teachers were explored. All of them completed a questionnaire concerning the inclusion of students with ASD in mainstream settings. Afterwards, a semi-structured interview was conducted with 6

of these teachers. Chatzizisi (2009) argued that it was not necessary to conduct a greater number of semi-structured interviews, because the data collected through these interviews were very similar.

Jones (2007) reported a study which looks specifically at the impact of being peer tutors for children with autism from the perspectives of the tutors themselves, their parents and school staff. More specifically this enquiry focused on 10 to 11year-old mainstream pupils who were paired with 12 children with autism and associated learning difficulties for peer tutoring sessions at a primary school with a specialist autism unit. The peer tutoring sessions were held once a week for half-hour sessions. Each session involved two children with autism, each paired with a peer tutor. The sessions were supervised by a member of staff from the autism unit. Peer tutors were changed each half term (every six weeks). Over the course of the 24 weeks of this project, 27 of the 28 Year 6 pupils volunteered to be peer tutors. All 27 volunteers had the opportunity to be a peer tutor for half a term; 20 of these volunteers then had the opportunity to be a peer tutor for a second half term with a different child with autism. The tutor sessions were organised using reverse integration whereby the mainstream children were brought into the familiar environment of the children in the autism unit (Jordan & Powell, 1995). At the end of a series of tutoring sessions, the perspectives of the peer tutors were gathered through questionnaires. All of the peer tutors reported that they had enjoyed the experience and most felt that the peer tutoring had brought them direct benefits by building confidence, teaching responsibility, encouraging caring attitudes and helping them to acknowledge diversity. Parents, too, observed that peer tutoring had a positive impact upon their children. School staff agreed and also noted benefits for the whole school ethos. This recent research project took place in a very similar context with the one of the present study (attached specialist autism unit in the primary school, similar group age, weekly sessions etc) and the findings were very positive in relation to the impact of such efforts on mainstream students. The positive feedback was triangulated through data gathered by students themselves, parents and the staff, as this is the case in the present research study, too. However, there was a number of parents and pupils who chose not to complete questionnaires who may have held different and possibly negative views; the response rates were 67% for pupils and 56% for parents. There

have been similarities in the methodology used. In her conclusive comments, the researcher highlighted the fact that her study used peer tutors who were all older than the children with autism and that it would be interesting similar research projects to be conducted using aged peers and this is the case in the present research study.

Teachers' Supportive Strategies for Friendship Formation

Buysse et al (2003) have published a very interesting research project which examined the strategies that teachers used to support friendships among young children in inclusive early childhood classrooms. The 34 teachers who participated reported that they were using more active friendship strategies to support dyads in which one or both children had special needs. Overall, the friendship strategies which teachers reported using more frequently included providing sufficient free choice time, allowing children to form their own friendships and commenting on the play between friends. Therefore, it was obvious by research findings that as part of their role teachers perceived providing social opportunities and helping children manage these situations by giving emphasis at the same time on peer interaction. Of course in this case, children were younger but children with C.D. need discreet support even later on. According to Webster et al (2002), effective interventions prepare the child for independence and rehearse the skills needed to cope with peers and inclusive settings. In all cases freedom of children, mainstream and not, to choose their friends should be treated with respect. Otherwise, this kind of interventions could even become harmful, because they may trigger negative feelings to children (Colley & Hodkinson, 2001). And it is also important a holistic and system-oriented way of thinking to be fostered so that not to "put more blame" on specific people (Wapner, 2000).

On the other hand, there are research projects which report the lack of appropriate support to students with C.D. in mainstream settings in relation to issues of social interaction with their peers. Ochs et al (2001) conducted a study which illuminated the social realities of inclusion of 16 high functioning children with autism in public primary schools in the United States. Their findings suggest that the practice of inclusion rests primarily on mainstream schoolmates rather than teachers, who typically are occupied monitoring academic progress and disciplinary issues.

Utilizing ethnographic observations and video recordings of classroom and playground activities, the analysis showed how classmates employed a range of positive and negative inclusion practices that either integrated or distanced children with autism. Children whose diagnosis was fully disclosed enjoyed more consistent social support in the classroom and on the school playground. Despite difficulties in interpreting others' intentions and feelings, research findings indicated that high functioning children with autism can be distressed by others' acts. In association with this important issue of peer interactions, it could be seen another crucial consideration: the degree and the form of inclusion for children with autistic spectrum disorders (Jones, 2002; Mesibov & Shea, 1996).

2.4.3 Peer Interactions and Bullying
Social Networks and Bullying in Mainstream Peers

According to Olweus, "a person is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more persons (Olweus, 1991, p. 413). Pellegrini and Long (2002) conducted a research project which combined the issues of bullying and transition from primary to secondary school. The findings of this study describe in a very interesting way the creation of social networks and provide thought- provoking explanations. Bullying and victimization were studied from a longitudinal, multi-method perspective as students made this transition. Generally, bullying and aggression increased with the transition to secondary school and then declined. Bullying is believed by the authors to have mediated youngsters' dominance status during the transition. Bullying was reported to be one way in which young adolescents manage peer and dominance relationships as they make the transition into new social groups. Victimization declined from primary to secondary school. Correspondingly, youngsters' peer affiliations decreased, initially with the transition, and then recovered. Victimization, however, was buffered by peer affiliations. Additionally, it was found that boys targeted other boys and did not target girls. Again this is considered to be consistent with the idea that bullying is used for dominance displays. Therefore, the finding that the development of peer relationships is a good defense mechanism for bullying victims is another strong evidence that peer interventions during this stage of

transition from primary to secondary school may support students even after having experienced bullying and probably this could be effective as a preventative strategy, too.

Fox and Boulton (2005) reported a study related to bullying which examined the social skills of students being bullied, according to the perceptions of students themselves, peers and their teachers. A convenience sample of 330 pupils aged between 9 ad 11 years (162 girls and 168 boys) provided self-report and peer-report data. They were drawn from 12 classes from 6 junior schools in the UK. Additionally, 11 of the class teachers provided data. All participants were provided with 20 short statements that described a different social skill and they were asked to rate themselves, 2 of their peers (a "victim" and a "non-victim", according to their personal view) or 2 of their students (a "victim" and a "non-victim", according to their personal opinion) by using a 3-point scale in terms of how like the person described each statement was. According to the findings, these 2 researchers reached the conclusion that victims were perceived by 3 different sources as having poor social skills. Fox and Boulton (2005) argue that this finding has important implications to support victims of bullying.

Savage (2005) studied the perceptions of friendship and bullying in 6 children of year 7 attending a speech and language base part-time and the perceptions of their mainstream peers without speech ad language problems. Base-taught children and mainstream peers completed a bullying questionnaire and a social inclusion survey. Savage (2005) reports that base-taught children with language difficulties rated themselves as 3 times more likely to be bullied than their mainstream peers. These 2 sub-groups differed on the number of peers willing to "hang out" with them, suggesting language difficulties and attendance at a segregated base together are a "risk factor" for bullying whereas peer-acceptance can be a "protecting factor". Savage (2005) argues that inclusion-oriented ecological interventions are more likely to encourage friendships and social acceptance among the wider peer group and thus may be the most effective interventions to prevent bullying. This finding supports the rationale of the present research project, too.

Bullying of Students with Autism

As bullying can become a part of student's with autism experience a few studies exploring this issue could give helpful information. Little (2002) conducted an enlightening study about the prevalence and frequency of bullying in a sample of more than 400 children with Asperger syndrome, whose ages were between 4 and 17 years. According to this study, the reported rate of bullying for these children was at least 4 times higher than of their peers. Little (2002) found that more than 90 per cent of mothers of children with Asperger syndrome who completed the survey had reported that their children had been victims of some form of bullying during the previous year. Especially boys with Asperger Syndrome experienced at a greater level than their peers non-sexual genital assaults. Other unpleasant findings were related to the adolescents with Asperger Syndrome; 1 in 10 was a victim of peer gang attack. Gradually an increasing number of such personal experiences are being reported or published by individuals with Asperger Syndrome (Dubin, 2007; Jackson, 2002) and it is still very possible that the estimate of bullying experience is relatively low (Attwood, 2007), because children or adolescents with autism or Asperger Syndrome may be reluctant to report acts of bullying to their parents (Hay et al, 2004) or they may not be able to recognize or express them. According to Konstantareas (2005), parents of 22 out of 22 children with Asperger's, ages 11-19, reported that their children were being victimized by peers. Average victimization among that group of children was 1.25 times a week. Another study interviewing 400 parents of children with ASD, ages ranging from 4 to 17, found that 94 percent had been bullied or victimized (Heinrichs, 2003).

The existence of bullying could explain partly why the idea of developing a small group intervention for children with social communication difficulties in preparation for school is present in the literature (King, 2003). Perhaps this could become a very good preventative way for a network of peer support to be built around these children and this network could be stronger if the appropriate mainstream peers could participate in it. Doyle and Iland (2001) made the suggestion that mainstream students should be taught to recognize and assist students with ASD, so as mainstream children to prevent the bullying of these students. In this way, perhaps adults could influence more the social network of adolescents, which can become

very cruel. Therefore, the creation of such mixed groups could be regarded as a preventative attempt to protect the most vulnerable children from bullying. Apart from this, there are arguments in favour of small group arrangements in classrooms for students with autism and other developmental disabilities (Kamps et al, 1992).

A few personal accounts about transitional periods of students with autism can be found. The following is given by a mother of a child with autism who describes in a very vivid way the experiences of her son during his transition from primary to secondary school.

> *"It had been a different story at Bernard's schools. True, at primary it had not been too bad. Bernard even had friends. There was one boy in particular, little Joseph, who 'adored' Bernard. The children seemed readier, at that age, to accept a child who was different. But at secondary school the real problems began. The school was supposed to give him help. But he got little, least of all in the area which bothered him most, his relationships with other kids. By this age, with the onset of adolescence, other children had become less tolerant. Nor was this just kids who were new to Bernard. It included some of his old friends who had joined him at the new school. Once there, they dropped him. Worse he began to be bullied. Kids would tease him, make a fool of him, tell him to walk down the corridor with his trousers down. Bernard, whose speech was very limited, especially at school, developed his own language of protest: he soon started refusing to eat anything at school, only at home".*
>
> (Cotton, 2002, p. 107-108)

In this extract Cotton (2002) mentions the fact that Bernard's 'friends' from primary school 'abandoned' him in the new setting. Therefore, the already existing social network of Bernard was not sustained 'naturally' without any kind of support by practitioners. Studies have shown that children who are usually bullied are generally those who have few friends (Brooks et al, 1999) and most children with Asperger syndrome lack a large social support network (Dubin, 2007). On the other hand, Coloroso (2003) reports that 85% of bullying takes place within the presence of other children and that this act brings social rewards to bullies, because bystanders condone their behaviour. Because of this reason, Coloroso (2003) eloquently states that disciplinary action taken by the school against the bully will not be nearly as effective as the disapproval or action taken by peers; therefore an intervention for bystanders is recommended. Dubin (2007) expresses the view that support groups might particularly benefit the Asperger population who often feel isolated in their chronic victimization. The same author supports his opinion by saying that if they students with Asperger could have an opportunity to see that a lot of different people

experience bullying, it would help reduce the internalization of blame and self-condemnation they often experience. One goal of a support group could be students taking part to share the experiences of being bullied. However, the same author mentions in his book the following recollection:

> *"When I was in the seventh grade, one of the counselors at school noted that I was socially isolating myself. She called my parents and recommended that I be placed in a social skills group, which at that time was called group therapy. My dad told me that this was a group of kids who were struggling socially, like I was. Based on that description, can you guess if I wanted to join this group? I'll give you a hint: no! I did go to this group once a week for almost a year, but I fought my parents tooth and nail every time I had to go."*
>
> (Dubin, 2007, p. 54).

In this case there was a peer intervention put in place, but this was not discreet; it stigmatized the child. However, it took place regularly and it did not occur only when unpleasant incidents arose. It is easier to create a suitable group mindset with programmes which involve everyone and occur regularly (Dubin, 2007). The same author argues that peer mentoring programmes become more efficient, if they reward positive behaviour on a daily basis. One aim of the present research study is to evaluate the effectiveness of a supportive transitional programme for students with ASD where there was the participation of mainstream peers, as well.

2.4.4 Leisure Activities for Students with ASD Including Mainstream Peers

> *"I was surprised. This kind of intense, demanding care was not what I thought boys of twelve wanted to do; surely they wanted to run down the path at their normal wild speed, not stumble haltingly? Why weren't they impatient? Nor was this how I expected them to feel; there was a delicacy, a high seriousness, almost, in the way they talked about their boys (with autism) which I just didn't expect from 12-year-olds. And yet this caring work had never been imposed on them. In fact, starting all those years ago, it had come about by a series of accidents; and if the early, limited experiments hadn't worked, the process would never have developed as it did……Why? The sense I got it was the way Mohawk embodied a particular idea of boyhood; an idea, perhaps, whose time had come".*
>
> (Cotton, 2002, p. 16-17)

Peer relationships of children with special needs do not need to be supported only in the school setting; this effort should be also extended during the children's leisure activities (Wing, 1996). Especially as children grow up, during their transition in adolescence, their parents cannot help them any longer up to the same degree to

participate in peer activities in their free time. It is characteristic that the prevalence of friendships and participation in social groups is low for adolescents with ASD despite where they are on the spectrum (Hendricks & Wehman, 2009). The social gap between individuals with ASD and typically developing peers usually widens during adolescence (Arick et al, 2005). But exactly at this stage taking part in this kind of activities is very crucial for children with autism, because it has an important impact on their self-esteem, especially when they are higher functioning, because they crave to have 'friends' and at the same time they are aware of their difficulty to achieve this (Marks et al, 2000; Lawson, 1998; Williams, 1992). Bauminger et al (2003) have reported that adolescents with ASD have higher levels of loneliness than their typically developing peers. Therefore, the present author believes that there should be an attempt peer relationships to be advanced during leisure time in an organized way but with respect to the fact that children still need to take some personal decisions (Wing, 1996). So the present author's opinion is that there should be an already planned structure for such kind of activities, but that these should also be flexible and not having a 'lesson' form; and this context could be provided in the most favourable way through artistic activities (Papamichalopoulou, 2010; Martinovich, 2006; Flowers, 1992). These could take place in a relaxing and playful atmosphere (Rubin, 2005; Beyer & Gammeltoft, 2003; Moor, 2002), which could have a very positive impact on the development of peer relationships. Group activities could include art activities, group play, role-play, dramatic play and story making (Nikoloudaki, 2010; Crimmens, 2006; Grove & Park, 1996). It is interesting that through these pleasant activities some serious problems could be encountered; for instance, Doyle and Iland (2001) suggested that it is very helpful for students with ASD bullying situations to be role-played with trusted peers playing the part of the bully, so as students with ASD to be taught to recognize such situations. In this case the focus is on drama or art activities as a process (Jindal-Snape & Vettraino, 2007). The context of art activities has been used in previous inclusion research projects, which involved students with special needs and mainstream peers and more specifically in some cases students with autism and their mainstream peers (Schleien et al, 1995). In such efforts mainstream students are prompted to change their perceptions of their peers with special needs through active participation in common

activities (Whitehurst & Howells, 2006). A characteristic statement given by a mainstream student who took part in a musical performance during a research project which involved pupils with severe and complex learning difficulties is the following: "It was like looking through a glass window but to interact meant I was able to become friends with them" (Whitehurst & Howells, 2006, p. 40). Other arguments in favour of such endeavours is that all children are likely to use the same art materials and that mainstream peers are not necessarily required to undergo specific instruction (Venn et al, 1993).

Apart from this, especially when visual forms of artistic activities are concerned, this may facilitate children with autism, because it is widely accepted that they often think through pictures (Grandin, 1995; Grandin & Scariano, 1995) and that they can process information more easily in this manner rather than through verbal instructions. However, visual artistic activities could be combined with some kind of conversation again in a relaxed atmosphere and not through direct teaching; this can happen in the form of the 'circle of friends' where a story could be developed in relation to the children's 'creations' (Jennings, 2004; Frederickson & Turner, 2003) or if children are asked to describe their 'creations' and explain what kind of feelings may be conveyed through them. Such kind of supplementary oral activities may enhance pupils' understanding and expression of feelings and the importance of this attempt has already been highlighted in the relevant literature especially for higher functioning children with autism (Attwood, 1998). According to Whitaker et al (1998), the aims of the 'circle of friends' when applied to children with autism are the following: (a) to create a setting where the child can be in regular and supportive contact with more socially competent peers, (b) to provide a context that will allow the teacher to focus on the social interaction disorder characterizing autism, (c) to aid typically developing peers recognize that the social impairment of children with autism constitutes a fundamental and pervasive difficulty, and (d) to address certain problems by introducing the notion of creativity to the members of the circle and to promote understanding of peer culture in certain educational settings. More recent research projects underline the important finding that typically developing peers of children with autism are enabled to learn to cope with the inappropriate behaviour that they may exhibit while communicating with them without exercising any undue

pressure on them (Kalyva, 2005). The expectation of positive outcomes for all pupils could be also attributed to the fact that all individuals tend to experience strong and even contradictory feelings during adolescence; this happens up to a degree because of biological factors, and it is more intense in the first years of this period, which coincide with the transition from primary to secondary school (Howlin, 2003; Manos, 2000; Connolly et al, 1996). Participation in the 'circle of friends' could give to all students the opportunity to talk about their feelings.

2.4.5 The Concept of Transition
The Term "Transition"

According to Adams et al (1976, p. 5), "a transition is a discontinuity in a person's life space. Sometimes the discontinuity is defined by social consensus as to what constitutes a discontinuity within the culture…. Another way of defining a discontinuity is not by general consensus but by the person's own perception". The same authors continue to argue that if an experience is going to be classified as transitional, there should be personal awareness of a discontinuity in one's life space and new behavioural responses required because the situation is new or the required behaviours are novel. Research has indicated that any transition will cause a predictable cycle of reactions and feelings and that it will involve a certain amount of stress. During this circle there would be a stage of disorientation or even of depression; however, this should lead to the stage of accepting finally the new situation, finding a positive meaning about it and incorporating internally the whole experience of change (Hopson et al. 1988; Adams et al, 1976). This cycle involves all kind of changes, smaller or major. A transition is likely to involve a change of culture and status and in reality it means leaving the 'comfort zone', as it is stated by Fabian (2007). This author gives the following definition for transition: "We define transition as a complex process made up of continued social activity in which the individual lives, and learns to cope by adapting to the given social conditions" (Fabian, 2007, p. 130). In this definition it is highlighted that an individual does not learn in isolation, but belongs to several microsystems and commutes between them, adapting to the different demands of these environments and learning from them (Bronfenbrenner, 1979). These systems are interwoven and on-going, therefore

transition cannot be seen as an event, which takes place on the first day in a new setting. Furthermore, transition competence should be perceived as a characteristic not of the individual alone, but of his/her social system. This happens, because effective transitions are a function of communication of all participants and of co-construction (Fabian, 2007). Regarding this theoretical approach about transitions, Dunlop and Fabian (2002) mention an example, which is related to children transition from nursery to primary school; during this transition 3 microsystems are interconnected in a mesosystem: nursery school staff and peers consist the first microsystem, primary school staff and peers form together the second microsystem and the child's family is the third microsystem. A conceptualized model of the ecological systems theory in relation to the present research project could be found in Appendix 1. What is more it could be noted that a transition process does not always process in a linear way, but it can have periods of no progress or it can even regress (Dunlop & Fabian, 2002).

An educational transition is defined as "the process of change that children make from one place or phase of education to another over time" (Fabian & Dunlop, 2006, p.3). Going through transition can be a learning skill on its own, therefore educational transitions could contribute to children acquiring life-long strategies for meeting and dealing with change. Students are being supported through their educational transitions when they experience similar environments and expectations at home and at school. Otherwise, students tend to be more confused and stressed during educational transitions, especially when the cultures in the home and school also differ (Dockett & Perry, 2001). Brostrom (2002) has also highlighted the importance of making the transition with friends, as this provides well-being and confidence for pupils to face new challenges. Margetts (2002) confirmed that moving with friends gives students the emotional foundation to gain confidence not only regarding their social skills but also in relation to learning. What really enhances the well-being of students during an educational transition, if they are systematically supported, is the feeling that they have a sense of control over their lives. According to Akos (2010), transition leads to a break in social networks; high levels of social skills and strong peer relationships can function as protective factors. Due to these reasons students perceive peers as both a challenge and a support system during

educational transitions (Newman et al, 2000). Regarding the impact of peers moving up to the same educational setting, Jindal-Snape (2010) has reached the conclusion that there is enough evidence to suggest that peers from one setting should be given the opportunity to move together into the new setting. Activities which facilitate transition to a next educational setting could include discussion, visits prior to starting (particularly with other children who will be starting at the same time) (Margetts, 2002), using play-based activities which could start in one setting and are completed in the next, if this is possible, or mentoring by children who are already at the new setting (Fabian & Dunlop, 2005). A systematic and planned transition programme should start several months prior to the transition and carry on for several months post-transition (Jindal-Snape, 2010). These sources support the rationale of the present research project. Younger students could be comforted by a transitional object, such as a special toy, which could link the school and the home environment (Winnicott, 1974). It is important parents to have sufficient information about the school context in order to be able to boost the child's confidence regarding his/her educational transition (Fabian, 2002). Transitions in a child's school life could be divided into vertical and horizontal. A vertical transition takes place, when a student is moving from one educational stage to another or even yearly in the case of gradual progression of curriculum. A horizontal transition is an ongoing process as the student makes sense of his/her social environment and adjusts according to sometimes unpredictable changes (Jindal-Snape, 2010). According to the findings of numerous studies (Akos, 2010; Galton, 2010; Pietarinen et al, 2010), emphasis is given on vertical transition by schools and teachers, for example through the continuity in the curriculum (Brodie, 2004). However, there is a need to take more account of the psychological and social aspects of transition (West et al, 2010). Due to this reason, more work is required to enhance the transition activities and programs and it is necessary practitioners to be involved in relevant research projects (Jindal-Snape, 2010). It is fundamental to prepare and document transition plans, which should be reviewed and monitored periodically (Akos, 2010; Broderick & Mason-Williams, 2005). It is important these plans to include opportunities for secure attachment either through a buddy system (Jordan & Jones, 1999) or though counselling staff, particularly for individuals who may lack a supportive network at

home or in school (Jindal-Snape, 2010). It would also be positive these programmes to provide multiple opportunities for social engagement supported by scaffolding from adults and peers in the school enviroment (Brewin et al, 2008; Stephens, 2005) moving gradually from adult guides to evenly matched peers (Gutstein & Whitney, 2002). By the number of sources referring to transitional experiences it becomes clear that a transitional procedure can be challenging at a lower or higher level for all individuals who participate in it (Bridges, 2003; Hopson et al, 1988; Bridges, 1980) and this can be even a more intense the case for people who have special needs and their families.

Transitions for Individuals with Special Needs

Their greater difficulties during transitional periods can be justified by the fact that individuals with special needs and their families tend to face a larger number of practical difficulties. Furthermore, these individuals may find it more complicated to process cognitively all the changes that a transition may bring (Groden et al, 1994); therefore they may feel less able to adjust adequately cognitively and emotionally in the new circumstances. Especially for individuals with special needs the factor of individualization is very stressed in the relevant literature (Goupil et al, 2002).As part of the support during a transitional period is to help each individual evaluate his readiness to make the anticipated transition (Bridges, 2003). Anderson et al (2000) have also highlighted the fact that facilitating successful transitions requires that attention should be paid to the individual's preparedness for the transition and the kinds of support students need before, during and after the transition. Therefore, if there is a tool which could be utilized for this purpose, even for personal use, this could be helpful. This tool could help the individual consider all the facts that could influence his/her transition to a next setting and to reach a personal understanding whether he/she feels ready and if not, what else could happen. This same tool could be used with the help of another person, sensitive and respectful towards the target individual, in cases where this is necessary. But among all people who face the challenge of having special needs there is one "subgroup" which could be considered as the most vulnerable during transitional periods and this is consisted of the individuals who have autistic spectrum disorders.

Transitions for Individuals with ASD

What makes people with autistic spectrum disorders having such an intense difficulty when facing changes is their rigidity in thinking, which is a very characteristic feature of individuals who are given this diagnosis and leads to their need to maintain sameness and consequently to their ritualistic behaviour (Tsompanidis, 2010; Vermeulen, 2001; Jordan & Powell, 1995). Lawson (2005) suggested that individuals with ASD are monotropic by nature. According to this author, monotropic individuals have difficulty performing a variety of tasks simultaneously because focusing on more than one activity at a time creates a mental overload. As a result they cannot spread their attention evenly over many different stimuli and they tend to focus on the details of any given situation. In social situations monotropism translates into missing the meaning or misinterpreting the context of a given communication (Vermeulen, 2001). Auditory processing difficulties which many individuals with autism face contribute to monotropism (Bogdashina, 2003). Dubin (2007) has reached the conclusion that because of all these reasons it is logical individuals with Asperger Syndrome to consistently exhibit anxiety about issues revolving around transitioning, changes in environment and social situations where there is no 'script'. Therefore, if students with ASD are not supported to adapt to a new setting, they may withdraw or be at risk for meltdowns, which may contribute in their turn to these students being bullied (Dubin, 2007). Another feature of autistic way of being is the fact that individuals with autism often perceive the environmental stimuli through their senses in different ways than those of neurotypically developing people (Bogdashina, 2003; Groden et al, 1994). And as these ways are not always easy to be predicted, the process of clarifying the children's needs in the new educational environment may be more time-consuming. Another challenge when trying to make clear which are the educational needs of children with autism during transitional periods has been highlighted with great sensitivity by Morgan (1996): he refers to the difficulty of the practitioners to identify the attachments of individuals with autism either with objects or with people and to understand the reasons for their significance to them. So, as many aspects of facilitating the transition of individuals with autism to a new setting may prove to be rather complex, this may have a stressful impact on the lives of their families

(Cantwell & Baker, 1984) and on the professional practice of all the involved. It is also characteristic that research findings suggest that parents of children with autism experience more stress than parents of children with other special needs (Dunn et al, 2001; Sanders & Morgan, 1997). Due to these reasons the present author's attention was focused on this interesting issue of transitions for children with autism, but this was seen in combination with some other appealing topics. Among them, the most crucial are peer relationships, leisure activities and transition to adolescence.

Forest et al (2004) have investigated the transition of young children with autism from preschool to kindergarten. They tried to identify the full set of elements within a transition planning for the critical stage of the first transition of children with autism to the first school setting. Their research project has similar goals with the present one but it is targeted at a different age group. These goals were: (1) identify and integrate critical elements in the transition process gleamed from the published literature, (2) develop a practical tool that families, schools and agencies can use to assess their transition process, (3) conduct a pilot field test with 3 families to determine both the perceived importance of each element and the extent to which each element was experienced in recent transitions. It is notable that there is a low number of children with autism as participants, only 3, as it is usually the case in relevant research projects. Furthermore, in this research project transition is studied taking into account the 6-month period before and during transition.

However difficult may be for children with autism to handle transitions, there are examples where children with autism managed with the proper support to adapt smoothly even during big life-style changes. Llacer and Jordan (2003) reported the case of a 9 year old boy with autism and learning difficulties who had to move from a Portuguese-speaking to a Spanish-speaking country and from a situation of a home-education to joining a specialist school for children with autism. Authors claim that the programme, which used books, videos and computer programmes and was based on the strong cooperation between the home and school was successful in helping the child make a successful transition.

Stone (2004) gives a short personal account of her son's with autism transition to primary school. This extract has been selected because it stresses the positive impact

that just one mainstream peer had on the adjustment of her son, Alexander, in the school environment.

> *"I will dearly remember a young boy with a heart of gold. He was naturally patient with Alexander ad happy to share and wait for Alexander to talk to him. The child became my benchmark for 'normal behaviour' and helped me monitor Alexander's progress. The same child became Alexander's rock during his first school years. Such children I regard as true gifts of life and love. Lloyd, thank you"*
>
> (Stone, 2004, p.112)

The present author believes that it is important Stone's (2004, p. 112) expression "naturally patient" to be kept in mind, as this will be discussed later on in relation to the results of the present study, too.

Held et al (2004) reported a descriptive case study about the transition planning for a young man with autism. These researchers focused on the facilitation of a self-determined planning. They combined a number of strategies such as the use of person-centered planning methods, a self-determination curriculum and self-instructional model, the use of technology to support the student expressing his views and the integration of instruction across the day. It was fundamental the fact that all the members of the Individual Educational Planning Team cooperated for this goal. By a methodological point of view there are some parallels between this study and the present research project. First of all researchers adopted the method of participation action research (Schoen & Schoen, 2003). Secondly, peer mainstream tutors played an important role.

> *"Peer tutors (general education students) were an integral part of the classroom and learned about self-determination, transition, and future planning alongside the students with disabilities. This gave the teacher flexibility in terms of grouping; hearing their peers talk about their hopes and dreams and likes and dislikes served as a powerful model for the students with disabilities. Soon John actually began to talk about living on his own in an apartment with a roommate".*
>
> (Held et al, 2004, p.182)

The above extract could be regarded as closely linked to the present research project, eventhough the age group is different. Held et al (2004) identified the importance of flexibility in terms of grouping and of group discussion in mixed groups where mainstream students and students with special needs participate. In

another part of this article researchers describe how they enlisted peer tutors and underline the fact that an important idea (about using modern technology) came by a peer tutor. By these pieces of information it becomes obvious that there is a constant link between feedback by students and future decisions in relation to the content and the structure of the programme. This reflexivity is a common characteristic in many research projects, which take place in a real school context. The present study was also accomplished using a similar methodology. It should also be noted that the participant with autism was only one; taking into account that this project was undertaken in a mainstream context, the most probable is that in most similar cases it is not possible a large number of students with C.D. to be gathered. But this did not mean that this effort was less valued by the student with C.D. and by mainstream peers.

Studies about Transition to Secondary School or Other After School Settings

A number of studies in different countries and contexts have examined the issue of transition from primary to secondary school. Wallis et al (1998) explored the appealing issue of transition from elementary to high school. 110 children from 2 elementary schools were followed across this transition and were screened for emotional and behavioural difficulties in grade 7 and again in grade 8 six months later. Results suggest the stability of emotional and behavioural difficulties in childhood and adolescents as the combination of self report of adjustment, teacher report of adjustment and assessment of relevant family variables obtained in grade 7 predicted the absence or presence of emotional and behavioural difficulties in up to 77% of children. It is worth mentioning that, according to the findings of this research project, the transition to high school is not perceived as a major stressor associated with decreased psychological adjustment for the adolescent population as a whole. However, the authors claim that the transition to high school may represent an appropriate access point to the target population, which is an interesting point. And as school transition is a critical life event for many children, another research team from Germany chose to study the transition from primary to secondary school.

Boman and Yates (2001) investigated the role of optimism in relation to the adjustment in the first year of high school. 102 students completed questionnaires at

the beginning of the school year, and also in the last term of their first year at high school. It was found that optimism was significantly related to classroom involvement and to students' self-reported adjustment. Only 15 (12 male, 3 female) of the students were clearly hostile towards the school and in general, the girls reported greater levels of positive adjustment than boys. The significance of students' optimism in relation to their transition to secondary school is highlighted in the present study, too.

Another research project exploring the transition from primary to secondary school was undertaken by Fegurson and Fraser (1999). Using a sample of 1040 students from 47 feeder primary schools and 16 liked secondary schools they mainly examined the role of student sex and school size pathway as influencing factors in changes in environment perceptions. Data were gathered through questionnaires in 2 stages, one in the penultimate month of primary schooling and the other in the fourth month of secondary schooling. According to their findings, change in environment perceptions across transition varied with student sex and school pathway. For instance, perceptions of class satisfaction across transition deteriorated for girls, but improved for the boys. It was also suggested that students from small-sized primary schools experienced larger deteriorations in learning environment dimensions than did the students from medium-sized primary schools. The most favourable changes in perceived learning environment during transition were reported by students whose secondary school was on the same size as their primary school. In the case of the present study the secondary school was large-sized, while the feeding primary schools were medium-sized.

Lohaus et al (2004) compared the changes in experienced stress level and in somatic and psychological symptoms during the transition from elementary to secondary school (from grade 4 to grade 5, according to the German educational system) to the perceived changes of 2 control groups (experiencing transition from grades 3 to 4 and from grade 5 to 6). The sample was consisted by 564 third- to sixth-graders in total. According to the findings, there is not a significant difference in experienced stress level during the transition to the next class of these 3 age groups and generally transition to secondary school does not seem to cause greater concern to students. However, in all cases there is an increase in experienced stress

level and somatic and psychological symptoms after summer school break and the children who need support are probably those who show slow or inadequate "recovery" after breaks. Lohaus et al (2004) suggest that, if these children are supported as earlier as possible through stress management programmes, they could start in a more relaxed way their new academic year and they may learn to control better their stress level, as they grow up. An interesting point about this research project is that it identifies the most 'vulnerable' students in the typically developing population. These students could be supported in social groups which include students with C.D.

In contrast to the pervious study where the issue of transition from primary to secondary school did not seem to be a very important concern for the majority of students, Austrian researchers have reached a different conclusion. Sirsch (2003) has reported a study as part of the Vienna School Transition Study in which 856 children were asked to appraise the transition to secondary school as a challenge or as a threat in relation to academic achievement and adjustment to the new social environment. As very few students in this study perceived this transition as both a low challenge and a low threat, it is believed that this finding confirms the assumption that transition from primary to secondary school is a significant life event for most of the children. It was also found that personal factors can predict students' attitude towards the impending change.

A rather similar research project to the present one was conducted by Kvalsund (2000) and is considered to be one of the very few research studies exploring the transition from primary to secondary school in Norway. What is very interesting in this research project is the fact that the researcher has focused his attention on informal social learning mediated through the social relations between and among pupils. Pupils are regarded as active participants and the meaning of transitions is based on their experiences in very different school contexts. The factor of the school size is examined, too. Kvalsund combined the methods of observation and interview in relation to his 80 participants. According to his results, students make this transition in age-divided and sex-divided cohorts. The number of pupils in a social reality has dramatic consequences in the forming of relationships; in larger schools "cliques" seem to be more "closed". Secondary school pupils are aware of alternative

patterns of interaction, but they do not choose them. The "mechanism of equality" (Kvalsund, 2000, p. 418), according to age and gender, which is also based on self-distancing, is the dominating relation-forming mechanism. The transition is also a continuation of the segregated, intimate conversations and relationships from the primary school level. Kvalsund also reached the conclusion that the local context is a decisive factor for the relationships developed as well as the socially constructed meaning of the transition from primary to secondary school. His closing reflection is that this transition can be best understood as one "with decisive cultural limitations" (Kvalsund, 2000, p. 418). In this study again the researcher highlights the fact that adjustment in a large-sized school can be harder. Therefore, creating social groups to prepare students for this transition could be regarded as more important in relation to a large-sized secondary school, as it was in the case of the present research study.

Benz et al (2004) have approached this topic in a very interesting way. They examined the factors that influence the sustainability of secondary transition programmes in local schools. They used two-stage research project, which combined broad survey methods and an embedded case study design to investigate the transition of youth with disabilities to after school provision. They reported that 3 factors are very important as far as the sustainability of this kind of programmes is concerned: 1) to have the support of at least one key administrator, 2) to produce positive student outcomes that are valued by school and community stakeholders and 3) to create a clear and unique role for their services that meets identified needs within the district. These researchers finally suggest that programme staff and administrators can increase the likelihood of these events occurring and of local programmes being sustained. The present author believes that research findings of this project could really be applied in many similar cases of supporting individuals during transitional periods. The significant factors of the personality and the personal interest of the programme staff are underlined.

Demetriou et al (2000) have also focused their attention on listening to the student voice during transition periods. Authors argue that there is much to be learnt by taking into account students' views about the role of friendship during these periods, which may affect even the academic performance. Galton and Mornson (2000) have also highlighted the need to listen more carefully what pupils have to say during

transitions from one year to the next, as this could help students overcome dips in their academic progress or in other aspects of their life. In the present study students' views were valued and systematically studied.

Anna Nelson (2003) reported the findings of a research project at Tanfield School related to facilitating transition from primary to secondary school. It took place in 3 stages and there was an increasing number of mentor/mentee partnerships during these stages. The project involved year 10 older students mentoring pupils in year 7 in relation to citizenship education. Apart from easing transition from primary to secondary school, a second aim was to improve the key skills of the mentors and have an impact on their learning. According to the findings, it is argued that the aims were met and that students were pleased by their participation in this effort. In this research project emphasis is given on the positive effect that this programme had not only on mentees but also on mentors. This evidence is in favour of the expectation that mainstream students could be benefitted by their participation in programmes which mainly address the needs of students with C.D.

Transition of Students with ASD from Primary to Secondary School

Even though there are not too many sources about this critical transition of students with autism, recently a relevant report has been published by SEN Partnership South East Region et al (2004). Its goal was to indicate practical strategies for achieving successful transition for students with autism and Asperger Syndrome and it was accomplished with the collaboration of 16 students with a diagnosis of Asperger Syndrome and a statement of special educational needs. The parents and some practitioners of these students and also a number of ASD outreach teachers participated in this project, too. Unfortunately, not too many details are given about the methodology which was followed. The report provides to the reader some pieces of advice in a very systematic way about many important topics, such as the stage of planning for transition (which includes the last 2 years in elementary school and the first year in secondary), bullying, behaviour strategies etc.

The positive characteristics of this report are its practical orientation and the fact that it does not become too simplistic, for instance the complexity of any cause and result relationship is stressed. But it is not presented as a strict scientific research and

the present author believes that there is still the need for such a report. A few useful checklists about this transition of children with autism from primary to secondary school have been presented by Brock (?). She includes guidelines about a variety of issues such as choosing the appropriate school, preparing for the transition and facing adjustment difficulties in the new setting. Thorpe (2003) also makes some suggestions about how students with autistic spectrum disorders may cope better when making their transition to secondary school. A positive aspect of her work is that she gives very detailed pieces of advice about very specific issues such as school diaries, lockers, break and lunchtimes, following a timetable etc. However, these suggestions are not presented as being the result of a research process. Plimley and Bowen (2006) highlight the beneficial impact of an ASD resource base in a secondary school during children's with autism transition from primary to secondary school. And even if this could not be available to students, there could be a break time 'safe haven' room accessible to vulnerable students (Plimely & Bowen, 2006; Beaney & Kershaw, 2006). Other useful ideas are related to sensory issues, e.g. labeling the secondary environment in a visually clear way (Cook and Stowe, 2003). These authors also propose the use of a CD-ROM 'virtual map' as a guide for all new pupils well in advance of their actual transition to the new setting.

2.5 Originality of the Research Project

As far as the originality of the research project is concerned, it should be noted that there has not been any previous effort of all these subjects of peer activities, leisure activities, visual art activities and transition from primary to secondary school to be combined. But it is widely recognized that in all these fields even separately for each one of them more research needs to be undertaken and a larger number of activities should be put into practice (Osborne, 2003; Disalvo & Oswald, 2002). There is also little evidence on which pupils benefit most from participation in mainstream or specialist setting or how to best support inclusion (Jones, 2002; Mesibov & Shea, 1996; Wing, 1996) and the development of peer relationships is a fundamental part of this process (Harrower & Dunlap, 2001; Kamps, et al., 1993). Even though there is reference to the strategies of 'circle of friends' and the 'buddy system' in relevant sources regarding the transition of individuals with autism

(Broderick & Mason-Williams, 2005), peer relationships during transitions of individuals with autism is the less explored and systematically studied transitional topic. Suggesting an alternative approach in order to enhance peer relationships through artistic activities without direct instruction of communication skills does not mean that this kind of approaches are not necessary; however, the present author deems that they could be supplemented in the most effective way by more relaxed activities which will be orientated towards the same goal. This may also help them become more optimistic about the events to come in their near future.

Exploratory Work Related to Formulation of Research Questions

Before this research procedure a rich exploratory work took place which influenced at a great degree the formation of the final research subject and of the more specific research questions. The author's research interest from the very beginning was focused on the challenging issue of transitions of individuals with autism. In the beginning the author decided to explore transition of children with ASD from home to the first school setting. Therefore, the author visited a number of places where it was possible to gather information about the strategies which were followed to enhance this first educational transition of children. This happened during the academic year 2003-2004 and a number of interviews were conducted in the following Local Educational Authorities:

- Sandwell
- DISCS-Leaminghton Spa
- CASS-Coventry and Development Team
- Warwickshire Parent Parentship Service
- Cheshire Autism Support and Development Team

In some cases material was given not only about the transition from home to the first school setting but also about the transition from primary to secondary school, because the processes which were implemented about this transitional stage were considered to be more developed; very interesting material about this stage of transition was given by Cheshire Autism Support and Development Team.

Apart from this the author attended an educational psychologist meeting in Solihull about early intervention in autism to see how this takes place and also to

come in contact with professionals working in the field of transitions. But perhaps the most important part of the initial exploration of this first educational transition of children with autism was the fact that the author was given the valuable opportunity to have a placement in the Nursery of Uffculme School. The author went there once a week and in the first term of the academic year 2004-2005 so that it was possible to watch this transition of children with communication difficulties and autism from home to the first school environment.

During this stage the author started understanding not only by interviews with relevant professionals but also by personal observation and participation in this procedure that specific principles were followed, which were also supported by the relevant literature, such as:

- Bringing children gradually to the school environment one by one
- Giving them time to settle
- During the first days of children not putting too much pressure on them in order to do specific activities, according to the daily programme, but mainly giving then the opportunity in the beginning to become familiar with the environment (physical and social: staff - other children already being there)
- Using visual cues to help children understand what is expected from them during their daily programme
- Using visual prompts in a specific order from more concrete to more abstract: in the beginning an object is being shown to the child, then a photograph of the object, afterwards a picture of the object and finally a symbol of the object.
- Providing children with visual material in relation to the school before the child coming to the school for the first time
- Arranging an initial visit to the school at a time when not many other children are present there.
- Arranging a number of visits by appropriate professionals to the child's house before the beginning of the school year, if this is possible.
- Trying to achieve a continuous cooperation with parents taking into account what kind of educational provision they would prefer for their child

and informing them daily about the adjustment of their child in the school setting (in a written or even oral way in the beginning of the school year). Parents were also asked to give information about the behaviour of their child at home as this could have been influenced by his/her experiences in the school.

- In some cases there was also the effort to create a small group of toddlers in order to prepare them together for their transition in the first school setting.

Even though all these strategies were very interesting, it was apparent that there was a wide variety of strategies used, as each local educational authority adopted different educational approaches. Apart from that, in this age group it is not always easy to elicit information by children themselves, especially in the case of children with learning difficulties.

Therefore, the subsequent transition of students with autism from primary to secondary school was selected to be studied in depth. During this transitional period all the principles mentioned above could still be useful, but more data could be gathered about the personal views of children (mainstream and with communication difficulties) regarding inclusive practices. This could also be combined with the examination of the phenomenon of bullying in schools, which may increase during this period, according to some sources (Pellegrini & Long, 2002).

During the academic year 2004-2005 other visits which provided very interesting information about the transition of children with autism from primary to secondary school took place in the following settings:

- Hillpark Secondary CDU
- Barlanark Communication Disorder Unit
- Cumbernauld High School
- Daldorch House School

In all these settings interviews were conducted about issues related to transition of students with autism , such as the difficulties of these students to cope with change and the ways these difficulties were encountered in each setting. Later on the author was given the opportunity to put in practice a short programme in order to facilitate

the transition of children with autism from primary to secondary school. This programme occured in a primary school in Scotland. This group was being nominated as 'Social Art Group'.

Finally, it is worth noting that during the whole academic year (October 2005-July 2006) the author joined "Project Ability" group where young adults and adolescents with autism and communication difficulties can enjoy a great variety of artistic activities. "Project Ability" is a specialist art organization located in Glasgow which supports people of all ages and abilities to participate in innovative visual art projects. It was very helpful for the author to take part personally in the art activities of this group and to get advice by professional artists who had experience working with individual with special needs and especially with people with communication difficulties and autism.

2.6 Aim and Research Questions

The author after having identified the gaps mentioned above in the relevant literature review aimed to develop an intervention based on a peer network which would be created through an art activity programme; the goal of this progarmme was to help children through their transition from primary to secondary school. This programme was designed to include 2 groups of students (children with communication difficulties/autism & mainstream peers). Pre and post measures were used but the intervention was also responsive to children concerns. This programme was put in practice as a trial taking place in a school context, because there is the need such efforts to be studied under real circumstances with real children and in a real school; this pragmatic approach is adopted by an increasing number of researchers, as it is highlighted in other studies concerning students with autism (Howlin et al, 2007).

The aim of this research project is to establish whether being part of a Social Art Group supports children with autism/ communication difficulties during their transition from primary to secondary school.

The particular research questions were:

A) In relation to the perceived children's inter-group relationships

i) Will there be found mutuality of expressed feelings between children of the Social Art Group?

ii) If yes, will there be found mutuality of expressed feelings between students with C.D. and their mainstream peers?

Hypotheses:

i) There will be found mutuality of expressed feelings between children of the Social Art Group.

ii) There will there be found mutuality of expressed feelings between students with C.D. and their mainstream peers.

B) In relation to the approach

Will there be any differences found in the assessment of children's concerns and expectations before and after each part of the approach, as these are reported by the children themselves?

Hypothesis:

There will be differences found in the assessment of children's concerns and expectations before and after each part of the approach, as these are reported by the children themselves, showing that children feel more optimistic about the forthcoming changes.

C) Regarding peer relationships of SAG students in secondary school

i) Will the relationships being developed in the SAG in primary school be maintained in secondary school?

ii) If yes, will these be helpful in the transition of children to secondary school, according to the perspective of children themselves, their parents and the relevant practitioners?

Hypotheses:

i) There will be positive relationships being developed in the SAG.

ii) The relationships being developed in these groups will be maintained in the new setting.

iii) These will be considered to be helpful in the transition of children to the next setting, according to the perspective of children themselves, their parents and the relevant practitioners.

D) Regarding the experience of taking part in SAG

Will the experience of taking part in the SAG be perceived as positive, according to the perspective of children themselves, their parents and the relevant practitioners?

Hypothesis:

The experience of taking part in the SAG will be perceived as positive, according to the perspective of children themselves, their parents and the relevant practitioners.