

Teachers' Experiences when Encouraging Social Interaction in Children with Autism Spectrum Disorder (ASD) in Mainstream Schools

A Case Study in the Czech Republic



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*I dedicate this work to my dear friend Neil.
Who, in winning his battle against serious illness,
has taught me to appreciate the simple things in life.
He inspired me not to give up when facing challenges.
I was able to complete this work by keeping in mind his strength of character.*

Student's statement

My commitment to this study has been shaped by almost ten years of experience in the field of autism. This is the termination of a journey, which began working within diverse cultural backgrounds in countries such as Canada, Turkey, Egypt and with the Palestinian community in the West Bank and Lebanon. Moreover, my previous experiences with children and younger people from ethnic communities in Scotland and in Northern Ireland, where I worked with individuals affected by deep political and religious division. Most of my professional experiences in Western society were in special schools. Here I learned the importance of introducing the child to an environment where smaller classes, individualised teaching and less overwhelming demands are more suitable. This benefitted the individual's emotional and cognitive well-being. However, a major obstacle faced by the children I worked with was that their involvement within their communities was minimal. At the same time, while working in countries in development, I became convinced that inclusion can also be achieved simply by creating a society where changing individuals' attitudes becomes a priority. Why has this journey proved so important? What influences has this brought to me? It has given me the opportunity to experience cultural differences and acquire a multicultural view while observing different perspectives in education. Throughout this journey I have come to appreciate that educating children is not only about text books, but also about life itself. I have realised that a good teacher can help children harness their imagination and give meaning and purpose to their lives. Nothing can be taught to an individual who is not motivated to understand the outside world. Therefore, the teacher can be the one who draws the map and helps the student find meaningful explanations for their experiences.

My motivation in working to improve children's ability to participate as active members, within an inclusive setting, increases when I see the positive outcomes that can be achieved. It is for this reason that I decided to undertake the Master Programme in Special and Inclusive education. Through this programme I understood the importance of recognising each individual's needs,

while appreciating differences. The aim is to promote a more integrated and egalitarian society. Peers and teachers can be fundamental resources in order to create a positive and comfortable environment for students with ASD. However, this might not prove to be sufficient. In my recent visit to Lebanon, supporting professionals and parents of children with autism in the Palestinian Refugee Camps, I was often asked the same question: Can we consider an individual with autism as being clever? I was surprised that I could not give a definite answer. So I asked myself: Would I consider an individual who excels in a particular skill, but is unable to generalize that skill within a wider context, intelligent? Or, what about a person who is extremely astute with numbers but who has personality issues and difficulties when communicating with other people? Lorna Wing (1981, p. 33) suggests that: 'Intelligence is made up of a large number of separate skills, each of which can be impaired independently of others or left intact when others are absent'. I believe, therefore, that the goal of any inclusive intervention is also to harness the child's strengths while working to improve on his weaknesses.

I hereby declare that this submitted study is not a copy, nor duplicate of other people's works, papers or examinations. It has a correct use of sources, references, and quotes. It has cited all relevant literature which has been made use of in the bibliography.

Kisley Di Giuseppe

Abstract

The rights of students with ASD to enter mainstream settings have been strongly advocated. However, past research has shown that inclusion might prove challenging for them, leading to isolation from mainstream peers. This study focuses on how the interviewee-teachers in the Czech Republic operate to provide opportunities for meaningful and sustainable social inclusion for learners with ASD. What knowledge they share to help these students socialize, and how they respond to challenges. In this study, two different approaches providing skills and techniques to develop genuine social interaction are considered. Firstly, the individually-based approach, where the student is taught how to develop social skills. Secondly, the child-to-child approach which aims to give guidance to classmates. This is a case-study in two urban primary schools in Prague. Five teachers were selected using a convenience sampling strategy within the purposeful sampling. Semi-structured interviews with open-ended questions, participant observations and field-notes were used to combine multiple sources when collecting data. The research questions evolved as the study progressed. The data verifies that in general interviewee-teachers recognise benefits in social interaction. They see positive advances in both the individual's perspective and note improvement in peers' awareness and learning. As a result, they fulfil an important role in mediating the interaction of students in their classrooms. However, there are some lapses on how teachers work on an individual basis to help the child with ASD to achieve social inclusion. Challenges which might hamper the implementation of social interaction are also faced by the participants: issues encountered when cooperating with other people, ineffective tutoring support which they allege is difficult to put into practice, limitations in time and resources.

KEYWORDS: ASD; Social Skills, Peer Interactions; Social Inclusion; Teachers Mediation

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Glossary

ADHD - Attention Deficit Hyperactivity Disorder

ASD – Autism Spectrum Disorder

AS – Asperger Syndrome

CC – Central Coherence

EF – Executive Function

MLE – Mediated Learning Experience

NAPSI – National Action Plans on Social Inclusion

SEN – Special Educational Needs

S1 – Student in Teacher 1’s classroom

S2/3 – Student in Teacher 2 and Teacher 3’s classroom

S4a – Student in Teacher 4’s first group

S4b – Student in Teacher 4’s second group

TA – Teaching Assistant

TA1 – Teaching Assistant in Teacher 1’s classroom

TA4 – Teaching Assistant in Teacher 4’s classroom

ToM – Theory of Mind

T1 – Teacher 1

T2 – Teacher 2

T3 – Teacher 3

T4 – Teacher 4

T5 – Teacher 5

WCC – Weak Central Coherence

ZPD – Zone of Proximal Development

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1 General Introduction to the Study

In order to facilitate the reading process of this study, I would like to introduce the reader to my research outline. The first chapter is the initial clarification of my topic. Here I define the operational definitions, the rationale and background information related to the study. I also introduce the emerging key questions which require further investigation. The second chapter shows a critical review of the main theories. In addition, the empirical evidence is presented. The third chapter clarifies and justifies my chosen method of research. Here, the literature relating to research methods are also evaluated. The fourth chapter involves the presentation of the results of my empirical investigation. Here, the data analysis framework consists of description, analysis and interpretation. Finally, the fifth chapter is a summary of the conclusions and suggestions for future research, including a description of the limitations encountered within the present research.

1.1 Introduction

In this study I will focus on an issue which I consider important in terms of inclusion in mainstream school: Teachers' experiences when encouraging social interaction in children with Autism Spectrum Disorder (ASD). The purpose is to give an in-depth picture of how the interviewee-teachers in the Czech system work, to provide opportunities for meaningful social inclusion for the learners with ASD. What teachers' knowledge and experiences are, and how they respond to the challenges. Also, why they consider that a particular intervention which they implement, provides better support. What knowledge they share to help students with ASD socialize with their peers, in order to achieve a more meaningful and sustainable inclusion.

In this section I give operational definitions of the main concepts used in my research: social skills and social interaction. I will then discuss the research problem and rationale of my study, while reflecting on my professional experience. In the latter part I will give an insight of the contextual background. Finally, I will go over the emerging key questions.

1.2 Main Concepts of the Research

For the purpose of this study, I shall use both the terms *autism* and *ASD* interchangeably while referring to the spectrum as a whole.

I consider it essential to define both the meaning of *social skills* and *social interaction*. When talking of *social skills*, I refer to skills that the individual with ASD requires in order to undertake meaningful social interaction. The operational definition of social skills is based on the four sections elaborated by Knoff (in NASP, 2010): a) 'survival skills' (e.g., ability to be compliant, talk nicely, use self-rewarding, avoid distractions, etc.); b) 'interpersonal skills' (e.g., ability to share, develop turn-taking, join activities with others, etc.); c) 'problem-solving skills' (e.g., ability to ask for assistance, be aware of consequences, be apologetic, etc.); d) 'conflict resolution skills' (ability to deal with unsuccessful events, conflicts with peers and adults, etc.).

When talking of *social interaction*, I refer to that process through which the individual with autism will be able to generalise the social skills learnt through the support of his/her peers. For example, based on Reed's idea (1994, in Romanezyk et al., 2005), an individual who is socially competent, is capable of using appropriate social skills to integrate cognitive and behavioural aspects of particular actions. He/she then assesses these actions in order to self-regulate his/her social behaviour. However, learning social skills may be insufficient when the individual lacks the motivation to socialize. That being said, lack of motivation, social initiation and awareness (understanding the rules and conventions in an interactive context) can be other factors. These affect the individual's social competence, along with elementary social comprehension (nonverbal and verbal communication, speech related social capabilities) (Romanezyk et al., 2005). Social interaction is an evolving process. It arises when the actions of one individual might restructure and influence the behaviour of one or more persons. Human beings and society converge within this sphere called interaction, which constitutes the basis of culture (Turner, 1988; O'Driscoll, 2009). Garton (1995) asserts that 'optimum entry to culture is via social interaction with another member of the culture' (p. 6).

1.3 Research Problem and Rationale of the Study

The development of this theme arises from my experiences within the field of autism. In a Masters programme, the combination of academic studies with 'hands-on' experience creates less detachment from professional life. An analysis of my past experiences, based on academic lessons learned achieved during the programme in Special and Inclusive Education, has helped me to merge theory and practice. Therefore, the process of examining my personal experiences critically, while analysing them from an academic background, helps me to continuously channel my learning. Moreover, this contributes to avoid reaching a stage, as Ponte (2007) would state, of 'uncritical experiences with everyday events [...] without consequences for future actions' (in Van Swet et al., 2007, p. 26 cited in Di Giuseppe, 2012). That being said, for the purpose of this study, I will use Appendices related to my previous experiences to demonstrate some of the theories in practice.

During the summer of 2003 I was working in Northern Ireland, on a peace project in a centre hosting children coming from the deprived areas of both Catholic and Protestant communities. I met a boy who never spoke nor interacted with his peers. He continued to stare at the drawing paper on the table while apparently ignoring my presence. To get his attention, I decided to speak in Italian and then followed with: *'look, I am Italian, I am speaking Italian'*. He looked up and replied: *'you are not speaking Italian, you just speak English differently from me'*, then he returned back to his paper. I found myself in a similar state of incomprehension when I was working in Turkey, in a centre of dolphin therapy for children with autism. There was a little girl who was aggressive, and with whom I found impossible to establish any form of interaction. With each attempt she tried to hit me and when I asked her to stop, she gazed into the distance and laughed. That was her way of socializing with me. A year later in Scotland, I came across another situation of extraordinary behaviour, on my first day working with a young man. While trying to get to know him, I said that my house was near the fire-station. Making a joke, I said that I was lucky because, if my house went on fire, the fireman would be able to put it out by shooting the water, directly from the fire-station through the window of my house. He did not laugh at my joke but remained perplexed, asking how this could be possible.

The thread connecting these three stories is that these individuals could be possibly placed within the Autistic Spectrum Disorder (ASD). ASD is a lifelong developmental disorder that affects several

areas of development in childhood (NAS, 2012). The linking of spectrum and disorder with autism signifies that the symptoms can vary from mild to severe: it can include learning disabilities, language issues, tic disorders, attention deficit hyperactivity disorder (ADHD), nervousness, manic depressive psychosis and seizures (Ozonoff et al., 2003). It can also be associated with behavioural difficulties and in response to sensory stimuli: hearing, vision, touch, taste and/or smell (Godwin & McKendry, 2005). As a syndrome, ASD presents itself in many different ways. Three main areas of impairment, shared by most people with ASD, are identified as the 'Triad of Impairments' (Wing & Gould, 1979): social impairment, affecting how people relate to others; communication impairment, referring to verbal and non-verbal communication; and rigid thinking, affecting the way a person behaves and his/her imaginative abilities, including obsession and lack of flexibility. Impairment in social relations has always been considered an issue and crucial deficit in children affected by ASD. It is seen as an elemental barrier in the development of human relationships. This often presents itself early in life (Hobson, 2002, cited in Roth, 2010), where emotional and social abilities are considered fundamental for infants when relating to their caregivers, and it lasts during adulthood (Dunlop et al., 2003, 2002; Ozonoff et al., 2003).

The issue of ASD must be considered within an educational environment since its prevalence has increased in recent years. Also, the rights of students with ASD to enter mainstream setting strongly advocated (Kirk et al., 2012). However, Barson (in Roth, 2010) states that inclusion does not follow automatically. Therefore, simply attending a mainstream setting cannot be enough. This is due to the various challenges presented within the syndrome, which can affect the individuals' psycho-social conditions. Thus, affecting the outcomes within the inclusive educational process.

1.3.1 What is the Importance of this Study?

My commitment to this study has been shaped by almost ten-year experience in the field of autism in special settings and within diverse cultural backgrounds. Here, I came to appreciate that educating children is not only about text books and learning to read and write. These experiences taught me that adopting an effective multicultural view depends on the ability to create an environment where professionals, peers and the child are equal participants. I believe social interaction among students within an educational setting should be part of the learning environment. This becomes particularly important and demanding in the presence of students facing challenging

conditions such as ASD, who may be weak in social abilities. While working in special schools, I learned the importance of introducing the child to individualised teaching, benefitting the individual's emotional and cognitive well-being. However, the challenges faced by the children in this context were that the involvement within the wider community was lacking. In addition, while working in countries in development, I realised the importance of educating a child within an inclusive environment. I found here that inclusion can also be improved simply by adopting good attitudes and resourcing people's sensitivity and knowledge. Promoting a society where changing individuals' attitudes towards autism becomes the priority.

Undertaking the investigation on teachers support for children's development of social interaction, can be an insight for those who are responsible for raising the professional level of teaching in the Czech context. This study will be carried in English. Therefore, it can be a useful resource for international professionals interested in analysing inclusive education in Czech Republic. I also aim to contribute to more understanding of teachers' experiences. Here, it would be interesting to discover what strategies are implemented by the interviewee-teachers that can be easily generalised for further studies.

1.4 **Background Information**

In recent years, the worldwide educational system has witnessed transformations in relation to the diversity of the school population. After the Salamanca Framework, with its concern on inclusive education (UNESCO, 1994); and the Dakar Framework for Action (2000), the right for basic education has become internationally recognised (Mitchell, 2009; Jha, in Verma et al., 2007). Here the concept of inclusive education has become the buzzword. It is considered a process through which students' participation is imperative for the quality of their educational experience. Moreover, it denies their exclusion due to cultural and attitudinal barriers (Booth, in Clough & Corbett, 2006; Ainscow, 2005). There is a change in emphasis from a hierarchical to a collaborative approach between stakeholders, with students being active participants (Alur, in Barton & Armstrong, 2008). Using Boys' words: 'this model welcomes diversity and perceives education to be a social and interactive process that encourages the eventual establishment of an inclusive society' (in Jones et al., 2005: 128).

1.4.1 Current Situation in the Czech Republic

Throughout the 90s, the Czech educational system itself experienced significant changes. These aimed to provide sustainable support for pupils with special educational needs (SEN) in mainstream education. It seems clearly evident here that the Czech system has aspired to welcome the broadest variety of individuals, with its final goal being the establishment of a more inclusive society (EADSNE, n.d.). However, some challenges still remain. For instance, limited resources and lack of awareness result in over-reliance on singular teachers rather than an effective overall system. Historically, this challenge might be seen in relation to how the Czech educational system was organized. A dual-based system with a mainstream setting alongside a special educational system, which provided specialized education for the majority of students with SEN (Straková et al., 2011; Bevan, 2011). Nonetheless, efforts to introduce inclusive education in the Czech Republic have increased and are supported by legislative initiatives. This especially after the influence of Salamanca (1994) (Strnadová & Hájková, 2011). In 2003, as an EU member, the Czech Republic agreed to the Joint Memorandum on Social Inclusion. This was followed by two National Action Plans on Social Inclusion (NAPSI), 2004-2006 and 2006-2008. Here, lack of resources compromised the effective implementation (Sirovátka & Rákoczyová, 2007). With the Education Act (2004) and the School Act (2005), specialised schools became resource centres in support of mainstream schools, and children with any disability used mainstream facilities (Bevan, 2011; Šiška & Novosad, 2007; MEYS, 2008; EADSNE, n.d.). Moreover, the National Plan for the Support and Integration of Persons with Disabilities (2006 – 2009) gave importance to the prevention of social exclusion in educational settings (Government Board for People with Disabilities, 2005). Despite these legislative initiatives, it seems that challenges are faced when theories have to be put into practice, highlighting possible inadequacies in monitoring of the entire system (Česká Školní Inspekce, 2010; Pokorná, 2005). Therefore, some may consider inclusive education 'a myth rather than a reality in the Czech Republic' (FIMITIC, 2011, p. 8).

1.4.2 Inclusion and ASD

When examining inclusion for students with ASD, research has shown positive results in terms of social interaction within the mainstream educational environment (for example, Ferraioli & Harris,

2011; Terpstra & Tamura, 2008 and others). However, I wonder if the participation of pupils with autism has actually effectively increased. Despite the general idea of inclusion as a strategy to achieve social gains, the end result might be reduced to a merely physical placement, if this is not properly supported and planned (Ferraioli & Harris, 2011; Chamberlain et al., 2007). Past studies have shown that inclusion might present a challenge for students with autism. Particularly because they exhibit weakness in social skills: difficulties with interaction and communication, and developing and maintaining close relationships. This might lead to isolation from mainstream peers, less involvement in classroom social events, and deficient quality of friendship which exacerbates with age. As a consequence, bullying becomes a major concern (Roth, 2010; Jones & Frederickson, 2010; Humphrey, 2008; Kasari et al., 2011; Cappadocia et al., 2012). Furthermore, I am in agreement with Terpstra and Tamura (2008) when stating that approaches aiming at increasing socialization in mainstream schools should be considered. Here, social interaction activities and social skills teaching should be included when developing a curriculum.

Consequently, one positive consideration when including students with autism in mainstream settings, could be that peers are regarded as natural models during the socialization process. However, this might be rendered meaningless if facing classmates holding stereotypical or prejudicial views. Therefore preparing typically developed students while giving continuous assistance (awareness and sensitivity guidance) might enhance positive attitudes (Ferraioli & Harris, 2011; Terpstra & Tamura, 2008; Humphrey, 2008). Moreover, the weakness of basic social skills in individuals with autism might obstruct their ability to govern social interaction. Consequently, this may hamper the inclusive process. As an alternative, specific individualised interventions through continuous support, aimed to reduce these difficulties while enhancing inclusion, are essential. That being said, learning social skills while reducing the child's challenging behaviour should be considered a fundamental aspect of the educational process. The aim here is to maximize socialization among the individual and his/her peers (Eldevik et al., 2012; Ferraioli & Harris, 2011; Von Der Embse et al., 2011; Humphrey, 2008). In this case, adult mediation is considered important since teachers can influence the inclusive attitudes of peers. Mainstream pupils' positive attitudes evolve, as they absorb knowledge and observe the professionals' perspectives towards students with special needs. Teachers are responsible for forging a positive and well structured setting to encourage proactive relationships amongst students. They can also function as role-models, while educating and supporting both the individual with autism and other classmates to develop social interaction. Furthermore, teachers should be aware of approaches that target students with ASD,

therefore teaching should be differentiated and individualised (Chamberlain et al., 2007; Ferraioli & Harris, 2011; Cappadocia et al., 2012).

1.5 Emerging Key Questions

In this section I have analysed the aspects fundamental for the development of my research. These create the base of my investigation, which aims to give an in-depth picture of how the interviewee-teachers in the Czech system work. Particularly, how they provide opportunities for meaningful social inclusion for the learners with ASD. This assisted me uncovering the key issues and formulate the research questions. With the aim of providing clarity to the following questions, I attempt to discover how the teachers that I have interviewed see the reality when teaching students with autism within their inclusive setting.

Do teachers working with learners with ASD know what these learners' needs are for interaction?

Do they encourage peers to interact?

How do they encourage peers to interact?

Do they create the conditions and encourage the child towards social interaction?

How do they create the conditions and encourage the child towards social interaction?

Do teachers working with learners with ASD know what these learners' needs are for developing social skills?

How do they develop social skills with the child?

2 Theoretical Background

2.1 Introduction

This study focuses on the importance of giving ongoing support in the development of essential social skills within the educational setting. Here creating conditions for social interaction and understanding becomes the key area. I believe social interaction is a fundamental aspect to build better understanding and participation within the school context. Understanding, because both peers and the child with ASD benefit from clearer insight and mutual empathy. Participation, because the child is more likely to be included when his peers are willing/able to accept him. Therefore, changing attitudinal barriers within the school environment becomes fundamental for 'diversity' to be appreciated. That being said, working both on the individual-skill and peer-awareness approaches are key examples of an inclusive process. This reinforces my idea that professionals should develop their knowledge with the aim of supporting peers, rather than just the single individual. This should be considered fundamental when building the 'imaginary ramp'. I refer here to the barriers that social attitudes present, and which have to be overcome to allow students with autism a 'mainstream identity' (e.g., creating a sense of belonging) (Shakespeare and Watson, 2002, p 24.).

In this section I will discuss the theoretical background of the investigated phenomenon, with the empirical evidence also presented. The aim of this section is to provide a theoretical and empirical context for the remainder of my research; and illustrate the complexity of children with ASD's social interaction within mainstream settings. Theories based on Vygotsky's Zone of Proximal Development and Feuerstein's Mediate Learning Experience will be considered when analysing interaction with peers. I will also reflect on influential cognitive-based theories in autism: Theory of Mind, Central Coherence and Executive Function. I consider these useful when investigating individual needs during the process of teaching social skills. I will also use Appendices of my previous experiences to demonstrate these concepts in practice.

2.2 Importance of Social Interaction and Mediation

Social interaction is an evolving process and it is a means through which individuals are able to create conditions for their 'social development'. This expression refers to the social and emotional abilities needed for children to interact with society. This process begins within the family, but it is during periods at school that the opportunities increase, as the child becomes more involved with other peers (Krogh, 1994). Anderson (2001), when talking of social inclusion, considers school as 'an environment that provides ample opportunities for children and young people to evolve social responsibility' (p. 81). In my study, I consider social interaction as the means through which the individual with autism will be able to generalise the social skills learnt through the support of his/her peers. Therefore, I believe social interaction and participation among students within an educational setting should be an integral part of the learning environment.

Vygotsky and Feuerstein put much emphasis on the influence of the socio-cultural context for the development of individuals' cognitive functioning. Here, social interaction becomes the link between the individual and his/her surroundings. Human intellectual capacity is influenced through mediation with the historical, cultural and institutional phenomena presented in the environment (John-Steiner & Mahn, 1996; Presseisen & Kozulin, 1992; Feuerstein et al., 1985; Kozulin et al., 2001; Feuerstein et al., 1997). With mediation, there is a qualitative difference on how people perceive stimuli, compared with direct exposure. For example, in presence of new activities, a child tends to depend on more experienced others, who stand between him/her and the environment. The exposure through mediation would make things easier to understand. Therefore, it gives the child the ability to interact with the outside in a more active way. Kozulin and Presseisen (1995, p. 69) state that: 'the ultimate goal of mediated learning is to make the child sensitive to learning through direct exposure to stimuli and to develop in the child cognitive prerequisites for such direct learning'. Here, teachers might become mediators and facilitate the learning process. Their role is to create conditions where students can develop social relations within classrooms. Moreover, they should encourage pupils to put into practice what has been previously learned (Presseisen & Kozulin, 1992; Kozulin et al., 2001; Feuerstein et al., 1985). That being said, I agree with Palincsar et al. (1993), who states that 'classrooms can become learning communities [...] in which each participant makes significant contributions to the emergent understandings of all members, despite

having unequal knowledge concerning the topic under study' (p. 43).

2.2.1 Vygotsky and the Zone of Proximal Development

Vygotsky highlights the importance of others during the process of individual learning, while conceiving the zone of proximal development (ZPD) as:

'[...] the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers' (Vygotsky, 1978, p. 86).

This makes sense when thinking of classroom-peers as supportive means for the social development of students with ASD. When thinking of ZPD, others' assistance can help the child to perform functions which have still to mature; and that him/her would be more likely able to manifest only when interacting in cooperation with his/her peers. Here, guidance, imitation, scaffolding and mediation are all components of the ZPD process. For these to be more effective, the child's cognitive developmental level should be also considered (Vygotsky, 1978; Hedegaard, 2005; John-Steiner & Mahn, 1996; Presseisen & Kozulin, 1992; Gredler & Shields, 2008; Mentis et al., 2008). Kozulin and Presseisen (1995) see the ZPD as a process through which the child acquires techniques of conduct typical of his/her cultural context. The dynamic interdependence of social versus individual is facilitated by what Vygotsky defines psychic tools (with continuous reference to spoken language). Interacting with others becomes a source of continuous learning, in order for the individuals to expand cognitive capabilities. This process of social determination lies between two actions: first as activity shared collectively in the social context; second as internal means of thinking, leading to the process of internalization. With the internal stage of consciousness completed, and the acquisition of psychological tools, the child will be able to be more independent (Hedegaard, 2005; John-Steiner & Mahn, 1996; Bodrova & Leong, 2007).

However, in some cases, where individuals with ASD might present severe issues, the process of socialization can be affected. Consequently, their classmates might find it difficult to establish effective contact. This may be overcome by encouraging the peers to create better strategies of interaction, while guiding them to understand the conditions presented. It could be claimed that this

is a negative approach, as it 'labels' the student with ASD as being different. Nonetheless, I agree with Vygotsky's premise when stating that 'a child with disability must be accommodated with experiences and opportunities that are as close as possible to the mainstreamed situation, but not at the expense of "positive differentiation"' (cited in Kozulin & Gindis, 2007, p. 350). That being said, I believe that in presence of 'positive differentiation', the teacher has the major role in creating conditions, helping peers to better understand the student with autism. In my opinion, if peers' interaction with the student with ASD is mediated by the teacher, the classmates will be more likely able to develop independent problem solving. Especially in situations where the student might present challenging behaviour. This idea leads me to discuss Feuerstein's Mediated Learning Experience (MLE).

2.2.2 Feuerstein and Mediated Learning Experience

MLE is a quality of interaction, and it does not include all types of interaction. It refers to when an adult mediator intentionally interposes between the child and the environment. The mediator brings quality to child-adult-environment relations, by focusing and filtering the inputs/stimuli while mediating the responses. This supports the mediated child in developing better understanding of the situation, leading to potential adaptation and generalization of skills (Feuerstein, 1991, in Presseisen & Kozulin, 1992; Feuerstein et al., 1985; Kozulin & Presseisen, 1995; Feuerstein et al., 1997; Kozulin et al., 2001). Feuerstein (1997, p. 276) states that 'the mediator has a very crucial role in the development of this flexibility of the human being. [and it] will affect the child's level of awareness, create a consciousness of the observed experience'. In my opinion, this is an interesting approach when trying to maximise the social relations of the classmates with their peer with ASD. Modifiability is at the centre of MLE, and it refers to the learner's cognitive plasticity and flexibility. The more individuals will be exposed to MLE, the more their learning potential will improve. In this case, it is not only the child with autism's ZPD to develop by interacting with the classmates, but also those of the mediated peers. Here the mediated classmates are not passive learners, but able to adapt to new conditions. This because the teacher-mediator enhances their ability of making sense of the presented phenomenon (Feuerstein et al., 2010; Kozulin & Presseisen, 1995; Feuerstein et al., 1985; Presseisen & Kozulin, 1992; Mentis et al., 2008). During my past experiences in the educational field, I have always found group-activities a good source of mediated learning experience. An example of this can be found in Appendix A.

2.3 Cognitive Functioning in Students with ASD and Social Skills

In view of the observations above, I think that in order to develop a meaningful approach that promotes social interaction in autism, it is essential to have a clear understanding of the symptoms presented at the cognitive level. This helps when working on the child's weaknesses while reinforcing possible strengths. This might appear as an attempt to apply the idea of medical labelling, wherein the single individual is at the heart of the focus. However, I agree with MacKay (2002), who maintains that having disability 'disappear' (within the individual perspective) can be hazardous as specific needs might be neglected. Furthermore, Feuerstein (1997, p. 259) considers 'detected signs' as valuable when there is not 'passive acceptance', and they are seen as leading to a condition of 'modifiability'. Therefore, it is fundamental to recognize that social interaction in ASD can be delayed, impaired or simply different. This can lead to atypical behaviour (Bogdashina, 2005a). Social interaction is one of the focuses in cognitive theory analysis, aiming to give insights into the abilities and challenges presented by individuals with ASD. These psychological explanations investigate how cognitive and social functioning interrelate. These theories help understand which interventions are likely to be effective when providing support for the individual's needs. What is important is that they attempt to offer a better understanding, helping educators to develop appropriate support and effective intervention (Happé, 1994; Roth, 2010).

I will analyse three different psychological explanations: Theory of Mind, Central Coherence and Executive Function. These theories should not be considered exhaustive, and in fact may also face some criticism. It is without doubt that anyone working in the field of autism in the present day can have access to a mountain of literature on this subject, which some people might want to criticize or praise. However, how we might theorize, categorize, intellectualize or disagree on the subject of autism, is not for me the important issue. I believe professionals should aim to utilize any useful information, or put to good use any reasonable practical experience they might learn, to help unlock doors in the mind of a child. This statement might be regarded as idealistic. However, it is how I feel in my approach. It is inspired by ten years of experience working in this field.

2.3.1 Theory of Mind

During the 80s, one of the most influential theories that analysed ASD through a cognitive based perspective referred to Theory of Mind (ToM) (Roth, 2010). For the purpose of this study, when talking of children's ToM, I refer to their 'understanding of people as mental beings who have beliefs, desires, emotions, and intentions and whose actions and interactions can be interpreted and explained by taking account of these mental states' (Astington, 2005, p. 3). Through ToM, the individual is able to predict another person's behaviour and intentions. This is a process where the individual uses the contextual framework to make sense of the intent behind people's speech and actions. This may be formulated through any physical stimuli (body or facial gestures, verbal utterance, sign, etc.), which potentially becomes of relevance to the individual. Moreover, it helps make sense of his/her general perception of the world. In this case the relevant stimulus connects with the person's background information, and is selected from within inner mental resources. This natural cognitive ability helps to fine-tune relevant information, making it possible to interpret and understand while interacting with other people (see note for a more realistic example¹) (Astington, 2005; Sperber & Wilson, 2004).

Baron-Cohen when discussing the atypical ToM in autism, calls this process 'Mindblindness', which he first coined in 1990 (Baron-Cohen, 1990, p. 19). This resulted from different observations undertaken with other researchers such as Frith (1989). In fact, she considered the challenges in social interaction in autism due to the failure in acquiring appropriate ToM (cited in Happé, 1994). 'Mindreading' is another terminology used by Baron-Cohen to describe the ability human beings possess when interpreting another's mental state. This is considered fundamental during the non-verbal process of communication (irony, metaphor, sarcasm, etc.). It has been argued that individuals with ASD present difficulties in perceiving this subtle interaction. Therefore, presenting challenges when attempting to predict and understand others' perspective (Baron-Cohen, 1997;

¹ For example, suppose I have to confront a child who has been accused of stealing a candy. If while I am talking to him/her (interaction) the child does not show eye-contact, this becomes a potentially relevant stimulus. This is because if the child feels unable to look into my eyes, it might be that he/she is not being truthful. In this case I am connecting this relevant sign (no eye-contact) with my contextual background (it might mean that he is hiding something), which helps me to predict the child's behaviour. However, if the same situation arose in a different context (e.g. Arabic society), my perception might be different. In this case, the avoidance of eye contact is no longer a potentially relevant stimulus as, in the Arabic context, the younger seldom make eye-contact with their elders, since it is seen as a sign of respect (here I am using the contextual framework to make sense).

Roth, 2010; Bogdashina, 2005a). Additional findings confirmed previous Baron-Cohen et al.'s results (1993, cited in Ryan & Charragáin, 2010). These suggest that some children had problems recognising emotions such as surprise, disgust, embarrassment and fear. The reason behind this might rest with the fact that these are 'cognitive' emotions, which are based on beliefs and other deliberate mental states (Roth, 2010).

Further ideas investigated ToM in relation to ASD. For instance, Leslie (1991, cited in Jordan, 1999) discussed the relationship between Metarepresentation and ToM. She defines Metarepresentation as the ability infants have to disengage with reality (e.g. playing with a banana pretending it is a receiver). Leslie considers this function fundamental for children to represent others' mental states. She found that children with ASD seem unable to develop this capacity (Happé, 1994; Roth, 2010). Furthermore, Happé (1994, in Bogdashina, 2005b) stated that the main problem for more capable children with autism is to generalise and apply mindreading ability into a real context and everyday interaction. This can be associated with an uneven integration of contextual information, which will be discussed below in the following section (Happé, 1994)².

Applying the concept of ToM helps to explain some typical behaviour in autism: the inability to acquire and use personal pronouns; the unawareness of people's feelings, the difficulty in imitating others and make-believe/pretend. In addition, fear and aloofness due to difficulty in predicting others' behaviour; atypical interaction without real motivation to please; and challenges in understanding others' thoughts and feelings. Pretend play is not sophisticated, with tendencies on focusing on details with repetitive actions. Eventually, absence of understanding of social interaction leads to one-sided conversation and incorrect eye contact³ (Frit et al., 1991, cited in

² In reaction to the ToM approach, Hobson (1993) proposed a theory where emotional and social abilities were considered fundamental for the infant to relate to others. Hobson argued abilities are impaired from birth. He referred to Trevarthen (1979) 'intersubjectivity', which connected to activities shared by the infant and his caregivers (cited in Jordan, 1999, p.80). Hobson argued the capacity to perceive others' feelings is innate in the child and is important in developing social and emotional relationships. He maintained that the core feature of autism is the lack of empathy which is not developed through intersubjectivity. This prevents the child from establishing deep interpersonal relatedness, affecting the further development of ToM (Happé, 1994). In recent studies Baron-Cohen (2006) has also looked at the emotional component of people's mental states, intersubjectivity and empathy.

³ Personally, teaching my students with ASD to show eye-contact is often something I have had problems with, but unfortunately quite common in the field. I would suggest not enough consideration is given to the issue of peripheral view in autism. This refers to a behaviour typical in some children with ASD where the pupil is turned towards an end of the eye socket and the head turned in the opposite direction. Mottron et al. (2007) see this situation 'as an attempt to over-stimulate peripheral vision in order to

Happé, 1994; Baron-Cohen, 1997; Roth, 2010). Several approaches have been developed with the aim of encouraging students with ASD to achieve more sophisticated social interaction (e.g. Cumine et al., 1998; Roth, 2010; and others). However, I feel there is often an overall tendency to look at the student with autism as one who needs a 'cure'. For this reason I am in agreement with Bogdashina (2005b) when stating that if students with ASD have issues with ToM, then it is us professionals who should make a substantial effort to understand their 'Theory of Autistic Mind' (p.13). Therefore, not be limited when 'attempting to mindread' them. In the Appendix B I am reporting an example of my past experience working with a student who presented ToM issues.

2.3.2 Central Coherence

Not all aspects regarding the relationship between cognitive functioning and social challenges can be entirely explained by ToM. For example, the obsession for routine, the interest in detail (e.g., great ability with jigsaws), anxiety and particularly developed skills are all features that might have other cognitive based explanations. In 1989, Uta Frith undertook studies on the Central Coherence (CC) of humans. She defined this as a cognitive process that integrates different outputs of information into a coherent context, thus obtaining a complete sense and meaning. Frith stated that, to protect us from being overwhelmed, the neuron system instinctively blocks the excessive amount of external stimulus perceived, while retaining the most relevant to us. This gives individuals the ability to generalise knowledge into different contexts (Happé & Frith, 2006; Roth, 2010; Bogdashina, 2005b; Huxley, 1954, cited in Bogdashina, 2005a).

Furthermore, Happé (1999, cited in Bogdashina, 2005b) saw this cognitive process as a continuum approach, going from stronger to weaker. She stated that individuals with ASD are at the extreme of this continuum, presenting therefore Weak Central Coherence (WCC). Within WCC, the detail-focused processing preference leads to extraordinary skills perception of detail, thus representing a challenge when perceiving the whole. Here, WCC attempts to explain both strengths and weaknesses presented within the ASD (Happé & Frith, 2006; Roth, 2010; Bogdashina, 2005b; Jordan, 1999; Happé, 1994). Ozonoff et al. (1994, in Bogdashina, 2005b) asserted that children with autism present difficulty in integrating external information at a higher logical level. This might

regulate excessive amounts of local detailed information' (cited in Simmons et al., 2009, p. 2727). Other studies have also demonstrated that for some individuals eye-contact can be painful (Bogdashina, 2004, P. 87).

explain their propensity for focusing on details at a conceptual level. Based on this assumption, Bogdashina (2005b, p. 271) talked of 'gestalt perception', referring to the 'perception of the whole scene as a single entity with all the details perceived (but not processed!) simultaneously'. Here, she agrees with Ozonoff's studies, confirming that the main challenge for individuals with ASD is to select parts of the entire context meaningfully. This inability to interpret the situation compromises the ability to generalise, while presenting rigid thinking, causing anxiety and frustration in the presence of changes. WCC can be presented even in children with ToM (Happé, 1994). Moreover, Happé (1997, cited in Bogdashina, 2005b) investigated the effects of detail-focused processing on language understanding. She suggests that individual with ASD might have difficulty in understanding the whole sentence, while focusing on single words only. This might also be an explanation why individuals with ASD tend to be extremely literal (Frith and Snowling, 1983, cited in Happe, 1994).

That being said, it seems clear that WCC can be easily associated with social interaction difficulties. Particularly with regard to challenges presented when trying to give a coherent interpretation of other people's thinking, feelings and behaviour (e.g., facial expressions, social context interpretation, speech and etc.) (Roth, 2010; Happé & Frith, 2006). For example, studies have investigated the visual fixation strategy of children with ASD. Particularly, it has been recognised that when interacting with others, they give much more focus on the mouth rather than the eyes. Others' findings seem to confirm this, stating that looking at eyes can be too overwhelming in terms of the understanding of emotions. Moreover, some individuals with autism do not look at faces as a whole but in terms of component parts (Deruelle et al., 2004; Klin et al., 2002; Peer et al., 2007; Baron-Cohen, 1997, all cited in Ryan & Charragáin, 2010).

The implications due to misunderstanding of contextual meaning might include: obsessional interests; imposition of their own perspective; preference in routine thus avoiding changes; difficulty in choosing and organising. At the same time, some individuals might present outstanding memory and talented abilities (Roth, 2010; Happé & Frith, 2006; Happé, 1994). Principles of intervention, with the aim of assisting the individuals' needs might be: provide any task with clear starting and ending points; avoid ambiguity; help the child make choices; use pictures/images to support stories. Moreover, encourage the individual to avoid using a detail-focused approach, whereby they adjust their processing from local to global, when properly guided or instructed

(Heaton, 2003, cited in Roth, 2010). These strategies are helpful to provide a secure environment for children, alleviating therefore anxiety and stress. Visual prompts (cues, pictures, sheet and cards) can also be used as reinforcers (Happé & Frith, 2006; Mesibov et al., 2005). An example of how I used visual aids as a reinforcer can be found in Appendix C.

2.3.3 Executive Function

Executive Function (EF) is another cognitive explanation of autism. This aims to give an insight of particular behaviour typically presented in individuals with ASD, such as: stereotypy (ritualistic actions), restricted interests and obstinate thinking/acting. I will also investigate how this affects aspects of socialization.

EF is a broad term which refers to higher cognitive processes fundamental for controlling actions and attention span. Especially in the presence of unknown/constantly changing events. This entails having the ability to solve problems through: planning; using information in memory to lead action; controlling one's own instinctive motive, while suppressing irrelevant information or impulses. Moreover, it helps managing to organise activities to achieve a goal, spontaneity in generating ideas and behaviour, decision making, problem solving, monitoring, and flexibility in response to external changes. It is necessary, within this higher cognitive process, to detach from immediate reality to reflect on and guide actions. Here, attention span is allocated in a way that is consistent with individual goals and plans (Baron-Cohen, 2001; Hill & Frith, 2003; Hughes, 2011; Hopkins et al., 2005;; Hill, 2004; Robinson et al., 2009; Hill, 2008, cited in Roth, 2010; White et al., 2009).

Some people with ASD might present considerable difficulties during this process. They might face challenges when elaborating external outputs, thus giving a proper cognitive or emotional definition of outside information. In this situation there is a deficit in mental flexibility, which may lead to rigidity in behaviour in everyday life, or showing repetition in thoughts and actions (Roth, 2010; Jordan, 1999). Professionals might face atypical situations in presence of a student with autism and EF issues: poor mental flexibility, difficulty adjusting during transition times, excessively repetitive actions, weak impulse control, and constraints on thinking in a broader sense (Hill, 2004, Rajendran & Mitchell, 2007, cited in Robinson et al., 2009). Moreover, Hill & Frith (2003) maintained that, in

this instance, individuals with autism might also have trouble in planning. They can show difficulty stopping tasks without clear ending, and poverty in the initiation of a new action. Such conditions presented above can consequently impact on many areas of everyday life and typical everyday activities, including socialisation.

Social interaction might prove difficult for children with ASD presenting issues with EF. Thus, EF is consequently linked to diverse aspects of children's social understanding. Vygotsky explored the role of social environment in EF, stating that development of the latter is a natural consequence of social learning. Therefore, social interactions enhance cognitive development (Hughes, 2011; Lewis & Carpendale, 2009). That being said, in order to promote children's social understanding, it seems clear that pretend play is related to EF. This is because pretend play requires the ability to separate reality from imagination, enhancing children's capability to cooperate within an interactive process. This becomes an issue for students with autism who find it challenging to perform 'spontaneous functional and symbolic play' (Jarrold, 1993, cited in Jordan, 1999, p. 100). In this case, principles of intervention include the provision of structures for planning actions, in order to clarify identifiable steps, and to sequence activities towards goals (Cumine et al., 1998; Hill & Frith, 2003). An example that I have experienced in the past, on how I worked on giving a child a clear defined start and finish of event, can be found on Appendix D.

2.4 Significant Empirical Research

Rogers's research (2000) demonstrates the effectiveness of several strategies for facilitating social interaction in students with autism. This addresses both the importance of teaching on an individual basis and involving peers. For the purpose of this study, I considered two different approaches that can provide skills and techniques, while enhancing wishes and/or needs, to develop genuine social interaction. Both of which are considered independently successful. First is the individually-based approach, where the child with ASD is taught how to develop social skills. This might help to build more appropriate social interaction. Secondly, the child-to-child approach. This aims to give guidance to the classmates of the student with autism. With this in mind, I will first analyse the most significant theoretical and empirical perspectives relevant to both approaches.

Humphrey & Symes (2011), when talking of social inclusion of students with ASD, stated that this originates at two levels. The 'endogenous' level refers to the individual characteristics of the student with ASD. The 'exogenous' level instead, alludes to the school population (awareness and understanding of ASD). They assert that both can have impact on the quality of social interaction. This seems confirmed when analysing further studies. For example, Wolfberg & Schuler (1993), when investigating the social and cognitive dimensions of play in children with ASD, discussed their findings based on Vygotsky's Zone of Proximal Development. Here, results showed the importance of peer support during play activities for cognitive improvements. In Kozulin et al.'s study based on Feuerstein's Mediated Learning Experience (2010), it was demonstrated that the efficacy of the intervention depends on the teachers' commitment as the model/mediator. Others have demonstrated that teachers can increase children's social and behavioural skills (including social cognition, problem solving and social emotion), with benefits for future academic outcomes (Jennings & DiPrete, 2010; Bauminger, 2002).

Encouraging child-to-child interaction consists of approaches wherein same-age individuals, both ASD and not, interact together. Here, those who have no autism become models of more appropriate social behaviour for classmates with ASD (DiSalvo & Oswald, 2002). Past research investigated how students with autism and their peers were involved in social interaction in naturalistic mainstream school activities. These studies provided consistent evidence of the efficiency of interventions based on the child-to-child approach. For instance, they argued that making peers aware of ASD led to increased social initiatives (Owen-DeSchryver et al., 2008; Kamps et al., 2002; Morrison et al., 2001; Koenig et al., 2010; Harper et al., 2008; Krebs, 2010). It is believed that peers can be more successful than adults. This is because the skills gained are already within the natural habitat, and more likely to be generalized through daily life (Chan et al., 2009). On the other hand, some studies highlighted the importance for professionals to be aware of multiple cognitive domains in children with ASD. For example, Harper et al. (2008) investigated the issues of imaginative play in autism, suggesting that teaching in classrooms should always involve socialization. Moreover, Boyd et al. (2007) observed that some behaviour displayed by students with ASD, might interfere with their group participation. Other studies (such as, Sansosti & Powell-Smith, 2006, cited in Rao et al., 2008; White et al., 2007, Tse et al., 2007, Ryan & Charragáin's, 2010) supported the idea of working at the individual level at an early stage. The goal here is to support the student in developing opportunities to socially interact with others. The approaches used were: social-skill groups, using social stories, teaching recognition of emotions.

In this section, two different approaches aiming to encourage social interaction for students with autism have been investigated. It is my opinion that the two complement each other. However, despite the positive findings, some limitations were exposed. For example, some studies only addressed a particular time of the school day (i.e., recess), while classroom activities were not considered. These present limitations in terms of generalisation of social achievement in more naturalistic settings. The majority of these studies were based on a quantitative analysis rather than qualitative. Moreover, some were obtained from scenarios artificially constructed. Therefore, it is difficult to evaluate the quality of the interaction or the consistency over time, showing limitations to its accuracy. This leads me to agree with Tutt and others (2006), when thinking of two problems typically presented in children with ASD. Firstly, the generalization of learned skills to a wider context; Secondly, the weakness presented in isolated learning, which I feel can be limited by its inherent artificiality. Moreover, methods to measure outcomes in most of the studies excluded teachers' feedback. There was not detailed investigation of teachers' experiences regarding ASD and social interaction within school settings. This might be viewed as an oversight, considering that teachers are the main protagonists within the educational system. This leads me to consider Reiter and Vitani's study (2007, cited in Locke et al., 2012), on the possible challenges typically developing students can face when interacting with the student with autism. Here, I believe the teachers' role as facilitator can help to avoid situations wherein negative attitudes might arise. Finally, very few studies used observational techniques, while I believe it can be an efficient means to assess the students' social abilities.

2.5 Summary

Throughout this chapter I have examined the influence of the socio-cultural context in the development of an individual's cognitive functioning. Based on Vygotsky's theory on ZPD, I highlighted the significance of peer-association for the child with autism during the process of individual learning. Through Feuerstein' MLE instead, I focused on the importance of the role of teachers as mediators, to facilitate interaction between students. With the three different psychological explanations in ASD (ToM, CC, EF), I have attempted to demonstrate complexities in the nature of interaction as presented in children affected by autism. These theories aimed to better understand which interventions might be most effective when providing support for the

individual's needs. This analysis relates to the focus of my study: An investigation of teachers experiences when encouraging social interaction amongst their students. How they respond to challenges presented both at individual and social level.

3 Methodology

3.1 Introduction

My findings from the empirical studies review have revealed some limitations, identifying gaps in existing research. For example: some studies only addressed a particular time of the school day (recess), the majority were based on a quantitative analysis rather than qualitative, and most of these excluded teachers' feedback and personal experiences. Finally, very few studies used observational techniques. Therefore, one intention while undertaking my personal research is to help address these deficiencies. My study is not intended to be an exhaustive investigation on how teachers socially include students with ASD in Czech Republic. However, it might help promote potential benefits and excellent opportunities for teachers' voices to be heard.

In this chapter I will demonstrate the research methodology and strategy that I considered appropriate for the purpose of the study. Here the general approach and design will illustrate my view, as a researcher, towards the topic of study. The data collection procedures will include aspects on which sampling and methodological tools I considered most feasible and appropriate. The importance of piloting, reliability, validity and ethical concerns will be also discussed within the latter section of the chapter.

3.2 General Approach and Design

When discussing the research design of the study, it is assumed that qualitative investigation may contain elements of the social constructivism. This paradigm assumes that values influence the researcher during his study, and so rejects the concept of the real world as being objective. Here the interaction between the researcher and participants is the core element of the research, with the former trying to understand the complexity of a particular social phenomenon (Guba & Lincoln, 1995, cited in Mertens, 1998). In my study, the primary interest is to examine teachers' experiences when working with students with ASD. Social science, therefore, is not considered an objective matter, but influenced by what Curtis (1978) defines 'subjective consciousness' (cited in Cohen et

al., 2011: 18). Here the researcher is able to reach conclusions of the phenomena observed through comparison, dissimilarity, reproduction and classification of the study object (Miles & Huberman, 1984, cited in Creswell, 2009). Finally, the reality corresponds to what participants see and believe, what they experience and how they participate (Robson, 2002). This paradigm is appropriate to this type of study. My research focuses on how the interviewee-teachers support children with ASD, in their development of social interaction in mainstream schools of the Czech system. The challenges faced within their own contexts and their perspectives. Therefore, the social constructivist approach is most suitable to answer the research questions of my study. The reason I have not considered quantitative measuring is that this would not allow me to undertake an in-depth investigation⁴. In fact, Creswell (2009) highlights the importance, for the researcher in qualitative investigation, to analyse the complexity of views rather than categorize them. In this case, I depend on the interviewee-teachers as co-operators in creating the reality. With this in mind, as a qualitative researcher, gathering information directly in schools helped me see the participants' professional environment.

Gaining the best possible understanding of my phenomenon of interest in a real-life context, has been fundamental in my research. This is my rationale for using a case-study strategy as methodology framework. Since it offers an in-depth understanding of a complex behavioural situation within its demarcated natural context (Punch, 2011; Simons, 1996, cited in Creswell, 2003). Therefore, the purpose of my investigation is an examination of how teachers in the Czech schools work to provide meaningful inclusion for the students with ASD. What their knowledge and experiences are, how they respond to the challenges, and why they think a particular intervention that they implement provides better support. Geertz (1973, cited in Cohen et al., 2011) talks of 'thick description of participants' lived experiences and feelings' (p. 255). Following this

⁴ For example, quantitative measuring refers to the positivism paradigm. Here, the researcher's attitude is based on his/her knowledge being objective. Therefore, the findings are able to be generalised, using methodologies designed to discover general laws, wherein the values and feelings of the individuals involved within the research are not considered (Cohen et al., 2011; Mertens, 1998; Robson, 2002). Hypothesising is the initial approach of the research. Having a hypothesis is fundamental in the scientific method when talking about quantitative study. Kerlinger (1970, cited in Cohen et al., 2011) highlights the importance of it within the research, in terms of organising and clarifying the research problem which helps in collecting, analysing and interpreting the data. That being said, my study did not present a hypothesis at the earlier stage. Therefore, a case-study strategy was implemented aiming to describe a phenomenon of interest that was unknown to me. Moreover, since the objective was to investigate teachers' perspectives, high consideration was given to the participants' feelings and opinions. For this particular reason I opted for a qualitative approach.

perspective, the case-study allows the readers to better comprehend the situation, since the results are seen in real contexts. I also appreciate the view of Adelman et al. (1980, cited in Cohen et al., 2011, p. 256), when defining case-study as a process that leads to 'the "democratization" of decision-making'. Here, they see the readers as being able to draw conclusions of the study based on their own context, experience, knowledge and interest. I would also hope that reading my type of investigation can inspire other professionals. For instance, those who are responsible for raising the professional level of teaching in the Czech context. Also other teachers, who may generalise some of the strategies where appropriate to their own real context. Based on Gall et al.'s examples developed in their manual: *Educational Research: An Introduction* (2007), and Yin's categorisation of case-studies (2009), I would classify my own as a descriptive single case-study. The phenomenon of the study refers to teachers' experiences, when encouraging social interaction in children with autism in Czech mainstream schools. The case are two public schools in Prague, and the embedded units of analysis consist of five teachers (including former teacher, now working as teacher assistant), with direct experience teaching students with ASD. The focus of my study aims to shed light on teacher's perspectives in relation to social interaction within their settings. In order to gain some detailed insight, my data collection is undertaken using semi-structured interviews with open-ended questions, participant observations and field-notes.

My research invites readers to draw their own conclusions. Thus, they may be able to transfer knowledge from my case-study to their own contexts, and make sense of it. Therefore, my aim is to create what Stake and Trumbull (1982, cited in Melrose, 2009) call a condition of 'vicarious experience'. This refers to the narrative way of reporting a story through which readers become more involved (like if they were undergoing the experience themselves), and give deeper understanding of the case. Here, readers' personal generalisation would be shaped by comparison with their particular experience. Tripp (1985, cited in Bassie, 1999) looks at this process where the reader develops personal understanding as a qualitative generalisation. In this case, the concepts of 'transferability' and 'fittingness' become more appropriate (Lincoln and Guba, 1985, cited in Melrose, 2009). The former refers to possibility of applying the discovery of a case-study to another situation. The latter refers to when assumptions from a case are suitable for another. Here, the process of hypothesising lies at the final stage of the study, which may be used in the future to test other research (Punch, 2011). That being said, I agree with Stenhouse (1985, in Bassie, 1999, p. 26) who asserts that in case-study research 'generalisation and application are matters of judgement rather than calculation'.

From my previous comments, the role of the researcher becomes fundamental within the case-study strategy. For example, one of its characteristics is to elucidate both the 'emic' (participants' views) and the 'etic' (researcher's interpretation). Furthermore, the constructivist researcher is aware of his/her interpretation being influenced by their own individual, cultural and original background (Creswell, 2009). That being said, it is important for me to reflect and be aware of any bias I may present during the process of collecting and interpreting data, and how this might encroach on my research. For instance, my ten-year experience working in the field of autism, took me to work in different contexts around the world. This has shaped the way I perceive the challenges teachers may face. Therefore, the way I understand and elaborate the data might develop by assuming instances that might be unsuitable for the context of my study. Moreover, being an Erasmus Mundus student at Masters level, it has proved beneficial for learning important theories and new perspectives about inclusive education. This might also influence the interpretation of data, particularly relating to hard-to-define concepts such as inclusion. That being said, while I will make every effort to ensure impartiality, I have to agree with Mertens (2003, in Creswell, 2003, p. 182) when stating that in qualitative research 'personal-self becomes inseparable from the researcher-self'.

3.3 Research Methods

Qualitative methods such as interviews, field notes and observations are the tools used in my research for data collection. According to Punch (2011), the combination of different sources when collecting data, technically called 'triangulation' (Fielding & Fielding, 1986, in Maxwell, 2005), allows elevated standard of data in qualitative research. Therefore, I opted for this strategy with the aim of achieving more credible information than if limited to one tool. Also, it allowed me deeper understanding of my area of interest. Yin (2009), when talking of rationale for using multiple sources of data collection, states that '[...] no single source has a complete advantage over all the others. In fact, the various sources are highly complementary, and a good case study will therefore want to use as many sources as possible' (p. 101). I agree with the logic of considering triangulation as a feature of case-studies. Here, its process of verification of same phenomenon becomes more persuasive and precise if it originates from different angles.

3.3.1 Field-notes

I implemented field-notes as a supplement to my interviews and observations. Bogdan & Biklen (2007, p. 118 – 119) define field-notes as 'written account of what the researcher hears, sees, experiences, and thinks in the course of collecting and reflecting on the data in a qualitative study'. Furthermore, they distinguish field-notes as descriptive and reflective. The former refers to a detailed/factual description of participants, actions, location and situations relevant to the study. The latter concerns the researcher's personal consideration of what he perceives. I found field-notes very helpful during the process of data collection. For instance, while taping the interviews, I also tried to give meaning to the whole context through reflective field-notes. Some of these comments uncovered some methodological issues, which led me to make further observations (this will be discussed in the observations' section). Here, during both interviews and observations, my reflective field-notes brought to my attention additional points. These will be further discussed within the ethical issues section.

3.3.2 Interviews

Open ended questions in semi-structured interviews were the predominant tool when collecting data. Analysing significant theoretical perspectives helped me uncover key issues and formulate appropriate questions (A sample of my interview-guide is shown in the Appendix E). By interviewing teachers, I aimed to have knowledge of the perception and opinions of local participants. This helped me understand the realities of teachers' work in the Czech system, which was unknown to me. Kvale (1996) uses the term 'inter view', as an exchange of two people's visions (the interviewer and the informant) which creates knowledge. This qualitative methodology facilitated my investigation on the respondents' understanding of particular occurrences and circumstances. Moreover, it helped me to assess the interviewees' knowledge and go more in-depth when needed. It also provided broader information and generated unexpected data. These aspects, typical with this research tool, are not only found in Cohen et al. (2011) and Robson's studies (2002), also Punch (2011, p.144) considers interviewing as 'a very good way to accessing people's perceptions, meanings, definitions of situations and constructions of realities'. Since my research aims to investigate the realities faced by teachers, it was necessary to gather this information through an accurate analysis of their perceptions. Therefore, a qualitative type interview was most

appropriate.

I opted mainly for interviews rather than questionnaires or observations for different reasons. For example, Oppenheim (1992) suggests that questionnaires tend to involve participants to a lesser extent than in the interviews, with the risk of affecting their motivation. Questionnaires also have limitations in establishing trust, which can be easily overcome when dealing face-to-face, typical in interviews. Moreover, I decided that an observational route would be subsidiary to the interviews because this alone may have entailed taking a substantial amount of time. Whereas, as Robson (2002, p. 272) states, the interview is 'an obvious short cut in seeking answers to our research questions'. Another reason for using interviews is a consequence of language barriers. In order to achieve fully detailed observations on interactions among teacher and students, the knowledge of Czech language is fundamental. With the interviews, on the other hand, I had the support of simultaneous interpreters, while with observations these might have caused some distraction or bias.

My interview developed based on a precise thread. I started with what Robson (2002) considers warm up questions, which helped the interviewer feel at ease. Also, I closed my interview in a friendly manner, since I was also planning observations afterwards. My intention to audio-tape the interviews helped me to focus also on field-notes and examine any contextual aspects.

3.3.3 Observations

Observations were the secondary source of data collection in my research. Since my case study is an in-depth description of the phenomenon in real context, I considered direct observations of teachers' social behaviour within their natural settings to be very useful. Cohen et al. (2011) define observational technique as a first-hand data gathering of actions within societal contexts. Consequently, this approach can be considered complementary. Especially if thinking of Robson's (2002) idea on inconsistency in interviews between what participants may say and how they act in real situations. Particularly in my case, I found my observational tool a positive strategy to overcome some issues. For example, when some of the interviewee-teacher's answers seemed to reflect desirable responses, rather than real attitudes (also cited in Robson's study, 2002). Here, an interpreter who kindly helped during the process of data collection, had a familiarity with one of the

schools, with long history of cooperation. Occasionally, I had the feeling that she would attempt to overemphasize while translating the teacher's comments, to show the school in good light. The aim here was to observe how my informants acted based on what they had previously stated in their interviews (there is a shift from *what they were telling me* to *what they were showing me*). Using observations as a way of triangulating, my intention was to assess the consistencies in what the interviewee-teachers had reported. Therefore, using observations as an additional method assisted in verifying the information extrapolated from the interviews. With this in mind, I undertook semi-structured observations, which are considered common in qualitative research (Punch, 2011).

In order to ease the recording of my observations through field-notes, I created units of focus resulting from my interview guide and research questions. This process was based on Bogdan and Biklen's (2007) examples of how to develop field-notes (an illustration is given in Appendix F). These helped to shape my observations, whilst rendering their structure less rigid. This was because I wanted the 'elements of the situation speak for themselves', as Cohen et al. would state (2011, p. 398). Furthermore, the units of focus were also thought to be used as themes during the process of analysing the data (this is discussed in the next chapter). In order to gather as much data as possible, while accounting for the language barriers, I also focused on the 'molecular' units while the participants were interacting. These are considered by Wilkinson (2000) as minimum actions (gestures, non-verbal communication, etc.) with a sustainable amount of specific data. Moreover, bearing in mind the limitation of time, I focused more on 'critical events' (Wragg, 1994) rather than seeking consistency of a particular action (both authors cited in Cohen et al., 2011, p. 402). My role was 'observer-as-participant', based on Gold classification of researcher's role in participant observation (1958, cited in Robson, 2002). This means that I was known to the participants as being the researcher, but not involved in any interaction. I believe this was a good strategy since my aim was to have a 'thick description'⁵ of natural events within a defined context. If I had intervened, the events would have ceased to be considered natural, and the data collection compromised.

Luckily, in most of the cases I was allowed to spend the entire day observing. However, if this was not possible, I could go observe as different situations arose. This helped to reduce what Cohen et al. (2011) define the 'reactivity effects'. This refers to the initial influence my presence had played

⁵ Maxwell (2005) when talking of 'thick description' refers to Geertz's (1973) explanation, which alludes to the quality of emic report, rather than the quantity of information provided by an informant. Bearing this in mind, my case-study aimed to develop as much qualitative information as possible provided by specific actors within their natural settings.

on the participants, before they could become accustomed to me. However, this did not completely eliminate the risk of bias during my observations. Robson (2002, p. 322 – 324) discusses the possibilities of the observer's influences during data collection, and I thought of a few possible instances of this. For example, how I focussed my attention; did my particular interests and expertise lead me to look at one aspect rather than another? Moreover, where I felt I had too much information to fully absorb, sometimes I had to promptly decide which aspect to focus on. This led to the problem of 'rush of judgement' also discussed in Robson's. Memorizing was another issue presented during my observations. Observing for three to four hours consecutively compromised the speed of my writing, affecting perhaps my recollection of events.

3.4 Data Collection Procedures

3.4.1 Sampling

This discussion focuses on essential aspects of the sampling strategy of my research plan. Punch (2011) considers the sampling process fundamental and strictly linked to the intention of the study. He advises novice researchers like myself, to consider a multitude of aspects before deciding which samples to consider (e.g.: people, actions, settings, etc.), and how these relate to our study's research questions. This makes complete sense when thinking of all the components of my case-study research (e.g., the phenomenon of interest, the case, and the units of analysis). My sampling procedure includes participants who have direct experience teaching students with ASD. Five teachers were selected from two urban primary schools in the Czech Republic. They have been teaching for 8 to 32 years, with an average of 19 years of experience. Ages ranged from 33 to 62. My aim in choosing a purposeful sampling follows Cohen et al.'s (2011) criteria which includes: being representative, comparing informants' experiences, focusing attention on detailed and distinctive cases. Moreover, Gall et al. (2007, p. 178) state that 'the purpose in selecting the case, or cases, is to develop a deeper understanding of the phenomena being studied', and the 'goal is to select cases that are likely to be "information-rich" with respect to the purpose of the study'. Therefore, selecting several teachers for the interviews has given me the opportunity of dealing with different personalities, skills, abilities and language competences (English was not their native language), thus increasing the accuracy and reliability of my study. However, only five teachers have been selected due to limitations of resources and time. Since my investigation focuses on how

students with ASD are encouraged to develop skills in social interaction in mainstream settings in the Czech Republic, two public schools in Prague were selected for my observations. For the purpose of this study, I have considered any given aspects of autism, as my primary interest is to investigate the teachers' experiences, whether the student has classic autism, Asperger syndrome or atypical autism. Moreover, I have not considered the grade of the classes, nor sex of the students, since this was irrelevant for the purpose of my study.

Generally, the convenience sampling strategy within the purposeful sampling was chosen, with the exception of one teacher. However, the motivation for using different sampling strategy in this case will be discussed when talking of validity/reliability in the study. The convenience sampling, which refers to participants who are selected basically because of their availability, is not recommended by Patton (1990, cited in Gall et al., 2007). However, in my particular situation this was the most convenient. I am Italian and had been in Prague only for two months by the time I began collecting data. Given the shortage of time and language barriers (as I do not speak fluent Czech), it was difficult for me to establish broader connections with other professionals. Therefore I had to rely on this type of sampling.

In conclusion, to answer the questions that Miles and Huberman (1994, p. 34) posed when discussing the general principles to develop a plan for sampling in qualitative research, I should state that: my sampling is relevant to my research questions, since these aim to discover teacher's perspectives when encouraging social interaction in students with ASD; the phenomenon of interest will appear because by carrying out observations in public schools, social interaction amongst students was a natural occurrence. Thus my plan enhances transferability, since the interviewee-teachers can inspire other professionals in the field; believable descriptions can be produced, since the case is a real-life context such as school; the sampling plan has been feasible in terms of costs, access and time. Finally, ethical practice has been observed throughout with formal and informal consent given by the participants.

3.4.2 **Gaining Access to the Physical Setting**

Various steps were taken to help gain access for conducting the study. My thesis supervisor from

Charles University identified my initial contact with one of the centres in Prague specialising in inclusive education consultancy. Here I met an English-speaking professional who helped me to find two schools, while volunteering to be my interpreter in one of these. Firstly, I met the principal and head-teacher of the selected schools, these both represented my gatekeepers. I then explained the purpose of my study, and finally they introduced me to the available teachers.

3.4.3 Pilot Study

The piloting stage was conducted two weeks prior to data collection, and this was extremely helpful to test and refine my tools. Following Maxwell's (2005) idea on how to assess the methods, the aim here was to allow my second interpreter (who had no experience in translating) some practice time and get acquainted. Volunteering in a special school during my piloting time was convenient. Here a Speech Language therapist agreed to give feedback on my questions and support the interpreter during her training. With regard to my observational skills, I related to my previous work in a school in Montreal, where my role consisted of supporting students who had difficulties coping in their classroom environment. In order to have a full understanding of their actions, part of my task included first-hand classroom observation. This type of functional behaviour assessment proved to be helpful during observational data gathering for this research.

3.5 Validity and Reliability Issues

Validity and reliability are fundamental in establishing the quality of any empirical research, and both make the study more worthwhile. In qualitative research, Creswell (2009) considers validity its particular strength. This is essential to achieve a good piece of research, which increases the credibility of findings in order to persuade the readers. On the other hand, Gibbs (2007, cited in Creswell, 2009) identifies reliability in qualitative research as the ability to achieve the same results of a study, when implemented by different researchers in different settings. It is necessary here to present a clear description of the study process, in order for this to be replicated. In order to create the above conditions, I have used several tactics and strategies. Therefore, I aimed to identify and reduce what Maxwell (2005) calls 'validity threats'. For example, I have previously mentioned both issues of researcher's bias and reactivity. In the first instance, through reflective field-notes, I

addressed how I might influence my data collection and how this could be alleviated. Secondly, to reduce reactivity, I aimed to observe throughout the whole day, or in several occasions. This helped accustom participants to my presence and foster natural activity. However, I agree with Cohen et al. (2011) when stating that some issues were impossible to overcome. Therefore, it was my duty to continuously recognise and reflect on possible influences.

In order to create rich data, and validate my description, I tape-recorded and transcribed my interviews. During this time, using peer debriefing with colleagues was fundamental when analysing the data. Moreover, keeping detailed field-notes during participant observations helped me to ensure less biased interpretation subsequently. I also relied on triangulation to deal with the validity threat. Here I recognised the weaknesses presented within each tool, and tried to diminish those by mixing field-notes, observations and interviews (details on motivations have been already given above). The sampling selection needs more clarification. By using convenience sampling this meant that I did not have control of the selective process. Thus, I was intentionally introduced by gatekeepers to teachers who were considered excellent in working with students with autism. Therefore, to have a broader perspective of the reality, it was beneficial afterwards to interview another teacher, whom I then learned had worked in the same classroom as the teacher assistant previously interviewed. Here I found interesting to investigate the cooperation amongst these two teachers.

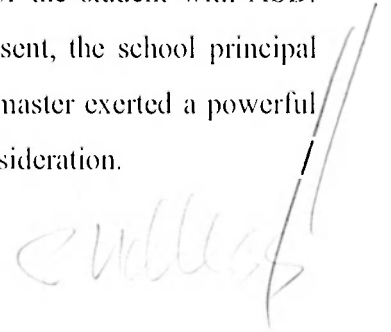
I followed several procedures to ensure the truthfulness of statements taken and that I was not being told just what I wanted to hear. Firstly, I assured teachers anonymity. Then, I considered myself and the interviewee-teachers as equals, thus encouraging comfortable relationship and confidence. I began each session introducing myself, with some explanation of my background both academic and professional. I was as open as possible in terms of informing the teachers of the purpose of the interview. I can say with confidence that this helped put the informants at ease. I also ensured that the interviewees understood there were neither good nor bad answers, but any information provided would help me understand their particular situation. It was not my role to show my disapproval. I also invited the interviewee-teachers to ask any clarification or questions. The settings selected were free from distractions. I also allowed my informants choose which place and time had suited them best, and where they felt most comfortable. However, this highlighted an issue which will be further discussed on the ethical section. When formulating the questions, I ensured that every teacher was

able to understand my intention and meaning. It was important in this case to use simple language, avoiding vagueness, bias and inaccuracy. Where necessary, I prompted the interviewee to impart with any potentially useful information and to establish clarification. However, I was careful not to ask 'leading' questions nor give suggestive cues.

3.6 Ethical Concerns

Ethics refers to the particular conduct researchers must adopt. Investigators should refer to the standards and moral principles that apply within any society and are applicable within the legal framework in which they operate. Particular awareness and care in respect of these issues must apply when planning for research. The issue of ethics can arise in any methodology but particularly in qualitative approach, when dealing with individuals' feelings and personal lives (Punch, 2011; Burgess, 1989).

As my investigation involved interviewing teachers regarding their experiences and perceptions, substantial personal matters were involved. Since part of my study involved observations in classrooms, consideration on children's consent was also required. Therefore, before recording the interviews, I sought the teachers' written permission. In order to be as clear as possible this was translated into their native language (both Czech and English samples can be found on Appendix G). For observations in classrooms, I had a preliminary talk with students to acquire their informal consent, before entering their classroom environment. These aspects lead me to discuss two events which I experienced and I believe require ethical consideration. As mentioned before, I allowed my informants to choose the setting and time for the interviews. In one case, a teacher decided to be interviewed during her duties, which resulted in her talking in front of the student with ASD. Furthermore, in one school, when asking the students for informal consent, the school principal kindly helped as interpreter. Here, I found that the presence of the headmaster exerted a powerful influence on students' final decision, which also merits further ethical consideration.



4 Data Analysis and Discussion

4.1 Introduction

This chapter discusses my empirical findings and it is structured as follows: description of data and discussion of this in relation to my literature review. To facilitate the reading of this section I will outline a framework for data analysis.

A necessary step prior to the discussion of findings has been the data description. This has followed the transcription of interviews and review of field-notes. Here, using coding and 'memoing' to engage in the systematic process of analysing textual data has been fundamental. Rossman & Rallis (1998, p. 171) define coding as "the process of organizing the material into chunks or segments of text before bringing meaning to information" (cited in Creswell, 2009, p. 186). Punch (2010, p. 176) describes it as the 'process of putting tags, names or labels against pieces of the data'. The codes were subcategorised into: major topic, codes in topic, unusual but of conceptual interest, and surprising codes/those that address a larger theoretical perspective. During the coding process, I create memos (my own ideas on the codes) useful for the later discussion of findings. This coding process has supported the development of themes, and the interviews and field-notes have been structured with reference to these. The themes reflect on the research questions, the units of focus created to give structure and ease the recording of my observations, and the main concepts from the review of literature:

Theme 1: *Teacher's consideration of social development and social inclusion;*

Theme 2: *Teacher recognises benefits of social interaction;*

Theme 3: *Teacher mediates the interaction between students;*

Theme 4: *Teacher creates conditions for the students to develop social interaction;*

Theme 5: *Teacher's skills in teaching students with ASD;*

Theme 6: *Teacher's challenges when encouraging social interaction.*

The first two themes refer to the teachers having a pre-understanding of the need for students to interact and be socially included. These relate to teachers' awareness. I consider this fundamental in shaping teachers' perceptions and attitudes when encouraging social interaction in classrooms. Themes 3, 4 and 5 refer more to the skills teachers have. What knowledge they share in order to support the learners' needs. Specific research questions assisted me in my attempt to uncover some key issues. These evolved as the study progressed, typical in flexible design research, and theme 6 is formulated from my analysis within the process of data gathering. During the data description, each teacher will be depicted in a separate unit. The themes will be used as subsets for each participant's section. Each teacher unit will have its own appendix wherein the reader may locate direct quotation or reports on field-notes.

In the final section there will be an examination of my findings. Here I will compare and contrast my informants' data and their responses. I will then co-relate these with the information from the literature review and contextual background. The actual evaluation of my overall research work with the provision of summary of my findings will appear in the following chapter as a conclusion.

4.2 Description Teacher 1 (T1)

T1 is female, 56 with almost 32 years teaching experience. She has good personality, with a strong relationship with students displaying a nourishing attitude. Her warm vocal tone encourages participation. T1 is eager to teach her students. She jokes frequently during class, which helps create a friendly environment. It was obvious that she loves her job. She considers herself 'very patient and focused' but can be firm when necessary. Observing T1 teaching was a good inspiration and a pleasant experience. She has 21 students including S1 who has Asperger Syndrome (AS) (this was during my observation). T1 defines S1 as being very bright, with excellent general knowledge skills but having communication issues. *Stimming*⁶ is presented in S1's behaviour. He sits at the edge of a 'U-shape' desk alignment close to T1, and between his friend and another classmate. He appears

⁶ Roth (2010, p. 83) gives an excellent explanation of the meaning of the word *stimming*: 'A stereotypy is a repeated or ritualistic movement, posture or utterance. Some of the most common in autism are waving, twirling or flapping of hands. It is possible that these movements may be used to gain stimulation. For instance, moving the hand in front of the face may change the amount or pattern of light reaching the eyes. Some high-functioning people on the autism spectrum even refer to their stereotypies as "stimming" (or stimulation)'.

comfortable interacting with students and vice-versa. The lay-out of the desks lets T1 operate from the centre with space for group activities, while allowing students to face each other. T1 has the support of a Teaching Assistant (TA), for 10 hours per week.

4.2.1 Teacher's Consideration of Social Development and Social Inclusion

T1 stresses the importance of social development and inclusion of all pupils, seeking a multi-disciplinary approach between teachers, parents and psychologists. However, she finds communication between stakeholders can be an issue and, the role of teachers increasing in terms of helping children develop socially. As they take over from parents who do not have the time for it (Appendix I11). She feels both family and school should share this responsibility. For her, social development refers to the ability of students to cooperate with classmates. Moreover, social inclusion relates to our readiness to understand differences, and appreciate everyone has their position in class with their own particular skills (Appendix I12). T1 feels that developing situations for social interaction should be part of daily school activities since it is a basic human skill. She suggests working on this 1-2 hours throughout the day, without fix terms. In fact, she recommends including this in all activities.

4.2.2 Teacher Recognises Benefits of Social Interaction

T1 considers social interaction benefitting both the student with autism and the peers. For the individual, this would help him in terms of social communication and participation. Also, she states the peers can benefit enormously from the general knowledge of the ASD student (Appendix I18).

4.2.3 Teacher Mediates the Interaction between Students

T1's mediation begins with a pre-term parents meeting at which she explains the reasons and benefits of having a TA. Here, confidentiality and respect towards parents of the child with autism is assured (Appendix I13). She feels it is her duty to act as mediator and promote interaction amongst students since she can redirect students if problems arise. Her role continuously benefits

the students as she advises, encourages and explains circumstances. For instance, to prevent the student with ASD being left out, she states that she always watches the students during break. Furthermore, although most times she will leave them on their own, she is always available to intervene if appropriate. Another aspect of mediation consists of preparing peers to interact with the child with ASD. She firstly explains the child's behaviour and issues, and instructs on how peers might help. However, she often reminds the students that everybody has their own personality (Appendix H4). T1's adoption of a mediating role to help encourage interaction was often evident throughout my observations (some examples from my field-notes are in Appendix H5).

4.2.4 Teacher Creates Conditions for the Students to Develop Social Interaction

T1 implements different activities within the classroom: individually, in pairs, small groups, with the students often changing roles. In terms of SI's social inclusion, while preparing the lessons, she always allocates him a task. This aims to reinforce his popularity, autonomy and independence within the group (Appendix H6). I observed this approach frequently. For instance, during the day, she created conditions where everybody can intervene: reading aloud, asking questions within group activities and in pairs. Here, I noted SI interacting with several peers rather than one favourite (extract from field-notes can be seen in Appendix H7).

4.2.5 Teacher's Skills in Teaching Students with ASD

From T1's interview, it was clear she had no intensive training in ASD, in particular, none in social interaction. However, she relies often on self-training and her positive attitude. In fact, utilising a practical approach rather than theoretical experience (Appendix H9). Structured teaching is a strategy she uses when teaching students, changing her strategy to suit different situations. When dealing with individual issues, she prefers to talk to the student with ASD. However, from my observations, this does not always result as being the best approach, as it will be discussed later on. However, she also seems to appreciate training in social interaction as '*useful and important*'. Moreover, when asked to reflect on her needs to improve her own knowledge she replied with a joke: '*What I need is more information about Nuclear Energy and more information about Life of Animals*'. What apparently was stated as a joke, gave me something to think about while elaborating

my memos during the coding process. This will be discussed later in this chapter.

4.2.6 Teacher's Challenges when Encouraging Social Interaction

T1 identified several challenges when encouraging social interaction in class. Firstly, the age of the group. She feels the younger they are the easier to create conditions for developing socialisation. She noted two possible issues: the particular interest of the child (perhaps incompatible with other children); and the difficulty peers face when interacting with the individual. When other professionals are involved, this can cause problems with communication. In particular, shortage of assistance can be a limitation (she teaches 25 students, including S1, with TA working only 10 hours weekly).

4.3 Description Teacher 2 and Teacher 3 (T2 – T3)

In this section I will discuss both these teachers, since they work together. T2 is the main teacher in the classroom, and T3 is the TA. Only after interviewing T3 I decided to ask T2 to take part. Both were interviewed independently at different times, with a gap of three months between their interviews. Both teachers are female: T2 is 45 with 15 years teaching experience, T3 is 42, working as a teacher for 8 years. At the moment T3 is working as a TA. Their attitudes with students are very warm and calm. This creates a welcoming environment within the classroom (21 students when I observed). T2 runs the class, T3 sits in the background but regularly walks around the classroom to check on pupils. S2/3 is diagnosed with AS, presenting high cognitive ability. He was introduced to me by T3, and appeared to be quite reticent. During my observation S2/3 sat alone at his desk, which was situated in the centre-right of a three-row layout. T3 sat behind him at her own desk. In front of S2/3 sat another student, who did some pair-work with him. When S2/3 walked in the classroom initially he did not interact, and went straight to his desk. Although T3 is S2/3's TA, she is not constantly with him, preferring to interact with all students. T3 considers herself '*very tolerant and patient*', has an amiable attitude with all students, making her appear as much as a friend as teacher. T2 also adopts a pleasant tone of voice when talking to the children, and appeared very composed during the lesson.

4.3.1 Teacher's Consideration of Social Development and Social Inclusion

T2 defines social development as the ability to cope with others within a group, to manage with normal life and other people's life. When talking of the social aspect of children with ASD, she stresses the challenges they face when establishing relationships and understanding others. She identifies generalisation of skills as a major issue (Appendix 11). She feels that both family and school are responsible for social development of children. However, the family has the bigger task since the individuals spend most time in this context. She considers social inclusion as the capability of children to communicate and share in normal living. T2 agrees to develop situations for social interaction within lessons. However, not as a '*single subject*'. The time spent organising social interaction is variable, and strictly depends on the challenges presented by the students in class. Generally half-hour a day, prioritising break-time. Moreover, she believes it is more feasible when students go for an outing rather than have an ordinary day in class.

T3 defines social development for children as the ability to communicate their needs. To be able to initiate new contacts with people. In particular, the ability to recognise who might threaten their safety. In autism, this refers to the ability to '*cope with stressful situations*'. Sharing responsibility between parents and teacher is also considered important by T3 (Appendix 12). When discussing social inclusion, she considers working and living within the community a priority. In case of ASD, she is against separating children, but giving them opportunities to learn by remaining with others. She feels the support of other children helps the individual to cope '*without any panic or fear*'. T3 considers creating conditions for social interaction as part of teaching, because it is a basic skill to socialise between people. She dedicates 5 hours weekly both outwith school (e.g. trips incl. shopping etc.) and in school.

4.3.2 Teacher Recognises Benefits of Social Interaction

Both teachers recognise the benefits of social inclusion for all students. T2 states that this is important for two reasons. For S2/3, as he learns how to communicate, he is also pushed to socialise more (Appendix 112). On the other hand, this is advantageous to the classmates, since someone who is different can bring new perspective on life.

T3 seems to agree with T2, as she feels this might help the individual with ASD achieve full independence, without support. She states that: *'the benefits are huge'*. From the peers' perspectives, she thinks this is helpful since the students are aware of differences and accept that *'everybody has his own way of behaving'* (Appendix I13). For this reason she believes it is best that the child with autism should attend mainstream school from first year. This, in T3's opinion, will assist the peers to know the individual better, and therefore provide more appropriate support.

4.3.3 Teacher Mediates the Interaction between Students

T2 did not prepared the peers previously in both instances where there were students with ASD in her class. In the first case, because she considered the students in the class *'very small'*. In the other instance, the student with AS (S2/3) only attended part-time. Therefore, she relied on students' adaptation. Moreover, S2/3 wanted discretion and not to highlight the situation (Appendix I3). T2 thinks her role has been important for the improvements S2/3 has shown. She feels the student senses her and TA's ongoing support. However, she believes this is more TA's task rather than hers (Appendix I4). She uses improvisation as her main mediating approach, without special preparation. For instance, if something unusual happens, she would then discuss and explain to the students (Appendix I5). Finally, to help the learner participate in class, she seeks some common interest between him and the group, thus encouraging interaction. Here, she always praises and reinforces the student for joining the others.

T3 relies on peer-support. Therefore, she always encourages other students to assist their classmate within ASD when needed (Appendix I6). She also thinks that parents should be included within her mediating role. The aim here is to create awareness: *'[...] all parents [...] must know they [the students] will have much more work on social relation and how to cope with the child'*. T3 states that school's projects are very helpful for students' interaction, and the learner with ASD might hold a position within that. She thinks her mediating role is important, *'because without support he wouldn't be able to cope'* (Appendix I7). Through playing games, she helps the students understand how their peer with ASD experiences life. She also finds drawing a good strategy that helps him communicate. Moreover, in cases of misunderstanding, the students can rely on her to clarify (Appendix I8).

During my observations, a mediating role was noted from both T2 and T3. This involved checking regularly on S2/3, asking questions to help him participate. However, I did not detect much mediation during paired-work activity. For instance, neither T2 nor T3 praised S2/3 and the peer for working successfully together. There was no reinforcement, especially in this context where at the beginning the peer was visible unhappy to be chosen by S2/3 as a pair. This will be discussed later in this chapter.

4.3.4 Teacher Creates Conditions for the Students to Develop Social Interaction

In terms of creating conditions for the students to develop social interaction, T2 finds the cognitive level of the student within ASD influencing her strategies (Appendix I9). Overall, she thinks group-activities are preferable. To alleviate S2/3's stress when working with another student, she lets him choose his pair. However, as noticed during my observations, this sometimes might uncover some unexpected issues (Appendix I10). T2 finds break-times good for students to relate. However, here S2/3 tends to interact more with the teachers than peers. To prevent this, both teachers decide not to be in class during breaks, encouraging S2/3 to connect with classmates. However, despite this strategy, at the time of my observation no interaction was taking place.

T3 uses preventative strategies to help the individual with ASD in social circumstances. She begins with making attempts and investigates the outcomes. Generally she provides structures and limits to avoid overwhelming the student. Finally, preparing him for changes is another strategy she adopts.

Some examples from my field-notes shown in Appendix I11 give insights of the strategies implemented by T2 and T3 in order to create conditions for social interaction.

4.3.5 Teacher's Skills in Teaching Students with ASD

T2 feels she has learned enormously from her personal life-experience (having a daughter with impairments). This alongside the practical experiences she gained when working with students with

autism. In terms of training, she attended one afternoon-session for all teachers in school, which was about ASD in general. She feels that more practical experience with students with autism would help her improve. However, she would benefit from further training along with learning from the sharing of other schools' experiences. Finally, she relies on her instinct to work successfully.

T3 is educated as a teacher in special education. However, she feels it was too theoretical, and actually practicing teaching is rather different. She attended ASD-related courses which included: '*anger-management, social development, how to integrate a student with ASD in basic school, structured teaching*'. She always looks for new courses and shares information with other schools, and thinks some training in social interaction '*[...] would be perfect, in this situation and in our classroom and our school*'.

4.3.6 Teacher's challenges when encouraging social interaction

A major challenge T2 faces, refers to the cognitive ability of the student. She thinks encouraging social interaction with a low-functioning student with ASD is more difficult than the child with higher cognitive abilities. However, even with a high-functioning student, some difficulties are presented. For instance, when the S2/3 refused to attend school, or due conditions wherein she states: '*there is very short time and it is working*'.

T3 finds personal emotions (e.g. fear of child acting aggressively) a limitation when trying to push a student with autism to more sophisticated tasks (Appendix I14). She also highlights the issue of lack of appropriate support outside school to intensify socialization with peers. This can be seen as a challenge when trying to generalise social skills outside the school context (Appendix I15). She also refers to the individual personal characteristics and cognitive ability as a deterrent, for example: '*[...] there were some problems between school-hours because he was not able to learn and to be taught with other students; [...] when he was younger and his interests were extremely narrow [obsessions]; He was afraid to be with other children*'. Moreover, T3 thinks that challenges increase with age, because the topics of interest differ between the student with autism and the peers, creating a substantial gap (Appendix I16).

4.4 Description Teacher 4 (T4)

T4 is female, 33, working as a teacher for 11 years. Her energetic approach encourages a close bond and participation from students. T4 teaches English across several classes and works with five different students within the ASD. For the purpose of this analysis, I observed T4 working with two students with autism (S4a & S4b). S4a seemed quite independent, and he appeared a quiet pupil. He participated and blended with other students without issues. S4b had the support of a TA to help him in transition between classes. TA regularly sat close to S4b. Even when paired, TA would sit between S4b and the peer. T4's lessons are lively. She has a great relationship with the students who feel free to intervene during class, making the interactive process much easier.

4.4.1 Teacher's Consideration of Social Development and Social Inclusion

T4 considers early intervention essential for social development. She states different factors can play an influential role (e.g. family, background and school) (Appendix J1). She also considers this the same in any child, despite any disability. However, in case of students with ASD, she holds teacher's responsibility to be in touch with specialised centres. Based on T4's comments, communication with families is also important (Appendix J2). However she feels sometimes parents lack responsibility (Appendix J3). When discussing social inclusion, she thinks that society (or school) should be prepared for any differences. Regarding autism, T4 considers individuals socially included when able to *'take care of themselves, work and communicate'*. In other words, when they reach independence or supported independent living, in more severe cases. T4 thinks that prioritizing teaching social interaction should be available only when needed. However, she states that *'social interaction is such a natural thing that it happens in every moment in every situation'*.

4.4.2 Teacher Recognises Benefits of Social Interaction

T4 agrees that social interaction can bring benefits to everybody within the classroom. To the child since he would learn how to co-operate, improving his/her social skills. To the peers because they would become familiar with differences in society.

4.4.3 **Teacher Mediates the Interaction between Students**

Overall she recognises the importance of mediation on socialization in children (Appendix J4). When talking of school, T4 states: '*[...] the teacher should be a good example*'. T4 uses specific programmes to explain differences and states the involvement of parents and other children crucial (Appendix J5). However, I challenged her saying that some people might consider this as 'labelling the child with ASD'. T4 disagrees with this view and thinks it is important for children to experience differences, as misunderstanding and fear may lead to bullying (Appendix J6). She thinks that it is not difficult to create situations for interaction. T4 considers the role of teacher '*very important*' in creating group-activities, especially as role model when it comes to correcting students' behaviour (Appendix J7). As a part of her mediating role, T4 uses several materials to give insights on how individuals with ASD experience life. For instance, she uses movies or reads novels on the subject of ASD. However, she prefers to highlight things that they have in common as human beings (Appendix J8). From my observations appeared that T4's mediation was continuous within the lesson. For instance, she would check on the two students regularly to ensure they were part of the groups. Moreover, this also confirmed her previous statements, regarding supporting students during the process of socialisation when facing difficulties (avoiding that the student stops when facing challenges or during breaks) (Appendix J9). Two additional strategies are implemented by T4 to help prepare classmates and mediate the individual interaction. The first is to treat the child with ASD as being typical. The other is to uncover the personal interest of the child, and build a project on the subject where everybody participates.

4.4.4 **Teacher Creates Conditions for the Students to Develop Social Interaction**

T4 encourages socialisation in any situation and classroom, despite any student with autism. In her opinion this is '*because in every class there are children with other problems that maybe don't have names*'. Activities she may implement include: structured teaching, pair work, group work, play groups, changing groups and drama. She does not allow students to select partners, thus avoiding rejection of students with ASD. She highlights strengths rather than weaknesses (Appendix J10). During my interview, she mentioned she would like to bring together students and their parents,

with the aim to let them get to know each other. Arranging outings is another strategy T4 would like to implement, along with a programme called 'Understanding Friends' by Catherine Faherty (Appendix J11). Furthermore, T4's ability to create conditions to encourage interaction was often evident throughout my observations (some examples from my field-notes are in Appendix J12).

4.4.5 **Teacher's Skills in Teaching Students with ASD**

T4 strongly recommends all teachers should have basic knowledge on autism, and embrace changes in their teaching strategies when needed (Appendix J13). She received training both from a specialised Czech organisation and at her university. However, she finds them 'too theoretical' rather than practical (Appendix J14). She also thinks that schools should support teachers in pursuing further training, while recognizing that it should be a personal aspiration. Finally, T4 does not think she would benefit from additional training in social interaction. She feels only more practice can help her to improve to encourage social development and inclusion.

4.4.6 **Teacher's Challenges when Encouraging Social Interaction**

Competition amongst students is another challenge faced by T4. She believes this is a problem because students prefer to be in groups and succeed, which can lead to rejection of less skilled students. She also feels some teachers' negative attitudes can be a hurdle: they '*don't know how to work with a child, or with the parents or the rest of the class*'; or '*are against the idea of inclusion*'. Finally, age and puberty are other features considered challenging by T4. Especially as the students become older, and their interests differ enormously compared with the child with ASD.

4.5 **Description Teacher 5 (T5)**

T5 is the only teacher involved in this study of whom an official observation was not undertaken, as she was completing her last year of teaching before retiring after 30 years at the time of my interview. During her career, she had worked with four students within the ASD, all presenting different features. T5 considered herself very knowledgeable when working with students with

autism. Although no official assessment on her teaching strategy was undertaken, T5 appeared to be a very caring person, involved in many aspects life socially. For instance, the day I introduced myself to arrange the interview, she was keen to discuss the conflict in the Middle East, and the conditions of people living in Africa and South America. This illustrated that for T5 the importance of creating an egalitarian society was part of her beliefs.

4.5.1 **Teacher's Consideration of Social Development and Social Inclusion**

T5 believes that cultural tradition in society influences social development in children, where families play an important role. She also believes teachers and parents should agree to cooperate together. When discussing social inclusion, she refers to the capability of people with disability to interact with society in the broader sense: *'live with other people, to understand them'*. T5 feels this begins early in life, with the support of family. However, she argues that social interaction should be part of teaching in school from early years, with at least one special lesson weekly (Appendix K1). She personally takes advantage of any opportunity presented during the school-day to do so.

4.5.2 **Teacher Recognises Benefits of Social Interaction**

T5 thinks that encouraging a student with autism interact with others brings benefits: *'because the child starts playing games, for example, they bring their cars or stickers album, there is an exchange of things, there is constant interaction'*. However, she is also concerned about the risks of bullying (Appendix K8). On the other hand, she thinks this interaction might benefit peers *'because other classmates realise that not everything is normal or easy'*.

4.5.3 **Teacher Mediates the Interaction between Students**

T5 considers her mediator role *'really important'*, especially in terms of modelling the behaviour of the students (Appendix K2). She explains to students how an individual with ASD experiences life and ASD in general. She also highlights the importance of informing children about differences. She feels very lucky her school has had an autism-friendly environment for the last three years.

(Appendix K3). Her mediating role consists of approaching the parents of the student with autism. Here she gives them information about the classroom. Moreover, she informs the parents that she would like to discuss the topic of ASD with the students. Therefore, she shares information with the other students and their parents before school term begins (Appendix K4).

4.5.4 Teacher Creates Conditions for the Students to Develop Social Interaction

She uses psycho-drama in class, this helps the students discuss feelings (Appendix K5). To avoid any child being left out, she adopts specific strategies. For example, asking peers who would like to sit with the child with ASD. Creating circle-time to discuss positive aspects of each child is another tactic T5 implements (Appendix K6). To help develop social interaction she aims to find some common interest between the child with ASD and peers (this could be a video-game). She also works on individual skills, while encouraging the student to interact with others. Here she is also concerned about how other students communicate, which the ASD child might find difficult to cope with (Appendix K7). Overall, she finds it easy to create conditions for social interaction.

4.5.5 Teacher's Skills in Teaching Students with ASD

T5 considers herself having substantial experience given all the years she has taught students within the ASD: *'I am now experienced with these children. It is not new for me'*. She had some training in autism at university. However, the main focuses of her study were special pedagogy and Roma-people studies. She also had some additional training in ASD while working with a two-afternoon section, giving 8-hour training in total. This is also associated with a monthly supervision from an organisation specialised in inclusion for students with autism. However, she feels the main problem with the training's theoretical aspects was that it did not always work in practice (Appendix K12). She also uses internet to improve knowledge, and she believes she would benefit from outsiders (professional or parent of child with autism) attending school to give her some extra training in social interaction.

4.5.6 **Teacher's Challenges when Encouraging Social Interaction**

Several challenges were recognised by T5. For example, the behavioural characteristic presented within each student she worked with: aggressive behaviour, cognitive level, atypical behaviour, etc. (Appendix K9). Subsequently, another aspect enforcing her believing inclusion of students with autism might not always be feasible, refers to a large number of students in class (Appendix K10). Furthermore, T5 highlights the challenges of social inclusion presented at older age. Issues such as puberty, and the natural desire of students to create hierarchy in classrooms. She experienced how some older students approaching high school, felt the student with autism took away their learning time, as he required constant attention by the teacher. Finally, she feels different interests might lessen interaction (Appendix K11).

4.6 **Discussion and Interpretation of the results**

From the analysis of my data, it appears evident that all interviewee-teachers recognise the importance of social development for the inclusion of all pupils. They consider school, in partnership with family, responsible to help children socially develop. I find this remarkable, since it shows that my informants consider social interaction a fundamental aspect of school education. This aligns with Krogh's idea (1994) of social interaction as a means to enhance social development in children, previously discussed in the literature review. It begins with the family then expands into school-contexts with teachers and peers. The interviewee-teachers have differing opinions regarding social inclusion. Some see it as the ability of individuals to interact within the community, through the support of family and others. Alternatively, some view it more as society's task to better recognise and appreciate diversity. Despite this slight divergence, it shows that all my informants seem to be aware of the current educational legislation of Czech Republic, since the agreement of the Joint Memorandum on Social Inclusion in 2003 (Sirovátka & Rákoczyová, 2007). Particularly, T1 and T4 seem to reinforce Boys's idea of inclusive education as a model that appreciates diversity, aiming to establish inclusive society (in Jones et al., 2005). Interestingly, only these two teachers refer to the support of specialised professionals regarding social development for students with ASD.

The responses from interviewee-teachers indicate they all recognise the importance of their mediation on socialisation in children. Some suggest their actions help create understanding with peers, while others emphasise the idea of teacher as role model. In the literature review the importance of Mediated Learning Experience is also highlighted. For example, Feuerstein (1997, p. 276) states that 'the mediator has a very crucial role in the development of this flexibility of the human being, [and it] will affect the child's level of awareness, create a consciousness of the observed experience'. Moreover, the concept of role model is investigated in Kozulin et al.'s study (2010), demonstrating that teachers' commitment as the model/mediator positively influences the results of any intervention. Each teacher interviewed was asked to identify how their mediation would help prevent exclusion of the student with ASD. Some rely more on school events and projects. They appear to agree with Terpstra and Tamura (2008) who state that approaches aiming at increasing socialization in mainstream schools should be considered. Moreover, my informants often employ preventative measures by preparing, explaining and guiding peers. I feel this is an excellent method considering previous studies, which stress that the end result of inclusion might be reduced to a merely physical placement, if this is not properly supported and planned (Ferraioli & Harris, 2011; Chamberlain et al., 2007).

Also of interest is the stance taken by T2, when respecting the student's wish not to be classified with ASD. Therefore, avoiding discussion of this pupil with his peers. However, on the day of my observation in T2/T3's class, without prior agreement, I was introduced to the student by T3. I had the impression T3 informed the student of my visit and, although she spoke in Czech, I heard her mentioning '*Aspergerův Syndrom*' in front of the child. This point leads me to raise two issues. Firstly, the inconsistency between what T2 claims and T3's actions, despite both working together. This reminds me of the problem of communication between staff, which arose in other interviews and it will be also discussed later in the chapter. Secondly, the problem of labelling. Here I might reflect on Vygotsky's premise when stating that 'a child with disability must be accommodated with experiences and opportunities that are as close as possible to the mainstreamed situation, but not at the expense of "positive differentiation"' (cited in Kozulin & Gindis, 2007, p. 350). Here, of course prioritizing the individual's wish is fundamental. However, we should bear in mind that this might bring us back to the problem of 'merely physical placement' as discussed above. In fact, during T2's observations, I noted that the classmate visibly showed his disappointment after being chosen by S2/3 to pair-work. This reveals the challenge of classmates holding stereotypical or prejudicial views previously discussed. Therefore, I agree with Humprey (2008) and others, who highlight the

importance of encouraging students to adopt positive attitudes in classrooms. Moreover, some studies argue that making peers aware of ASD leads to increased social initiatives (Owen-DeSchryver et al., 2008; Kamps et al., 2002; Morrison et al., 2001; Koenig et al., 2010; Harper et al., 2008; Krebs, 2010).

Some interesting considerations arise when discussing how interviewee-teachers create conditions for the student with ASD to develop social interaction. For instance, when I observed T1's student frequently picking his nose, I thought this might inhibit social interaction, since peers might find it inappropriate. Therefore, as a point of clarification I asked what strategy T1 had implemented to help S1 prevent this behaviour. T1 states that she often reminds S1 that he is not allowed to pick his nose. Also, if she notices this during class, she signals to him to stop. However, my observations indicate this strategy lacks efficient results. As an alternative, T1 might use different principles of intervention aiming to assist S1's autonomy to control impulses. This is also discussed by Hill (2004) and others in the literature review, when arguing the individuals with ASD might present weak impulsive control. In this case, usage of pictures/images on his desk, to remind him to blow his nose with a tissue rather than using the finger might well prove more successful.

Overall, from the analysis of my empirical data, it appears evident that the interviewee-teachers do not dedicate sufficient time on teaching social skills at individual level. T3 seems to be the only exception, who, I should remind, is a TA. I believe this is an important issue for consideration in view of comments arising from the interviews. For example, T2 believes supervising the student with autism is a TA's task. She also claims a lack of time leads her to prioritize more academic subjects. Therefore, some questions arise from the review of my analysis: why do some interviewee-teachers present some gaps in teaching social skills to the student? Is this due to lack of time and resources, as claimed? Is it because academic teaching has the priority? Do they consider this a specialised task for teaching assistants only? And finally, is this because of lack of specialised knowledge? The issue of guiding the learner into meaningful inclusion within school has been at the centre of my investigation during the development of my literature review. Research confirms that learning social skills, while reducing the child's challenging behaviour, should be considered a fundamental aspect of the educational process. The aim here is to maximize socialization between the individual and his/her peers (Eldevik et al., 2012; Ferraioli & Harris, 2011; Von Der Embse et al., 2011; Humphrey, 2008). In addition, other studies (such as, Sansosti & Powell-Smith, 2006,

cited in Rao et al., 2008; White et al., 2007, Tse et al., 2007, Ryan & Charragáin's, 2010) support the idea of working at the individual level at an early stage.

The above issue leads me to another aspect of this investigation. This refers to teachers' skills in teaching students with ASD. The majority of my informants did not undertake intensive specialist courses in ASD. However, some interviewee-teachers relied on self-learning (reading books, gathering information through internet, exchanging opinions with other professionals) and positive attitudes. Furthermore, other informants state that they learned from their everyday experiences. However, theory versus practice is an issue which arises frequently during the analysis of data. Here the informants allege that they find training too theoretical, and rather difficult to put into practice: *'[...] the problem is that there are lots of things that they have to study as a teacher [...] it was too theoretical, and actually practicing teaching is rather different [...] the main problem with the training's theoretical aspects was that it did not always work in practice'*. Finally, all interviewee-teachers, with the exception of T4, state they would appreciate further tutoring in social interaction. However, T4 recommends all teachers should have a basic knowledge in autism.

All my informants consider break-times as a good opportunity for the student with autism to relate with the rest of the class. In most of the cases this comes about without their support. This strategy seems to agree with what was previously discussed in the literature review. Here peers are considered more successful than adults in nurturing skills within the natural habitat. Therefore, these are more likely to be generalized in daily life (Chan et al., 2009). However, sometimes the teachers' role as facilitator could have helped prevent situations of isolation or negativity. Overall, it is remarkable to note that all interviewee-teachers recognise benefits in social interaction. They see positive advances in the individual's perspective such as, communication, participation, social skills and independence. Their opinions confirm Wolfberg & Schuler's (1993) findings based on Vygotsky's Zone of Proximal Development. Here, results show the importance of peer support during play activities for cognitive improvements. Moreover, teachers noted improvement in peers' awareness of differences within society, and learning from the general knowledge of the student with autism. Therefore, not only the child with autism's ZPD is developed by interacting with the classmates, but also those of peers. This is because the students are encouraged to engage in more sophisticated mental processes and strategies.

During my interview with T1, when asked how she might improve her own knowledge she replied with a joke: *'What I need is more information about nuclear energy and more information about life of animals'*. This comment, although intended as a joke, led me to consider the challenges presented when the individual's interests vary consistently from his/her peers. This is reflected in my literature review on the possible challenges typically developing students can face when interacting with the student with autism (Reiter & Vitani 2007, cited in Locke et al., 2012). Moreover, Boyd et al. (2007), observe that some behaviour displayed by students with ASD, might interfere with their group participation. This issue is also raised by my informants. Ageing is another challenge identified by the interviewee-teachers, which easily leads to isolation from mainstream peers. Other studies confirm this, stating that poor quality in friendship exacerbates with age (Roth, 2010; Jones & Frederickson, 2010; Humphrey, 2008; Kasari et al., 2011; Cappadocia et al., 2012). Other challenges highlighted include a lack of time, support and resources. This point leads me to recall of the situation in the Czech educational system. Here limited resources and lack of awareness result in over-reliance on singular teachers rather than implementation of an effective overall strategy. Therefore, despite legislative initiatives, it seems that challenges remain when theories are put into practice, highlighting possible inadequacies in monitoring of the entire system (Česká Školní Inspekce, 2010; Pokorná, 2005).

Some unexpected findings are also extrapolated from the analysis of data. For example, the issues presented when other professionals are involved, in particular TAs. I have previously mentioned the lack of consistency between T2's beliefs and T3's actions. As I said, this topic also arises in other interviews. Here I found incidences of teachers feeling threatened by the presence in class of their own assistants, leading to miscommunication. Also, situations where the student with autism respected only the role of the main teacher, while discrediting TA's role. Finally, some interviews highlight the need to advocate a more active involvement for TAs, within the decision-making process, rather than being passive spectators. During my visits to classrooms, I had the opportunity to observe three TAs. T3 (who is also part of the study). T1's TA (TA1) and T4's TA (TA4). The approach used in T1's class aimed to render the student with ASD as independent as possible. Therefore, TA1 assumed a detached profile with the student with autism, while also intervening with other students. Conversely, TA4 appeared to be very close to the student, sitting with him much of the time, even during groups. In one instance, I noted this approach deterred the student from socialising with his peers. For example, one day the students were sitting on their bench awaiting the teacher's arrival. It was interesting to note the disposition of the students sitting at the

bench. To one side there was a group of students chatting, while at the opposite end there was TA4 and the individual with autism. When asked, T4 stated that TA4's presence is essential for the student during transition time, as he displayed some anxiety during this time. This is a valid point, which has been also investigated in my theories. Anxiety is a feature that might have cognitive based explanations in autism such as Weak Central Coherence. It refers here to the challenge the individual faces when trying to integrate different outputs of information into a coherent context (Happé & Frith, 2006; Roth, 2010; Bogdashina, 2005b; Huxley, 1954, cited in Bogdashina, 2005a). In presence of WCC, the learner may become somewhat overwhelmed and subsequently anxious. This may occur in situations such as transitions at school, which lack structure. However, in this particular case, I wonder if this 'overprotecting' approach is in itself limiting the pupil's social inclusion.

As a final question in my interviews, teachers were asked to signify three most important things that make teaching social interaction successful. The answers included were: '*[...] patient, sensibility and understanding (T1) [...] pupils must trust the adults; classmates need to understand the child and vice-versa; teachers, family and society in general must be perceptive (T2) [...] trust all the students they will be able to cope with this situation, give them opportunity to assist the ASD child when in need, to give them information (T3) [...] co-operation, creativity and sense of humour (T4) [...] personality of teacher, motivation, atmosphere (T5)*'. Interestingly, none of the interviewee-teacher referred to the need of additional tutoring in social interaction and ASD.

4.7 Summary

In this chapter I have analysed and discussed data from the interviewee-teachers. The six themes extrapolated aimed to uncover the main concepts and give fuller understanding to my study's criteria. Firstly, teachers' awareness of the requirements for students to interact and be socially included (their perceptions and attitudes). Also, what knowledge they share to support the learners' needs (their skills and strategies). Finally, the unforeseen findings regarding challenges faced. While conducting the data-analysis, new concerns arose from the teachers' responses. Therefore, my research questions have evolved as the study progressed. In the following chapter I will discuss how additional questions were created in response to that. This strategy is also typical within the interpretive/constructivist paradigm.

5 Conclusions and Recommendations

5.1 Introduction

This study aimed to provide an accurate depiction of how the interviewee-teachers in Czech mainstream schools, generate opportunities for meaningful social inclusion for the learners with ASD. I reviewed their knowledge and experiences, and how they respond to challenges. By undertaking this investigation, I have uncovered the demanding processes my participants experience when working with students facing challenging conditions such as autism. Specific research questions assisted me as I attempted to illustrate some key issues, with some aspects evolving as the study progressed:

- How do teachers of learners with ASD support these learners' needs for interaction?
- How do teachers of learners with ASD support these learners to develop social skills?
- What are the challenges teachers face when encouraging social interaction in classrooms?

In this section I will revisit the research questions as above, while summarizing my data analysis. I will then comment on the implications of the findings, including suggestions for further research, policy and practice. Furthermore, I will discuss the methodology used, highlighting its weaknesses and strengths. Finally, I will reflect on how this research might influence my practice in my own context, and any impact it may have for the future.

5.2 Summary of findings and conclusions

Based on the discussion of findings, the main conclusions of the research can be drawn as follows. In this part three sub-sections will be extrapolated with the aim of answering the research questions. The first of these refers to the teacher's awareness and attitudes in relation to social interaction. This is considered a pre-condition, which then fosters the teachers to develop expertise in order to support the students' interactive process. If a teacher does not consider social interaction in classroom an important matter, consequently no interest in gaining skills will be shown. This leads me to the second sub-section. This refers to their mediating role to facilitate interaction and understanding amongst the students. Also, the conditions they create in practice, and how they work individually to help the child with ASD acquire meaningful social skills. I will then finalize the conclusions in the third sub-section on the challenges teachers face. This key issue has evolved as the study has progressed, subsequently changing my research questions. I consider this an important component within my analysis. Challenges might affect teachers' attitudes and impact on their subsequent actions and practices. A diagram explaining how the sub-sections interrelate is shown below in Figure 5.1:

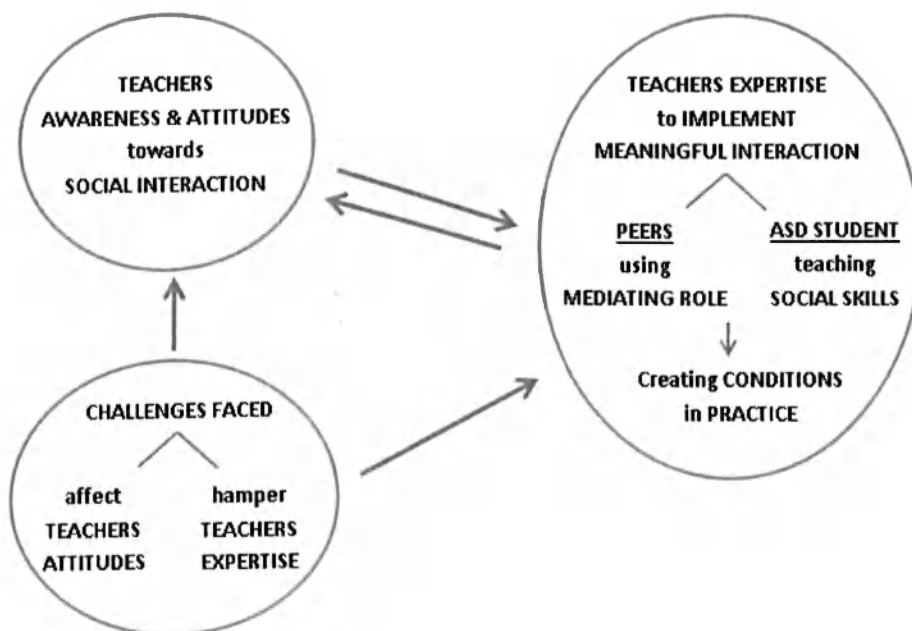


Figure 5.1 Diagram showing how the three sub-sections interrelate to and impact on teachers' abilities to encourage social interaction.

5.2.1 Teachers' Awareness of Needs for Students to Interact and Be Socially Included

My findings from the analysis of data provide evidence that generally interviewee-teachers recognise the importance of social development for the inclusion of all pupils. They consider school, in partnership with family, responsible for helping children socially develop. In terms of social inclusion, despite some slight divergence in opinions, it shows that overall all my informants have awareness of the current educational legislation in the Czech Republic. Furthermore, all participants recognise benefits in social interaction. They see positive advances in the individual's perspective such as, communication, participation, social skills and independence. Moreover, teachers note improvement in peers' awareness of differences within society, and in learning from the general knowledge of the student with autism. A significant factor in this regard is that teachers' awareness, perceptions, attitudes and beliefs create the appropriate conditions to encourage social interaction in classrooms. This seems to dictate their motivation to learn and improve in practical terms. Here, their behaviour is influenced by their personal beliefs, increasing their ability to make a difference. Therefore, being aware of the benefits of socialization within classrooms is already a desirable pre-condition. This motivates teachers to further their expertise.

5.2.2 Teachers' Strategies and Skills in Support of Students' Needs

Another significant conclusion arising from this research is that all interviewee-teachers recognise the importance of their mediation on socialisation in children. They believe this helps create understanding with peers. Here, the idea of teacher as role model is also emphasized. The participants also identify how their mediation might help prevent exclusion of the student with ASD. My informants often employ preventative measures by preparing, explaining, guiding and encouraging peers. This with the exception of where the student with autism wishes not to be 'labelled'. Other mediating strategies include pre-term parents meetings, redirecting students if problems arise, instructing on how peers might give support, and praising and reinforcing desirable

actions. The importance of informing children about differences is also a common strategy, alongside creating projects on subjects where everyone can participate. All informants consider break-times a good opportunity for the student with autism to relate with the rest of the class. In most of these cases this comes about without their support. However, sometimes the teachers' role as facilitator could have helped prevent situations of isolation or negativity.

Other considerations arise when examining how interviewee-teachers create conditions for the student with ASD to develop social interaction. For instance, school events and projects, or formulating activities within the classroom (structured teaching, use of teaching assistants, pair work, group work, play groups and drama). In addition, they create conditions where anyone can intervene. Some let the individual choose his/her pair or vice-versa, some ask peers to volunteer to associate with the child. Finally, some try to locate some common interest between the child with autism and peers.

Overall, from the analysis of my empirical data, it appears evident that the interviewee-teachers do not dedicate sufficient time on teaching social skills at individual level. T3 seems to be the only exception. The above issue leads me to another aspect of this investigation. The majority of my informants did not undertake intensive tutoring in ASD. Some rely on self-learning, everyday practical experiences and positive attitudes. As a final question in my interviews, teachers were asked to signify three most important things that make teaching social interaction successful. Interestingly, none of the interviewee-teacher referred to the need for educational preparation in social interaction and ASD. However, the majority of the teachers would appreciate further tutoring in this topic.

An important conclusion can be drawn here, which is verified by their previously stated beliefs. All interviewee-teachers present remarkable competence as a mediators. They also continuously create opportunities to facilitate the interaction and understanding amongst the students. The strategies implemented by the participants of this study aim to create the conditions in which all students feel they are part of the group. Making students aware of differences builds the basis for development of a sense of acceptance and understanding. The teachers' aim here is to create in children the ability to perceive their environment more egalitarian and inclusive. However, some gaps are encountered

on how the teachers work on an individual basis to help the child with ASD to acquire meaningful social skills. Some questions arise resulting from this: why do some interviewee-teachers display some gaps in teaching social skills to the student? Is this due to lack of time and resources? Is it because academic teaching has the priority? Do they consider this a specialised task for teaching assistants only? And finally, is this due to a lack of specialised knowledge? These questions lead me to the third sub-section, wherein I will discuss the challenges faced by the participants, which might hamper the implementation of social interaction.

5.2.3 Teachers' Challenges when Encouraging Social Interaction

Evidence of the challenges encountered by the participants is supported by other research findings. Some teachers experienced obstruction while cooperating with parents, particularly when facing problems with classmates who held stereotypical or prejudicial views. The number of students in classroom is another issue which impacts on other structural problems such as: lack of available time, support and resources. These factors lead some teachers to prioritize more academic subjects. Moreover, my observations indicate that challenges are presented at a practical level, when strategies used have insufficient success. This might be a result of inconsistent or ineffective tutoring. Theory versus practice is an issue which arises frequently. Here, the informants allege that they find courses on ASD too theoretical, and often difficult to put into practice. Other challenges may arise dependant on the individual with autism's characteristics. For example, when the student's interests vary considerably from his/her peers, or when the student's behaviour interferes with group participation. Ageing is another identified issue. Finally, there is some evidence of unexpected friction with the involvement of other professionals, in particular TAs. Here, some problems arise, such as miscommunication, teachers feeling inhibited by the presence in class of their own assistants, and TA reduced to being passive spectators. These are added to the issue of TA assuming an 'over-protective' approach. Moreover, some teachers have a view that supervising the student with autism is exclusively a TA's task. Again, this might lead to a breakdown of communication between staff.

As a result of these findings, I can conclude that difficulties may also arise with respect to teachers encouraging social interaction. Circumstances may hamper teachers' ability to foster social

inclusion. If teachers have a positive attitude towards the benefits of social relationships in classroom, they are more likely and willing to improve on their expertise. However, if too many challenges jeopardize the facilitation of this process, the risk is that teachers will neglect the importance of social interaction in schools. Therefore, tackling these challenges becomes a priority for those who are responsible for raising the professional level of teaching in the Czech context. This issue leads me to the next section, where suggestions for further research, policy and practice will be discussed.

5.3 Recommendations

In view of my study, the following observations and recommendations may help improve on future research, policy and practice. The interviewee-teachers recognise the importance of social development for the inclusion of all pupils. As a result, they fulfil an important role in mediating the interaction of students in their classrooms. However, there are some lapses on how teachers work on an individual basis to help the child with ASD to achieve social inclusion. Furthermore, unexpected findings show that interviewee-teachers face some challenges. Within this section, cooperation with other people and ineffective tutoring will be examined in-depth.

A few suggestions may be put forward with respect to teachers acknowledging the importance of socialization in classrooms. At a practical level, the school management should reinforce this tendency and encourage teachers to increase the interaction amongst students, making this mandatory. Regarding curriculum implementation, topics such as Democratic Citizenship, included in cross-cultural subjects within Basic Education, should be reinforced from Preschools. Moreover, charge-free Kindergartens would certainly encourage the earliest possible entry into the school system, and introduce children to the process of socialization. This recommendation provides a number of benefits. For example, students become aware of being members of the community at an early stage in their lives. Moreover, the authority of headmasters reinforcing the concept of social interaction within classrooms, would encourage teachers to work more on this aspect. Thus, there will be less over-reliance on singular teachers and more of an overall school approach.

Another suggestion is to look at possible avenues for future research. For example, with reference to the role of teacher as mediator, it would be interesting to discover how this is perceived by fellow pupils or parents. Two targets can be identified here. Firstly, to undertake a qualitative investigation on peers' perspectives on the teachers' mediating role. Here, the implementation of focus-groups might be appropriate to uncover students' feelings and perceptions of their teachers' support. How they experience this, with regard to the development of better social interaction with the child with autism. Secondly, a case-study investigating the student with ASD's opinion on his/her mediated social experience would also be of interest. These recommendations might help teachers have more awareness of the implications their role might have on students.

Other related areas of study that might benefit from further recommendations refer to the challenges teachers face. In particular, issues encountered when cooperating with other people and receiving tutoring support which they consider ineffective. The involvement of more than one professional is typical in educational settings. An ideal condition would be for higher institutions in the Czech Republic to offer guidance to future teachers on working in multi-disciplinary settings⁷. This may provide several benefits for future teachers, without prior experience of team-work, to maximize their later effective collaboration. An additional comment on the interviewee-teachers' problem in generalising what they learn in courses is important. I recommend support from specialised professionals should be revised. This should identify which approach best suits teachers' needs. As presently, these directives are considered to be excessively theoretical. Therefore, autism-skilled instructors should re-consider how this is delivered, perhaps by re-modelling their strategies into a more practical approach. This will render the transferability from theory to practice more feasible and effective.

Finally, encouraging more positive involvement of TAs, and making their contributions more effective is another issue which should be tackled by the school as a whole. Creating an 'inclusion' friendly environment might lead to a better way of working together, which headmasters can

⁷ I refer here with the concept 'multi-disciplinary' as the essential condition through which all professionals involved combine their experiences and knowledge to make decisions, which might benefit from each of their fields of expertise. James & Buffer (1985, p. 148) assert that 'the multidisciplinary concept is based on the premise that experts in various fields, working together to reach a common goal, will achieve more than researchers working alone'.

reinforce within their institutions. Here I refer to Alur's idea on inclusion (in Barton & Armstrong, 2008, cited in Di Giuseppe, 2011). He advocates a change in emphasis from the specialist or hierarchical model to that of co-operation and collaboration. Powell (in Jones et al., 2005, also cited in Di Giuseppe, 2011) states that to have an effective collaboration it is fundamental that professionals, while having appreciation of the same cultural circumstances, come together to decide the best course of action. Therefore, my study might be used as a foundation for Action Research, with the involvement of TAs. This would act to increase their feelings of self-worth and confidence, enhance their competence, encourage collaboration and participation, and promote mutual respect (as stated in Cohen et al., 2011, p. 346 - 348).

5.4 Weaknesses and Strengths of the Methodology Used

This research project was a rewarding experience. I have considered it a learning process, transforming my student attitudes into that of a more professional researcher. Therefore, reflecting on lessons learned, I find encouragement to improve further from my own experiences. For example, using a case-study strategy was a positive approach, since this helped me to understand the real situation of teachers in the Czech Republic. This case study is not representative of all schools in the country. However, I hope that my study will inspire other professionals to transfer the knowledge in their own context. I found triangulating different tools while collecting data very effective. This helped me gather more information from different angles and viewpoints. Through reflective field-notes, additional considerations emerged, which were also discussed as ethical issues. The interviews helped me assess teachers' knowledge. At the same time, the intention of my observations was to uncover any inconsistencies in what my informants had reported. Volunteering in a special school was helpful for my piloting. Here I could revise my questions, and my interpreter practice.

Although my study has achieved its purpose, I should also recognise that this research presents limitations. My individual and cultural background might have had some influence. During the interviews, I realised that some questions were not leading in the direction I had planned. Therefore, not as beneficial as hoped. Not having a professional interpreter (although both my translators work in the field of special education, therefore familiar with technical terminology), presented some

limitation when trying to examine more in-depth with my informants. My main concerns were both the shortage of time and language barriers. These sometimes limited my perception of the entirety. Having more time to observe teachers would have helped me to review the implementation of the programmes previously mentioned in interviews. While transcribing the data I found it difficult to perceive some of the teachers' answers, as they could not be heard clearly. So, some data was omitted. With the convenience sampling strategy, I did not have control of the selective process. Therefore, I could not select participants randomly. Finally, two other technical issues limited this study. Firstly, I did not create any analytic strategy at early stage of my research. Yin (2009) recommends to consider the 'analytic phase' when developing the case study protocol. Furthermore, he states that my mistake is typical amongst novice researchers. Secondly, using 'member checking' (Creswell, 2009) to determine the accuracy of my findings was not possible as a result of language barriers and logistic issues in arranging meetings with the interpreters. Also, I have to report that my only English speaking participant, perhaps due to other commitments, was unavailable for further meetings and failed to respond to emails.

In conclusion, this experience gave me several inspiring insights, from which I am creating the basis for a future project on my return to Italy. Here I would like to undertake an Action Research on the same topic. However, my focus will be teaching assistants. To begin with, I will adopt the same triangulating strategy when collecting data. Then, I will actualize the Action Research, through first-hand tutoring. During this process I will have in mind one of the challenges identified in this research. Therefore, my support aims to facilitate the generalisation of skills, by using teaching assistants' instances observed in class, and associate these with the theories. I will return to observe and assess any changes in practice. Finally, I will again interview teaching assistants to analyse the perceived benefits and challenges. The advantages here are that I will speak the same language as the participants, while being familiar with the contextual cultural background.

Bibliography

- Ainscow, M. (2005). Developing inclusive education systems: what are the levers for change? *Journal of Educational Change*, 6, 109 – 124.
- Alur, M. (2008). The lethargy of a nation: inclusive education in India and developing systemic strategies for change. In L. Barton & F. Armstrong (Eds.), *Policy, experience and change: cross cultural reflections on inclusive education* (pp. 91 – 106). Springer.
- Anderson, S. (2001). Social inclusion in compulsory schooling in Norway: reflections on the 1994 and 1997 reforms. In S. Tawil (Ed.), *Curriculum change and social inclusion: perspectives from the baltic and scandinavian Countries. Final report of the regional seminar held in Vilnius, Lithuania, 5 – 8 December 2001* (pp. 80 – 85). UNESCO
- Astington, J. W., & Baird, J. A. (2005). *Why language matters for theory of mind*. Oxford University Press.
- Baron-Cohen, S. (1990). *Autismo: un trastorno cognitivo específico de 'ceguera de la mente'*. [Translated by Alonso, E.], officially published in *International Review of Psychiatry* (1990), 2, 81 – 90.
- Baron-Cohen, S. (1997). *Mindblindness. An essay on autism and theory of mind*. London: A Bradford Book.
- Baron-Cohen, S. (2001). Theory of mind and autism: a review. *Special issue of the international review of mental retardation*, 23 (169), 1 – 35.
- Baron-Cohen, S. (2006). Empathy. Freudian origins and 21st-Century neuroscience. *The Psychologist*, 19 (9), 538 – 537.

Bassie, M. (1999). *Case study research in educational settings*. Buckingham: Open University Press.

Bauminger, N. (2002). The facilitation of social-emotional understanding and social interaction in high-functioning children with autism: Intervention outcomes. *Journal of Autism and Developmental Disorders*, 32 (4), 283 – 298.

Bernstein, J., Altimas, J., & Di Giuseppe, K. (2010). *In the land of Summit*. Montreal: Blurb Publications.

Bevan, N. (2011). Discrimination in the Czech education system: Advocating for an inclusive agenda. *Minority rights now!* Issue 5, Spring-Summer 2011.

Bodrova, E., & Leong, D. J. (2007). *Tools of the mind. The Vygotskian approach to early Childhood education*. Pearson.

Bogdan, R., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods*. Pearson.

Bogdashina, O. (2005a). *Communication issues in autism and Asperger syndrome. Do we speak the same language?* London: Jessica Kingsley Publisher.

Bogdashina, O. (2005b). *Theory of mind and the triad of perspectives on autism and Asperger syndrome: A view from the bridge*. London: Jessica Kingsley Publishers.

Bogdashina, O. (2004). *Sensory perceptual issues in autism and Asperger syndrome*. London: Jessica Kingsley Publishers.

Boyd, B. A., Conroy, M. A., Mancil, G. R., Nakao, T., & Alter, P. J. (2007). Effects of circumscribed interests on the social behaviors of children with autism spectrum disorder. *J Autism Dev Disord*, 37, 1550 – 1561.

Boys, R. (2005). Integration, inclusion and diversity. In L. Jones, R. Holmes & J. Powell (Eds.), *Early childhood studies. A multiprofessional perspective* (pp. 126 – 138). Open University Press.

Burgess, R. G. (1989) Ethics and educational research: An introduction. In R. G. Burgess (Ed.), *The ethics of educational research*. The Falmer Press.

Cappadocia, M. C., Weiss, J. A., & Pepler, D. (2012). Bullying experiences among children and youth with autism spectrum disorders. *J Autism Dev Disord*, 42, 266 – 277.

Česká Školní Inspekce (2010). *2009/2010 Annual report of the Czech School Inspectorate*. Czech School Inspectorate, Prague.

Chamberlain, B., Kasari, C., & Rotheram-Fuller, E. (2007). Involvement or isolation? The social networks of children with autism in regular classrooms. *J Autism Dev Disord*, 37, 230 – 242.

Chan, J. M., Lang, R., Rispoli, M., O'Reilly, M., Sigafos, J., & Cole, H. (2009). Use of peer-mediated interventions in the treatment of autism spectrum disorder: A systematic review. *Research in Autism Spectrum Disorder*, 3, 876 – 889.

Clough, P., & Corbett, J. (2006). *Theories of inclusive education. A student's guide*. London: Paul Chapman Publishing Ltd.

Cohen, L., Lawrence, M., & Morrison, K. (2011). *Research methods in education*. New York: Routledge.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* – 3rd ed. Los Angeles: SAGE.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* – 2nd ed. Los Angeles: SAGE

Cumine, V., Leach, J., & Stevenson, G. (1998). *Asperger syndrome, a practical guide for teachers*. London: David Fulton Publishers.

Di Giuseppe, K. (2012). *Disability in the context of international cooperation: suggestions and implications for better practice* (Unpublished master's assignment). Charles University, Prague, Czech Republic.

Di Giuseppe, K. (2011). *The importance of family partnership within a multi-disciplinary approach to foster inclusion in school settings* (Unpublished master's assignment). Roehampton University, London, UK.

DiSalvo, C. A., & Oswald, D. P. (2002). Peer-mediated interventions to increase the social interaction of children with autism: consideration of peer expectancies. *Focus on Autism and Other Developmental Disabilities*, 17 (4), 198 – 207.

Dunlop, A.-W., Knott, F., & MacKay, T. (2002). *Developing social interaction and understanding in individuals with autism*. Project Report, University of Strathclyde, Glasgow, Scotland, U.K.

Dunlop, A-W, Knott, F., & MacKay, T. (2003, November). *Social interaction and understanding in autism. Supporting success in mainstream education for pupils with autistic spectrum disorders*. Peer reviewed paper in the published Conference Proceedings, NZARE/AARE Conference, Auckland, New Zealand. Retrieved from <http://www.aare.edu.au/03pap/dun03189.pdf>

European Agency for Development in Special Needs Education (EADSNE) (n.d). *Country information for for Czech Republic*. Retrieved from <http://www.european-agency.org/country-information/czech-republic>

Eldevik, S., Hastings, R. P., Jahr, E., & Hughes, J. C. (2012). Outcomes of behavioral intervention for children with autism in mainstream pre-school settings. *J Autism Dev Disord*, 42, 210 – 220.

Ferraioli, S. J., & Harris, S. L. (2011). Effective educational inclusion of students on the autism spectrum. *J Contemp Psychother*, 41, 19 – 28.

Feuerstein, R., Feuerstein, R. S., & Falik, L. H. (2010). *Beyond smarter: Mediated learning and the brain's capacity for change*. Teachers College Press.

Feuerstein, R., Cross, S., Cohen, B. B., Levin, S., Rathner, A., Stevens, T., Sril, T., & Faik, L. H. (1997). Early detection: Blessing or curse. *Approaches to Developmental and Learning Disorders - Theory and Practice*, 253 – 276.

Feuerstein, R., Hoffman, M. B., Rand, Y., Jensen, M. R., Tzuriel, D., & Hoffmann, D. B. (1985). Learning to learn: Mediated learning experiences and instrumental enrichment. *Special Services in the Schools*, 3 (1-2), 49 – 82.

FIMITIC – International Federation of Persons with Physical Disability (2011). *Czech Republic: Alternative report for the UN committee on the rights of persons with disabilities*. Retrieved from <http://www.fimitic.org/content/good-example-czech-republic-alternative-report-un-committee-rights-persons-disabilities>

Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research. An introduction*. Pearson Education.

Garton, A. F. (1995). *Social interaction and the development of language and cognition*. United Kingdom: Lawrence Erlbaum Associates.

Gredler, M. E., & Shields, C. C. (2008). *Vygotsky's legacy: A foundation for research and practice*. The Guilford Press.

Godwin, E. P., & McKendry, L. A. (2005). *Understanding sensory dysfunction. Learning, development and sensory dysfunction in autism spectrum disorder, adhd, learning disabilities and bipolar disorder*. London: Jessica Kingsley Publishers.

Government Board for People with Disabilities (2005). *National plan for the support and integration of persons with disabilities 2006 – 2009*. Government Resolution, n. 1004, 17 August 2005.

Happé, F. (1994). *Autism: an introduction to psychological theory*. London: UCL Press.

Happé, F. & Frith, U. (2006). The weak coherence account: Detail-focused cognitive style in autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 36 (1), 5 – 25.

Harper, C. B., Synon, J. B. G., & Frea, W. D. (2008). Recess is Time-in: Using Peers to Improve Social Skills of Children with Autism. *Journal of Autism and Developmental Disorders*.

Hedegaard, M. (2005). The zone of proximal development as basis for instruction. In H. Daniels (Ed.), *An introduction to Vygotsky* (pp. 227 – 252). New York: Routledge.

Hill, E. L., & Frith, U. (2003). Understanding autism: insight from mind and brain. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 358 (1430), 281 – 289.

- Hill, E. L. (2004). Executive dysfunction in autism. *TRENDS in Cognitive Sciences*, 8 (1), 26 – 32.
- Hopkins, B., Barr, R. G., Michel, G. F., & Rochat, F. (2005). *The Cambridge encyclopedia of child development*. Cambridge University Press.
- Hughes, C. (2011). *Social understanding and social lives. From toddlerhood to the transition to school*. Sussex: Psychology Press.
- Humphrey, N. (2008). Autistic spectrum and inclusion. Including pupils with autistic spectrum disorders in mainstream schools. *Support for Learning*, 23 (1), 41 – 47.
- Humphrey, N., & Symes, W. (2011). Peer interaction patterns among adolescents with autistic spectrum disorders (ASDs) in mainstream school settings. *Autism 2011*, 15 (4), 397 – 419.
- James, J., & Buffer, Jr. (1985). A multidisciplinary approach to human development and learning. *Theory into Practice*, 24, 2, 145 – 148.
- Jennings, J. L., & DiPrete, T. A. (2010). Teacher effects on social and behavioral skills in early elementary school. *Sociology of Education*, 83, 135 – 159.
- Jha, M. M. (2007). Barriers to student access and success. Is inclusive education an answer? In G. K. Verma, C. R. Bagley & M. M. Jha (Eds.), *International perspectives on educational diversity and inclusion* (pp. 31 – 44). London: Routledge.
- John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework, *Educational Psychologist*, 31 (3/4), 191 – 206.

Jones, A. P., & Frederickson, N. (2010). Multi-informant predictors of social inclusion for students with autism spectrum disorders attending mainstream school. *J Autism Dev Disord*, 40, 1094 – 1103.

Jordan, R. (1999). *Autistic spectrum disorders. An introductory handbook for practitioners*. London: David Fulton Publishers.

Kamps, D., Royer, J., Dugan, E., Kravits, T., Gonzalez-Lopez, A., Garcia, J., Carnazzo, K., Morrison, L., & Kane, L. G. (2002). Peer training to facilitate social interaction for elementary students with autism and their peers. *Council for Exceptional Children*, 68 (2), 173 – 187.

Kasari, C., Locke, J., Gulsrud, A., & Rotheram-Fuller, E. (2011). Social networks and friendships at school: comparing children with and without ASD. *J Autism Dev Disord*, 41, 533 – 544.

Kirk, S., Gallagher, J. J., Coleman, M. R., & Anastasiow, N. (2012). *Educating exceptional children*. Wadsworth, USA: Cengage Learning.

Koenig, K., White, S. W., Pachler, M., Lau, M., Lewis, M., Klin, A., & Seahill, L. (2010). Promoting social skill development in children with pervasive developmental disorders: a feasibility and efficacy study. *J Autism Dev Disord*, 40, 1209 – 1218.

Kozulin, A., & Gindis, B. (2007). Sociocultural theory and education of children with special needs. From defectology to remedial pedagogy. In H. Daniels, M. Cole, & J. V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 332 – 362). Cambridge: Cambridge University Press.

Kozulin, A., Feuerstein, R., & Feuerstein, R. (2001). Mediated learning experience paradigm in teacher training. *Opening Gates in Teacher Education*, Jerusalem: International Center for the Enhancement of Learning Potential.

Kozulin, A., & Presseisen, B. Z. (1995). Mediated learning experience and psychological tools: Vygotsky's and Feuerstein's perspectives in a study of student learning, *30* (2), 67–75.

Krebs, M. L., McDaniel, D. M., Neeley, R. A. (2010). The Effects of Peer Training on the Social Interactions of Children with Autism Spectrum Disorders. *Education*, *131* (2), 393–403.

Krogh, S. L. (1994). *Educating young children: infancy to grade three*. McGraw-Hill College.

Kvale, S. (1996). *Interviews. An introduction to qualitative research interviewing*. Thousand Oaks: SAGE.

Lewis, C., & Carpendale, J. (2009). Introduction: Links between social interaction and executive function. *New Directions for Child and Adolescent Development*, *123*, 1–15.

Locke, J., Rotheram-Fuller, E., & Kasari, C. (2012). Exploring the social impact of being a typical peer model for included children with autism spectrum disorder. *J Autism Dev Disord*, *42* (9), 1895–1905.

Maxwell, J. A. (2005). *Qualitative research design: An interactive approach - 2nd ed.* Thousand Oaks: SAGE.

Melrose, S. (2009). Naturalistic generalization. In A. J. Mills, G. Durepos & E. Wiebe (Eds.), *Encyclopedia of case study research*. Thousand Oaks, CA: Sage Publications.

Mentis, M., Dunn-Berstein, M., & Mentis, M. (2008). *Mediated learning. Teaching, tasks, and tools to unlock cognitive potential*. Thousand Oaks, CA: Corwin Press.

Mertens, D. M. (1998). *Research methods in education and psychology. Integrating diversity with quantitative and qualitative approaches*. Thousand Oaks, CA: SAGE Publications.

Mesibov, G.B., Shea, V., & Schopler, E. (2005). *The TEACCH approach to autism spectrum disorder*. New York: Kluwer Academic/Plenum Publisher.

MEYS (2008). *National Report on the Development of Education, Series 2008, Czech Republic*. Ministry of Education, Youth and Sports.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis - 2nd ed*. Thousand Oaks, CA: SAGE.

Mitchell, D. (2009). *Contextualizing inclusive education. Evaluating old and new international perspectives*. London: Routledge.

Morrison, L., Kamps, D., García, J., & Parker, D. (2001). Peer mediation and monitoring strategies to improve initiations and social skills for students with autism. *Journal of Positive Behaviour Interventions*, 3 (4), 237 – 250.

National Association of School Psychologists (NASP) (2010). *Social skills: promoting positive behavior; academic success, and school safety*. Retrieved from http://www.nasponline.org/resources/factsheets/socialskills_fs.aspx

National Autistic Society (NAS) (2012) *About autism*. Retrieved from <http://www.autism.org.uk/about-autism.aspx>

Oppenheim, A. N. (1992). *Questionnaire design, interviewing and attitude measurement*. London: Pinter.

Ozonoff, S., Rogers, S. J., & Hendren, R. L. (2003). *Autistic spectrum disorder: A research review for practitioners*. Washington: American Psychiatric Publishing.

Owen-DeSchryver, J. S., Carr, E. G., Cale, S. I., & Blakeley-Smith, A. (2008). Promoting social interactions between students with autism spectrum disorders and their peers in inclusive School Settings. *Focus on Autism and Other Developmental Disabilities*, 23(1), 15 – 28.

O'Driscoll, J. (2009). Erving Goffman. In F. Brisard, O. Östman & J. Verschueren (eds.), *Pragmatics of interaction* (pp. 79 – 95). Amsterdam: John Benjamins Publishing Company.

Palincsar, A. M., Brown, A. L., & Campione, J. C. (1993). First-grade dialogues for knowledge acquisition and use. In E. A. Forman, N. Minick, & C. A. Stone (Eds.), *Contexts for learning: Sociocultural dynamics in children's development* (pp. 43-57). New York: Oxford University Press.

Pokorná, V. (2005). Inclusive policies in the Czech Republic, with special reference to assessment practices. *Transylvanian Journal of Psychology*, Special Issue, 1, 161 – 167.

Presseisen, B. Z., & Kozulin, A. (1992, April). *Mediated learning. The contributions of Vygotsky and Feuerstein in theory and practice*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.

Punch, K. F. (2011). *Introduction to research methods in education*. Los Angeles: SAGE Publications.

Rao, P. A., Beidel, D. C., & Murray, M. J. (2008). Social skills interventions for children with Asperger's syndrome or high-functioning autism: A review and recommendations. *J Autism Dev Disord*, 38, 353 – 361.

Robinson, S., Goddard, L., Ditschel, B., Wisley, M., & Howlin, P. (2009). Executive functions in children with autism spectrum disorders. *Brain and Cognition*, 71, 362 – 368.

Robson, C. (2002). *Real world research. A resource for social scientists and practitioners-researchers*. Oxford: Blackwell Publishers.

Rogers, S. (2000). Interventions that facilitate socialization in children with autism. *Journal of Autism and Developmental Disorders*, 30 (5) 399 – 409.

Romanczyk, R. G., White, S., & Gillis, J. M. (2005). Social skills versus skilled social behavior: a problematic distinction in autism spectrum disorders. *JEIBI*, 2 (3), 177 – 193.

Roth, I. (2010). *The autism spectrum in the 21st century: Exploring psychology, biology and practice*. London: Jessica Kingsley Publishers.

Ryan, C., & Charragáin, C. N. (2010). Teaching emotion recognition skills to children with autism. *Journal of Autism and Developmental Disorder*, 40, 1505 – 1511.

Simmons, D. R., Robertson, A. E., McKay, L. S., Toal, E., McAleer, P., & Pollick, F. E. (2009). Vision in autism spectrum disorders, *Vision Research*, 49, 2705 – 2739.

Sirovátka, T., & Rákoczyová, M. (2007, September). *The strategy of social inclusion in the Czech Republic*. Paper presented at the ESPAnet conference, Vienna. Retrieved from <http://eucenter.wisc.edu/>

Šiška, J., & Novosad, L. (2007). ANED country report on equality of educational and training opportunities for young disabled people. *Academic Network of European Disability experts (ANED) – IT/2007/005*. University of Leeds.

Shakespeare, T., & Watson, N. (2002). The social model of disability: an outdated ideology? *Research in Social Science and Disability*, 2, 9 – 28.

Sperber, D., & Wilson, D. (2004). Relevance theory. In G. Ward & L. Horn (Eds.), *Handbook of pragmatics*. (pp. 607 – 632). Oxford: Blackwell.

Straková, J., Simonová, J., & Polechová, P. (2011). *Overcoming school failure. Background report for the Czech Republic*. Institute for Information on Education.

Strnadová, I., & Hájková, V. (2011). Striving for inclusive education in the Czech Republic. *Intervention in School and Clinic*, XX, X, 1 – 5.

Terpstra, J. E., & Tamura, R. (2008). Effective social interaction strategies for inclusive settings. *Early Childhood Educ J*, 35, 405 – 411.

Tse, J., Strulovitch, J., Tagalakis, V., Meng, L., & Fombonne, E. (2007). Social skills training for adolescents with Asperger syndrome and high-functioning autism. *J Autism Dev Disord*, 3, 1960 – 1968.

Turner, J. H. (1988). *A theory of social interaction*. Stanford, California: Stanford University Press.

Tutt, R., Powell, S., & Thornton, M. (2006). Educational approaches in autism: What we know about what we do. *Educational Psychology in Practice*. 22 (1), 69 – 81.

UNESCO (1994). *The Salamanca statement and framework for action on special needs education*. Retrieved from http://www.unesco.org/education/pdf/SALAMA_E.PDF

Von der Embse, N., Brown, A., & Fortain, J. (2011). Facilitating inclusion by reducing problem behaviors for students with autism spectrum disorders. *Intervention in School and Clinic*, 47 (1), 22 – 30.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.

White, S. J., Burgess, P. W., & Hill, E. L. (2009). Impairments on “Open-Ended” executive function tests in autism. *Autism Research*, 2 (3), 138 – 147.

White, S. W., Keonig, K., & Seahill, L. (2007). Social skills development in children with autism spectrum disorders: A review of the intervention research. *J Autism Dev Disord*, 37 (10), 1858 – 1868.

Wing, L. (1981). Language, social, and cognitive impairments in autism and severe mental retardation. *Journal of Autism and Developmental Disorders*, 11, 1, 31 – 44.

Wing, L. & Gould, J. (1979). Severe impairment of social interaction and associated abnormalities in children: epidemiology and classification. *Journal of Autism and Developmental Disorders*, 9, 11 – 29.

Wollberg, P. J., & Schuler, A. L. (1993). Integrated Play Groups: A model for promoting the social and cognitive dimensions of play in children with autism. *Journal of Autism and Developmental Disorders*, 23, 3, 467 – 489.

Yin, R. K. (2009). *Case study research: design and methods - 4th ed.* Thousand Oaks: SAGE.

Appendix A

The project that I discuss in this section refers to a social group that I have set up for children with ASD and their peers (who have also presented some learning difficulties but not autism). The group involved in the project consisted of eight students aged between 6 to 9 years. The pupils presented learning difficulties, were not high functioning, and most of them had poor language skills. Among these, four have been diagnosed with ASD. The group sessions follow on from a seven-month book project which I created earlier during the school year. It was published in hard-cover and won a prize at the Quebec Entrepreneurship Contest. The book was conceived throughout to utilize sensory themes and colours with the group being asked to contribute with the idea of incorporating senses, colours, sight reading and social programming based on the book. This included exercises in sharing, turn taking, and discussions around the book with the aim of increasing their awareness and self-confidence. The story tells about a King who has the power to change the colour of the days of the week. Every day represents a different colour of the rainbow, ending with Sunday being the rainbow day. For instance, Monday is the Red Day: everything the King touches, smells, hears, tastes and sees is red. This had been a personalized book, which had also promoted the students sense of personal fulfilment and allowed them to develop their knowledge of the concepts of colour, senses, days of the week, and their sight reading (Di Giuseppe et al., 2010). The students had developed a product that was essential to their learning, which was also designed to encourage a continuation of learning at home with the family. As a first step, the students were asked to make seven crowns. This Art and Craft task allowed the students to develop their sense of creativity, self-confidence, organization, motivation, and an appreciation of cooperative values where the children had to work in pairs. This was a child-to-child approach, since the four individuals with ASD shared the story with other students who, although presenting some learning difficulties, their social awareness was considered higher. The group was run by myself with the support of the teacher and teaching assistant. The students were asked to sit around the table, and I lead them by telling what was going on. The students did not sit randomly but followed a structured plan (ASD student – non ASD student – ASD student – non ASD student...):

I sat with the students with my own crown on my head and I began by saying:

'Once upon a time, in the land of Summit, there lived a King. Each day, he decided what colour the day would be'.

Then, I changed my own crown for a red one (this was the crown they had previously made) and

said:

'Monday is the Red day'.

So, I passed the red crown to the first non-ASD student and said:

'Everything he sees is red'.

That student passed the crown to the next student and so on. Afterwards, I passed a red bowl with strawberries and I said:

'Everything he tastes is red'.

The students had to pick one strawberry and taste it and then pass the bowl to the next student. Next I passed a red flower and I said:

'Everything he smells is red'.

Each student in turn then had to pass the flower and smell it. Next, the students were asked to pass a red object that made sound and I said:

'Everything he hears is red'.

The last red object then was the one that gave the students sensory feedback and I said:

'Everything he touches is red'.

Since Tuesday was the orange day, I repeated the same process by starting to wear an orange crown and say:

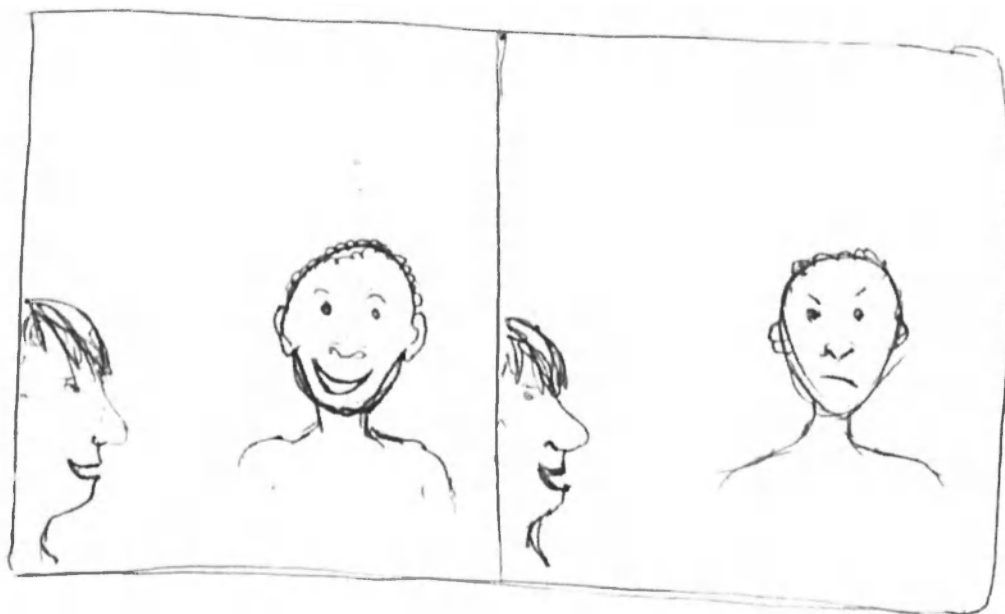
'Tuesday is the Orange day and everything he sees is Orange'.

Wednesday – Yellow / Thursday – Green / Friday – Blue / Saturday – Purple / Sunday – Rainbow



Appendix B

During my work experiences I have witnessed substantial challenges for students with ASD when attempting to establish social interaction with other peers, despite their verbal and cognitive abilities. For instance, I remember observing one of my students who often found himself in situations where he found it difficult to interpret his peers' mental states. I recall one occasion while observing him interact with another student that I had to intervene to prevent a troublesome situation that could even have become physical. The two students had begun joking but this progressed to stronger teasing and the student with ASD could not appreciate how he might be upsetting the other student. Basically, the student with autism did not notice that what he was doing was turning the joking into something with an entirely different nuance. I intervened in order to avoid any complication, and while talking to the student I noticed that he did not realise at all what had taken place. Therefore, I got him alone I drew a picture representing two different situations: in the situation A both characters were smiling, and in the situation B one character was having a cheeky smile while the other was pretty upset. In this case I helped make him aware of the difference between joking and being impudent or unkind. Thereafter, the student with ASD realised what he had done and went to apologise to his peer.



Appendix C

Conversing through drawing is a strategy that I have often used when presented with students who find it challenging to recollect the gist of a particular event or story, especially in cases of distress and anxiety. I firmly believe using visual prompts can help the individual with ASD to recall events more easily. For instance, when working in a special school, I encountered a student with anger management issues. This led him to extreme situations where he would be aggressive towards his peers or teacher. In one particular situation, he was sent to in-school suspension for being aggressive to the teacher. When I met with him and I asked why he was suspended, he claimed not to remember much and repeated: '*I don't know*'. It could be interpreted that the student did not recognise his wrong-doing, or was simply avoiding to respond. However, to ensure he was not simply ignoring his misbehaviour, I decide to adopt another strategy. I approached the teacher and asked her to explain the events leading to his suspension. Then I drew the story in comic-strip, a sequence of drawings arranged in interrelated panels narratively, and in the final panel I inserted the photo of the teacher clearly showing that she was upset. Afterwards I returned to the student and I asked him to relate the story again, but this time with the support of the comic-strip. The child was able to tell me the entire story (while adding more information), and expressed regret that he had hurt his teacher.



Appendix D

I agree with providing structures within daily activities for children with ASD. However, I believe for a strategy to be as successful as possible, it should be able to be generalised into a broader context. Therefore, being mindful of who is going to implement this strategy, and in which context, is fundamental when providing support within any inclusive environment. I remember a mother of a student with ASD wanted to meet with me at school as she was seeking for help. She was unable to attend church with her son since he became unsettled while there. It was clear to me that the lack of structure within the church might have caused the child additional anxiety. Therefore, I considered that making his church-experience as structured as possible would help the student to be more settled. To begin with, I suggested that the mother should structure the event by showing her son a series of pictures which would describe everything. She immediately appeared overwhelmed as she thought that it was too much work for her to carry the pictures to the church. Her observation clearly showed the limitation of my advice, and presents an example of what I would consider a 'non-inclusive approach', since I did not consider other factors within the context. As an alternative, I suggested she should use the child's fingers to help him understand what was going on, by telling step-by-step (or I would say finger-by-finger) throughout the situation, thus making the event as structured as possible. For example, by holding the child's hand and 'pinching' one finger after another, she would structure the church experience as such: *'first, we get ready to go to church... then, once we get into the church we say hi to the priest... then we sit on the bench quietly and listen to the priest... then the priest will be happy that you have been quiet and he will give you a biscuit'...* and she should repeat her explanations at each step to offer reassurance. For example, once they got to the church she would praise her son for getting ready and willing to attend, and repeat what to expect afterwards, always reinforcing that the priest would give him a treat after he had finished celebrating mass. Of course, before the mother would use this approach, both myself and the teacher helped the child to become familiar with this strategy beforehand. After a few weeks the mother called me as she was so happy that it had been working perfectly. So, this is what I consider a successful inclusive approach!!!



Appendix E

SOCIAL DEVELOPMENT

- 1a. What is your understanding of Social development?
- 1b. What are your skills in teaching Social development?
- 2a. What is your understanding of the Social development of children with ASD?
- 2b. What are your skills in teaching Social development to a child with ASD?
3. Who do you think is responsible for the social development of the children? The parents or the teachers?
 - 3a. Why do you think is P/T
 - 3b. Do you think that P/T should share responsibility

SOCIAL INCLUSION

1. What are your understanding and skills of social inclusion?
2. What are your understanding and skills of social inclusion for a pupil with ASD?
3. How do you prepare the teaching for encouraging social inclusion for a pupil with ASD?
4. How do you prepare the classmates and their parents in advance before a child with ASD officially joins the class? How does the school create conditions for the students to develop social interaction?
5. Do you think that encouraging a student with ASD interact with the others brings any benefit to the individual? If not, why not? If yes, How?
6. Do you think that encouraging classmates to interact with a student with ASD brings any benefit to them? If not, why not? If yes, How?
7. How do you create situations where the students can develop social interaction?
8. Is it easy or difficult for a teacher to create situations where the students can interact during the day? If difficult, why?
9. How do you organise the situation to prevent a child with ASD being left out from the rest of the group?
10. How important is the role of teacher to promote interaction between the child with ASD and the rest of the classroom? How and Why is it important?
 - 10a. What are the challenges and benefits that you have faced in your experience when

- mediating between your students?
- 10b. How do you prepare the child with ASD to interact with the others?
- 10c. How do you prepare the classmates to interact with the child with ASD?
11. Do you think that developing situations for social interaction should be part of the teaching in school? If yes, why? If not, why not?
- 11a. How much time do you think the teacher should spend to organise social interactions among the students? In your case, how much time during the school day is taken? If not enough, why?
12. Have you ever been given some training in ASD?
- 12a. If not, why do you think this is the case? And how did you manage to have a basic knowledge about ASD?
- 12b. If yes, can you give a brief explanation/summary of the training?
13. Have you ever tried to give insight or explanation to classmates about how a child with ASD might experience or perceive life? If not, why not? If yes, can you give me an example?
14. What are the needs, for you as a teacher, to improve your own knowledge about social development and social interaction?
14. What are the needs, for you as a teacher, to improve your own knowledge about social development and social interaction for students with ASD?

Mention three most important things that make teaching social interaction and social development successful.

Appendix F

Teacher: _____ (Observation n. ____ Date: _____)

- age: _____

- years of teaching: _____

Descriptive Field-notes

3. description of physical setting / subjects (relevant to the study)

4. accounts of particular events / depiction of activities (relevant to the study):

1: teacher organises class-teaching to encourage social inclusion for the pupil with ASD:

2: teacher creates conditions for the students to develop social interaction:

3: teacher intervenes to prevent the pupil with ASD being left out:

4: teacher supports the pupil with ASD to interact with others:

5: teacher supports the classmates to interact with the pupil of ASD:

6: time spent to facilitate social interaction amongst the students:

Reflective Field-notes

2. reflection on analysis (learning process and additional ideas):

3. reflection on method (additional decisions on the study's design):

4. reflection on ethical dilemmas and conflicts:

5. reflection on the observer's frame of mind (my opinions, beliefs and attitudes):

6. points of clarification:



Informovaný souhlas s rozhovorem v rámci kvalitativního výzkumu

Název výzkumného projektu: **Zkušenosti učitelů s podporou sociální interakce dětí trpících poruchami autistického spektra (PAS) v běžných základních školách**

Autor projektu: Tuto studii zpracovává p. Kisley Di Giuseppe, účastník magisterského studijního programu Erasmus Mundus v oboru Speciální pedagogika. Své magisterské studium zakončí diplomovou prací na Pedagogické fakultě Univerzity Karlovy v Praze pod vedením doc. Jana Šišky. Kontakt na pana Di Giuseppeho je: kislevdigiuseppe@gmail.com; tel.: 00420 608269315 a na doc. Šišku: jan.siska@pedf.cuni.cz.

Byl/a jste osloven/a, abyste se do tohoto projektu zapojil/a jako dobrovolník / dobrovolnice. Důkladně si, prosím, prostudujte následující text, a neváhejte vznést jakýkoliv dotaz či vyjádřit jakoukoliv pochybnost o obsahu či metodách této studie.

Cíl práce: Cílem mého výzkumu je zkoumat zkušenosti učitelů během práce s dětmi, trpícími poruchami autistického spektra (dale jen PAS) a zjistit, jak učitelé podporují rozvoj sociálních interakcí a dovedností těchto dětí ve školách hlavního vzdělávacího proudu v České republice. Budu hodnotit dva různé přístupy, které využívají dovednosti a techniky k rozvoji sociální interakce. První přístup je zaměřený na jedince, kde dítě, trpící PAS je vedeno k rozvoji sociálních dovedností. Druhý přístup, zaměřený na zprostředkování asistence dítěti jeho vrstevníky, je zacílený na práci se spolužáky dětí, trpících PAS. Proto se má práce zaměřuje na zjišťování zkušeností pedagogů při práci v těchto situacích a na to, pomocí jakých metod poskytují podporu jak jednotlivým žákům, tak kolektivu. Zde je mým cílem formulovat hloubkový obraz toho, jak dotazovaní učitelé v českém školském systému žákům, trpícím PAS, poskytují příležitosti k smysluplné sociální inkluzi.

Průběh výzkumu: V rámci studie povedu rozhovory s učiteli a budu se jich dotazovat na jejich zkušenosti. Rozhovory mohou probíhat na jakémkoliv místě tak, aby Vám to co nejvíce vyhovovalo. Rozhovory budu nahrávat, což mi umožní co nejpřesněji proniknout do podstaty Vašich sdělení. Veškeré informace budou zcela důvěrné. Také bych Vás rád požádal o možnost, abych vás mohl zpětně kontaktovat v případě, že bych v průběhu analyzování rozhovorů měl nějaké nejasnosti a potřeboval vaše sdělení vyjasnit - pro takový případ bych Vás rád požádal o Vaše kontaktní údaje. Je důležité zmínit, že v interview není

žádná odpověď "správná" či "špatná". Předpokládám, že nám rozhovor zabere hodinu či déle. Na žádost vám ochotně poskytnu shrnutí této studie.

Ujišťuji Vás, že vynaložím maximální úsilí na to, aby vaše spoluúčast na tomto projektu byla zcela anonymní a že Vám z ní nevyplynou žádné náklady.

Výhody: Přestože Vám z účasti na výzkumu neplynou žádné přímé výhody, za povšimnutí stojí fakt, že studie, která díky tomu vznikne, by mohla napomoci k utváření lepšího porozumění situacím, kterým jsou učitelé v České republice vystavováni.

Mzda za účast: Účastníkům výzkumu nebude poskytnuta žádná mzda. Vzhledem k tomu, že Vase účast na výzkumu je dobrovolná, máte právo od ní kdykoliv odstoupit. V případě, že byste se takto rozhodli, veškeré informace, které do té doby poskytnete, budou zničeny a v připravované studii se nevyskytnou.

Důvěrnost: Informace, získané v průběhu přípravy mé studie, budou prezentovány na veřejnosti: Vaše jméno či jiné údaje, které by Vás mohly identifikovat, však zveřejněny nebudou. Veškeré osobní údaje, které autorovi studie poskytnete, zůstanou přísně důvěrné, budou vyňaty z rozhovorů a uloženy v evidenci pouze po dobu trvání výzkumu. Jakmile bude studie uzavřena, zničím veškeré elektronické i papírové záznamy, které budou obsahovat identifikační údaje o Vaší osobě. Jediný, kdo bude mít k Vaším osobním informacím přístup, budu já (a tlumočnický / překladatelský tým, pokud bude potřeba využít k písemnému či telefonickému styku s Vámi). Stejná pravidla pro nakládání s osobními údaji platí pro případ, že by nashromážděné údaje byly někdy v budoucnu použity pro jiný výzkum. Rozhovor s Vámi v tištěné podobě dostane též k dispozici vedoucí mé práce, nicméně Vám zaručuji, že i tyto materiály budou po uzavření výzkumu zničeny.

Četl/a jsem a rozumím tomuto informovanému souhlasu a jsem spokojen/a, že p. Kisley Di Giuseppe odpověděl všechny mé případné dotazy, a proto:

- Souhlasím** se svou účastí na tomto výzkumu a také souhlasím s pořízením audiozáznamu z rozhovoru.
- Nesouhlasím** s pořízením audiozáznamu z rozhovoru, ale zúčastním se výzkumu.
- Souhlasím** s tím, že mne v případě potřeby můžete později kontaktovat.
- Nesouhlasím** s tím, abyste mě později kontaktovali.

Datum:

Podpis účastníka:

Jméno účastníka hůlkovým písmem / Vaše kontaktní údaje (pokud jste vyjádřil/a souhlas):

Qualitative Study Interview Consent Form

Research Project Title: **Teachers' experiences when encouraging social interaction in children with Autism Spectrum Disorder (ASD) in mainstream schools**

Researcher: This research is conducted by Mr. Kisley Di Giuseppe. Mr. Di Giuseppe is an Erasmus Mundus student and he is presently studying a European Masters Degree in Special and Inclusive education. He is working towards the completion of his Master thesis at Charles University in Prague, Faculty of Education, under supervision of Prof. Jan Šiška. Mr. Di Giuseppe can be reached at: kislevdigiuseppe@gmail.com; phone number: 00420 608269315. Prof. Jan Šiška can be reached at: jan.siska@pedf.cuni.cz.

You are being asked to volunteer in a research study. Please take your time when reading this Consent Form and do feel free to ask questions or raise any concerns about the nature of the study or the methods used.

Purpose of the Study: The purpose of the study is to explore teachers' experiences when working with children with autism and how the teachers support them in their development of social interaction and social skills within mainstream settings in the Czech Republic. I will consider two different approaches which provide skills and techniques to develop social interaction. Firstly there is the individually-based approach, where the child with ASD is taught how to develop social skills. Secondly, the child-to-child (or peer-mediated) approach, that aims to give guidance to the classmates of the child with ASD. Therefore, the study aims to investigate the teachers' experiences when working in these situations, and what strategies they implement to provide support to the individual and the group. The purpose here is to formulate an in-depth picture of how the interviewed teachers in the Czech system work to provide opportunities for meaningful social inclusion for the learners with ASD.

Study Procedures: The study involves interviewing teachers, on a one-on-one basis, and asking about their experiences. These interviews can be held in any place and entirely at your best convenience. Our discussion will be audio taped to help me accurately capture your insights in your own words. All information you provide will remain strictly confidential. I should also ask if you would be willing to be contacted at a later date, should I need to clarify any of the responses given during the interview. This would involve you providing some contact details. It is important for you to know that there are no right or wrong answers. The

interview may take up to one hour or longer. A summary of the study will be available to you upon request.

Assurance: I will make every effort to ensure that your contribution is totally anonymous throughout the study.

Costs: The study procedures are conducted at no cost to you.

Benefits: Although there may not be any obvious nor direct benefit to you from participating in this study, it should be noted that when the research is completed, it will help create a better understanding of the experiences faced by teachers in the Czech Republic.

Payments for Participation: Participants will not be paid for their participation in the interviews. Since your decision to take part in this study is voluntary, you may withdraw from the study at any time. In the event you choose to withdraw from the study all information you provide (including the audio taping) will be destroyed and omitted from the final paper.

Confidentiality: Information gathered in this research study may be published or presented in public forums; however, your name or other identifying information will not be used or revealed. All personal information you provide will be kept strictly confidential, separate from the interview data and kept on file for the duration of the study. At the conclusion of this research project I will destroy all computer and paper records containing your identifying information. I will be the only one to have access to your personal information (and the person I will use as a translator in case you have problems to understand English, if I have to contact you by phone or through e-mails). The same confidentiality will apply if other researchers will use the data later for a research project. A printed copy of the interview will be shared with my supervisor. However, I can guarantee that it will be destroyed on project completion.

I have read and understand this consent form and I am happy that Mr. Kisley Di Giuseppe has answered any questions I may have raised, therefore:

- I give my consent to participate in this study, and to being audio-taped during the interview
- I do not give my consent to being audio-taped, but I will still participate in this study
- I give my consent to be contacted at later date
- I do not give my consent to be contacted at later date

Participant Signature:

Date:

Participant Printed Name:

Participant Address Contact Details (if consent given)

Appendix II

- H1 -

'[...] Children parents don't have time for their children causing lots of behavioural problems. We have to solve these problems at school instead of parents. These kind of problems must be solve in school, so parents are not able to do, so teachers do this beside than be teachers'.

- H2 -

'[...] I try to lead the children to understand that everybody has a position in our classroom and every child skills and abilities are important for all classroom. One of them... together it is important for us to be together'.

- H3 -

'[...] In our first meeting I told the parents the number of the students then I said I have a teacher assistant because we have a student with AS. I did not mention the name and who was him. Sometimes parent might question about AS individually, not in front of other parents. I believe that confidentiality and respect are important for AS parents. When I think of the problems that these [she refers to her students with ASD] have, I never forget about the other children in my classrooms who have lots of problems. [...] Also I mention that having a teacher assistant in the classroom is a benefit for everybody. Because this assistant doesn't work only for the AS student, but helps the others too. So, the parents are pleased. Finally I can say that this is a big benefit for all parents and children'.

- H4 -

'[...] Explain that they shouldn't let him to talk constantly but must tell him to stop, give structure to him. Not bullying but in a way give him some structure. [...] I remember in the first days of first class we sat in circle and we talked about problems, and xxx was stimming, and the boy sitting next to him said continuously, more and more: "what are you doing? What are you doing?"... and I looked at this boy, and his sock and he did a movement with his sock, he seems he was steaming with his sock... the same as xxx. so I explained to all the students that everybody has different peculiar interest and fixations'.

- H5 -

Group activity (8:14): S1 seems to be in his own world and not participating. T1 goes and taps on his desks, soon after the child 're-joins' the group and participates more actively.

Math class (9:25): S1 is the first to complete, so T1 asks him to check other students' work (however she always does with any student who complete the work first).

Class activity (10:20): S1 says something (which I supposed was impressive) and T1's facial expression is very positive and asks everybody to clap hands on his comments. S1 smiles and feels very proud. In most of the cases T1 became a model for the students. In fact, sometimes S1 would make comments and she would show a very positive facial expression, like if she would like to reinforce his behaviour. She then looks at other students, modelling how to appreciate S1's comments. This was a strategy used quite frequently by T1.

- H6 -

'I always have to prepare my lessons, and I always think about his job. [...] I can use him to introduce the lesson, to be the important part within the lesson'.

'[...] Both children with AS are very clever, they have a fantastic skill in general knowledge [she is referring to two students with AS she has worked with]. All classroom. I try and encourage the fact that they have some other abilities such as the knowledge they have, so they are very good. I try to put his position to be higher than the others in the classroom because they need some support in term of self-esteem. I encourage the two students to show their knowledge, instead of me, giving them autonomy and independence. They could read, count but the others didn't. I try to emphasize their strong knowledge within the classroom'.

- H7 -

Throughout the day students have different opportunities to socialise. Early in the morning, while T1 checks home-works, the students have the chance to interact freely (in this case S1 seems quite comfortable to interact with more than a student). The smart-board is another tactic used by T1 to let the children sing together (This is switched on before the school-day starts). Calendar becomes an activity which fosters the students to talk together. There is lots of interaction and participation. During lunch break T1 leaves the students on their own, however, in more than one instances students went to her to offer her some of their food (this shows what amazing relationship she has with her students).

- H8 -

'[...] especially in together works, both of the AS students are the first... when they divide the groups, both the AS students are the first to be chosen to be with them, because they are very clever; they know a lot and they will be very helpful'.

'I think so because one of these problems, since there are problems with communication, because they sometimes are out of the children [outside the group], I mean, not physically but mentally... they are in their own word, because of their special interest which is different from the rest of the group'.

- H9 -

'[...] My skills become with practice. I don't have any specialisation in special teaching autism, but I have teach in classrooms for 31 years. [...] I have read lots of books about problems and life of people with AS'.

'[...] I think I have got one dream, have to spend more time with children, during the holidays. I have one student with down-syndrome, and I spent a week during the holiday with her and her family, and other children and their families presenting the same problem. It was perfect for me to understand the real problem'.

'[...] two courses a week during holidays and it was 10 years ago. Other types of courses are 2/3-hour training three times a year: [...] It was a video about lesson at school with children with AS and they gave a lesson how to teach and psychology. They explained the problems. And we visited schools were children with AS are studying [...] I think it is not enough. But the problems is that there are lots of things that they have to study as a teacher; there is not time. But for those teachers who like reading I think they have to read these books'.

Appendix I

- 11 -

'[...] first of all they have problems with how to contact with others, and they also have problems to understand... there is one situation where they can do something but not able to do in another situation'.

- 12 -

'[...] it should be a balance, like sharing. Because if the parents wouldn't cooperate with school we cannot do anything. We are responsible for the social situation here in school, but out of school is parents' job. It is a share commitment'.

- 13 -

'There was no preparation because he came a week before. But the kids were on the first grade, so they were very small. There were not preparation for the other because he came just in the middle of the school year, since he had big problem in the previous school as he refused to go. He only went for two hours a day. So, the students got used to seeing him and there was a kind of adaptation [...] I told them that there was a new student but without specifying. I want to respect him because he doesn't want to be different'.

- 14 -

'I am happy that he is improving and is able to communicate. He wasn't able to enter the classroom, and now he is pretty comfortable. And I helped a lot during this process [...] The biggest role is covered by the TA. Because she works closer with the child. To have a sense to read the situation when to intervene'.

- 15 -

'It is leading from the situations. There is not special preparation because you are not able to be preparing everything, so improvise. Sometimes while I am preparing I think this will be very easy for my student with ASD, and then it shows that it doesn't work [...] With the low-functioning, we had to talk with them, but not generally, but when was some situations they had to explain why he was behaving like this'.

- 16 -

'[...] I tell the other students, please take care about him as he will have problem. Usually they

know what kind of problem. Please need him as he needs some support'.

- 17 -

'I think that without me there wouldn't be any interaction. I was lucky, that I like going outings with the students, so I don't have problems to go to factories, rails stations, listen the same music'.

- 18 -

'I was the first person who they ask to when they don't understand. Now since the experience I had in the past with another boy, I am preparing the other students how he can behave, and sometimes when there are new problems coming, the students know that they can come here and ask'.

- 19 -

'It depends on the kid you are working with. It is can be a very big difference between the cognitive level. So, the strategy I used for one student was different from the one I used for another student... for example, there was a child who would like to have a nice relationship with the other students, and he felt bad because he could not manage. The other did not mind, as he was very severe autism. The other had one friend which was enough for him, while the previous wants to be friend with everybody. The difference between these two is because of the mental handicap, which the other is much lower'.

- 110 -

Before starting the paired-work activity, T2 asks S2/3 to choose one of the peers to work with. When S2/3 picks the peer to be paired with, the classmate visibly shows his disappointment. There is no intervention from either T2 or T3, the students sit together and eventually result being the best pair within the class.

- 111 -

School starting (7:57): the teachers leave the students interact on their own. No exchange is seen in S2/3.

School starting (8:00): TA walks in and S2/3 approaches to her with a big smile. They seem to have a very good relationship.

Math class (8:15): using the chalkboard, the students are asked results and stand up to go and write on the board.

Math class (8:20): during the lesson T2 makes sure S2/3 participates by asking him question. Other students are asked as well, not just him.

Reading (9:30): reading aloud as a strategy for everybody to participate and intervene (included S2/3).

Throughout the day paired-work activities were implemented within the lessons.

- 112 -

'[...] which is the difference between last year and this year: Last year he didn't want to go to outing with the rest of class, but this year he doesn't have any problem to go with the class'.

- 113 -

'[...] it is very nice when I can see the we have some action out of school and they meet with other students who do not have integrated classmates, they are staring the ASD student and they don't understand him. However ASD's classmates are able to explain them [...] The good thing is that they are not surprise of his behaviour: They are comfortable with him'.

- 114 -

'At the beginning we were afraid, as we didn't know how he would cope with tasks, and we didn't give him big challenges. Now we are giving him more challenging tasks and we don't have to be limited by us being afraid'.

- 115 -

'One problem is that in special school there is some programme, after-school programme in the afternoon for these kind of children. But these children in normal schools they only have the ordinary schedule which they have to cope with this schedule. Unfortunately after-school programmes they cannot go there without assistance, as there is no support there to be with them. So, parents must think about this, and to try to integrate his child to these after-school programmes. This could be create conditions where the classmates can be invited at home [...] my experience is that one the student was younger it was normal that he visited all the ceremonies/parties and classmates. The only problem is that he was not able to attend these alone. However the others' parents did not want him to go to parties alone, but in company of his mother: Help him to be there'.

- 116 -

'[...] they have problems with Hobbies, he has hobbies all the time... since he was younger. While the other students grow up and they change their topics of interest/hobbies all the time. When they were young, it was much easier as the children had the same interest, so it was easy to integrate. Now when they are older, it is not as easy'.

Appendix J

- J1 -

'I think here children need to go to the nursery or kindergarten, It's very important they go there before starting school because of the socialization. I can see in the first classes, the children who weren't in kindergarten, they are really much different from the other children'.

- J2 -

'[...] the teachers and the parents should talk together and choose the best way how to help socialize the child, and then work with it every single step. I think you have to know the differences but the role of teaching socialization is always the same as with the intact children'.

- J3 -

'In a dream world they should be in touch and share the experiences and try to find the problematic things and discuss it'

- J4 -

'The socialization also depends on what kind of school children go and then it also influences the kind of group they are in and the kind of teachers'.

- J5 -

'It's good to find maybe some programmes, help to introduce to the problematics to the other children, maybe not to tell them he or she is... to find some good examples, maybe to show them some movies [...]. Also I think when we want to socialize the children it's important to work with the parents of the other children, so that they know what's happening'.

- J6 -

'I don't think it's that, because I think on the other side they will hear or they will see that he or she is... I think if you don't understand something, maybe you are afraid of it, you are maybe I don't know... the risk that they won't treat such children in a better way. I think there is much bigger danger of bullying and things like this than if you explain properly, not saying 'he is autistic' but maybe it's like the programme which I translated into my promo work which is related to how the children can experience difference, maybe visual and things like this, and the can feel - they know what it's like to be different. I think when you understand, there is no danger to be afraid of it'.

- J7 -

'Yes it's very important, because it's important to choose a good activity, which is good to be done with a group, then it must, it should bring benefit to all not just one section. Because the teachers sees when something is going wrong and can correct it a little bit'.

- J8 -

'I could use materials for that. One the best movie to show how autism works is Temple Granding. We show a movie as a little piece, maybe some parts of Mark Haddon's book. And also I think is good to discuss with the children about that. I'm thinking about not to do much so because the results should be in some parts different because I don't want to show that he is different, but I want to show what we have in common. More important for them is to hear what we have in common'.

- J9 -

'I try to show them that to make a mistake is no problem, to make a mistake is just a way to learn something else. So they are not afraid to make mistakes because it's a big problem with autistic children when they make a mistake they stop... I think you even support children at the breaks because it's quite a big problem...not to stand with them but how to find another activity'.

Some examples of this also occurred while recording my observations. For example, part of a lesson involved the students creating a story about a robot. The student with AS clearly presented some perplexity. T4 noticed this and went to talk to the boy while encouraging him to be more creative. The language she used was very straightforward, avoiding ambiguity. I found this approach very appropriate.

- J10 -

'[...] and not doing in any way, choosing partners, because I know sometimes there is a danger that children don't want to be with them, and try to show them even if he or she has problems communicating and things like this he is very good at writing so he can help the group with things and show them that he or she can be a good member of the group so socialization, group work, role playing [...]. When I'm forming the groups, I usually don't let the children to choose them, but on the other hand, I am not forcing them, so I'm trying to do it by chance so I sometimes say 'stand up who was born in January' and the first four to stand up are the first group... I want to do such activities in which the children see that the autistic child has strong parts and can be really helpful to them'.

- J11 -

'[...] you show them the difference and then the teacher should explain some situations such as when you are in the playground and you are throwing the ball and you are bad; do you prefer that people tell you 'oh you are bad' or if they tell you that it doesn't matter. And you should tell the children, 'yes, everyone of us has some differences but one thing we have in common is the first step. Then there are some activities which are quite good, for example they wear garden gloves and there are small pieces and they should figure out what is inside it [...] and the last thing is you have a desk, and inside you put things like sausage, plate and spoon and things like that and you tell one child and you tell one child, and he sits, and he will start to speak in a language he doesn't understand. So if you don't know you're prepared, and you will ask to put things on a plate to prepare for lunch, but he or she doesn't understand... and on this shows how the autistic child feels sometimes. It is very simple, I think every teacher can do it on his own'.

- J12 -

From the extracts of my descriptive field-notes, it appears evident how T4 constantly reinforces the interaction amongst the students:

(observations S4b):

Group activity (9:05): students are divided in two groups, and take turns to draw parts of a big face on the chalkboard. They are then asked to write names of parts of body-face and then check each other's grammar. Very effective activity to enhance take turns and participation in co-operation with others. S4b was part of one group.

Smart board not working (9:20): circle time on the smart board was organised, however, since it is not working the teacher creates another activity. One of the students standing in the middle and the rest of the class had to describe him by using a definition in English (good improvisation skills)

Smart board working now (9: 30) students sitting in circle and working as a group.

(observations S4a):

During this class, pair-work activities were organised frequently. S4a was always overseen by TA even when he had to move to pair with another student. This had me reflect on the role of TA and the whole process of social inclusion, which will be further discussed during the analysis of the data.

Game activity on the chalkboard (11:50): students had to guess letters in order to fill the gaps and complete an invisible word. This was a group activity and everyone had the chance to intervene.

Class activity (12:14): one student had to pick a classmate and ask a question. Then, the classmate had to answer and write on the answer on the blackboard (great involvement of all students in the classroom).

As can be shown in the following observation's descriptive field-notes, T4 always facilitates social interaction amongst the students after individual work. What I found interesting here, is that T4 always leaves space for interaction. This allows everybody's participation with no-one being left out. Some examples are shown below:

Individual test (8:00): after she asked the students to take turns and give their answers.

Book activity (8:27): After reading the story, students were asked to take turn and read the questions.

- J13 -

'I really want to say the teacher should really try to get to know something about autism. I think these days a lot of teachers, even if they teach the child, (?...) they really don't know something about , maybe they don't want to know: something about the problem that's before them(?...) like he is different, he is different, I don't mind that. So I think at first it's important to find a lot of information about the problematics and then study the material of the child and try to find what really works and not to be afraid to change something that doesn't work'.

- J14 -

'We had some programmes here in school with a specialist from APLA. Some of my colleagues attended the course there, I didn't., and in university we had a course which was theoretical I think that's too theoretical. I think the main problem is that we are learning how to diagnose, Im sure its important but they don't teach us how to teach them, how to work with them [...] I think it's a big problem of inclusion and integration in our schools because the centres can prepare very well how to teach the child how to prepare things, but usually they don't help you how to work with the whole group'.

Appendix K

- K1 -

'It should be part of the teaching, and it exists in the second part of the teaching. It exists, subject which is called the education of relationship between citizens and people, but it is in the second part of school, beginning 6th class to 9th, but it could be better if begins from 1st class. [...] I believe during the week, one special lesson. In that special lesson, the teacher has the time to discuss to something that maybe happen during the week, so talk about relationships amongst the students'.

- K2 -

'The other students have to feel that the teacher respects this and they means really that [...] It is important that the students feel same and have the same opinion as the teacher about the ASD student. It is important that the students feel the same'.

- K3 -

'[...] the school is very open and friendly to welcome the ASD child. I can compare with other school where I worked before, and then there wasn't as good as here. before the revolution it was only for intelligent and after started to be more opened. So, here it was the classrooms with normal children and one classroom with people presenting disorders. And it was there when it started to be relations between these two types of classrooms. Now it is open to have all students in the same classroom'.

- K4 -

'So in the beginning of september there is parents-teacher meeting, and in this meeting I talk about the classrooms, the pupils. I tell the variety of pupils and different skills they have. I give the basic information about autism, And allow them ask'.

- K5 -

'For example they use scarf to use so the students pretend they are blind, and I choose one student, and this student put the scarf on a child and they experience how to be blind. After the blind student stays in a different place, and the other student puts his hand on the other student, and at the end of this game, the blind student talk about how they felt to be blind, when he was led by a child, when he was alone, so how it feels to be blind'.

- K6 -

'Before I ask the children if someone can sit beside the child with ASD, and if it doesn't work I respect their choice but if it works then it worked well. I don't like when students in general are left out. So, I create circle-time and when they make the circle and every child goes in the middle of the circle and all the students have to say something nice about this child in the middle'.

- K7 -

'I told the ASD student, who is nice, bright, kind and friendly, and suggest the student with ASD who might be willing to play with him. But I have to be very careful with this because the problem of this is that the others student use a way of communicate which can be difficult for the child with ASD. For example, they laugh, hugs together, and he doesn't want to be touched, so this is a problem'.

- K8 -

'Because this ASD child when they start to interact with some other people they share information with other people but they can be abused because they don't understand [...] This student in the classroom makes fun of this boy and tell him to do things... make the fun, and the ASD boy follows. However, the ASD child doesn't know what he is doing. The friend manipulate him, I show the naughty student how it feels when the ASD student goes to other students and make fun of them'.

- K9 -

'The first one had the real problems in the social interaction. [...] It was real problems because one time he jumped on the girl in the classroom and make the same thing that he saw on TV, and was a problem with the parents. This boy was left out in the classroom and the class-mates doesn't like him because he make these strange things. [...] The second one was the hardest case because he had a problem with teaching and with education and with social relationships. His education was always assisted, wasn't able to respect her or listen to the teacher only this one assistant. He needs this. [When talking of the third student] Yes, staring, and it was sort of unpleasant for these children, so his classmates wrote on their paper 'don't look at me!' but in a vulgar, in a vulgar don't look at me, but he doesn't understand what they mean. When he leave the basis school the third boy, he went to study in another school [...] and in that school, the middle school, because he had this problem, this staring, [...] Start to be problem with his teacher, thinking he was homosexual. After it became a problem with his orientation'.

- K10 -

'Because it's really difficult for the teacher and for the class [...] it's heavy for the teacher to teach so differently group. It's a problem in our schools are really big group of children for example thirty pupils in one class and it's a lot. It should be better, when for example eighteen pupils in the classroom because the other parents they don't talk about this but they know that this autistic child is disturbing this education, this teaching, and they know when this autistic child won't be in this classroom the teacher can teach these other pupils more and they attend'.

- K11 -

'[...] however, when two boys chose him to be their roommates, they did not want to be with him in reality, they were together in the room but not interacting at all. So, I came in in this room and I so him always alone in the room. The problem was that these boys liked to play games but the ASD boy didn't like. So, they tried to find a solution that the ASD student can do. So, they tried to find some solution. So, they discovered that he liked history of Greece, but these two boys didn't like history, and this was in a 3rd class'.

- K12 -

'Yes, first it was a course for everybody in school, and later it was only for teachers who teach students with autism, and it was run by APLA. Every two months, a special pedagogic from APLA, he is a supervisor and looks how it works in here and see if the teacher needs special support when working with a child. [...] it helps that somebody from outside and talk about the experience in autism, it helps that comes here, some professor and tell about the autism, so, not only the teacher but other people. It is always good when someone comes. it helps to know other people's experiences from other organisations. The training from APLA, the problem was that they talked about the general things about autism'.