CHILDREN'S ATTITUDES AND SOCIAL INTERACTIONS TOWARDS PEERS WITH AUTISM: PROCESS AND OUTCOMES OF A PEER MEDIATED BUDDY PROGRAM

by:

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A thesis submitted in conformity with the requirements for the degree of Master of Arts
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Abstract

A peer mediated buddy program was developed for children with autism in an elementary school. Forty peer helpers initially volunteered to participate in one week peer buddying which consisted of participants spending recess and lunch periods with children with autism (no ‘formalized training’). This qualitative study is based on the twelve (n=12) students who participated in a semi-structured interview and who were involved in the second phase of the peer helper program which entailed more direct buddying (a peer initiated approach). The motivations, interests and profiles of these peer helpers who were more inclined to “help out” children with autism are also assessed. The follow-up component includes responses from parents and professionals belonging to 2 autism email groups about their experiences with peer buddy programs. Responses from these groups were compared to the findings obtained from this program to determine “best practices” for peer buddy programs which can be used in future settings.
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Sonia Mastrangelo,
M.A Candidate
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Dedicated to my husband Phil, whose love and support made this work possible.

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# Table of Contents

Abstract................................................................................................................................. ii  
Acknowledgments.................................................................................................................. iii  
Dedication.............................................................................................................................. iv  
List of Tables............................................................................................................................ vi  
List of Figures............................................................................................................................ vii  
List of Appendices................................................................................................................... viii  
Chapter 1: Introduction............................................................................................................. 1  
Chapter 2: Method .................................................................................................................. 18  
Chapter 3: Participants.......................................................................................................... 22  
Chapter 4: Procedure............................................................................................................. 26  
Chapter 5: Setting.................................................................................................................. 27  
Chapter 6: Data Analysis and Findings--Interviews............................................................... 28  
Chapter 7: Data Analysis and Findings--Email Discussion Group........................................ 34  
Chapter 8: Discussion and Implications................................................................................ 41  
References............................................................................................................................... 66
List of Tables

Table 1  Demographic Characteristics of Peer Helpers......................... 48

Table 2  Demographic Characteristics of Students with Autistic Spectrum Disorder.................................................. 49

Table 3  Academic and Social Profiles of Peer Participants................. 50

Table 4  Peer Buddy Responses to Specific Questions in the Semi-Structured Interview.................................................. 51

Table 5  Demographic Characteristics of E-mail Respondents............. 52
List of Figures

Figure 1  Application of the Theory of Reasoned Action to Children's Attitudes Toward Peers with Disabilities............. 53

Figure 2  Apparent Forces and Pressures Enhancing and Discouraging Peer Interactions with Children with Disabilities in the School Setting........................................... 54

Figure 3  Apparent Forces and Pressures Enhancing and Discouraging Peer Interactions with Children with Disabilities in the Neighbourhood...........................................55
List of Appendices

Appendix 1  Study Description and Questions Forwarded to Parents and Professionals on Two Autism E-mail Listserve Groups ................................................................. 56

Appendix 2  Peer Buddy Sign-Up Sheet Distributed to Teachers ............... 57

Appendix 3  Miller Method™ Developmental Techniques Used to Train Peer Buddies .................................................................................................................. 58

Appendix 4  Semi Structured Interview Questions Used With Peer Helpers ................................................................................................................................. 60

Appendix 5  Categories and Themes from Peer Responses .................... 62

Appendix 6  Summary of Responses from Email Groups ....................... 63

Appendix 7  Activities for the Regular Classroom that Increase Understanding of Special Needs ................................................................. 64
CHAPTER 1

Introduction

Children with autistic spectrum disorders (ASD) often have a difficult time establishing and maintaining relationships with peers. Within the school setting these challenges become even more apparent and may include some or all of the following: inability to greet others; difficulties with imitation, following instructions, sharing toys, and taking turns; and an inability to ask for help and request objects/events. This is largely due to the nature of the disorder which prevents them from processing input from inside their bodies so that it can be related to external events. Dysfunctions of the brain stem interfere with the child’s capacity to interact effectively with others and it often appears as though they are perpetually out of synchrony with messages sent to them (Miller & Miller, 1989: 141). As Whitaker et. al (1998) note, this deficit in social interactions and reciprocity is one of the primary diagnostic and defining characteristics of autistic spectrum disorders and is often complicated by the impairment of communication and imagination. Establishing relationships with peers is an important developmental milestone for children who fall under this umbrella term known as ASD and has become the predominant goal in many students’ Individual Education Plans (IEP’s).

Autistic Spectrum Disorder (ASD) has been found throughout the world in families of all racial, ethnic, and social backgrounds. It occurs in approximately twelve of every ten thousand births and is several times more common in boys than in girls (Ontario Ministry of Education, 1990). It seems likely that there have always been children with autism, although it is only since 1943 that they have been recognized as a distinct group and thought of separately from other severely developmentally challenged children. There
are several theories about the cause or, more likely, causes of ASD, but as yet there are no definitive answers.

For educational purposes in Ontario, ASD has been identified as a communication exceptionality and educational interventions have focused on the child's inability to communicate with others. ASD is a severe, lifelong, pervasive developmental disorder, identifiable by the presence of the following three characteristics: significant impairments in the development of social relatedness; significant impairments in verbal and non-verbal communication; and unique patterns of behaviour (i.e., preoccupation with certain objects or parts of objects, routines, and interests; distress over changes in seemingly trivial aspects of the environment; and an insistence on maintaining sameness) (Ontario Ministry of Education, 1990). The following associated features are often revealed in medical discourse: variability of intellectual functioning, uneven developmental profile, unusual perceptual responses, aggressive or self-injurious behaviour, difficulties in sleeping, toileting, and eating (Duchan, 1998; Rogers, 1998; Swaim & Morgan, 2001). All children with ASD have impairments in the three key areas listed above and may or may not have any of the associated features. The degree of impairment and the extent of their abilities differs significantly from student to student.

Controversy continues to exist with respect to which educational setting is best for developing social skills in children with Autistic Spectrum Disorder (ASD). Specific studies looking at school placement and academic achievement in children with Autistic Spectrum disorders are well documented (Rogers, 1998). However, there are disparate views among professionals (special education and regular education teachers) and parents (who have children along the Autistic Spectrum) as to which setting is optimal—a self-contained or mainstreamed one. Mainstreaming has been given further
impetus by the philosophical position known as “normalization” (Peck, Odom & Bricker, 1993) which holds that all handicapped individuals, regardless of the severity of their condition, have the right to participate in society to the greatest extent possible (Downing, 1996). Although precise definitions of mainstreaming are elusive, in education the term typically implies integration with normal peers in regular classes to the maximum extent appropriate (Peck, Odom & Bricker, 1993), with necessary supports in place to facilitate that placement. Some children with autistic spectrum disorder are never removed from their mainstream classes but instead are given the necessary supports to succeed in their classrooms. However, in many circumstances, mainstreaming is often a “pull out, then put back in” approach to educating children with ASD which entails collaboration between the special and regular education teachers to facilitate this transition. A self-contained class for students with ASD is one in which all the children carry a similar diagnosis under the ASD umbrella (ie. Autism, Asperger’s Syndrome..etc). Typically, it is the children with higher needs (especially those with extreme behavioural concerns--ie. aggression, self-injurious) which are often placed in self contained classes.

A variety of studies have been conducted on the successes of peer-mediated buddy programs for increasing the social skills of children with autistic spectrum disorders (Gunter et. al, 1988; Roeyers 1996; Kamps et. al, 1997). Within these studies, peers were trained to use several strategies (ie. scripts, praise, prompting) to increase the participation of children with autism in play activities (Kamps, 1997:336). Harrel, Kamps and Kravits (1997), developed networks of peers to develop the social-communicative behaviours of students with autism. Peers were selected on the basis of popularity with classmates and teacher nominations. The peers received eight 30-minute training sessions on social skills including--initiating,
responding, conversing, sharing, giving instructions and saying nice things. These social skills were modeled by the experimenter through role play who in turn gave the peers an opportunity to practice. The results showed an increase in expressive language and social interaction time for the students with autism (241).

A study conducted by Roeyers evaluated the influence of non handicapped peers on the social interactions of children with a pervasive developmental disorder. For the children with pervasive developmental disorders (P.D.D), the objectives of the study were to increase: the time they spent in interaction, the length of uninterrupted interactions, the ratio of responses offered and the number of initiations made (as well as decrease the time spent in interfering behaviours in favour of social behaviours). Furthermore, the researchers hypothesized that the children with P.D.D would generalize their interactions to an unfamiliar, untrained peer. The peer training component of this study involved showing the peers a videotape of children with autism who were at different cognitive levels. Information about the autistic syndrome was given to them (at their comprehension level), followed by small role-playing sessions in which three children successively participated. The experimenter played the role of the child with autism and tackled three topics with the peers: a) how to react to possible aggressive behaviour; b) the importance of being on the same level as the child with autism (ie. do not remain seated when the child with autism stands up); and c) alternative ways to get the attention of the child with autism when that child does not listen to verbal attempts to make contact (ie. encourage peers not to give up too soon, persist in trying to establish an interaction (Roeyers, 1996:308-309). The outcomes of this peer mediated intervention approach demonstrated an increase in social exchanges between peers and children with PDD. Although the latter did not show greater signs of “instating”
contact, they did demonstrate an increase in "responding" to peer initiated questions. The results of this study are very encouraging and emphasize the fact that children with PDD are able to generalize the social skills they have learned from trained peers to other untrained classmates.

In her review of the social interventions with demonstrated empirical support, Rogers (2000), emphasizes the important role peers play in developing social and communication skills in children with ASD. Peer-mediated techniques for increasing interactions between typically developing students and those with ASD have included: teaching typical peers to initiate towards the child with ASD with perseverance (ie. sharing, helping, giving, affection and praise) and role playing with adults to learn the techniques which can be later transferred to the target child with ASD. These studies have been successful in maintaining high rates of social reciprocity for both parties and decreasing inappropriate behaviours. Peer tutoring using incidental teaching, adult instruction in social games, social skills groups and circle of friends are all well documented interventions which effectively use peers to promote social engagement (Rogers, 2000).

Research about the effects of peer helper programs on “typically” developing children has provided a wealth of positive findings which supports an inclusive education model (Haring et. al, 1984; Sasso & Rude, 1987; Noland et. al, 1993; Whitaker et. al, 1998). In his review of the ‘circle of friends’ approach, Whitaker et. al (1998) note that the first step in establishing a circle involves a discussion with the child’s class about his/her strengths and weaknesses. This is usually followed by recruiting a group of volunteers (6-8 students) to meet with the focus student and to set up a schedule of social and academic mentoring. The circle of friends approach is strengthened by weekly meetings (overseen by a teacher) to celebrate the successes of students and to discuss their concerns. Whitaker
et. al (1998) interviewed children who had been involved in a ‘circle of friends’ model, and indicated that all reported increased levels of: empathy, understanding, self-esteem, and confidence in group discussions (1998:62).

Several studies have been carried out which focus on the attitudes and perceptions of students after having participated exclusively in peer mediated buddy programs for children with ASD (McHale & Simeonsson, 1980; Gillies & Shackley, 1988; Hendrickson, et. al, 1996; Favazza et. al, 1997; Kamps et. al, 1998). Noland et. al’s (1993) research has assessed the differential effects of “in-class” versus “pull-out” service delivery models on peer attitudes toward students with disabilities. As predicted, peers who were exposed to exceptional pupils being serviced “in-class” showed significantly more positive attitudes towards students with disabilities. This study sheds light on the fact that increased “visibility” results in higher ratings from typically developing peers. Favazza and Odom (1997) note that children form attitudes about people with disabilities as early as Kindergarten, and that those attitudes are often negative and rejecting (Swaim & Morgan, 2001). As a result, early intervention in the form of peer mediated buddy programs is an important step in helping to shape positive attitudes in youngsters who are just entering the school system since they are most malleable and least resistant to change.

Researchers have begun studying the attitudes of peers who come from settings which include students with severe disabilities. Peck et. al, (1990), interviewed 97 adolescents who had experienced at least one school semester of direct personal contact (ie. tutoring, social time) several times per week with students with moderate to severe disabilities, and further had maintained or extended their relationship beyond the required activity. The results of this study indicated that students’ responses were generally positive, noting several benefits from their participation such as, improvements
in self concept, growth in social cognition, increased tolerance of other people, reduced fear of human differences, a development of personal principles and interpersonal acceptance and friendship. Kamps et. al (1998) sampled 203 (n=203) students across multiple settings regarding their participation as members of social skills groups for children with autism. Their findings demonstrated that: the majority of typical peers enjoyed peer group programs, and felt that they benefited academically and/or socially. Their responses pertaining to the students with autism generally reflected a positive outlook (ie. felt that the children with autism improved their social, interaction and play skills as well as their ability to learn new activities). Furthermore, the peers reported that there was a personal interest and general satisfaction in being friends and/or helpers to persons who have autism (1998:107). This was evident in their response to the question, “What did you learn from the students with autism?” Participants stated,

...some of the games I didn’t know how to play, so ____ taught me how to play. I learned that children with autism can learn things and do things as well as normal people...you have to take time to teach them. When we played with the cards, they liked it and we had fun too. You understand them better if you get to be friends with them. Now you can play with him and he can talk to you more. I learned how to look him in the eye and much more about him. Disabled kids are not that much different from me....they are smart (123).

It is clear from Kamps’ research that when students are given the opportunity to be peer helpers they develop a genuine understanding and friendship with children of varying abilities.

The powerful, positive impact of peer buddy programs has been well documented. Research by Kishi and Meyer (1994) investigated the stability
of peer attitudes by interviewing teenagers who had participated in elementary school “friendship programs” for students with disabilities. They reported “more positive attitudes and more frequent social contact over time for both the peer helpers and children with autism” (in. Kamps et al, 1998:109). Haring et. al (1984), examined the effects of peer tutoring and special friend experiences on non-handicapped adolescents. The study investigated attitude change among 27 high school students toward 9 severely challenged peers with autism following two types of direct contact programs—one of a tutorial nature and one of a non-instructional, friendship nature. The data were collected through surveys measuring student attitudes towards individuals with special needs and through observations of both contact programs. Findings revealed that the informal “friendship” contact yielded longer interactions with an increased frequency of positive reciprocity between the buddies and children with autism as demonstrated by the interview and observation data collected (Haring et. al, 1984:16).

Kamps et. al (1998), also reveal the “negative” findings which resulted from giving typically developing children information about autism. For example, Sale and Carey’s (1995) report on the sociometric status of students with disabilities serviced in a full inclusion school indicated that the students with disabilities received significantly fewer nominations for ‘most liked’ and significantly more nominations for ‘least liked.’ These findings demonstrate that “inclusion did not increase acceptance levels by peers in this sample. In essence, putting students together for 100% of the day in this school did not change how they are reported to be liked or disliked by their same-aged peers” (Kamps et al, 1998:109). Similarly, Swaim and Morgan (2001) researched children’s attitudes and behavioral intentions toward peers with autism. These third and sixth grade students (n=233) were exposed to
peers on videotape that had symptoms of autism and peers who did not. Results indicated that children had more stereotypical attitudes toward a child displaying autistic symptoms than toward a child who did not display such symptoms. Children who had been given information about autism before viewing the tapes did not show more positive ratings of a peer displaying autistic symptoms than children who had not received such information. However, it is important to note that the negative findings in both Carey's (1995) and Swaim and Morgan's (2001) research was due to the lack of contact between peers and the child with autism. In both studies, students were simply asked to rate their attitudes about a child who had autistic-like symptoms, a very impersonal procedure, and the students had never been involved in any formalized training as peer helpers/tutors. The students in Swaim and Morgan's research had no direct contact with the child and in Carey's (1995) study, the peer raters had seen the students with autism in passing within the "inclusive" school but did not necessarily have these students in their particular classrooms. Downing et. al (1996), and Favazza & Odom (1997), reported that students who were "exposed" to children with autism through social contact and who received information about the disorder through children's books, were more positive about their peers than those in low-contact and no-contact groups.

As noted earlier, student's attitudes and perceptions about disability are formed at an early age. Weiner's (1984) attribution theory states that children's attitudes toward the affected peer may be more positive if they view the problem as being beyond rather than within the peer's control (in. Swaim & Morgan, 2001:195). Furthermore, "social desirability" may affect children's attitudes towards peers with mental and physical challenges. In a study by Morgan et. al (1998), children showed highly positive behavioral intentions toward a peer in a wheelchair, but in their ratings of their
classmates' intentions toward this peer, the ratings were much more negative, thus suggesting a social desirability effect. "[The students] may present themselves through their ratings to be consistent with their conception of how 'good boys' and 'nice girls' should respond to someone with a disability" (in. Swaim & Morgan, 2001:196). According to Roberts and Lindsell (1997), one of the important indicator's of an inclusive classroom is the extent to which children with disabilities are accepted by those around them--namely their classmates. Students without disabilities can make valuable contributions to the inclusion model through peer tutoring, positive social interactions, peer advocacy and peer buddyng. "The attitudes and perceptions held by peers have been shown to exert an important impact on the social and emotional health, and the long term adaptation of children with disabilities" (Roberts & Lindsell, 1997:133).

The theory of reasoned action proposed by Fishbein & Ajzen (1975), provides a useful model for understanding the process of peer attitude formation and change.

The main objective of this theory has been to predict and understand the relationship between attitudes and behavior by describing the associations between beliefs, attitudes, behavioral intentions, and actual behaviors. [This] theory holds that beliefs govern attitudes, attitudes guide behavioral intentions, which in turn predict behaviour (in. Roberts & Lindsell, 1997: 134).

According to this theory, the attitudes of significant others (ie. parents, friends, teachers), have a strong influence on children's attitudes and behaviours toward peers with disabilities. Goodman (1990) found that students' attitudes toward people with intellectual challenges closely resembled their
teachers' attitudes (in. Roberts & Lindsell, 1997:134). Work done by Hetherington and Parke (1993) reveals that parents typically influence their children to have social attitudes that are similar to their own and that parents are often concerned that their non-disabled child’s education will be impaired if a child with a disability shares the same classroom (in. Roberts & Lindsell, 1997). Figure 1 represents the subjective influences which can positively or negatively affect children’s attitudes and behavioral intentions to befriend/neglect children with disabilities. Children’s attitudes can become positive with actual experiences of participating in peer helper programs since they allow for a reciprocal relationship to develop over time. Findings from representative studies suggest that “attitudes and perceptions of elementary school-age children about people with disabilities can be altered in a short period of time by providing positive, direct experiences with children with disabilities, as well as indirect experiences such as information through books, guided discussions, or simulation activities” (Favazza & Odom, 1997:406).

Age and gender also affect children’s attitudes towards peers with developmental challenges. In Swaim and Morgan’s study (2001), third graders were found to rate children with autistic symptoms more favorably than sixth graders. Furthermore, in rating their behavioral intentions and inclinations to interact with students with autism, third graders showed a greater willingness and motivation to do so. Morgan and Wisely’s (1996) research demonstrated that children’s ratings of both their attitudes and intentions toward a child in a wheelchair became significantly less positive with age. In essence, younger elementary school children may show less discrimination toward children with disorders than older children. This finding is consistent with the unintended effects of the peer buddy program I established as part of this action research (which will be further discussed in
the results section). Some studies have also reported that girls express more positive attitudes about disability than boys (Gottlieb & Gottlieb, 1977; Favazza & Odom, 1997).

An analysis of the factors which influence children’s attitudes towards peers with disabilities has been explored. However, there are a multitude of factors which may also prevent a child from carrying out his/her intentions to actually interact with a child who has ASD. These include: characteristics of the individual peer helper (ie. personality traits--shy, fearful), lack of opportunity due to structural or organizational arrangements in a classroom; may attend the same class but live in different neighbourhoods, or peers may hold positive attitudes but feel they lack the skills and knowledge to interact with a student who has a disability (Roberts & Smith, 1999:36). Figures 2 and 3 outline some of the forces and pressures that can either enhance or discourage a peer helper’s interactions with a child who has a special need, both in the school setting and in the community. The figures also reveal the forces that enhance and discourage the disabled child’s ability to interact with the peer helper.

The wide array of research on peer mediated buddy programs for students with disabilities has resulted in a refinement of techniques and strategies to make the programs effective for both the children with autism and the peer helpers. Beginning with the individual characteristics of peer helpers, Myrick and Bowman (1981) have noted that these characteristics can determine the levels of positive social behaviour elicited from the students with autism. Furthermore, investigations have shown that if the child with autism shows many signs of aggression and disruption, peer buddying (both with trained and untrained peers) is less likely to be effective due to fear, lack of reciprocity and lack of social response (Mundschenk & Sasso, 1995). Therefore, if peer buddy programs are to be effective, it may be necessary to
reduce the major behaviours of the child with autism before exposing him/her to peer helpers. The Miller Method™ provides a theoretically grounded approach to preparing children with autism for peer buddy programs. Dr. Miller's cognitive developmental systems theory approach recognizes that all children are born with the nature to explore, communicate with, cope with, and make contact with others and their environment (Miller & Miller, 1989). When this is interrupted, for any number of reasons (structural anomalies in the brain--autism), children may become frozen at an early stage of development, or may approach more advanced stages of development in an incomplete or distorted manner. The theory proposes that the type of interventions and remedial techniques that could help children with ASD should relate to people and objects in the environment in order for them to move up the developmental ladder (Miller & Miller, 1989). The theory maintains that every child, regardless of how withdrawn or disorganized he/she appears to be, is trying to find a way to cope with their world (Miller & Miller, 1989), and that the best way to introduce peer buddies to the child is to understand the child's likes/dislikes. Furthermore, he suggests recognizing the antecedents which may cause specific negative behaviours in the child with autism such as, lighting, offensive smells and loud noises to name a few. The Preliminary Diagnostic Questionnaire (which is completed by both parents and professionals) he developed is an important tool which provides both adults and peer buddies with the background on the student and alerts them to situations which may possibly cause the child distress.

The students involved in peer mediation played a large role in the success of the buddy program. Rather than have students "volunteer" in a peer mediated buddy program (as I did for this action research), Sasso and Rude (1987) had 117 classmates assess the social standing of the children in their respective classrooms using a peer nomination measure. Each
student had to respond to three statements: a) list three people in your class who are your best friends; b) list three people in your class that really like you; c) list three people in your class that you'd like to play with best. High status peers were those whose names appeared on the nomination forms at least 8 times. All five classes were then divided into 2 groups--high and low social status. The experimenters randomly selected 4 high-status and four low-status peers to participate in the study which included a brief one hour training session where peers were provided with:

A discussion of individual differences, with a list of similarities between the [buddies and their friends with special needs]; a description of the child they would be shadowing, including name, communication medium, educational program, skill level, and personal likes/dislikes; a discussion of specific games and activities that the students enjoyed, culminating in the generation of a written list of these activities; a presentation of five manual signs that the special needs students knew or could produce, followed by modeled practice by peers; and a discussion of several types of interactions (ie. touching, eye contact) that had in the past been exhibited by the special needs students.

(1987:36)

The findings generated by Sasso and Rude (1987) revealed that using “high status” peers as buddies, resulted in greater response levels from the children with autism than using low-status peers. This might be explained by the fact that high-status peers prompt and/or reinforce special needs peers' initiations and responses more frequently. However, in the second phase of the study, which involved pairing high and low status peers to work together with the child with autism, low status peers showed an increase in initiations and interactions towards the special needs child. In
essence, the high status peer buddies served a dual role of not only helping the child with autism, but of also influencing their low-status peers to interact with the child.

Social interactions and reciprocity can be considered necessary components of a dyadic relationship where two people reinforce each other at an equitable rate, thereby increasing the probability of future interactions (Egel & Shafer, 1983). Hendrickson et. al (1996) further define social engagement as a “form of friendship between two people that is reciprocal, rewarding, and fun for both parties, and is characterized by multiple, voluntary contacts and shared experiences across weeks, months or years” (20). The aim of many peer mediated buddy programs is to establish a strong, mutually satisfying, social relationship between the child with autistic spectrum disorder and the peer buddy. Roeyers (1996), reiterates that for children on the autism spectrum, establishing and maintaining peer relationships is extremely difficult since they actively avoid peer contact. Furthermore, many of these students are often given high levels of well-intentioned adult support (ie. teaching assistants), which may further reduce their opportunities to learn from peers and to establish a supportive relationship (in. Whitaker et. al, 1998:61). Within peer mediated programs, students directly attempt to influence a peer’s social behaviour through some form of social interaction. The three most common approaches include: 1. proximity interventions (socially competent children are placed together with mentally and/or physically challenged children and are instructed to play with these target children with no specific training; 2. prompt/reinforce interventions (peers are trained to prompt and reinforce the social behaviour of the child with special needs); 3. peer initiation interventions (typically developing peers are instructed and trained to initiate social contacts with the target students) (Roeyers, 1995:162).
The purpose of this investigation was to: establish a peer mediated proximity program for students diagnosed with autistic spectrum disorder in a self-contained class. A peer mediated proximity approach was initially chosen since previous research had shown that children with autism who learned to interact with highly intrusive trained peers, had subsequently less interactions with untrained children, than if they had initially been exposed to the untrained. Therefore, a less intrusive peer mediated proximity approach, which more closely resembles a normal situation would more likely accomplish generalization of gains and interactions with peers outside the buddy program. However, as the weeks progressed, the untrained peers became astute observers of the teacher and educational assistants in the self contained classroom and the peer mediated proximity approach slowly developed into a peer initiation procedure where peers began to receive instruction and training by the teacher and assistants.

A second aim of the study was to unravel the factors which affected the peers' decisions to participate and persevere in a peer mediated proximity program for students with autistic spectrum disorders. An understanding of the factors which enhance peer buddy participation and some of their characteristics and personality traits can help professionals create more effective “reverse integration” and integration programs and thus match the right peer helpers to corresponding children with autistic spectrum disorders. Since children with autism and related exceptionalities are often placed in self contained classrooms, they rarely have occasions to interact and become familiar with other children. Reverse-integration involves giving the students well-structured opportunities to socialize with peers by having students from the mainstream classes go to the specialized class for various periods in the day. Another objective of the study was to reveal the peers' attitudes and perceptions towards children with ASD after participation in the buddy
program. Lastly, by sampling a group of parents, teachers and professionals in the field of autism, this qualitative case study also examines their experiences and reflections about peer buddy programs and compares them to the findings which resulted from my case study.
CHAPTER 2

Method

As a teacher of a self contained program for elementary aged students with autistic spectrum disorders, I quickly realized how difficult it was to access typically developing children throughout the day for peer tutoring and social skills support. Even though my specialized class was housed within a regular elementary school (Kindergarten-Grade 8), in a middle class neighbourhood, it was difficult to begin any form of integration since many of the students and staff rarely approached or interacted with my students. The social isolation and exclusion my students encountered was even more visible during recesses and lunch time. As a result, I decided to begin a peer mediated proximity program which would entail recruiting students from Grade’s 3-8 to serve as peer buddies for my students. Children ranging from the ages of 4-6 were excluded due to the fact that they did not go outdoors for recess and only attended school for half days.

The second component of my case study involved emailing groups of parents and professionals (who were members of two autism listserv groups) about their experiences with peer mediated buddy programs. The two list serve addresses were: AUTISM@MAELSTROM.STJOHNS.EDU and AUTINET@LISTSERV.IOL.IT. I ensured that the parents of the peer buddies in this study were not members of the listserves since I wanted to obtain the reflections from parents and professionals who were outside the scope of this peer buddy program. These listserves are only open to parents who have children with autism and to professionals working in the field. A general description of my study was forwarded to the email groups, followed by three questions. 1. What are your experiences with peer buddy programs
for children with autism? (ie. are they effective, WHY? or WHY NOT?); 2. What types of students were “ideal” for peer buddying? WHY? 3. Why do you think those specific students were willing to actually be “peer buddies” for children with Autism? What impact did the peer buddy role have on them? (see Appendix 1 for a full description). It was important to only include responses from individuals who stated their relationship to the child with autism or to the peer buddy. In order to compare and contrast their responses and perspectives, I needed to know how they were connected to a peer buddy program (ie. parent, teacher, psychologist...etc).

For a one week period I attended all Grade’s 3-8 classes and explained the details of what a peer mediated proximity was about. I discussed the fact that being a peer buddy and role model for a child with ASD would result in the child’s reduced anxiety, improved behaviour, better socialization (ie. eye contact), and increased communication. I also discussed the nature of the disorder by reading storybooks (ie. Little Rainman and Andy and the Yellow Frisbee ) to the 7-9 year olds and by sharing simple literature (provided by Autism Society Ontario) to the 10-13 year olds. Furthermore, all students were informed that children with autism simply need extra help and extra time to process information. Furthermore, I explained that we can bring about positive changes in the child with autism and also learn a great deal from their unique talents by helping out as a peer buddy. The 10 minute discussions in each class were kept positive and students were given an opportunity to ask questions at the end of the talk. Some of these questions included: “Does he have any brothers or sisters? Do they have the same problem? Will he hit me if he is upset? and Will there be a teacher nearby to help me if I’m having a hard time?” It was evident that some of the students felt anxious about taking on a task of this nature.
Conversely, some students were heard whispering, "This sounds great. When can we start coming to help out?"

The second week involved distribution of peer buddy sign up sheets to teachers from the Grade’s 3-8 classes (see Appendix 2). Forty children signed up to participate in the program. I intentionally chose to keep the rotations short so that students would not feel inundated and bogged down by the experience. Furthermore, this was the preliminary stage of my study, which aimed to establish a program and to keep it sustained with peer buddies even once the 40 students completed their one week rotations. Students were rotated in groups of 5 for a one week time frame. Within that week, five students (who were usually from the same class) would come to the contained class and individually shadow 1 child with ASD during morning and afternoon recesses. For those peers who stayed at school for lunch, the peer buddy included joining the child with ASD during this time.

Since I initially began with a peer mediated proximity approach, the peers received no specific training on how to interact with the students during recess and/or lunch. They were given opportunities to ask questions and were supported if they were experiencing difficulties with a behaviour or tantrum. I wanted to keep the interactions as normal and free flowing as possible, and therefore I encouraged the social exchanges to be open-ended and child centered with minimal adult intervention. Furthermore, I wanted the creativity and spontaneity in the exchanges to come from both the peers and children with ASD. During the one week shadowing period the peer buddies would: begin conversations with their assigned student, share what they had done on the weekend, encourage the child to share his/her snack, and would occasionally bring specific equipment outdoors (ie. ball) and show the student how to throw, kick and pass.
Once the two month rotations were completed, I revisited the classes of the 40 peer helpers, thanked them for their valuable contributions, encouraged them to share their experiences with other classmates who had not participated, and presented some examples of the successes I had noted in my students (i.e. greater awareness, increase in expressive language...etc). In my closing remarks the peer helpers were told that they were all more than welcome to return to my class for more frequent and in-depth peer mediation. I also extended another invitation to the other students from these classes who had not yet participated in peer mediation.
CHAPTER 3

Participants

Within the next couple of days some of the children who had been involved in the peer mediated proximity program began to return to my classroom for continued contact with the students with ASD. After several weeks, I noticed that the same group of students were returning to serve as peer mediators. I also recognized that these students were beginning to form meaningful social relationships with my students. Furthermore, they began to ask more specific questions about the children they were shadowing—especially the non verbal students who could not answer for themselves (ie. What toys does he like? Does he have any brothers or sisters? What kind of music does he listen to?). The peer buddies were taking the initiative to inform themselves about their respective child. It is at this point in time that I began to write field notes based on the interactions between the frequent peer buddies and my students with ASD. The social exchanges became more sophisticated and significant. The peers would bring pop music to the class and would show their respective peers “dance moves” before going outside for recess. They began to come to the contained class minutes before the designated recess period. Furthermore, these frequent peer helpers were often seen dashing down the hallways to get to the class so that they could begin peer shadowing.

One month later I began to rotate the children with ASD among the peer buddies so that both parties would have an opportunity to expand their repertoire of friendships. The students who were voluntarily coming to peer mediate spontaneously changed the structure of their peer mediating style from one of proximity (peers were simply asked to play with the target
children with no ‘specific’ training) to one of peer-initiation. As noted earlier, the students began to ask questions about the child, about his/her family, about his learning style and about our teaching strategies. These peer buddies were not content with simply playing unstructured games during recess and felt that they could elicit greater social reciprocity from the students. It is these peer initiators who were sampled for the present study.

The staff in the self contained class (including myself) began to train the buddies in developmental strategies for establishing communication and contact with their peers. The peers were told to never use “time out” procedures towards the child with autism since he/she may already be socially withdrawn and hence removing the child from the group and placing him in a ‘time out’ situation would only add to the child’s withdrawal. Furthermore, we reminded the peers that the ‘time out’ intervention assumes that the child with autism connects the unacceptable behavior to the ‘consequence’ of being placed in an isolated room. Yet for many non or limited verbal children who live only in the moment, the connection between their behavior and the consequence is never understood. So, instead of isolating the children, we trained the peer buddies, and through modeling showed them how to work through disruptive behaviours and tantrums.

As a teaching staff in the self contained class, we adopted the Miller Method™ developmental approach and we also wanted our peers to adopt these techniques and strategies which would enhance their social interactions with the children. We encouraged the peers to use movement and action with their buddies, since the research shows us that many of these children have great difficulty taking in and integrating information from their surroundings through their senses. Students with autism learn more effectively when their entire bodies are actively and repetitively involved in this process. The buddies were also taught how to praise the children for their
accomplishments. We discouraged the use of the term ‘good job’ or its variants for several reasons. Firstly, it is an abstract term and even if it were understood by the nonverbal children who hears it, its frequent repetition would soon turn into meaningless jargon as happens with any term that is frequently repeated. Instead of endless ‘good jobs’ the peers were asked to use narration (ie. role of a sports announcer) which is far more useful to the child with autism. When the peer helper would vividly tell his/her buddy that he/she is climbing, jumping, peddling his bike, and so forth, the narrated terms allowed the child to relate what he heard to what he was doing (his action system) at that moment. This developed their receptive language and self-talk, a precursor of being able to communicate with others. A variety of other strategies were shown to the peer buddies which further increased their confidence levels and their social interaction capabilities (see Appendix 3).

Twelve students (n=12) ranging in age from 7-13 years participated in the study. These peer helpers came from a variety of classes (from Grade’s 3-8) and they were chosen by me on the basis that they frequented the class to participate in the “buddy” program with the children in my classroom who are all formally diagnosed with autism. Although the purpose of this study was to examine the attitudes and perceptions of the “peer helpers” who were extensively involved, I decided to also interview three peer helpers who voluntarily came back to peer help 3-4 times after their initial one week rotation. These three students are included in the sample of (n=12) that participated in this study because I felt strongly that this component would add richness to the overall study and would help me better understand how I can work on alleviating some of the potential ‘stressors’ that these “infrequent” buddies experienced in their short term participation in a buddy program. I quickly recognized that with the second, in-depth phase of the
buddy program (which had no sign up sheet/no obligations), the number of peer helpers declined dramatically from 40 to 9. I often wondered if it was fear, boredom, unwillingness to commit for more than one week, or other obligations that kept them from returning to the special education class to serve as peer helpers during recess and/or lunch.

All 12 peer helpers came from mainstreamed classes (or half time in a resource classroom for students with a language/learning disability) in an upper middle class school where the self-contained class for students with autism was also located. Table 1 outlines the demographic characteristics of the peer mediators. Table 2 outlines the demographic characteristics of the students diagnosed with autistic spectrum disorder.
CHAPTER 4

Procedure

The principal of the school granted me permission to conduct this qualitative case study. Parents of the 12 peer helpers were given a letter outlining the details of my research and requesting permission for their child’s participation in the study. All parents consented to full participation. Furthermore, I approached the teachers of all 12 peer helpers (followed by an email) explaining the nature of my study and how their specific student would contribute to my case study. Fortunately, all teachers were willing to give me the time I needed with their respective students for the purpose of conducting my research.

All 12 students individually participated in a 15 minute semi-structured interview with me after three months of peer initiated intervention (see Appendix 4). I used the guidelines for interviewing people with learning difficulties provided by Lewis (1995), since many of these frequent peer helpers had academic and social difficulties (see Table 3). I spoke to each student before the interview and told them that I would be asking them a few questions and tape recording their responses. I did not “specify” what the questions were because I wanted their “spontaneous” responses and did not want them to have time to possibly conjure up what they felt would be the “right answer.” The peer helpers were reminded that there were no “wrong” answers and to speak freely and openly.
CHAPTER 5

Setting

The interviews took place in a small mini workroom which is located down the hall (it is often used by students). This environment was chosen due to the fact that it was away from both their mainstreamed classrooms and the self-contained class for students with autism. The students were informed that they would be tape-recorded beforehand and were given a few minutes to look at the tape recorder. I followed up with a brief discussion about the need to tape-record their answers, and I placed the recorder among a variety of storybooks (out of direct sight) in hopes of increasing their comfort level. The peer responses were written down as well as tape-recorded for further analysis. Lewis (1995) notes that there are “inherent difficulties in obtaining fair and accurate responses when interviewing children and these have been well-documented. In addition, children with learning difficulties may be unaccustomed to being asked for their opinions” (1995:41). It was important to keep this in mind when I was going through the interviews.
CHAPTER 6

Data Analysis and Findings—Interviews

Experience and familiarity are considered to be very important factors in the development of peer competence in typical children (in Roeyers, 1995:162). Interview responses revealed that the peer buddies began to develop a comfort level in playing with the students as time went on. Furthermore, it was the peer helpers who were exposed to children with autism in their mainstream classes that felt at ease in interacting with the target child. The responses from the semi-structured interviews have been summarized in Table 4. These responses were also coded into six distinct categories/themes (see Appendix 5).

Many of the students (75%) had no understanding of autism. It was noted that the 25% who did demonstrate an awareness of this exceptionality, were in the 11-13 year old age group. This is consistent with the literature that as children get older, they become more aware of “differences” in others and are better able to articulate these differences. Licht (1992) notes that many students probably understand the “normative conception” of ability by Grade 2--age 7, meaning that children understand that their ability is judged on the basis of how they perform relative to their peers (252). Since all the peer helpers are beyond this age, one can assume that they recognize that the children with autism are needier than they are. Samantha, a 13 year old girl who had been diagnosed as “learning disabled” often came to the class to serve as a peer helper. Her response to the question about the significance of the word autism was, “people that need help. Can’t do it themselves.” Morey, a 13 year old boy with a behavioral disorder responded, “Autism means disabled. The kids need help because there are
many things that they can't do." A nine year old child with a learning disability responded, "I have no idea what Pervasive Developmental Disorder stands for. I know that the kids need help. I have to do sign language to talk to them. I have to talk loud because they might be deaf and can't hear what I'm saying." One of the "gifted" peer buddies, an 8 year old stated, "Autism means challenged or having a disability. These kids are not born like us. Something happened to their brains. It doesn't mean they're different from regular kids." This gifted peer helper contradicted herself in her answer because she pointed out a distinct difference between autistic children and typical children--namely their brains, however attempted to state that the autistic child is still a child like the rest. Perhaps she was wanting to express that they should not be treated differently, however this was not explicitly stated in her answer.

The most interesting finding was that among the 12 students in the study, 92% were either diagnosed with some difficulty themselves or were experiencing academic/social problems. This educational history on each child was obtained through the classroom teachers. Alonzi did a study on teenagers (n=28) and their feelings about being peer helpers to children with autism. She discovered that,

Although all of the Grade 8's were terrific in their contributions, special mention must be made to the students that made the best buddies and appeared to work extremely well with the children in the Autistic class. These were the students who had their own exceptionalities or had academic difficulties that went 'undiagnosed.' It appears as though they had a stronger bond with the students and were better able to empathize with these children because of their own personal challenges and difficulties in belonging to their peer group. It was a chance for them to be in the role of teacher. Many of these kids are
so accustomed to being told what to do, when to do it and how to do it. Being a peer buddy to an exceptionally needy child places these students in an authoritative role—something they've never experienced before. (1998:3)

Many of the classroom teachers reported that these peer helpers had low self-esteem and no deep personal friendships with other students in the classroom. Therefore, the students with autism became the friends that they valued and enjoyed playing with. Through their responses it became evident that strong ties had developed and that they participated as “peer helpers” by choice. Throughout the day, the buddies were often seen making contact with the target children when passing one another in the hallways. The recess and lunch periods became a very special sharing time where buddies could place themselves in the role of “big brother or sister.”

The data in Table 1 reveal that more girls (67%) than boys (33%) participated as peer helpers. There is research stating that boys are less willing to “give up” their recess time to participate as “peer helpers” (Alonzi, 1998:8). Of the 4 boys who were part of this sample, only 1 came as often as once a day. Furthermore, it was 3 students in the 11-13 year old range that came less frequently and when asked why, some of their responses were, “I am older now. I have more homework. I don’t have enough time.” Another student stated, “I don’t come as often anymore because my friends bug me to play soccer.” The peer buddies also provided a wide array of answers when asked, “What is it that makes you come to the class to be a peer helper?” Some of their responses included,

I come to help the kids. It feels good to be helping and I like it...These kids need helpers. My friends don’t know how much fun I have when I come...The kids are fun and so are the teachers... The kids need me on their team. I like helping and I like the teachers...I can make them
learn more stuff... It is fun helping out and I like the teachers too... It makes me feel happy to know that I’m helping... I like working with Brant and Ryan. They make me laugh... They need me on their team... I want to be a teacher so it’s good practice for me.

When asked if they felt that they had helped the students, some of the peer helpers stated,

Yes. I make them smile and laugh. I wear shirts with their favourite cartoon characters so that they’ll be interested in me; Yes. I’ve helped in personal ways. I calm them down. Brant knows my name in sign language; Kind of. I taught them how to do things properly. How to come to me when I call them. I taught them sign language; Yes, by playing with them, teaching them to say hello and other stuff; Yes, I taught Brant to jump and Aaron to run; Kind of. I’ve helped them with their talking. I taught them hopscotch and how to say their names. I taught them not to run away from people; Yes. I feel that I’ve helped them learn how to play tag. I taught Ryan to be gentle when he starts hitting someone; Yes. I’ve taught Anna how to say things that she sees outside.

Only 2 peer helpers felt unsure as to whether they truly helped the children in any significant way. One of them responded with a question to my question, “I’m not sure. How will I ever know if they learned from me? Do you think I’ve taught them something?” I assured the peer helper that she had taught them in so many ways and I cited specific examples of when I observed her interacting with the children.

It is also important to understand that many of the students felt really uncomfortable and unsure of themselves and the students when first beginning the peer buddy program. Table 4 provides a categorized list of the
descriptors which emanated from the peer interviews. When asked, “How did you feel when you first came to be a peer helper?” some of the students responded, “Scared. Nervous. I didn’t know what to do. I was afraid I’d hurt them.... A bit scared and shy... I was happy when I first came. Excited to help... I was worried that I would do something wrong...I felt weird. Then I thought this is tough and no one else is going to do it.... I was nervous and scared. I thought the kids were going to hurt me.” All the peer helpers responded that they now feel very comfortable interacting with the students and have a great deal of fun too. Descriptors such as happy, settled, easy, comfortable and fearless were used to describe their feelings after involvement in the buddy program. When asked what they disliked most about being a peer helper, 8 students (67%) stated that they liked everything about being a peer helper. Two of the students stated, “I don’t like it when the kids won’t listen to me.” Another student responded, “I hate it when I have to walk them to the washroom. Some of them try to pull their pants down before going in and I have to be strict and tell them to stop.”

Over time the quality of student interactions increased because both peer helpers and the children with autism felt more comfortable with one another. Furthermore, the students had naturally moved into a peer initiation procedure, where they began to receive specialized training (by myself and the teaching assistants in the self-contained class) in sign language and Miller Method™ developmental techniques for eliciting communication. When asked what kinds of things they did while peer mediating, the students provided a wide array of responses. “I play tag games with them. I teach them about hiding spots, counting, and how to tap somebody....I play in the sandbox with Anna. We make a castle and then pretend that she is the princess and I am the prince. We have to rescue the stolen horse....I teach them how to dress themselves and do their own buttons and zippers.”
Although this question asked about specific activities the peers engaged in, many of their responses demonstrated that their aim was to teach the child particular skills.
CHAPTER 7

Data Analysis and Findings–Email Discussion Group

The results from the email discussion group provided information about the experiences parents and professionals had with “buddy groups” for children with autism. Many of their responses substantiated my findings that girls were more keen than boys about participating in peer buddy programs. Table 5 represents a demographic breakdown of the respondents. Parents were the largest group of respondents (47%), followed by teachers of contained and mainstreamed classes (29%). In total, 17 people responded to the following three questions: 1. What are your experiences with peer buddy programs for children with autism? (ie. are they effective, WHY? or WHY NOT?); 2. What types of students were “ideal” for peer buddying? WHY? 3. Why do you think those specific students were willing to actually be “peer buddies” for children with Autism? What impact did the peer buddy role have on them? Responses are summarized and represented in Appendix 6.

A variety of interesting responses emanated from the question which stated which “types” of students were ideal for peer buddying. Parent responses included,

Kids are people too, some want to help more than others, some intuitively understand how to help better than others. We are also lucky because the helpers police the other kids and keep the "bad" behavior like teasing suppressed...a girl who will grow up to be a teacher or counselor--some of these types are very maternal and protective......it has been my experience that my son [with autism] gravitates towards the girls in his class as they tend to be more
nurturing, patient and kind. Also I think that the boys who tend to be less 'rough and tumble' make better buddies for my son. Stephanie, another parent respondent, provided some "personality traits" to look for when selecting a peer helper and these included, "kind, caring, doesn't tease others, good conversationalist and polite" to name a few. Her response is especially helpful in assisting teachers who are beginning to set up peer buddy programs for the first time. She goes on to state where the buddies can be found and how to actually implement a program.

A short presentation about autism. Pass out forms for the children who are interested. Make the form brief so that it can be filled out right then. The teacher should call the families and ask permission and then send a permission slip home for parents to fill out. I would not recommend that the group be large. Try three children. Watch and observe that the friendship is a good match.

Teacher responses to the question, what “types” of students were ideal for peer buddy ing, resembled parent responses.

They are all girls from a range of ethnical backgrounds, SES and educational abilities. I think it was their curiosity that made them beg their teacher to let them give up recess to come to my classroom to help the students with autism. I have been impressed with their maturity and the questions they have asked. They are very academically driven (college bound) and compassionate individuals..... One child in particular has been wonderful to have around this year. She is a very compassionate leader, quite bright from what I can tell and is not flustered by anything. She is very sure of herself but not at all snobby...Children who have the temperament to enter the caring professions in the future make great buddies. In short any child who
has some autism awareness, patience and sympathy for the person with autism.....All of the Grade 6 students wanted to assist my students. Most of the Grade 6 students were helpful, however there were about 7 girls in particular that were absolutely incredible. They were always on time, they did not ‘baby’ my students and they always spoke and interacted with the kids at their own level....Students ideal for peer buddying are the ones who are very outgoing. Sometimes, at a young age, little girls work better. They like to be bossy naturally, so taking someone under their wing is fun for them. They also like to be helpful, a teacher’s pet. You want to make sure to pick a child that has age appropriate skills, someone who is very creative with play, listens to the teacher (so they are not modeling inappropriate behaviours). Students who are peer buddies have a very kind heart, as do most individuals who work with special needs student. They’re patient.

All responses emphasized the need for caring and compassionate individuals and many reported that it was the girls who were able to be the supportive and nurturing buddies that children with autism needed. Myrick and Bowman (1981), outline four necessary ‘peer facilitator’ characteristics which include: caring, accepting, understanding and trustworthy (61). They note that these qualities should be highlighted when training a peer facilitator so that they can understand the importance of the helping relationship. Furthermore, being a good listener and using appropriate interpersonal communication skills are essential to the peer helper’s profile.

Children who participate as peer mentors often report feelings of satisfaction and contentment with their contributions to children with autism. One teacher noted,
I feel that peer buddy programs help the children learn that everyone is different and that it is okay to be a little different. For the typically developing peers who are involved in buddy programs, the teachers often report high self-esteem and confidence as well as a chance to move away from some of their own social and/or academic problems. It allows them to feel like they are giving back to someone else. It develops their sense of humanity. Peer buddy programs give them an understanding that they can interact with children who are different from themselves. They learn not to shy away from difference. They have learned what it feels like to have a lesson be learned from them, and the satisfaction of teaching someone something. Some of the buddies who have a learning disability learned that they have something to contribute that they weren't aware of. These buddies started out being very shy and afraid, but after working successfully with their student, came out of their shell, and started interacting with their peers. They gained confidence and felt a sense of safety to spread their own wings.

This experience is reflective of what occurred in the peer mediated program for students with autism. Many of the peer buddies themselves had learning difficulties and behavioural issues. Peer mentoring gave these children an opportunity to “help” rather than be helped, as is often the case with students facing academic and social challenges.

Buddy programs also have a profound impact on the child with autism. One parent wrote,

My daughter participated in a circle of friends that we created at her elementary school. The kids that participated were just kids from the general education program. They did social activities together. For my daughter, her social skills and language improved and interestingly
enough many of her autistic characteristic like flapping her hands would subside as she would behave more like her peers. We have videotaped some of their sessions together and it was amazing how appropriate she was the entire time, especially since my daughter can become aggressive. She developed a very close friendship with one girl. They became best friends and really love each other. It is the only friend she has ever had.

Teachers also provided some cautionary remarks about buddy programs and emphasized that a “spill over” effect would take place once the buddy program was established. “You want the child watching other children, and the best way to get this going is to pair the child with a buddy in his class. This buddy probably has other friends in the classroom and therefore the child with autism will end up being around several children who can model lots of play. You do not want to pick the child that is always into trouble, one who cries at everything, or one who does not follow the teacher’s instructions.”

Pratt and Moreno (1991) offer an array of practical strategies to increase interactions between typically developing students and those with autism. They suggest pairing elementary age students with autism with buddies while walking down the hall, playing on the playground, and during other unstructured times of the day. To prevent dependence on one child, it is important to vary buddies across time and activities. Furthermore, building in cross-age peer buddy supports allows for older students to assist a student with autism. Utilizing the strengths of specific individuals with autism also helps to build relationships with peers (1991:90-91). Some initial training and rules for peer buddies can include: being punctual (children with autism have a difficult time waiting to go outside), being specific when giving directions, avoiding references such as “the autistic” or “the disabled,” intervening when
others are making fun of or teasing your buddy, and most importantly treating classmates with autism like people (ie. these individuals have the same feelings as the peer helper).

Two parent respondents offered very detailed reflections about their experiences with peer buddy programs. Both respondents are mothers of young boys with autism. One parent offered a general reflection about peer buddies. She stated,

**Due to the efforts of other children, my son now knows that his peers are more fun than his toys. Since Grade 2 he has been placed in a regular classroom with ‘typical’ peers, while still working on a modified academic program. Peer groups have been absolutely, positively wonderful for my son. I am convinced that without those ‘little helpers’ Kyler would still be desperately trying to fit in, to handle the classroom environment, to have friends. It will be little people like them, that I have come to rely on to befriend and educate my son. It will be these ‘little people’ that will allow my son to have a future, to grow up and find his niche in this society. Children with autism have an ability to model their peers almost perfectly (provided motivation) and it is his peers’ behaviour in class and in the playground that Kyler has developed. It has been his peers that have taught him to write, play, do math and hopefully someday, to read. It has always been a little girl, with an over developed sense of maternal instinct that has taken Kyler by the hand and gently guided him through the many, almost non-noticeable cues of school behaviour...always there with a soft touch, a quiet voice. The little boys have taught him what’s cool and what’s not. But it is only recently that Kyler has taken to them. Boys, seem to be more demanding and believe it or not, more critical of the slightest social ‘faux pas.’ They do not have that instinct that allows them to**
overlook the missed quest--and to teach him what he's missed. Kyler still has girls that are best friends, though he adores the boys he hangs out with. The girls, however, have a special place in his heart, and his behaviour noticeably changes around them.

The second mother wrote about parental influences on children's attitudes about disability. She wrote:

I am convinced that it starts at the top. Children have an instinctive fear. We all do. But children are taught what to fear. It is up to parents to teach their children that to fear difference is ignorant. To fear those that need help is to give in to fear. If parents, consciously or unconsciously fear those who are different--ostracize those who are different, their children will also do the same. They learn this response from a very early age. Different does not mean bad. An open mind, a willingness to learn, and perhaps a healthy dose of common sense is all you need to become a peer buddy.

Responses from the email groups also supported the research studies described in the literature review. One parent respondent noted, "it seems vital that peers be taught about what autism is and is not. The behaviours, fears, and anxieties these children experience should be explained to peer buddies in terms they can understand." Children fear the 'unknown' but when they are give ample information about a situation, they are better prepared to deal with it. Furthermore, many of the reflections from email participants, resembled the circumstances that had occurred in the peer buddy program I developed. A teacher stated, "the frequent peer buddies were usually the students who asked the most questions about why the student did this or that." This is consistent with the peers who voluntarily returned for more intense peer mentoring in this study. They asked many questions and were motivated to help the children develop social skills.
CHAPTER 8

Discussion and Implications

This qualitative case study of peer attitudes towards peers with autism yielded positive results after their participation in a two phase buddy program which began with peer mediated proximity and ended with peer initiated interventions. Firstly, social intervention in the form of peer mediated buddy programs is an effective approach to increasing social interactions between children with autism and their peers. As Kamps suggests (1998), “physical integration alone, as noted in low baseline levels for participants, and as suggested by others, will not necessarily produce true interaction time with peers. Peer mediation increases durations of social interaction for students with autism” (1998:127). The findings of my study also concur with reports of positive peer interaction and attitudes following “buddy time” with children with autism. Why are peer buddy programs needed? The DSM-IV states that,

Students with autism by definition have severe difficulties in developing social behaviours--there is a qualitative impairment in social interaction, failure to develop peer relationships appropriate to developmental level, lack of spontaneous seeking to share enjoyment, interests, or achievements with other people, lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level (in. Sainato et. al, 128).

Kamps also notes that “peers are accepting and often times excited about social activities with children with autism” (1998:128). This was evidenced in the responses the peer helpers provided in the semi-structured interviews. This is noteworthy given the social problems typical to autism, and Kamps et.
al (1998) concur that promoting interactions within school environments is a first step towards the development of friendly relationships for many students with autism. Coe (1995) recommends choosing peers based on their initial responses to formalized questionnaires such as the PATHS (Peer Attitudes Towards Handicapped Scale), developed by Bagley et. al. She then suggests re-administering the PATHS to adolescents once they have participated in a peer buddy program to see whether changes in attitudes and perceptions have resulted.

Blackford and King also provide a variety of activities that can be used to teach students about special needs (see Appendix 7). In essence, high school students can be taught a simplified version of Saraga's social model. Her book, *Embodying the Social: Constructions of Difference* provides useful techniques (ie. analyzing advertisements) that question the stereotypical depictions of children and adults with mental/physical challenges. Saraga reveals that there are a great deal of popular, yet negative representations (ie. disabled person as their own worst enemy) that are perpetuated in the media (1998:52). Students can be taught to deconstruct advertisements and to be analytical thinkers when viewing commercials or movies. All of this "preparation" will help to not only educate the peer helpers about different learners, but can also help to foster a friendship of greater understanding.

Powers and Powers (2000) have developed a comprehensive guide for teachers and students entitled, *Principles that Promote Friendships*. They emphasize that a lifetime of understanding starts in school and that educators and peers should not underestimate the power and commitment of a child who is invited to learn.
We often forget about the persistence of children when we think of ways for them to develop relationships with students with autism. Many are willing and excited about the prospect of helping and befriending, but need one simple thing: an invitation. With that opening made, parents and teachers have the opportunity to provide guidance, explanations, and ideas about how to be a friend—but it all starts with an invitation. (15)

Powers and Powers (2000) also provide a summary of important student reminders when being a friend to a child with autism. These include: treating the student like anyone else; stopping others who are teasing/name calling; being helpful but not too helpful (letting the child try the task himself before jumping in); explaining to other kids that the ‘different’ behaviour is not the child’s fault, it is just how he/she functions; never ignoring the child (even if you think he/she hasn’t noticed you); finding out about the disability by reading on the internet, asking a teacher or the child’s parent; asking a teacher for clarification if you’re confused about something the child is doing (there is a reason why they do things a certain way), being patient because sometimes it takes kids with autism longer to do something; taking time to say hi; trying to get to know the child as a person, not as someone with special needs who you have to be nice to; trying to help them learn; encouraging them to try new things because sometimes they’re afraid to do so; finding ways to let them use their special abilities or interests; giving them high fives when they do great things; being courageous by asking them to do certain tasks; finding something about them to admire (we all have special qualities and admirable traits); and trying to figure out what the child is trying to say with his/her behaviour.

With peer mentoring everyone’s needs are being met—peers are assisting peers and it is an opportunity for everyone to feel empowered
through “friendship.” The peer helpers in this study have acquired a sense of pride in being able to help a child who requires extra assistance, but in the interim have developed friendships that go beyond the “helping phase.” These peer helpers have also been instrumental in creating interesting play situations and interactional activities at recess time. Many of these students have experienced challenges themselves and thus have low self-esteem. The peer buddy program enhanced their confidence and empowered them to “make a positive difference” in somebody else’s life. Furthermore it allowed them to reflect on their individual willingness and desire to be “volunteers” for children who have such challenging profiles. Reciprocal peer interactions occur when children exchange social interactions with one another, when their acts support each other in the relationship and when their actions become similar to each other. Peer relations, which are of significance even to the young child, serve many important functions in children’s lives and development and in fact the egalitarian and reciprocal child-to-child interaction is central to learning social skills that last a lifetime. More than anything else, it is the reciprocity of social exchange that successfully developed in this peer buddy program.

Schools offer more than an academic life for children. They are a place where children have the opportunity to learn how to belong to a community, how to work together, how to play together, and how to make new friends. It is extremely important to enhance social relations among children. The goal of every school should be to foster an environment of belonging—an inclusive one where everyone is accepted and secure. Bélanger notes,

In many establishments, school integration seems to have been partially achieved. In spite of the closing down of many segregated establishments, mainstream and special classrooms, continue to educate and cater to populations of children previously identified as
having special educational needs. This situation leads to a continuing form of segregation that differentiates the tasks of the resource or special teacher from those of regular teachers, and thereby raises a challenge to the ideal of inclusion, which would necessitate collaboration between the educational partners, not a segregation of tasks. (2000:232)

A “school commitment” to a peer buddy program requires the support of all teachers and administrators. The buddy program I have implemented could not have been possible without the support of the community (parents of peer helpers and children with autism), teachers (mainstream and special education teachers) and administrators (principal and vice principal).

My analysis of this peer buddy program which took place over four months has resulted in several important and positive conclusions which support the literature and the parent/professional reflections which were obtained from the email groups. First, positive peer interactions and attitudes resulted after implementation of the peer buddy program. All students reported heightened feelings of self worth after intense participation in the program. Furthermore, the findings reveal that the second phase intervention (peer-initiated program which included training) may be more beneficial than reliance on naturally occurring interactions alone. In essence, the first phase of the program, (also known as the peer proximity approach) did not result in lasting social relationships. It was the peers who returned for the second phase of the buddy program who ‘naturally’ moved into a training mode and through the interviews it was evident that the peers needed to move into this phase to obtain strategies and further direction to enhance their social interactions with the students with autism.

A second major finding, as suggested during interviews, is that peers are often excited about social and life skills activities with children with
autism. The students stated that they liked many aspects of peer buddy programs, such as playing tag and hopscotch, and showing the students how to tie their shoes and zip up their coats. This finding concurs with reports from Kamps and Kravits (1998), that “structured opportunities to have meaningful interactions while engaged in ‘child preferred’ activities (i.e. play groups, recess activities...etc) can increase tolerance, acceptance, and interactive time together for peers and children with autism, while also improving children’s social engagement” (128). The results described from the interviews provide both evidence and encouragement for implementing peer buddy programs in schools to address the social integration and participation of students with autism.

The email respondents provided a number of interesting anecdotes which supported the results of this peer mediated program. First, girls were seen as more effective mentors than boys due to their character traits (i.e. patient, compassionate, nurturing...etc). This is consistent with the findings in the literature and this study. More girls (67%) participated in the peer buddy program than boys (33%). Furthermore, several parent respondents noted that students who had academic and social difficulties themselves were often keen on helping children with autism. This was also consistent with the academic and social profiles of the peer participants of this study (i.e. 42% were diagnosed with a learning disability). Parent and professional reflections also revealed that younger students were more willing to peer buddy. This finding supports the demographic characteristics of the peer helpers where 67% were between the ages of 7-10, while only 33% were between the ages of 11-13. Furthermore, the three students who dropped out were in the 11-13 year old range.

Studies of children’s reactions to special needs children have typically measured attitudes rather than overt behaviour. Furthermore, these studies
measured perceptions and attitudinal change on the basis of stories or pictures about exceptional children rather than as a function of experience with them. This study aimed to measure both. A major limitation of this study was the small sample size used, and therefore generalizability to other populations (ie. older students) and communities is cautioned. Furthermore, it may have been beneficial to probe the students with a mini questionnaire before beginning the peer buddy program to further validate their attitudinal changes after the peer buddy experience. In addition, peer responses may have been influenced by the interviewer (myself), since I was associated with the program and thus was a person who was an obvious advocate for the students with autism. Future research should include interviewers independent of the peer buddy programs or schools.

The importance of friendships in preparing all children for adult life is a critical one and I believe that peer buddy programs are an ideal way to enrich the lives of both peer helpers and children with autism. Teachers play an influential role in selecting instructional methods and activities which compliment and expedite the acceptance process of children with autism. Every school is unique and therefore policies about peer buddy programs, inclusion and acceptance have to be made by teachers (for teachers) so that they can be executed. Children with autism and related exceptionalities can develop peer relations if: goals for social behaviour with other children take into account their level of development and if appropriate social contexts are made available to them. I'll conclude with a simple yet profound statement I found throughout my research regarding the definition of loneliness, it reads, "caused not by being alone but by being without some definite needed relationship." All students need positive peer interactions throughout their school lives because it is through these interactions that friendships are established which in turn form the foundation for inclusive education.
<table>
<thead>
<tr>
<th>Demographic Characteristics of Peer Helpers (n=12)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>GENDER</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>n=4</td>
<td>33%</td>
</tr>
<tr>
<td>Girls</td>
<td>n=8</td>
<td>67%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>AGE</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7-10yrs</td>
<td>n=8</td>
<td>67%</td>
</tr>
<tr>
<td>11-13yrs</td>
<td>n=4</td>
<td>33%</td>
</tr>
<tr>
<td>Mean Age</td>
<td>9.75</td>
<td></td>
</tr>
</tbody>
</table>
Table 2

Demographic Characteristics of Students with Autistic Spectrum Disorder (n=5)

**GENDER**
- Boys ......................... n=4
- Girls ....................... n=1

**AGE**
- 7 yrs........................ n=1
- 8 yrs........................ n=1
- 9 yrs........................ n=0
- 10 yrs....................... n=2
- 11 yrs...................... n=1
- Mean Age............... 9.2 yrs.

**YEARS STUDENT SPENT IN A SELF CONTAINED CLASS**

<table>
<thead>
<tr>
<th>Years</th>
<th>No. of children</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4 or more</td>
<td>2</td>
</tr>
</tbody>
</table>

**CHILD'S DIAGNOSIS UNDER THE AUTISTIC SPECTRUM DISORDER UMBRELLA**

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pervasive Developmental Disorder</td>
<td>2</td>
</tr>
<tr>
<td>Autism</td>
<td>1</td>
</tr>
<tr>
<td>Asperger's Syndrome</td>
<td>1</td>
</tr>
<tr>
<td>PDD-Not Otherwise Specified</td>
<td>1</td>
</tr>
</tbody>
</table>

**SEVERITY OF THE DISORDER AS PER MEDICAL REPORTS/ASSESSMENTS**

| Category                                                        | No. of children |
|                                                               |-----------------|
| Severe (non-verbal and/or aggressive and/or self injurious)     | 2               |
| Moderate (some communication)                                  | 2               |
| Mild (higher functioning, fully expressive)                     | 1               |
Table 3

Academic and Social Profiles of Peer Participants

<table>
<thead>
<tr>
<th>PEER HELPERS IDENTIFIED AS EXCEPTIONAL OR EXPERIENCING ACADEMIC/SOCIAL DIFFICULTIES AS PER CLASSROOM TEACHER</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Disabled...... n=5</td>
<td>42%</td>
</tr>
<tr>
<td>Attention Deficit............. n=2</td>
<td>17%</td>
</tr>
<tr>
<td>Behavioral Disorder.... n=2</td>
<td>17%</td>
</tr>
<tr>
<td>Gifted............................. n=1</td>
<td>8%</td>
</tr>
<tr>
<td>Social Difficulties........ n=1</td>
<td>8%</td>
</tr>
<tr>
<td>No Diagnosis/Difficulty n=1</td>
<td>8%</td>
</tr>
</tbody>
</table>
Table 4

Peer Buddy Responses to Specific Questions in the Semi-Structured Interview

UNDERSTOOD GENERAL MEANING OF AUTISM

- Yes ........................................ n=3 25%
- No ........................................ n=9 75%

WHAT IS IT THAT MAKES YOU COME TO THE CLASS TO SERVE AS A PEER BUDDY?
(note: some students provided multiple reasons)

- A liking for all the children with Autism n=2 17%
- A liking for one specific child with Autism n=5 42%
- Enjoyment of Peer Buddying n=3 25%
- The Spec. Ed teacher and support staff from the contained class are fun n=6 50%
- Feels good to be helping other kids n=9 75%

HOW OFTEN DO YOU COME TO THE SPECIAL NEEDS CLASS TO HELP

- Once a day or more n=6 50%
- A few times a week n=3 25%
- A few times a month n=0 0%
- Every few months n=1 8%
- I don’t come anymore n=2 17%

STUDENT DESCRIPTIONS OF HOW THEY FELT WHEN FIRST BEGINNING THE PEER BUDDY AND AFTER EXPERIENCE IN THE PROGRAM (note: some students provided multiple descriptions)

PRE BUDDY PROGRAM

- Worried n=8 67%
- Nervous n=7 58%
- Scared of Children n=3 25%
- Scared of Being Injured n=3 25%
- Scared of Making Mistakes n=2 17%
- Excited n=1 8%
- Shy n=1 8%

POST BUDDY PROGRAM

- Happy n=9 75%
- Fearless n=6 50%
- Comfortable n=2 17%
- Easy n=2 17%
- Settled n=1 8%

DO YOU FEEL YOU HAVE HELPED THE CHILDREN?

- Yes ........................................ n=10 83%
- No ........................................ n=0 0%
- Not Sure .................................... n=2 17%
Table 5
Demographic Characteristics of Email Respondents
(n=17)

<table>
<thead>
<tr>
<th>GENDER</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Males</td>
<td>n=5</td>
<td>29%</td>
</tr>
<tr>
<td>Females</td>
<td>n=12</td>
<td>71%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RELATIONSHIP TO THE CHILD WITH AUTISM</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent</td>
<td>n=8</td>
<td>47%</td>
</tr>
<tr>
<td>Special Education Teacher</td>
<td>n=5</td>
<td>29%</td>
</tr>
<tr>
<td>(contained class or mainstream)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional in field of Autism</td>
<td>n=2</td>
<td>12%</td>
</tr>
<tr>
<td>Grandparent</td>
<td>n=1</td>
<td>6%</td>
</tr>
<tr>
<td>Individual affected by A.S.D</td>
<td>n=1</td>
<td>6%</td>
</tr>
</tbody>
</table>
Figure 2

Apparent Forces and Pressures Enhancing and Discouraging Peer Interactions with Children with Disabilities in the School Setting

Figure 3

Apparent Forces and Pressures Enhancing and Discouraging Peer Interactions with Children with Disabilities in the Neighbourhood

I am completing my Masters degree in Adaptive Instruction (Department of Curriculum Teaching & Learning) at OISE/UT. As part of my program, I am conducting qualitative research on, “The attitudes and perceptions of elementary aged children who have participated in a peer buddy program with children who have Autism Spectrum. I am a teacher of a self contained class and I often find that the same children come back to my classroom to help out during recess and lunch time. I would appreciate your feedback in terms of your experiences with peer buddy programs from the perspective of parent/professional. Rather than submit your response on the listserve group, please respond to me personally at: sonia.mastrangelo@dpcdsb.org. A response to my questions constitutes consent to be part of my study. I assure you that confidentiality and anonymity will be strictly adhered to. Prof. N. Belanger, is overseeing my study and she can be reached at 416-923-6641 x.2855.

1. What are your experiences with peer buddy programs for children with autism? (ie. are they effective, WHY? or WHY NOT?)

2. What types of students were “ideal” for peer buddying? WHY?

3. Why do you think those specific students were willing to actually be “peer buddies” for children with Autism? What impact did the peer buddy role have on them?
Appendix 2

Peer Buddy Sign-Up Sheet Distributed to Teachers

Dear Teachers,

I would like to implement a volunteer peer mediated buddy program this year. We require students to buddy up with one student in my class for a one week period at morning, lunch and afternoon recess. The buddies will change weekly and as a token of our appreciation we will once again be having our end of the year pizza party which will be a celebration of friendship and inclusion. Once we have a list of volunteers from each class, we will be approaching individual classes to let the students know when it is their turn to “peer mediate.” We, the staff in the classroom will still be outside monitoring the students, however the mainstream students will be together either playing a ball game or interacting with the children in my classroom. Last week I came around to your class to discuss the importance of helping out a child with a developmental challenge. Please reiterate this to your students and emphasize how important it is for “all children” to establish friendships. Please list the names of the students below and put this list in my box as soon as possible. Thanks for your ongoing support. We are looking forward to the success of our buddy program and know that all things can be achieved with the support and cooperation of fellow colleagues.

Teacher’s Name:

<table>
<thead>
<tr>
<th>Students who can Peer Mediate at both recesses PLUS Lunch</th>
<th>Students who can Peer Mediate only during morning and afternoon recesses</th>
</tr>
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</table>
Using Manual Signs/Sign Language
A strategy used to help the child with autism hear and respond. Manual signs are introduced with the words spoken to him/her so that he/she experiences them as part of what he/she is doing. Once this is accomplished, the signs and spoken words become ‘levers’ which induce him/her to respond to them and to you. This is accomplished by always embedding signs and spoken words within the child’s body action systems.

Peers were trained to teach the child to use signs to influence the behavior of others (i.e. teach him that when he makes the get up sign (while he is sitting) he causes another person to get up). Similarly, that when he makes the sit down sign (while he is standing) he causes the other person to sit down immediately.

- Help child generalize his expressive use of signs.
- A method for improving expression is to use signs and words together whenever talking to a child with special needs. By signs, we do not mean signs which represent letters, we are referring to gestures or signs which refer to and closely resemble their actions or objects. This means that when you say “Open, Walk, Jump, Push, Pull, Eat, Drink” and so forth you also use the manual sign with the word.

High Support/High Demand
Peer buddies are encouraged to use this mindset when shadowing the child with autism. This position avoids the errors of ‘over protectiveness, bullying or laissez-faire’ inherent in other stances. It implies a vigorous, supportive, playful, carefully intrusive, somewhat challenging attitude. This attitude shows itself in your intolerance of your buddy ‘disappearing’ from you. A disappearance you combat by cautiously challenging him/her in a variety of ways (i.e. putting his shirt half on so he has to struggle to find where his arms go, to putting one sock on and intentionally ‘forgetting’ to put the other on, by intentionally forgetting to give him the spoon he needs to eat his soup, by getting in his way or accidentally bumping into him as he tries to walk past you and so forth. This attitude, we suggest, in concert with the interventions suggested below are most likely to lead to a “breakthrough” with your special buddy.

Celebrate Success
Look for important non verbal signs from your buddy. A breakthrough is when the child responds to you with smiles and delight when you play with him, acknowledges your existence and returns your affection, shows through his behavior that he prefers you over others and that he can play with and even tease you—all behaviors that show that he is becoming more conscious of himself in relation to you. In short, that he is becoming ‘alive’ as a person capable of independent action and choices.

Transforming Autistic Patterns into Interactive Systems
There is an entire array of autistic systems which have within them a causal dynamic that is important for the children’s development and which can quite readily be transformed into interactive systems. These include repetitively rocking, dropping things, opening and closing doors, flicking on and off light switches (or TV’s) repetitively flushing the toilet and others like these. To transform these autistic systems it is necessary first to assess the causal dynamic that captures the child and then to find ways to cast that dynamic as part of an interactive and flexible system.

a) Rocking. Rocking back and forth either standing or sitting is a typical autistic behavior with the child demonstrating little or no awareness that anyone else exists. However, if you introduce rocking behavior with your child instead of waiting for him to produce it as part of his autistic system, then you may be able to transform rocking into an interactive system in which the child starts to develop some awareness of the distinction between him and you and his ability to influence what you do.

b) Flapping. Closely allied to rocking is repetitive flapping of arms and hands. After carefully observing arm-hand flapping motion in children with Autism, peers might provide him with cymbals (one for each hand). When this is done, the child’s flapping motion will result in the cymbals clashing together with a resonating metallic sound. With help from the peer buddy, the child may be able to modulate the sound by producing both loud and soft cymbal sounds. He may be ready for cymbals in a small rhythm group with other children.
c) Repetitive Dropping or Throwing Things. If buddies see their respective child dropping/throwing objects, we encourage them to make this into a functional game (i.e. throwing balls into a bucket or throwing darts on a board). We replace the objects they are throwing, with toys that are meant to be thrown (i.e. throwing a frisbee to a partner).

d) Rough and Tumble. Rough and tumble interaction between the child and buddy is probably the most important and underrated means of establishing strong emotional contact with all kinds of special children. We suggest that rough and tumble is effective in helping peers relate because it involves direct vigorous and repetitive physical contact between both parties that provides repeated opportunity for the special child to take note of their buddy. Activities include, swinging the child, and jumping him up and down on a trampoline. Keep a playful mood throughout all rough and tumble activities. Once the child becomes aware of you as a source of fun, the relationship can be expanded to other shared activities such as riding together on scooters.

e) Mutual Face-Touching. When a child repeatedly demonstrates eye aversion and poor awareness of others, the use of mutual face-touching often proves helpful. Take both the child’s hands in yours and begin hand-over-hand to have the child alternate between having one of his hands gently stroke your cheek while you help him use his other hand to stroke his own cheek. This is done in a rhythmic fashion with you softly saying the child’s name each time you help your child stroke his own cheek. Once this quiet, rhythmic alternation is established, you abruptly and unexpectedly break it by blowing on the child’s hand. The dramatic contrast between quiet and gentle rhythm with the abruptness of the blowing frequently induces a child to look intently at the buddy to determine what new strange event may be coming up next!

f) Swinging.. After placing the small child in an enclosed swing (if uncertain about his ability to hang on to an open swing) face the child and begin to gently push the swing while saying your name+pushes+child’s name. As the child becomes comfortable with the rhythmic motion of the swing, unexpectedly stop the swing (interruption) to determine whether or not or how the child indicates his wish that you continue pushing the swing. Expansions include varying the extent of the swing’s arc or the shape of the arc as well as telling your child you are going to touch his (foot, nose, hand, arm, etc) each time the swing brings him back to you.

g) I’m Going to Get You. “Threatening” to catch your child and tickle him is an excellent way to stimulate heightened awareness in the child that both he and you exist and that you, his buddy, will catch him if he doesn’t run away. When the child runs away giggling and looks over his shoulder to see how close you are to catching him the game is going well. An excellent variation of the game is for you to suddenly turn and run in the opposite direction as you are about to catch him. If your child tries to catch you then the game has become reciprocal and will transfer readily to playing tag games with other children.

Interactive Games Involving an Object
While the preceding games were primarily concerned with interaction between you and your child, the following games involve you and your child around an object. To succeed with such games the child must keep two things in mind at the same time: the object and the person--toward whom the object is directed.

a) Knocking Down Objects. Build an array of block towers and join your buddy in knocking them down. Then, after he has built a second or third array of towers he could negotiate with his buddy as to whose turn it is to knock down a tower. These acts of “joining” turn into playful interactions.

b) Trading Precious Objects. Some children find it necessary to fill both hands with an object (often a crayon or a stick). An effective way to teach the child to release objects and to begin to tolerate some delay in getting them back involves you having identical or very similar objects ready to replace the object you take from the child. In other words, right after taking an object from the child’s hands (and before the child becomes distressed) you place a similar object in the child’s hand. You then trade objects with the other hand in the same manner. As the child tolerates these trades it is possible to introduce somewhat different objects and to gradually increase the time between you taking the object and replacing it with another. As you do this, you are also interacting with the child around these objects in contrast to his prior static involvement with them.

c) Competition Cup. This procedure is effective with special children who have some beginning awareness of the other person as an independent entity. The goal of the competition cup task is to help the child sharpen this awareness by setting-up a situation in which the special child can compete with him or her to gain a desired object under a cup. There are two phases involved in setting-up competition cup. The first phase establishes a need for the item under the cup; the second, is competing for that item.
Appendix 4

Semi Structured Interview Questions used with Peer Helpers

Name of Student: __________________________  Age: _____  Grade: _____

Date: __________________________  Time: __________________________

1. How did you first hear about this class? __________________________

2. What does Autism or Pervasive Developmental Disorder mean to you?

3. Who first spoke to you about being a buddy/peer helper? ______________

4. How often do you come? __________________________

5. What is it that makes you come to the class to serve as a peer buddy?

6. What kinds of “things” do you do when you come? __________________________
7. Is there a specific student you prefer working with and why? ______________

8. Do you feel that you have helped the children? If yes, how?

9. Tell me how you felt when you first started and how do you feel now?

10. What do you like/hate the most about coming to the PDD class?

11. Is there anything else you would like to say about being a peer buddy for students with autistic spectrum disorders?
Appendix 5
Categories and Themes from Peer Responses

1. Materials and Activities Comments
Student names a toy, game, curriculum activity (ie. playing with the ball, reading books, break the ice); student describes an activity or component within the game or activity (ie. getting points during tutoring, using the question cards, talking about the weather, getting stickers).

2. Social and Intrapersonal Comments about Peers/Children with Autism
People comments were related to being with friends, working together, playing with friends or specific persons. Some social comments were similar but more general and related to social skills, for example: “sharing the toys,” “getting along better,” “it’s fun playing,” “learning responsibility.” Similarly a negative comment (when asked what was the least favorite part) were less desirable social aspects (ie. when the kids would hit, when they would walk out of the washroom without their pants up).

3. General Descriptive Comments
Descriptive answers indicating general positive or negative feeling towards the activity (ie. it’s fun, it’s boring, without a specific are of influence or detail for the materials and activities, for social aspects, or related to tutoring and helping categories.

4. Learning, Academic Content
These are responses commenting on learning and academic content. Examples include: “I learned sign language,” “he learned how to get my attention.”

5. Teaching, Tutoring and Helping Comments
Responses using the words teaching and helping others to learn an academic or play skill/activity to indicate preference to “assisting” characteristics of the peer group activities.

6. No Response
Answers included “I don’t know,” or “I can’t think of anything,” or “I’m not sure.”
Appendix 6

Summary of Responses from Email Groups

• What are your experiences with peer buddy programs for children with autism? (ie. are they effective, WHY? or WHY NOT?);

<table>
<thead>
<tr>
<th>Experience Description</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No experience with peer buddy programs</td>
<td>4</td>
<td>24%</td>
</tr>
<tr>
<td>Minimal experience with peer buddy programs (Positive)</td>
<td>3</td>
<td>18%</td>
</tr>
<tr>
<td>Minimal experience with peer buddy programs (Negative)</td>
<td>2</td>
<td>12%</td>
</tr>
<tr>
<td>Extensive experience with peer buddy programs (Positive)</td>
<td>7</td>
<td>41%</td>
</tr>
<tr>
<td>Extensive experience with peer buddy programs (Negative)</td>
<td>2</td>
<td>12%</td>
</tr>
</tbody>
</table>

• Some descriptors used to establish which students were “ideal” for peer budying

• intuitive
• girls who grow up to be teachers or counselors
• maternal and protective students
• girls from a range of ethnical backgrounds, SES and educational abilities.
• curious
• academically driven (4 year college bound)
• compassionate individuals
• good conversationalists
• students experiencing difficulties themselves (ie. academically, socially)
• younger students
• active
• interested in new things
• leaders
• patient
• understanding
• empathetic
• outgoing
• good listeners

• Impact of Peer Buddy Program on Mentors...

• increased self esteem
• feelings of self worth
• feelings of accomplishment/contribution
• respect for humanity
• understanding of disability
• learn specific skills (ie. sign language)
• increase in confidence
• learn not to fear “difference”
Activities For the Regular Classroom That Increase Understanding of Special Needs

Mobility Needs

1. Students wear a sling on their dominant arms for one day. An easy way to do this is to tie a rolled-up newspaper to the arm.
2. Students insert a wedge of paper in the heel of one shoe for one day, to demonstrate difficulty balancing.
3. Using crutches or a wheelchair, make up a schedule where each student uses either one to carry out usual activities (perhaps for a half-day, one period in the day...depending on number of students in class).
4. Fasten one arm behind students’ backs while they carry out regular activities to experience having only one arm.
5. Students put one of their socks on their writing hand to write, simulating difficulty with fine motor control. Also, with socked hand, can try to tie shoe-laces, button coats, use scissors, turn pages of a book, etc.
6. Link students’ ankles with a one-foot string and ask them to walk with their legs as far apart as possible (gym class may be appropriate).
7. Students must do pencil and paper exercises only using a pencil held in their mouths or between their toes. Can do pictures and compare to Easter Seals.

Communication Needs

1. If there is a student in your class who uses symbols or pictures to communicate, have the students use copies of the symbol display to communicate or write “secret messages” to each other.
2. To increase understanding of speech problems, tape record everyone’s speech to show that everyone has a different voice.
3. To demonstrate articulation problems, have the students talk for an hour with their mouths only slightly open.

Learning Disabled

1. Prepare a sheet of paper with sentences that have some of the letters written backwards. Students must copy the sentences as quickly as they can.
2. Students try to write their names and addresses while looking in the mirror.
3. Students try to write using only their non-dominant hand.
**Visual Needs**

1. Blindfold students and have them find their way to the closet and find their coats to go out for recess.
2. Choose several students to come to front of class, blindfold, have them touch and describe objects, have them try to pour liquid from a jug into some glasses, have them count out $1.00 from a pile of change.
3. On a television, turn the brightness control to maximum darkness and have the students listen to a program. Afterwards, ask them to explain what it was about and discover how many different interpretations there were.
4. Cards with Braille alphabet are available from Canadian National Institute for the Blind (CNIB)--have students make a menu using the alphabet.
5. To demonstrate only light perception, students can smear vaseline on the lenses of swimming goggles and look through them.

**Other Ideas**

- Following any above activity, students may write about their feelings in a journal, write a story, or make a drawing
- Role-play i.e. how you might make a child with a particular disability feel comfortable, how you might ask the child if he/she needs help, etc.
- Invite children and adults with specific disabilities to come to your class
- Ask associations to come and demonstrate or explain things like how Braille works, what a brace does, why a hearing aid sometimes squawks, how a wheelchair works, etc.
- Field trips: watch a wheelchair basketball game, visit Variety Village (sports complex in Toronto where disabled and non-disabled children participate together in sports activities), visit a rehabilitation centre to see how braces are made, visit CNIB to learn about Braille
- Look for things in the neighbourhood which make it easier for someone with a disability to get around (signs in Braille, special buses, curb cuts, ramps, parking spaces...) as well as hurdles (high steps, heavy doors, narrow aisles, high door handles....) Rate your school or neighbourhood by making an accessibility check sheet.
- Choose a particular disability, make a list of things which would be difficult for someone with that disability, invent a device which would make their life easier or more interesting

**Reference**
References


*Behavioral Disorders.* 13, 116-126.


