

ATTITUDES TOWARD INCLUSION OF STUDENTS WITH AUTISM

A MIXED METHODS STUDY

by

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**ABSTRACT**

As a measure to support inclusive practices in education, children with autism spectrum disorder (ASD) are increasingly being included in general education classrooms. Despite this desire for inclusion children continue to have negative attitudes towards their peers with autism and are less accepting of them (Nowicki, 2006; Tonnsen & Hahn, 2016). The present study explored if a facilitated group conversational approach with elementary aged students had a mediating or predicting factor in fostering inclusive attitudes towards their peers with autism. The theoretical framework for this study was Theory of Mind (ToM) and a mixed quantitative and qualitative design was implemented. A pre/post test of Attitudes Towards Inclusion of Students with Autism Scale was administered to 26 grade six students. The interventions included 4 sessions, involving a discussion of an overview of autism and inclusion, reading parts of the biography of Naoki Higashida, watching YouTube videos, from the Canucks Autism Network in which children with autism share their personal stories, as well as learning about other high profile individuals living with autism such as Austin Riley. Follow up interviews were conducted with 5 random students. The participants were 26 grade 6 students 15 boys and 11 girls aged 11 and 12 from an elementary school in Surrey, B.C. The results illustrated that there was a positive change in student's attitudes toward inclusion after participating in a conversational approach, which appeared to provide them with a greater understanding of autism.

**Keywords:** Autism, inclusion, theory of mind

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## CHAPTER 1: INTRODUCTION

It is now common for schools in British Columbia to be comprised of students with and without disabilities including autism spectrum disorder (ASD) all learning in the same classroom (Maich & Belcher, 2011). Inclusion of special needs students such as ASD into mainstream classrooms has now become a dominant paradigm, resulting from the changing discourses such as the medical or charity discourse in the field of special and regular education (Winzer, 2006). The medical discourse suggests that people are disabled because of their disability or differences, which require fixing while the charity discourse suggests that people with disabilities are weaker and require the sympathy of able-bodied people. In this study the earlier term “mainstreamed” used by Winzer, 2006 may be interchanged with the more current term “inclusive”. ASD is a neurodevelopmental disability characterized by impairments in social and communication interactions and atypical restrictive and/or repetitive behaviour (American Psychiatric Association, 2013.) Despite this growing shift towards inclusion, research has illustrated that children can have negative attitudes towards peers with autism (Tonnsen & Hahn, 2016; Norwicki, 2006; Chamberlain Kasari, Rotheram-Fuller, 2006; Ring & Travers, 2005). Bullying, social isolation, and victimization are reported to take place at greater rates among children with autism (ASD) in comparison to the overall population (Cappodocia, Weiss & Pepler, 2011; Humphrey, 2008). It is estimated that about 30% of students with disabilities have considerably fewer friends and are less accepted by their classmates than their typically developing peers (De Boer, Pijl, Post & Minnaert 2013; Tonnsen & Hahn, 2016). Studies have shown that students with disabilities, who are being taught in inclusive classrooms have more negative body image concerns, a limited number of close friendships, and received less favourable social prestige than peers without disabilities (Armstrong, Rosenbaum, & King,

1992). In light of the research inclusive practices alone may not fully expel stigmatized attitudes and behaviours toward atypical children.

## **Background**

The road to inclusion has lead students with disabilities towards being educated together with their non-disabled peers (World Health Organization, 2011). Inclusion intends that students with disabilities have the right to be educated in the same manner as their peers, and are entitled to receive the same access to educational, physical, social and emotional programs as non-disabled students. According to the *British Columbia Government News Factsheet: Education by the Numbers (2018)*, the number of students with special needs designations in British Columbia has increased substantially from the 2016-2017 school year. In 2016-2017, there were 66, 665 students with special needs in the province. In 2017-2018 that number increased to 69, 685 students with special needs, an increase of 3,020 students with special needs. Note these statistics do not include students who have special needs but have not yet been diagnosed. Due to this increase of students with special needs, it is critical that we examine how inclusive practices are working in our schools.

In 1994, The United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Conference on Special Needs Education published a document on the education of students with disabilities. This resulted in the Salamanca Statement, which was agreed upon by 92 countries and 25 organizations, outlining that children with special educational needs should have the right to attend regular schools. This declaration supports the notion that inclusive neighbourhood schools “are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all.” (UNESCO, 2009).

The Salamanca statement is part of a worldwide initiative of having an inclusive education system. It has been urging governments to encourage, design, fund, and evaluate inclusive education programs within their education organizations. In British Columbia the Ministry of Education states the, “The practice of inclusion is not necessarily synonymous with full integration in regular classrooms, and goes beyond placement to include meaningful participation and promotion of interaction with others” ([www.gov.bc.ca](http://www.gov.bc.ca)). The notion of promoting interaction with others is essential to inclusion.

### **Definition of Terms**

To enhance the clarity in understanding the context and nature of this research, the terminology used is defined as follows.

**Typical, atypical and neurotypical child:** The term *typical* child is used to describe a child that does not have a B.C. Ministry designation for an exceptional learning need whereas *atypical* children include those who have a designated, exceptional learning need, such as Autism. Armstrong (2012) refers to neurotypical students, as “so-called...normal individuals” (p. 10). Merriam Webster online dictionary describes neurotypical as “not affected with a developmental disorder and especially autism spectrum disorder: exhibiting or characteristic of typical neurological development neurotypical students; the neurotypical brain.”

**Autism Spectrum Disorder:** ASD will be used when referring to a child with autism spectrum disorder. ASD is a neurodevelopmental disability described as having impairments in social and communication interactions and atypical restrictive and/or repetitive behaviour. Autism is considered a “spectrum” disorder because there is an extensive difference in the type and degree of symptoms that people experience. ASD can occur among all cultural, racial and various levels

of social economic status (American Psychiatric Association, 2013.) Although ASD is a disorder that remains with one for life early intervention, treatment, and services can help improve a person's condition and ability to function successfully ([www.autismspeaks.org](http://www.autismspeaks.org)).

**Theory of Mind:** ToM will be used when discussing theory of mind. ToM also defined earlier is known as “mindreading” it can be understood as having the skills to comprehend other peoples mental states such as thoughts beliefs, needs, intentions and feelings (Baron-Cohen, 2001).

**Inclusion:** Inclusion refers to more than just physical integration of students with exceptional needs, but instead welcomes diversity. Inclusion BC (2019) defines inclusion as follows: “Inclusion is an attitude and approach that embraces diversity and differences and promotes equal opportunities for all. Inclusion is not just about people with disabilities. When our communities include and embrace everyone, we are ALL better able to reach our full potential” ([www.inclusion.bc](http://www.inclusion.bc)). Katz and Mirenda (2002) define inclusion as, “...a sense of belonging: feeling respected, valued for who you are; feeling a level of supportive energy and commitment from others so that you can do your best...Inclusion is about valuing all individuals and giving equal access and opportunity to everyone and removing barriers so that everyone can participate” (p. 16). Jean Vanier (2008) founder of L'Arche and a pioneer of inclusion described inclusion of those who are ostracized as, “affirming that they have a gift to give to all, to each of us individuals, to the larger forms of human organization, and to society in general” (p. 84). When those who are excluded are invited as friends and as people with gifts to share inclusion is possible. If Vanier's vision of inclusion could take place in our school communities it could gradually seep into our societies and change them for the better.

## **Theoretical Framework**

Theory of Mind is the theoretical framework that is guiding this research study. ToM refers to the skills that an individual can have to interpret what others may be thinking or feeling and foresee how they may behave based on those inferences (Schilinger, 2009). Students with ASD have limited or lack ToM skills (Kimbi, 2014) however; typical children have ToM skills (Baron-Cohen, 2001). Studies have shown that ToM can be developed using a conversational approach in typical children (Bianco & Lecce 2016). The over all goal of this study is to explore if a conversational approach about autism can impact typical students' attitudes toward inclusion.

## **Research Problem**

A disconnect is present between the idea of inclusion as defined by the Salamanca Statement, the Ministry of Education, and the experiences of inclusion for students with ASD. Humphrey (2008) suggests that in the case of students with ASD there is a need to develop peer understanding and knowledge of ASD, which can allow students to support their peers with ASD rather than to ignore or taunt them.

The research addressing this problem has typically focused on delivering information through video presentations, using peer mediated interventions or curriculum such as Circle of Friends (Swaim & Morgan, 2001; Simpson & Bui, 2016). These interventions appear to lack a platform for students to have a conversation about special needs and process any concerns or questions they may have. They also neglect the power of personal narratives that students with autism can share which can profoundly contribute to understanding the human other as they navigate through an education system of diversity and inclusion. A personal narrative is the sharing of one's personal life story, which can be source of rich information resulting in the

listener feeling, connected to the narrator (Zak, 2013). Swain and Morgan (2001) have shown that knowledge itself is not powerful enough to change attitudes. Yet it is evident that typical students need to acquire knowledge and a deeper understanding that connects not only their minds but also their hearts towards students with ASD in hopes to inspire them to be more inclusive. A means to achieve this is by fostering Theory of Mind in typical students.

As noted above, Theory of Mind (ToM) refers to children's ability to reason and understand other people's mental states such as thoughts, emotions and beliefs (Baren-Cohen, 2001). Children from the ages of 3 to 8, can have empathy for another's feelings, while recognizing that these feelings may be different from their own (Hoffman, 2000). It has been well documented in Theory of Mind (ToM) studies that neurotypical children exhibit ToM skills, however children with ASD display a deficit in ToM skills (Baren-Cohen, 2001). Research that has attempted to teach ToM skills to children with ASD has shown limited success, which may be due to poor communication skills given communication is a core deficit with ASD (Peterson, Slaughter, Moore & Wellman, 2016).

Research suggests neurotypical children exhibit ToM skills but do not appear to be applying these skills towards their peers with ASD (Eyuboglu, Baykara & Eyuboglu, 2017). Recent research on ToM with typical students has illustrated that involving children in a conversational approach about mental states, beliefs, needs and perceptions with adults and peers improved their ToM skills (Bianco, Lecce & Banerjee, 2015). Considering the above information, this study will focus on fostering ToM skills with typically developing children.

### **Purpose of the Study**

The purpose of this study was to determine if a conversational approach with neurotypical children would provide an opportunity to engage in meaningful discussions about autism and inclusion, in order to elicit ToM skills, which as a result could positively impact their attitudes towards peers with ASD. Neurotypical students need to be given the opportunity to be challenged in their attitudes towards inclusion. This will be fully discussed in the subsequent chapter. In addition to engaging in a dialogue, students were presented with information about autism, read excerpts from biographies of people living with autism and watched YouTube video clips. Analysis for this study included a pre/post test Likert Scale, assessing the attitudes of inclusion towards students with autism and five semi structured interviews with students following the intervention.

### **Research Question**

For the purpose of this study the following question will be examined:

- How could a facilitated group conversational approach with elementary aged students be a mediating or predicting factor in fostering inclusive attitudes towards their peers with autism?

### **Research Hypothesis**

As part of this study, investigation will include one research hypothesis:

- Given that students have ToM which can be further developed through conversations, if students are given the prospect of understanding autism through asking/answering questions and being challenged about the beliefs they hold,

they may have a positive change in inclusive attitudes towards their peers with autism.



## CHAPTER 2: LITERATURE REVIEW

### **Attitudes & Knowledge towards Peers with Autism**

As indicated above, several empirical studies have found that children are inclined to carry negative attitudes toward their peers with Autism. Attitudes have been suggested as significant factors that may infringe upon the successful inclusion of students with ASD (Humphrey, 2008). Students who embrace optimistic attitudes about peers with ASD are expected to be more accepting while, those who tend to carry negative attitudes may reject their peers with ASD (Tonnsen & Hahn, 2016). Middle school years (grades 6-8) are characterized by an increasing emphasis on peer relationships in which, children often display attitudes and behaviors comparable to their peers, resulting in a hesitation to stray from the professed group norm by socializing with peers with autism (Tonnsen & Hahn, 2016). Thus, challenging typical students' negative attitudes about autism may be a viable avenue to promote positive attitudes and inclusion towards students with autism.

Along with negative attitudes children appear to have a minimal level of knowledge as it pertains to autism. In a large study by Campbell, Morton, Roulston, and Barger (2011) the majority of their sample included middle schooled US students whom were able to give a definition of autism, but did not have a deeper understanding of the central deficits that define autism. Further, a sample of 79 children from grades 3-5 was taken in Greece; researchers found that no students were familiar with the word autism in comparison to their understanding of other general disabilities (Magiati, Dockrell, & Logotheti, 2002). Given the increasing prevalence of ASD it is concerning that children are lacking knowledge and positive attitudes of their peers with ASD.

Humphrey (2008) suggests that social seclusion and victimization experienced by children with ASD can be reduced by support from peers. This suggests a need to focus upon the development of peer understanding of ASD. Obtaining information and understanding of behaviors associated with autism may help students support their peers with ASD rather than ignore them. A powerful means to creating understanding is through the personal narrative of others. Stories are vital to helping people understand each other. Zak (2013) states, when a story is heard our bodies produce oxytocin and start to form a connection to the person we're listening to. Since we're social creatures stories are an effective way to share information (Zak, 2013). In fact, personal stories that are emotionally compelling engage a larger portion of our brain and thus are easily recalled than learned factual information (Zak, 2013). Stories bind us together and help us make sense of our experiences and each other.

Children with ASD often have a difficult time anticipating experiences of others, resulting in problems with picking up on social cues, working through conflicts, and accurately understanding the behaviour and words of others, making it more challenging to change their social behavior (Tonnsen & Hahn, 2016). Therefore, teaching and helping typically developing peers to promote the inclusion of children who seem to be socially isolated is advantageous, in comparison to attempting to change the social behavior of children with ASD (Kasari, Rotheram-Fuller, Locke & Gulsrud, 2011).

Chamberlain, Kasari and Fuller (2006) examined the social networks of children with ASD in regular classrooms. The results of their study illustrated that children with ASD performed considerably poorer in social network centrality than typical peers. Children with ASD tended to be less socially involved in their classroom. It was found that of the children with Autism, 35% were categorized as peripheral 47% secondary, and 18% nuclear. With the typical

peers only 6% were categorized as peripheral, 47% obtained a score of secondary, and 47% were nuclear. The authors concluded that children with disabilities are at risk of being socially excluded despite their efforts to become part of the classroom social structure (Chamberlain et al., 2006; Simpson & Bui, 2016). Children with disabilities including ASD often try to be socially accepted, but research illustrates that they fall short. However, if typical students can gain a deeper understanding of these individuals it may result in increased social interactions, which in turn could be a positive shift towards greater inclusion.

### **Inclusion**

In an ethnographic study, students with ASD were cognizant of being excluded, ignored and teased by their typical peers, suggesting that mere proximity alone does not result in inclusion (Ochs, Kremer-Sadlik, Solomon & Sirota, 2001). A study by Rotheram-Fuller, Kasari, Chamberlain and Locke (2010) which examined social involvement of children with ASD within inclusive elementary school classrooms, found that children with ASD had significantly less mutual friendships among all grades compared to their typical classmates. In the early grades, (K-1) children with ASD appeared similar to their classmates in comparison to middle (2<sup>nd</sup> and 3<sup>rd</sup>) and late grades (4<sup>th</sup> and 5<sup>th</sup>) thus social involvement is at its pinnacle in the early years.

Reciprocated relationships for students with ASD appear to be a buffer from social isolation. Rotheram-Fuller et al. (2010) found that children with ASD who had at least one mutual friendship were more socially involved in their classroom environment and were generally more accepted by peers. As in earlier studies there is a large discrepancy between children with ASD and typical peers when it comes to social network centrality. Typical children may also be aware of the stigma that could be connected to them if they socialize with a peer that is deemed rejected by the majority of the class (Rotheram-Fuller et al., 2010). This social

deterioration in the later elementary grades among children with ASD may be a result of peers becoming mindful of the differences between themselves and peers with ASD and being less accepting of those differences.

In a recent study, researchers Bottema-Beutel, Turiel, DeWitt and Wolfberg (2017) studied the reasoning behind children's reluctance to include peers with autism. During individual interviews the students in the study (mean grade =2) were told four imaginary situations in which a character chose to exclude a child with autism to social events i.e. to a birthday party, play date, playing soccer at lunch, or an art group. The diagnosis of autism was clearly specified as to why the character chose not to welcome the child with autism. The result of this study revealed that children consistently, across contexts, reported that not including a child with ASD was unacceptable. Bottema-Beutel et al. (2017) suggest that supporting positive interactions and providing reasons for atypical behaviour and understanding of ASD may alleviate concerns that typical children may be experiencing when it comes to including peers with ASD. This understanding of ASD by typical students appears to be the gap in current research, which will hopefully be addressed by the research proposed here.

### **Theory of Mind (ToM)**

Understanding of ASD by typical students is related to Theory of Mind (ToM) in as much as ToM relates to the ability to recognize the presence of mental states and to utilize this information to anticipate, describe and affect social behaviour (Premack & Woodruff, 1978). ToM is inextricably related to interpreting social interactions, establishing relationships and having empathy which, makes it a suitable measure for this research study.

ToM research with typically developing children supports children in establishing positive relationships with friends and peers and achieving greater academic success (Fink, Begeer, Hunt & de Rosnay, 2014). Ornaghi, Brockmeier and Grazzani (2014) conducted a two-month ToM training programme in which typical children aged 6-7 were separated into small groups of 5 to 6, where a researcher recited situations and involved them in conversations on emotional parts of the stories. The results indicated that children in the ToM training group made gains with their knowledge and understanding of emotions and thoughts compared to the children in the control group who were requested to make an illustration about the scenario instead of taking part in a conversation.

In another ToM study Lecce, Bianco, Devine, Hughes and Banerjee (2014) used slightly older children (ages 9 to 10) who were assigned to a control or experimental ToM group. In both groups children were instructed to work independently on writing stories by answering pre-determined questions and then had to participate in a facilitated group discussion. The ToM group had a mental focus, where participants engaged in conversations that involved mental states and understanding intricate social scenarios. In the control group, the stories had a physical focus and participants had a dialogue that centered on physical rather than mental states. Again, the results indicated that the ToM training group made more progress with ToM skills compared to the control group. Although these studies are relevant they were limited in their application to real life contexts. To fill this gap Bianco and Lecce (2016) studied the effectiveness of a conversation based ToM training program facilitated by a classroom teacher during instructional time. A conversation-based approach was used because it was suitable to the school environment. The conversation based approach had 3 factors: (1) written narratives, (2) adult responses (to confirm and or elaborate children's answers), and (3) following the sequence

of children working individually and then taking part in a group facilitated discussion. Children in the ToM experimental group did better compared to the control group both at post-test and the follow up (Bianco et al. 2016). This was the first study that demonstrated that teachers could successfully promote ToM development in 8-10 year old typical students during class time.

Bianco et al. (2016) suggest that the power of ToM skills may offer teachers with a starting point to help their students to successfully navigate the social complexities of the school environment.

This facilitated conversational approach may be a suitable platform to help typical students understand the complexities of their peers with ASD.

## CHAPTER 3: METHODOLOGY

### Research Design

A mixed methods explanatory sequential design using triangulation was implemented for this study. A mixed method research design incorporates both qualitative and quantitative characteristics in the design and triangulation can be defined as comparing findings from the quantitative data with the qualitative results (Mertens, 2015). More specifically the researcher collects data, analyzes the findings and draws conclusions using both quantitative and qualitative approaches in a one study (Mertens, 2015). Explanatory sequential design refers to when one type of data determines the basis for collecting another type of data (Mertens, 2015). For example, in this study qualitative data using semi-structured interviews was used after administering a quantitative test to help gather more insight into student's attitudes towards inclusion of students with autism.

The theoretical construct of ToM was the framework that guided this research study. Bianoc, Lecce and Banerjee (2016) state that research with ToM is promising as it has shown that engaging in conversations about mental states (beliefs, desires and perceptions) with peers and adults helps develop ToM in school aged children. According to this model results of their study illustrate that the development of ToM could result in more positive attitudes of inclusion towards students with ASD.

### Instruments

A 5-point Likert scale called Attitudes Toward Inclusion of Students with Autism was developed for this study and subsequently administered prior to the four sessions of the conversational approach and with participants again once the intervention was completed (see Appendix A for Attitudes Toward Inclusion of Students with Autism Scale). The scores that

result from the administration of the scale are the dependent variable. Students were encouraged to answer how they sincerely felt rather than how they thought they should answer. Students answered the scale independently and quietly and were offered as much time as they needed to complete the scale. All students completed the scale within 5 minutes. The Attitudes Towards Inclusion of Students with Autism Scale was developed by the researcher. Data were analyzed using the Wilcoxon signed-rank t-test. Further, a qualitative approach of semi-structured interviews (independent variable) with 5 random students was employed, their responses being the dependent variable. Interviews took place in the counsellor's room during school hours and were conducted by the researcher (see Appendix B for a list of the interview questions). The interviews were taped with permission of the participants and transcribed by the researcher. Responses were subsequently coded, and then sorted into categories. The researcher used a mixed methods approach from a transformative paradigm, which strives to motivate toward change through the lived realities of marginalized populations. This helped deepen the researchers ability to draw conclusions about the issue of disconnect between the idea of inclusion and the actual experiences of students with ASD.

### **Participants**

The children who participated in this study were 26 grade 6 students, 15 boys and 11 girls ages 11 and 12, from the aforementioned school. A grade 6 class was selected as the sample based on the premise that previous ToM researchers using the conversational approach conducted their research with middle school students. This particular grade 6 class was chosen over another grade 6 class in the school because the researcher was familiar with the class. Since the researcher had co-taught the Second Step Program to the class rapport with the students had already been established. The sample was a sample of convenience; it was selected because of



being easily accessible and available (Mertens, 2015).

### **Parental Consent**

Prior to any research taking place a letter of consent was sent home to all parents to inform them of the research study (see Appendix C for a copy of the consent letter). All parents ( $n = 26$ ) agreed to have their child be apart of the study and likewise all students agreed to participate in the study with the knowledge that they could withdraw at any time without being asked any questions. Electronic data was kept private via password protected files and was stored in a locked cabinet. As well, paper copies of the research were kept in a locked filing cabinet.

### **Ethical Considerations**

Prior to beginning the study, the researcher submitted an application to the Research Ethics Board at Trinity Western University in January 2019. Approval was granted on February 26, 2019. The following month research and ethics approval was granted from the Surrey School Districts research committee as well as by the principal of the school where the research was being conducted. Participants and guardians were made aware in writing that the study was voluntary for all participants and that they could remove their child from the study at any time during the research. Though names were required on the Attitudes Towards Inclusion of Students with Autism Scale, confidentiality was protected, as the only person who viewed the results was the researcher.

### **Procedure**

This study was designed in the fall of 2018 by the researcher in consultation with the supervising committee and carried out until April 2019. Research was conducted in a suburban public elementary school, which educates 455 students from Kindergarten to grade 7. There

were 30 students who had a Low Incidence designation, as outlined by the BC Ministry of Education Special Education Categories.

### **Researcher**

Research was conducted in a suburban public elementary school in the Lower Mainland of British Columbia, which educates 455 students from Kindergarten to grade 7. Of the 455 students, 30 have a Low Incidence designation as outlined by the BC Ministry of Education Special Education Categories. Low Incidence designation refers to students who qualify for individual funding. The term “low incidence” signifies the fact that there is fairly low incidence of small number of these students in the overall school community. The researcher was employed as an Integration Support Teacher at the school three days a week, since 2015. The researcher co-taught the participants the Second Step social-emotional learning curriculum once a week from October 2018 to May 2019. The researcher collected the data in April 2019 over 8 separate days. The first session with the participants consisted of them filling out the Attitudes Towards Inclusion of Students with Autism Scale. The following 4 sessions were comprised of interventions using a conversational approach see below for more detail. Upon completion of the 4 sessions the Attitudes Toward Inclusion of Students with Autism Scale was administered as the post-test.

### **Session #1**

In the first session students brainstormed what the word autism and inclusion meant and discussed any myths they had. They also watched a power point presentation on ASD, which was followed by a discussion.

### **Session #2**

In this session students watched a short video about Autism called “Amazing Things

Happen” to provide additional knowledge about ASD. This was followed by a discussion.

### **Session # 3**

In the third session the researcher read sections from the biography “The Reason I Jump” and showed a YouTube video clip of Austin Riley, who is a race car driver and young person with ASD. Following the video clip there was time for individual reflection and group discussion.

### **Session #4**

The last session focused on watching five YouTube video clips from the Canucks Autism Network, of people living with Autism. These videos consisted of individuals sharing their story and were followed by a facilitated group conversation about what it meant to live with ASD.

The day after the 4<sup>th</sup> session a post test of the Attitudes Towards Inclusion of Students with Autism Scale was administered. Participants were required to write their names, however they were assured that the only person who would see their answers would be the researcher. The researcher used simple random sampling to pick the names of 5 students out of a hat and conducted follow up interviews with them. The interviews were based on having them answer follow up questions (see Appendix B for a list of interview questions). All interviews took place in the counsellor’s room, as there was no other comfortable space available to meet with students. The Statistical Package For Social Sciences (SPSS) was used to analyze the data collected from the scale to determine if there were significant differences between the pre and post test measures.

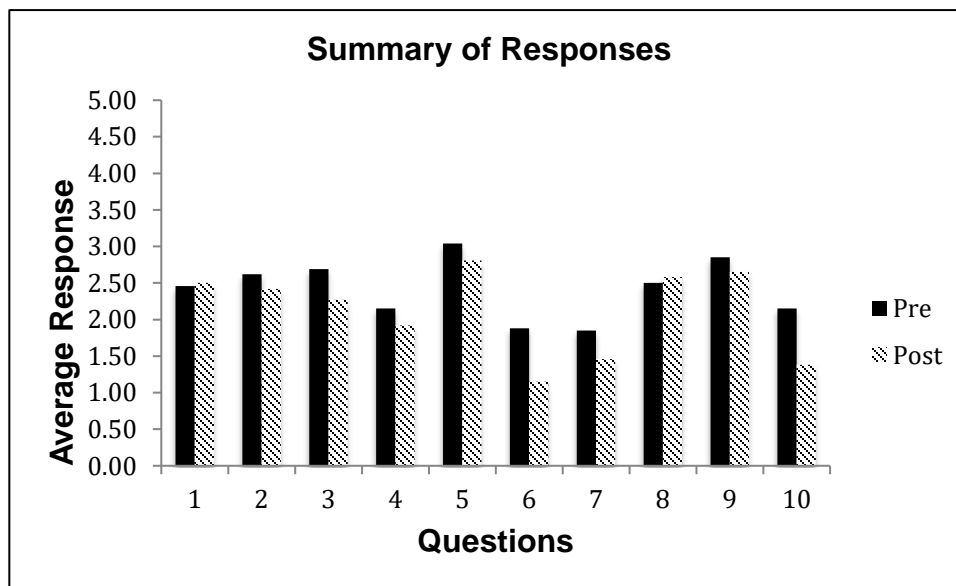
## **Summary**

Through this mixed methods research study, the researcher was able to obtain quantitative and qualitative data by having participants fill out a pre/post test, Attitudes Towards Students with Autism Scale, as well as interviewing 5 random students. By doing so, the researcher was able to draw conclusions based on the results of the scale and on the themes that emerged from analyzing the coded data. The following chapters discuss the results that were discovered.

## CHAPTER 4: RESULTS

### Quantitative Results

The Attitudes Towards Students with Autism Scale was administered to participants prior to having any conversations about autism (pre-test) and after the four facilitated conversations (post-test). The survey consisted of ten questions that were answered using a 5-point Likert scale. The Wilcoxon signed rank t test was administered to the data to determine if there was a significant difference in participant's attitudes. See the figure 1 below for a summary of the data.

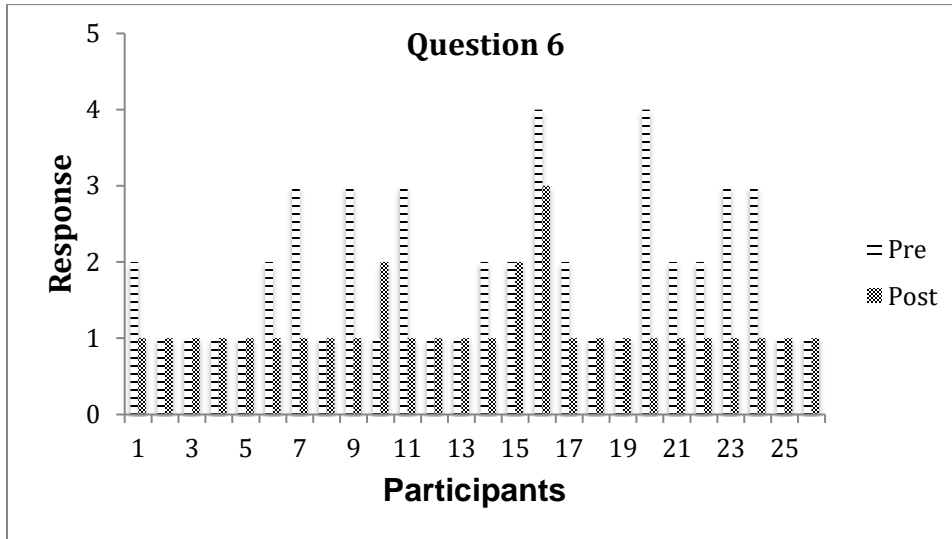


**Figure 1. Summary of student responses**

Note: 1.00 = agree strongly, 2.00 = agree, 3.00 = not sure, 4.00 = disagree, 5.00 = disagree strongly

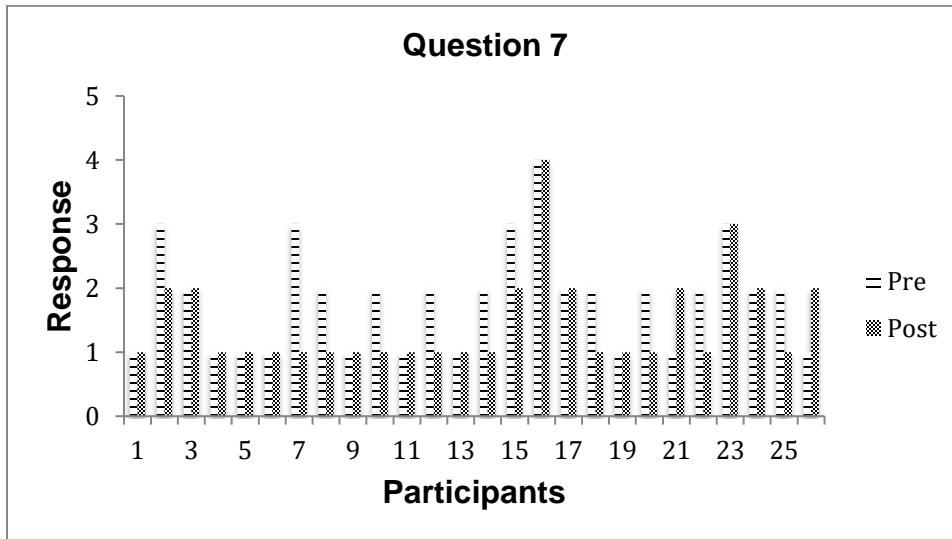
The results of the Wilcoxon signed rank t test illustrated that questions #6, #7 & #10 from the Attitudes Toward Inclusion of Students with Autism Scale were statistically significant. The p value was less than 0.05 for all three questions. Refer to figures 2, 3, and 4 below for more information. Individual figures depicting the data from the Wilcoxon signed rank t test for the questions that were not statistically significant, can be found in Appendix D.

**Statistically significant questions**



**Figure 2. I believe that autism is not contagious.**

Note: 1= agree strongly, 2 = agree, 3 = not sure, 4 = disagree, 5 = disagree strongly



**Figure 3. I believe that Students with Autism experience emotions or feelings like I do.**

Note: 1= agree strongly, 2 = agree, 3 = not sure, 4 = disagree, 5 = disagree strongly

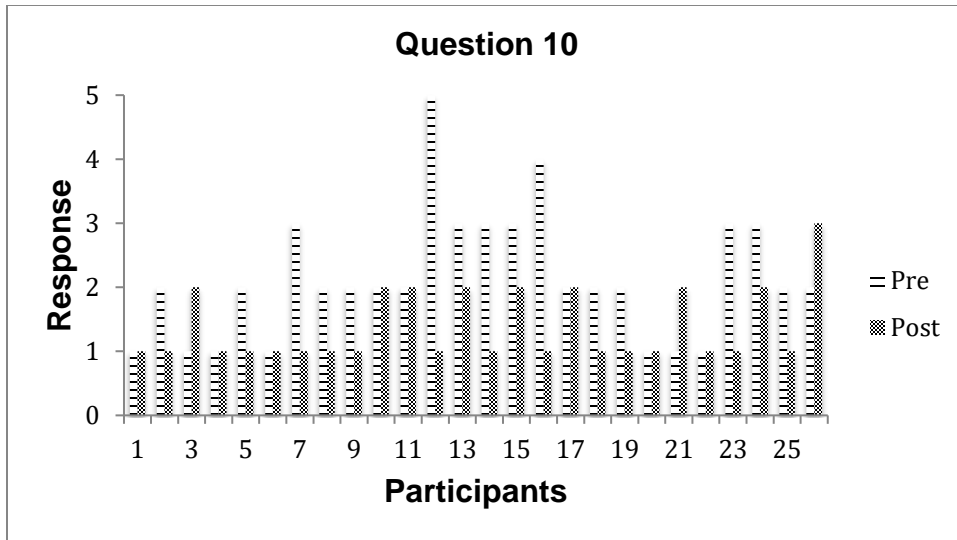


Figure 4. Students who have Autism are not all the same.

Note: 1= agree strongly, 2 = agree, 3 = not sure, 4 = disagree, 5 = disagree strongly

### Qualitative Results

The quantitative results allowed the researcher to gain a multifaceted understanding of students' attitudes toward their peers with autism and inclusion. The researcher randomly drew the names of five students, three girls and 2 boys from a hat and met with each one privately to ask the following questions:

- What do you think about inclusion?
- What did you enjoy about the facilitated conversations, what did you not enjoy?
- What session did you enjoy the most and why?
- Since the sessions do you feel that your attitude/perspective towards peers with ASD has changed? If so how?
- What did you think about ASD before our sessions and what do you think now?
- How would you define ASD?
- How would you define inclusion?

- Would you be interested in learning more about inclusive education?

All interviews were audiotaped and transcribed verbatim. The data were coded and analyzed using phenomenological techniques, and the results were interpreted through a transformative framework. A transformative paradigm, can be explained as a framework that researchers adopt who wish to make social justice and the maintenance of human rights a priority in their focus of research (Mertens, 2015).

Five themes were revealed through an analysis of the interviews.

- 1.) Acceptance
- 2.) ToM
- 3.) Power of personal narratives
- 4.) Increased knowledge of ASD
- 5.) Viewing students with ASD as capable

### **Theme 1: Acceptance**

When students were asked to define inclusion the theme of acceptance, i.e. including everyone and differences are okay, was evident in their responses. All of the five students used the word include or including in their answer. Student responses included:

- “I think it’s when you don’t worry if someone has a disability or anything but you just include them it’s not like a big deal if you have autism or if you do things a little different.”
- “Inclusion is when you include everyone even if they might do things differently like if they use a communication device because they don’t talk or if they’re in a wheelchair.”



- “Inclusion is including everyone even if they have a disability. It’s not just having them in class but like actually talking to them and including them in what you’re doing.”

**Theme 2: Theory of Mind**

Another significant theme that surfaced among the students that were interviewed was evidence of ToM skills. When asked if their attitude/perspective towards peers with ASD had changed student answered,

- “Before I wasn’t really sure if someone who has autism could understand me but now I know they probably can understand me. And just because someone has autism it doesn’t mean they’re all the same as everyone else with autism. Last year Sarah (pseudonym name) used to yell at Ms. Smith (pseudonym name) and I thought that wasn’t very nice but now I think it was because she was maybe frustrated and couldn’t get her words out.
- “If you just ignore someone with autism they won’t feel included and might start feeling sad I think at least I would feel that way.”
- “I didn’t really think about autism before I mean I heard of the word but didn’t know what it was. I think there have been people with autism in my classes before but I didn’t really talk to them, I don’t know why. But I know that if you have autism that you still want to have friends but maybe your not good at making friends so we should say hi to people with autism and try to be their friends because their feelings could get hurt. They have feelings like us too. Even if they don’t say hi back they probably will feel more included.”

**Theme 3: Power of Personal Narratives**

A noteworthy theme of the power of personal narratives arose when students were asked what they enjoyed about the facilitated conversations. All five students reported that they enjoyed hearing people's personal story whether it was from a YouTube clip or from a biography. Some of the responses include,

- “I enjoyed listening to people with autism talk about what it’s like for them to have autism and the story about the 13 year old boy who had his book published.”
- “In the YouTube videos when people with autism were talking about what it’s like to have autism and when you read stories from the book “The Reason I Jump.”
- “I enjoyed learning about the race car driver who has autism and how he’s going to schools to talk about autism.”

**Theme 4: Increased Knowledge of ASD**

It was interesting that students commented on their lack of knowledge about autism prior to the facilitated conversations. Most of them had heard of the term autism but were unsure of what it encompassed. For example, students replied,

- “Before the sessions I didn’t know what autism was but in grade 4 Ms. Miller (pseudonym name) told us that Kenny (pseudonym name) had autism.
- “Well, before I didn’t know too much about autism but now I know more”
- “I wasn’t really sure what autism even was but I knew it was something that some students had because I had heard the word before.”

**Theme 5: Viewing Students with ASD as Capable Individuals**

Another significant theme that appeared was assumptions that students with autism were incapable, which transformed to now viewing them as capable individuals with potential.

- “I think it’s different now like I didn’t think people with autism could be smart but now I know they can be really smart like Temple Grandin or just smart in different ways”
- “ ...I didn’t know if you had autism that you could do things like be a race car driver but you can”
- “Before I wasn’t really sure if someone with autism could really understand me but now I know they probably can understand me.”

The semi structured interviews with 5 students revealed themes of inclusion as acceptance, including everyone, and that differences are ok. Students also commented on their preference for listening to personal narratives of children with ASD. Evidence of ToM skills were shared by the students as well as acknowledging their lack of understanding of ASD prior to the facilitated conversations. Students recognized that their belief that peers with ASD were incapable, was flawed.

## CHAPTER 5: DISCUSSION

Although the inclusion of students with ASD has been the subject of numerous studies (Bradley, 2016; Cappadocia, et al. 2011; Chamberlain, et al. 2006; Horrocks, White & Roberts, 2008; Linton, Germundsson, Heimann & Danermark, 2016) a thorough search of academic data bases, shows there have not been any studies that have provided neurotypical students, with a conversational approach to challenge their attitudes about inclusion and autism, and to acquire a deeper understanding of peers with ASD. To address this gap the present study focused on the attitudes toward inclusion of students with ASD. The primary research question was to investigate if providing a facilitated group conversational approach with elementary aged students could be a mediating or predicting factor in fostering inclusive attitudes towards their peers with ASD.

### **Attitudes Towards Inclusion of Students with Autism Scale**

The research findings from the Attitudes Towards Students with Autism Scale illustrated that there was a positive change in student's attitudes for three of the ten questions. Their beliefs had changed in regards to acknowledging autism as not being contagious, realizing that students with autism experience emotions or feelings just as they do, and recognizing that not all people with autism are the same.

These findings are important because if students are aware that they cannot "catch" autism they may not fear it, rather they may feel more comfortable and trust that they're safe when interacting with peers with ASD. This knowledge alone can have powerful implications for inclusion. Jean Vanier writes,

I am beginning to discover how fear is a terrible motivating force in all our lives. We are frightened of those who are different...fear is at the root of all forms of exclusion, just as trust is at the root of all forms of inclusion. (2008, p. 71)

As well, when students recognize that their peers with ASD experience emotions such as sadness, loneliness, anxiety and joy just like them they may have greater feelings of empathy towards them. This understanding of having similar feelings could also facilitate a larger sense of connectedness to each other. Lastly, the survey revealed statistically significant results for the question students with autism are not all the same. This has valuable implications as students may start to view their peers with ASD as individuals rather than a homogenous group of special needs students who don't require their friendship. This could lead to students realizing they have more similarities than differences with their peers with ASD and desiring to be inclusive towards them.

The questions that were statistically significant were knowledge based which did not require students to take any physical action towards their peers with ASD. Questions such as wanting to become friends with someone who has autism or inviting someone with autism to play with them at recess or lunch did not demonstrate statistically significant relationships. However, these steps towards inclusion may naturally follow in the future, once students have had time to digest the basic understandings of ASD.

### **Interviews with Five Students**

The themes of acceptance, ToM, power of personal narratives, increased knowledge of ASD, and viewing students with ASD as capable emerged from the interviews. These themes have significant implications for students with ASD.

## **Acceptance**

When interviewed, all five students concluded that peers with ASD should be accepted and included as part of the school community rather than being excluded. Previous research suggests that children in middle school may avoid interacting with students with ASD if they expect their peer group will react negatively (Tonnsen & Hahn, 2016). However, if an atmosphere of acceptance for students with ASD is established in a school environment, is it possible that students will not be afraid of losing their social status by affiliating with peers with ASD. In his book, *Becoming Human*, Jean Vanier (2008) so eloquently writes:

The excluded, I believe, live certain values that we all need to discover to live ourselves before we can become truly human. It is not just a question of performing good deeds for those who are excluded but of being open and vulnerable to them in order to receive the life that they can offer; it is to become their friends. If we start to include the disadvantaged in our lives and enter into heartfelt relationships with them, they will change things in us. (p. 84)

If elementary aged children can be given the opportunity to challenge their attitudes towards inclusion the positive results of that could extend past the walls of the classroom and profoundly impact the hearts of students ultimately, creating an atmosphere of inclusion.

## **ToM**

Given that this study had a relatively short intervention it is encouraging that students showed evidence of ToM skills during the interviews. The answers students shared reflected thinking about and understanding another's mental state. This is an important concept because research suggests that ToM plays a critical factor in our social worlds as we work to understand

the people around us and to engage in positive social relationship (Bianco, et al. 2016). It may be possible to draw the inference that relationships with children with ASD can be more intricate given the social and communication challenges of the disorder. Thus, it's even more critical to be able to understand the intentions of others and think about what's going on in someone's mind. Humprey (2008) argues that inclusion of students with complex disorders such as ASD can be difficult when their peers lack understanding of their disorder and how it impacts them. However, with the acquisition of ToM skills, students can develop ideas about what their peers are thinking. With this insight students may have greater compassion for peers with ASD and may be motivated towards including them in their social networks and day-to-day interactions.

### **Power of Personal Narratives**

During the process of coding the interviews it was found that students communicated their preference for learning about ASD through the personal narratives of others. This aligns with research that suggests people feel connected when listening to someone sharing their personal story (Zak, 2013). Vanier (2008) states to open ourselves up to one who is different and to listen to their story and to understand it awakens something deep within our human hearts. In a school environment, there can be endless opportunities for student with ASD, parents of students with ASD, or other adults in the community with ASD to share their personal story of autism. The notion of storytelling also relates to the aboriginal ways of learning which is an integral component of the new BC Curriculum.

### **Increased Knowledge of ASD**

Students realized that their knowledge of ASD was quite limited; they had heard of the term but lacked understanding of what autism really was. It is estimated that 1 in every 66 children in Canada will have a diagnosis of ASD, thus it is a growing concern ([www.cbc.ca](http://www.cbc.ca),

2018). It's imperative that we not only support students with ASD but also help typical children understand ASD and how they can support their peers (Tonnsen & Hahn, 2016).

A parent of a grade 2 boy with ASD shared the following request with her son's teacher, "When my son is excited, nervous or bored he will engage in behaviours that will cause him to appear odd to his peers. Please consider giving the class an age appropriate definition of autism to help them understand my son" (A. Sanderson, personal communication, September 2018). It appears to be obvious that for genuine inclusion to take place in schools all students need to understand each other.

### **Viewing Students with ASD as Capable**

Another finding that surfaced from interviewing students was their view of students with ASD as being capable individuals. Prior to the intervention it appeared that students didn't equate their peers with autism as being smart, independent or capable of higher aspirations. However, it was evident that a transformation in their thinking had taken place. This could create significant changes in how students with ASD are included as contributing members of the school community.

### **Chapter Summary**

For meaningful inclusion to become a reality in schools and extend out into the community, it's essential that neurotypical students be provided the opportunity to understand and learn about their peers with ASD. In the Surrey School District alone, the autism prevalence of students with ASD has risen from approximately 150 students in 2001 to approximately 1100 in 2016 (Surrey School District, 2016). These statistics demonstrate a need for this type of research to continue to be addressed.



**CHAPTER 6: LIMITATIONS, RECOMMENDATIONS, AND CONCLUSIONS****Limitations**

This study had several limitations. First of all, the participants received instruction in a social emotional learning curriculum called Second Step Middle School Curriculum, which covered topics such as empathy, friendship building, perspective taking, and solving problems with friends. Participating in the second step program, on a weekly basis may have helped some students to be more empathic with their responses to the Attitudes Towards Students with Autism Scale and during the interviews. The skills learned from the program may have skewed the results of the research. However, this might suggest that a combination of approaches may be more beneficial than one single method when addressing the topic of ASD and attitudes towards inclusion.

Since the researcher is someone the students interact with regularly, it's possible the 5 randomly selected students answered in such a way to impress her. Perhaps, if the researcher was someone unknown to them their answers may have been different. The researcher had asked students to put their names on the Attitudes Towards Students with Autism Scale and assured them that no one other than the researcher would view their responses. However, this may have also influenced students to respond more favourably than if they were able to remain completely anonymous. It was initially intended that during the interviews the researcher would ask students about their responses, comparing any differences between pre and post test answers. Upon, further reflection it was decided that this may create an uncomfortable situation for the students.

Given the relatively small sample size of 26 participants results cannot be generalized to any other populations of children. As well, a sample of convenience was used from one school in Surrey, which does not necessarily reflect the results that may have been found with a different

population of same aged peers. The study was not designed to include participants with ASD thus; their perspective and lived experiences were not included in the study. Lastly, the Attitudes Towards Inclusion of Students with Autism Scale was being used for the first time and had not been measured for validity and reliability.

### **Implications for Future Research**

This study examined the attitudes towards inclusion of students with autism using a conversational approach with a small sample size. Future research could focus on a larger sample size to determine if a conversational approach about autism and inclusion correlates with student's attitudes toward inclusion of peers with ASD. Investigating individual differences with the Attitudes Towards Inclusion of Students with Autism Scale and considering gender differences could provide a robust analysis. Observational research could be completed at pre and post-test to gather additional data.

Furthermore, a longitudinal study that examines the relationship between an intervention of facilitating ToM skills and attitudes toward inclusion of students with autism could help to determine if changes remain stable over time. A longitudinal study could also examine if an increase in knowledge about ASD correlates with an increase in friendships using measures such as peer nomination scales.

In addition, future research could be completed with younger populations so that when students reach the middle school years they will already have an understanding of autism. Having a knowledge base of ASD could allow middle school educators to focus more on facilitating social interactions among students with and without ASD.

As well, future studies could incorporate the perspective of students with ASD at the school in which the research is taking place. This could provide a rich understanding of the lived experiences of students with ASD that are relevant to the particular school community.

With a more in depth understanding of how the relationship of educating typical students, about ASD can impact their attitudes of inclusion, educators can work to facilitate ToM interventions to promote inclusive environments for students with ASD.

### **Concluding Thoughts**

It is hoped that this study will add to a greater body of research that has investigated attitudes towards inclusion of students with ASD in elementary aged children. There does not appear to be any studies that have examined attitudes towards inclusion of ASD, by incorporating ToM through a conversational approach with typical students. With the numbers of special needs students on the rise (Tonnsen & Hahn, 2016) specifically autism, it's essential that educators work towards creating an environment of inclusion and helping typical students understand and support their peers with autism. If this vision can be achieved with students in an elementary school environments it could transcend with them to high school and beyond. A community of inclusion and understanding for those with special needs may not be so far off in the distance. As Vanier (2008) states, "We human beings are all fundamentally the same... We all have wounded, vulnerable hearts. Each one of us needs to feel appreciated and understood." (p. 59 ).

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**APPENDIX A: Attitudes Towards Inclusion of Students with Autism**

Below each sentence circle the number that best tells your answer.

Agree Strongly	Agree	Not sure	Disagree	Disagree Strongly
1	2	3	4	5

Struggling is defined as when a student with autism is having difficulty communicating their needs. You might notice them pointing, making loud noises, crying, throwing object or hitting others.

Autism is a neuro-developmental disorder. The “neuro” part refers to the brain and the “development” part refers to the variation in severity and symptoms.

**1. When I see a student with Autism struggling I want to help them.**

1	2	3	4	5
Agree Strongly				Disagree Strongly

**2. When I see a student with Autism struggling I do not want to ignore them.**

1	2	3	4	5
Agree Strongly				Disagree Strongly

**3. If I approach a student with Autism I believe that they will appreciate my offer of friendship even if they can't or don't tell me.**

1	2	3	4	5
Agree Strongly				Disagree Strongly

**4. When there is a student with Autism in my class/school I want to show kindness.**

1	2	3	4	5
Agree Strongly				Disagree Strongly

**5. When there is a student with Autism I want to invite them to join my group or invite them to play with me at recess/lunch.**

1	2	3	4	5
Agree Strongly				Disagree Strongly



**APPENDIX: B Interview Questions/Script**

Thank you for participating in my research study. Your name was one of five that was randomly selected for a follow up interview. I'm going to ask you some questions about autism and inclusion there are no right or wrong answer to the questions. I encourage you to be honest and answer how you sincerely feel.

**Example of questions:**

- 1.) What do you think about inclusion?
- 2.) What did you enjoy about the facilitated conversations, what did you not enjoy?
- 3.) What session did you enjoy the most and why?
- 4.) Since the sessions do you feel that your attitude/perspective towards peers with ASD has changed? If so how?
- 5.) What did you think about ASD before our sessions and what do you think now?
- 6.) How would you define ASD?
- 7.) How would you define inclusion?
- 9.) Would you be interested in learning more about inclusive education

**APPENDIX C: Consent Letter**

Dear Parents or Guardians,

My name is Jatinder Jonsson and I am one of the Integration Support Teachers at Woodland Park Elementary. This year, I will be conducting a research study with grade 6 students to explore the attitudes toward inclusion of students with autism. This study is part of my Master of Educational Studies: Special Education focus at Trinity Western University.

I am writing to ask permission to collect and use information regarding your child's attitudes toward inclusion of students with autism. Your child will be required to (1) participate in four facilitated conversations about autism and inclusion and (2) answer a short questionnaire before and after the four sessions. Participation in this study will not exceed beyond school hours. My research study has been approved by the Surrey School District and Mr. Taylor.

I have attached two copies of the consent form required by the University. Please read it carefully and sign and return one copy to Ms. Sundset. The extra copy is for you to keep for your records.

Please feel free to contact me at any time regarding your child's participation. My email is [jonsson\\_j@surreyschools.ca](mailto:jonsson_j@surreyschools.ca).

Kind Regards,

Mrs. Jonsson  
Integration Support Teacher  
Woodland Park Elementary

## **Parental Consent Form for Research Study**

**Research Study Title:** Attitudes Toward Inclusion of Students With Autism:  
A Mixed Methods Study

**Principal Investigator:** Mrs. Jatinder Jonsson, Integration Support Teacher at Woodland Park Elementary and Trinity Western University Graduate student in the Master of Arts in Educational Studies – Special Education focus. Research on the attitudes toward inclusion of students with autism is part of a major project for graduation requirements.

Contact number: 604-589-5957

Contact email address: jonsson\_j@surreyschools.ca

**Purpose:** The purpose of this research study is to determine if providing an opportunity for students to engage in meaningful conversations about autism and inclusion will impact their Theory of Mind Skills. Theory of Mind is the way that people understand thoughts, desires and perspectives of others. Div 4 was chosen for the study as Mrs. Jonsson (the researcher) has been co-teaching a social emotional unit with Ms. Sundset on Friday afternoons. A rapport has been developed between Mrs. Jonsson and the students.

**Procedure:** If you choose to consent and allow your child to participate in this research study they will take part in four 45-minute sessions (once a week) in which the researcher will facilitate a conversation about autism with the students. Students will be given a survey of ten questions to complete before and after the four sessions. The research study connects with the big ideas of “Learning about similarities and differences in individuals and groups influence community health” which is part of the Grade 6 curriculum for Physical & Health Education. The researcher will also conduct a 30-minute interview with five randomly picked students once the four sessions have been completed. Consideration will be given to ensure that children will not miss 30 critical minutes of the school day.

**Potential Risks and Discomforts:** Due to the nature of the study, there are few risks or discomforts that your child will face. However, it is possible that students may feel uncomfortable talking about autism. Your child will be assured that they can stop at any time if they feel uncomfortable, and will be reminded that there are no consequences for doing so. Your child will also be told that there is no reason to worry about “right” or “wrong” comments or questions.

**Potential Benefits to Participants and/or Society:** Your child will benefit from being in this research study by understanding more about autism and how it impacts their classmates who are living with autism. They will also learn strategies in how they can be inclusive towards their peers or people in the community with special needs. The benefits of this study will also pertain directly towards the scholarly community in understanding students attitudes about inclusion and autism.

**Confidentiality:** Any information that is obtained in connection with this study and that can be identified with your child will remain confidential and will be disclosed only with your

permission or as required by law. Any data that could identify your child with answers given will be kept under lock and key at the school, or in the researcher's personal possession. In addition, any data stored on the computer will be kept in a password-protected file on the researcher's computer. The final paper will not contain any personal identifiers. Upon the completion of the study (anticipated December 2019), all data will be destroyed and deleted from the computer permanently.

**Compensation:** There will be no compensation for participation in this study. Also, there is no academic mark attached to participation in this research. Participation is voluntary and children will be sincerely thanked if they choose to participate.

**Contact for information about the study:** If you have any questions or desire further information with respect to this study, you may contact Mrs. Jonsson or her research supervisor at Dr. Ken Pudlas, at 604-888-7511 or [pudlas@twu.ca](mailto:pudlas@twu.ca).

Contact for concerns about the rights of research participants: If you have any concerns about your child's treatment or rights as a research participant, you may contact Elizabeth Kreiter in the Office of Research, Trinity Western University at 604-513-2167 or [reseachethicsboard@twu.ca](mailto:reseachethicsboard@twu.ca).

**Consent:** The participation of your child in this study is entirely voluntary and you or your child may refuse to participate or withdraw from the study at any time without any consequences. If you would like to withdraw your child, a simple email or phone call will be sufficient, and no further explanation will be expected or required. After names have been removed from the data, your child will no longer be identifiable in the data, and it will no longer be possible to withdraw your child's results.

**Signatures:** Your signature on the following page indicates that you have had your and your child's questions about the study answered to your satisfaction and have received a copy of this parental consent form for your own records.



**CONSENT PAGE** – Please Return to Ms. Sundset

Your signature indicates that you consent to have your child participate in this study. Please check one of the following:

*I consent to my child's participation in this study.*

*I do not consent to my child's participation in this study.*

\_\_\_\_\_

Parent or Guardian Signature

\_\_\_\_\_

Date

\_\_\_\_\_

Printed Name of the Parent or Guardian

**Student:**

Please check one of the following:

*I consent to my data to be used in this study. I have read this form and understand it.*

*I do not consent to my data to be part of this study.*

\_\_\_\_\_

Student Signature

\_\_\_\_\_

Date

Dear Parents or Guardians,

Thank you for allowing your child to be a part of my research study on the Attitudes Toward Inclusion of Students With Autism. Over the past few weeks we've been discussing both autism and inclusion.

In the next several months I will be analyzing the data and writing up my research. Your child's name will not appear anywhere in my research. If you wish to remove your child from the research study, you can do so by informing me in writing at [jonsson\\_j@surreyschools.ca](mailto:jonsson_j@surreyschools.ca) by April 30<sup>th</sup> 2019.

If you have any questions please feel free to contact me at [jonsson\\_j@surreyschools.ca](mailto:jonsson_j@surreyschools.ca).

Kind Regards,

Jatinder Jonsson  
Integration Support Teacher  
Woodland Park Elementary

APPENDIX D: Data from the Wilcoxon Ranked T Test

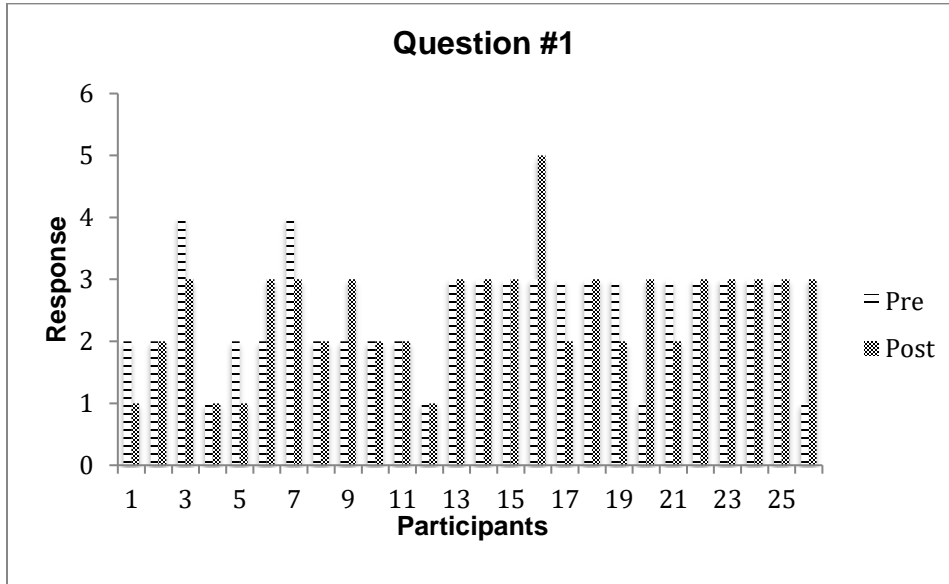


Figure 5. When I see a student with autism struggling I want to help them.

Note: 1= agree strongly, 2 = agree, 3 = not sure, 4 = disagree, 5 = disagree strongly

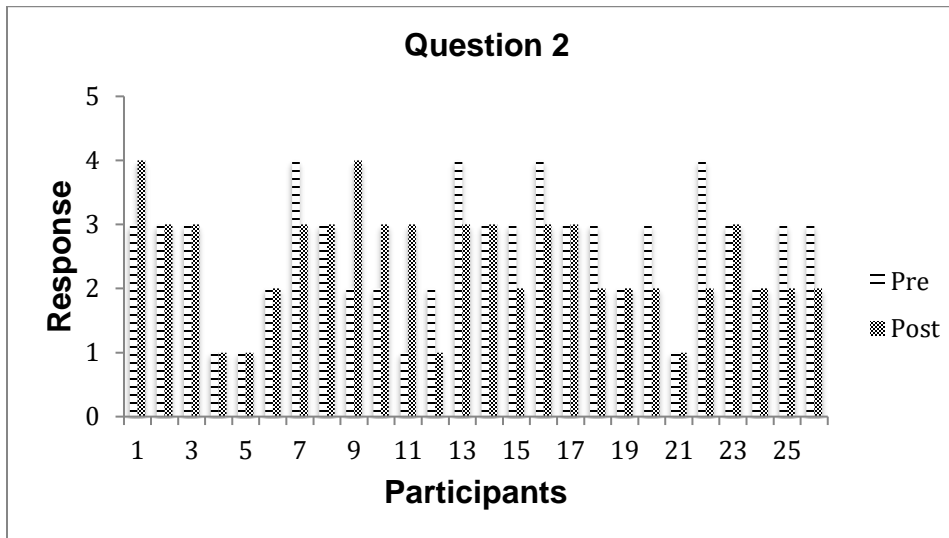


Figure 6. When I see a student with autism struggling I do not want to ignore them.

Note: 1= agree strongly, 2 = agree, 3 = not sure, 4 = disagree, 5 = disagree strongly

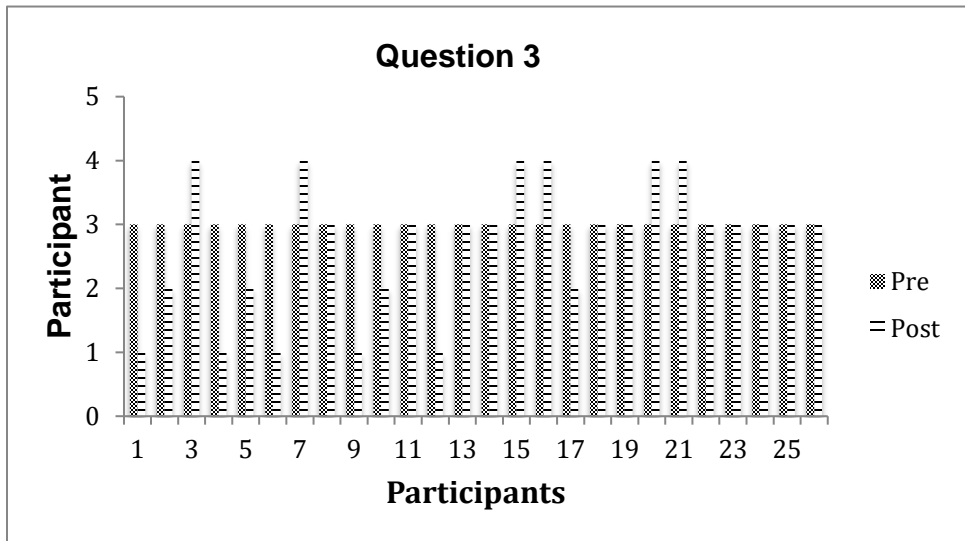


Figure 7. If I approach a student with autism I believe that they will appreciate my offer of friendship even if they can't or don't tell me.

Note: 1= agree strongly, 2 = agree, 3 = not sure, 4 = disagree, 5 = disagree strongly

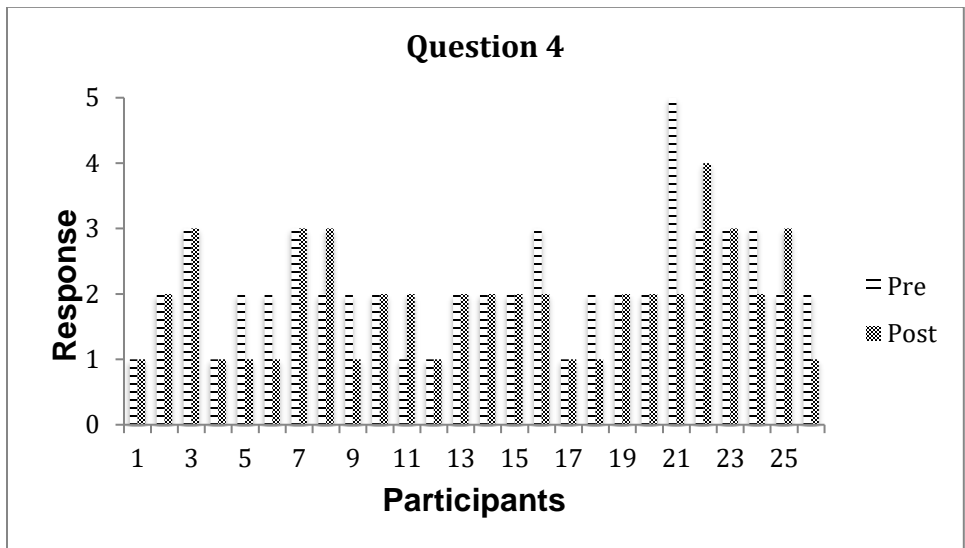


Figure 8. When there is a student with autism in my class/school I want to show kindness.

Note: 1= agree strongly, 2 = agree, 3 = not sure, 4 = disagree, 5 = disagree strongly

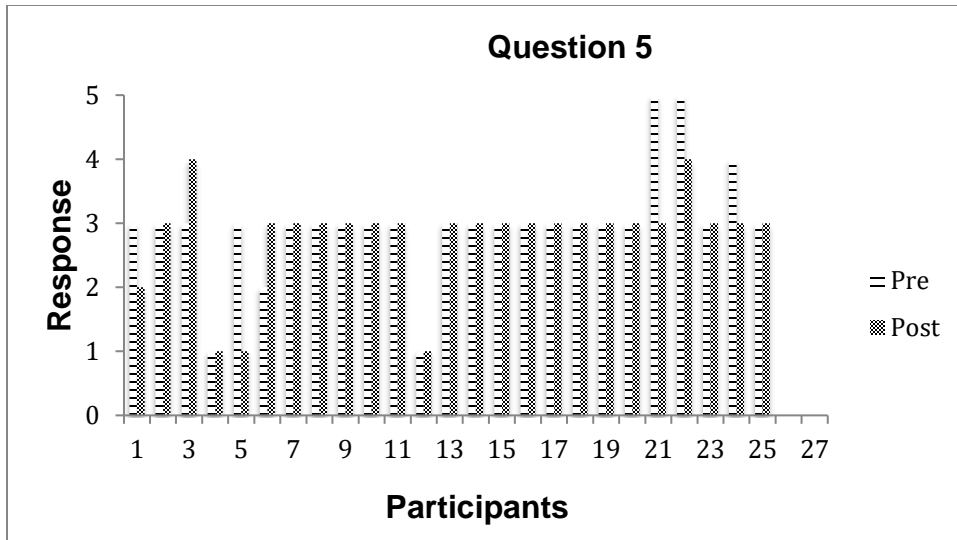


Figure 9. When there is a student with Autism I want to invite them to join my group or invite them to play at recess/lunch.

Note: 1= agree strongly, 2 = agree, 3 = not sure, 4 = disagree, 5 = disagree strongly

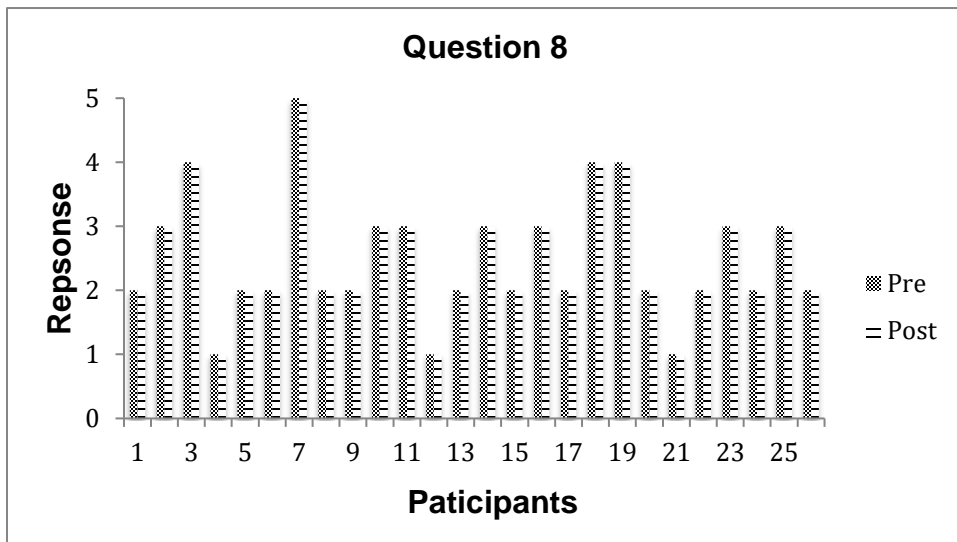
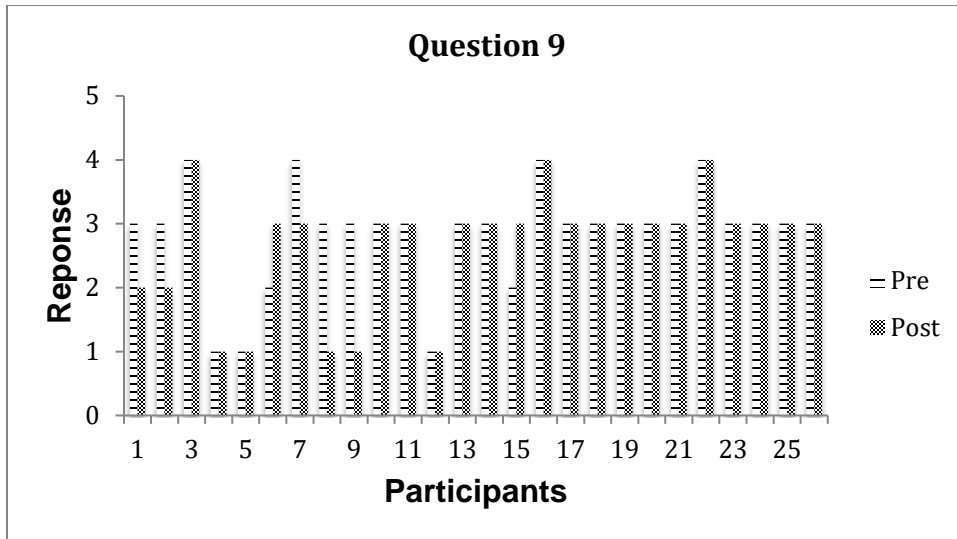


Figure 10. I want to learn more about Autism.

Note: 1= agree strongly, 2 = agree, 3 = not sure, 4 = disagree, 5 = disagree strongly



**Figure 11. I am interested in becoming friends with a student who has autism.**

Note: 1= agree strongly, 2 = agree, 3 = not sure, 4 = disagree, 5 = disagree strongly

## **APPENDIX E: Transcribed Answers to Interview Questions**

### **Interview with Student #1**

**Q.** How would you define Inclusion?

**A.** Inclusion is when you include everyone even if they might do things different like if they use a communication device because they don't talk or if they're in a wheelchair. Everyone is accepted and is part of the class.

**Q.** What do you think about Inclusion?

**A.** I don't know it's good because everybody deserves to be together even if we don't look or act the same.

**Q.** What did you enjoy about the facilitated conversations & what did you not enjoy?

**A.** Well I enjoyed learning about Autism and that people with Autism are just like us. I didn't not enjoy anything.

**Q.** What session did you enjoy the most?

**A.** I liked the video of Austin Riley and how he has Autism but now he's a race car driver. That was pretty cool.

**Q.** Why did you think it was cool?

**A.** Because I didn't know if you had Autism that you could do things like be a race car driver but you actually can.

**Q.** How would you define Autism?

**A.** I'm not really sure I remember but it when there is a spectrum and people with Autism can be on it so they can be really smart or they could need lots of help to do things. Everyone with Autism is different like one person with Autism is not exactly like someone else with autism.

**Q.** Since the sessions do you feel that your attitude/perspective towards peers with ASD has changed? If so how?

**A.** OK uhm I didn't really think about autism before I mean I heard of the word but didn't know what it was. I think there have been people with autism in my classes before but I didn't really talk to them, I don't know why. But I know that if you have autism that you still want to have friends but maybe your not good at making friends so we should say Hi to people with autism and try to be their friends because their feelings could get hurt, they have feelings like us too. Even if they don't say hi back they probably will feel more included.

**Q.** What did you think about ASD before our facilitated sessions and what do you think now?

**A.** I don't know what I thought before I didn't really think about it but I maybe just thought that people with Autism didn't really care if they were included or if people talked to them. Now I know that people with autism are more like everyone else in the class except they have autism so some things might be harder for them but they probably like candy like I do and like to watch movies and go to the mall too.

**Q.** Would you be interested in learning more about inclusive education?

**A.** Yes.

### **Interview with Student #2**

**Q.** How would you define Inclusion?

**A.** Inclusion is accepting everyone and not making fun of them or making them feel left out. It's including them in what the class is doing?

**Q.** What do you think about Inclusion?

**A.** We should include people in Canada because there are people who might believe different things than you but that's ok. It's mean to say you can't do this or this because you don't look like me.

**Q.** What did you enjoy about the facilitated conversations & what did not enjoy.

**A.** I enjoyed everything.

**Q.** Can you pick one thing that really stood out to you?

**A.** Ok, I enjoyed listening to the stories about that boy from Japan who wrote a book...I can't remember his name he wrote about his life.

**Q.** What did you enjoy about Naoki's stories?

**A.** Well he thought people didn't understand him so he tried to explain it like why he can't look at people when he's talking to them?

**Q.** How would you define Autism?

**A.** Ok I think it's a disorder that causes a problem in the brain like sometimes people have trouble communicating, or they like to play the same thing. And there a range of abilities like some people can have good jobs but other people might need help with going to the store. When someone has autism they are still important. Oh yeah and your born with Autism.

**Q.** Since the sessions do you feel that your attitude/perspective towards peers with ASD has changed? If so how?

**A.** Yes, I think it has changed.

**Q.** How has it changed?

**A.** Before I wasn't really sure if someone who has Autism could understand me but now I know that they probably can understand me. And just because someone has Autism it doesn't mean they're all the same as everyone else with Autism. Last year Sarah (pseudonym name) use to yell at Ms. Smith (pseudonym)name and I thought that wasn't very nice but now I think it was because she was maybe frustrated and couldn't get her words out.

**Q.** What did you think about ASD before our facilitated sessions and what do you think now?



**A.** I wasn't really sure what Autism even was but I knew it was something that some students had because I heard the word before. Now I know more about it.

**Q.** Can you name one thing that you learned about Autism?

**A.** Just because someone has Autism doesn't mean they like can't do stuff they might get stuck but if you help them then they can do it. People with Autism want to have and not be alone all the time.

**Q.** Would you be interested in learning more about inclusive education?

**A.** Yes

### **Interview with Student #3**

**Q.** How would you define Inclusion?

**A.** Inclusion is including everyone even if they have a disability. It's not just having them in the class but like actually talking to them and including them in what you're doing. If you just ignore someone with autism they won't feel very included and start feeling sad I think at least I would be like that.

**Q.** What do you think about Inclusion?

**A.** I think inclusion is a good thing because we should accept everyone it's ok if your different because we're all different.

**Q.** What did you enjoy about the facilitated conversations & what did you not enjoy?

**A.** I enjoyed learning about the race care driver and how he's going to school to talk about Autism. There wasn't anything that I didn't enjoy.

**Q.** How would you define Autism?

**A.** Autism is something that you're born with. More boys than girls have it.

**Q.** What else can you tell me about Autism?

**A.** Ok well it's like when you might not know to act in social situations or you have sensory issues.

**Q.** What are sensory issues?

**A.** I don't know how to explain it but it's like if the lights are too bright or if it's too loud it can be hard for people with Austim like that video you showed. So we should turns the lights down so it helps people with autism.

**Q.** Since the sessions do you feel that your attitude/perspective towards peers with ASD has changed? If so how?

**A.** Before the sessions I didn't know what Autism was but in grade 4 Ms. L told us that Kenny (not real name) had Autism.

**Q.** Do you feel your attitude towards students with Autism is different now or the same.

**A.** I think it's different now like I didn't think people with Autism could be smart but now I know that they can be very smart like Temple Grandin or smart in different ways.

**Q.** What did you think about ASD before our facilitated sessions and what do you think now?

**A.** Now I think it's good to say Hi to someone with Autism because even if they don't say Hi back they might appreciate that you took the time to say Hi.

**Q.** Would you be interested in learning more about inclusive education?

**A.** Maybe but we already learned that it's important to include everyone.

#### **Interview with Student #4**

**Q.** How would you define Inclusion?

**A.** I don't remember

**Q.** Think back to our discussions about inclusion when each group shared what they thought inclusion was.

**A.** Ok...I think inclusion is like being nice to everyone and making sure everybody is included.

**Q.** What do you think about Inclusion?

**A.** I'm not sure

**Q.** You just mentioned that inclusion means being nice to everyone and making sure they're included...what do you think about that statement do you agree or disagree?

**A.** I think we should include everyone.

**Q.** What did you enjoy about the facilitated conversations & what did you not enjoy?

**A.** I enjoyed listening to people with autism talk about what it's like for them to have autism and the story about the 13-year-old boy who had his book published.

**Q.** How would you define Autism?

**A.** I don't remember.

**Q.** Do you remember watching the slide show in our first session when we talked about autism can you think back to that...do you remember anything?

**A.** I don't know if this is right but some things can be hard like if it's too loud or if the lights are too bright. I don't remember anything else.

**Q.** Since the sessions do you feel that your attitude/perspective towards peers with ASD has changed if so why?

**A.** I'm not sure

**Q.** When you see someone with autism do you view them differently now or the same as you did before we talked about autism.

**A.** I think before I didn't know they could do things I thought their teacher helper did stuff for them.

**Q.** What did you think about ASD before our facilitated conversations and what do you think now?

**A.** I'm not sure...I didn't think about it

**Q.** Would you be interested in learning more about inclusive education?

**A.** What does that mean?

**Q.** It's how you include people with disabilities into our classes and learning.

**A.** Maybe

### **Interview with Student #5**

**Q.** How would you define Inclusion?

**A.** I think it's when you don't worry if someone has a disability or anything but you just include them it's not like a big deal if you have autism or if you do things a little different.

**Q.** What do you think about Inclusion?

**A.** Inclusion is when you accept everyone for who they are like it doesn't matter if they have a disability or anything we're all still human.

**Q.** What did you enjoy about the facilitated conversation & what did you not enjoy.

**A.** I like it.

**Q.** What session did you like the most?

**A.** In the YouTube video when people with autism were talking what it's like to have autism and when you read stories from "The reason I jump"

**Q.** How would you define autism?

**A.** People with autism are not all the same there is a spectrum so you can be anywhere on it.

**Q.** Since the sessions do you feel your attitude/perspective about ASD has changed?

**A.** I don't know I didn't know anything about autism before but I had heard of the word.

**Q.** Do you feel your attitude/perspective about ASD has changed now that you have learned more about ASD.

**A.** I know that if you have autism that you still want to have friends but maybe your not good at making friends so we should say Hi to people with autism and try to be their friends because they're feelings could get hurt because they have feelings like all of us.

**Q.** What did you think about ASD before our facilitated conversations and what do you think now?

**A.** Well before I didn't know too much about autism but now I know more.

**Q.** Can you tell me more about that?

**A.** I know that people with autism want to have friends and not be alone. People with autism can do lots of things just like anyone else but some things might be hard for them but somethings like Math are hard for me.

**Q.** Would you be interested in learning more about autism?

**A.** Sure