Inclusive Mainstream Classrooms: Supporting Middle School Students with Autism Spectrum Disorder

By

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Abstract

Inclusive teaching practices, that acknowledge meaningful integration of students with special needs in mainstream classrooms, have gained popularity in the past two decades. This study focuses on the impact of inclusive teaching strategies on the learning experiences of students with Autism Spectrum Disorder (ASD) in mainstream junior/intermediate classrooms. After examining the literature in the area of special and inclusive education, with a particular focus on inclusion of ASD students, two semi-structured interviews were conducted. Participants were two teachers who worked with junior/intermediate ASD students in different inclusive learning settings; from mainstream to providing in-class support. Analysis of the data collected from this study, as well as what is mentioned in the literature about this topic, indicates that students with ASD will have meaningful learning experiences when teachers have positive beliefs about including them, alongside having access to resources and supports to help them overcome the challenges that come with fostering inclusion in mainstream classrooms.

Key Words: Autism; Special Education; Inclusive Education; Mainstream Classrooms; Integration
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CHAPTER 1: INTRODUCTION

1.0 Research Context

The discussion of creating an inclusive classroom environment for all students has gained popularity in the past two decades (Lindsay, Proulx, Scott and Thomson, 2013; De Winter, Baeveldt and Kooistra, 1999; Lipsky and Gartner, 1997). Evidence from research conducted on inclusive education shows that educators who successfully facilitate this environment, wherein students with special needs are integrated with mainstream students, will see increased levels of student engagement in social interactions when compared to students placed in segregated classroom settings (Bredekamp and Copple, 1997; Chandler-Olcott and Kluth, 2009; Eldar, Talmor and Wolf-Zukerman, 2010; Vakil, O’Connor and Kline, 2009). However, inclusion, in the world of education, is actually much more complex than it seems (Lynch and Irvine, 2009). Inclusion does not simply mean that a student is placed in a certain learning setting; “it requires an individualized needs-based approach” (Lynch and Irvine, 2009, p. 846). For the purpose of this study, I will use the definition of “authentic inclusion” provided by Ferguson (1995):

>a unified system of public education that incorporates all children and youths as active, fully participating members of the school community; that views diversity as the norm; and that ensures a high-quality education for each student by providing meaningful curriculum, effective teaching, and necessary supports for each student. (p. 286)

Educators are increasingly expected to facilitate this inclusive setting for all their students in mainstream classrooms; namely in classrooms where students with Autism Spectrum Disorder (ASD) spend most of their school day (Lindsay et al., 2013; Harrower and Dunlap, 2001). In this context, educators are faced with the challenge of applying teaching strategies that promote an inclusive classroom environment and are responsive to the learning and social needs of students
with Autism Spectrum Disorder, in addition to students with other special needs (Robertson, Chamberlain and Kasari, 2003 and Lindsay et al., 2013).

1.1 Research Problem

According to the Centre of Disease Control (CDC), as of March 2014, it is estimated that 1 in every 68 children are born with an Autism Spectrum Disorder (Autism Society Canada). In turn, schools across Canada have reported an increase in the enrolment of students with autism in mainstream classrooms in the past few years (Geneva Centre for Autism, 2010; Fein and Dunn, 2007). As the prevalence of ASD increases, more and more children with ASD are also present in mainstream classrooms (Hess et al. 2008). Fein and Dunn (2007) argue that this is partly due to the introduction of Individualized Education Plan(s) (IEP) for each student in special education. The Ontario Ministry of Education outlines that an IEP should be developed for students that are identified as exceptional, such as autistic students across the spectrum, by the Identification, Placement and Review Committee (IPRC) (Ontario Ministry of Education, 2004). An IEP can also be developed even if a student is not identified by the IPRC as being exceptional. In that case, a student requires special education services and needs accommodations and/or modifications to instruction and assessment tasks (Ontario Ministry of Education, 2004). The challenge is that many teachers working in mainstream classrooms feel unprepared to support students with ASD on several levels; mainly socially, academically, and behaviorally (Hinton, Sofronoff and Sheffield, 2008; Symes and Humphrey, 2010). Another aspect of this main challenge is that some teachers have a preconceived attitude that children with ASD are inherently underachievers, and cannot perform at the same level as their “regular” peers (Jordan, Glenn and McGhie-Richmond, 2010; Humphrey and Lewis, 2008). This attitude leads to less meaningful opportunities for inclusive teaching strategies. The study conducted by
Jordan et al. (2013) found that, out of the nine elementary teachers interviewed, approximately one quarter held the belief that students with disabilities were to blame for their own learning difficulties. Other teachers, about 20% of the researchers’ samples, held opposing beliefs and understood their responsibility for providing special needs students with accommodations in order for them to be successful. The attitudes of teachers towards the learning needs of these students has a direct impact on their beliefs about inclusion, equity, and fairness in the classroom (Jordan et al., 2010; White, 2007; Horrocks, White and Roberts, 2008). Furthermore, some educators lack resources and support to address the learning needs of children with autism and this hinders their change in attitude (Lindsay et al., 2013). Ultimately, it is crucial to meet the learning needs of all students in an inclusive setting, particularly those of children with ASD, as they are at more risk of social exclusion and bullying (Connor, 2000).

In view of the current study, it is important to indicate that the literature in the area of inclusion of ASD students focuses more on elementary learning settings and less on junior/intermediate and high school ASD students. There is research in the area of inclusion of students in middle and secondary learning settings and the support provided to special needs students, in general, to successfully transition into high school, but little on the inclusion of ASD students in those settings.

1.2 Purpose of the Study

In view of these many challenges, the purpose of this study is to learn what teaching strategies junior and intermediate teachers are using to meaningfully integrate students with ASD in their mainstream classrooms and to respond to these students’ social and academic needs.

Ultimately, this study wants to address the strategies that have worked effectively with ASD students integrated in mainstream classrooms, as opposed to those who are segregated, and
how these can inform teachers’ perspective on the challenges that come with inclusive education. Thus, this study will focus on the inclusive model that many education systems have committed to. I will focus on how to support more teachers for this challenging work in mainstream classroom settings; especially as teachers are expected to do this while teaching a range of students. Furthermore, when ASD students are not provided with enough support they risk not benefitting from their integration in the mainstream. In light of that, this study will also look at how educators create these inclusive learning opportunities for ASD students in alternative settings.

1.3 Research Questions

This study aims to answer the following research question: How do a small sample of junior and intermediate educators instructionally respond to the learning and social needs of their students with ASD to create an inclusive classroom learning environment? Moreover, this research study is intended to address the following subsidiary questions:

1. How do these teachers conceptualize the meaning of an “inclusive classroom”? What are key instructional considerations and practices these teachers align with establishing an inclusive classroom?

2. How are they instructionally responsive to the needs of their students with ASD? How do they modify and/or accommodate their lessons for these students and why?

3. What are some indicators that autistic students in their classrooms are responding well to their inclusive teaching strategies?

4. What factors and resources support these teachers’ commitment and efforts to instructionally respond to the needs of their students with ASD?
5. What challenges do these teachers encounter? What kinds of additional supports do these teachers believe are important to overcoming these challenges?

1.4 Background of the Researcher

As of yet, I do not have teaching or volunteering experience with ASD students. However, this topic is of interest to me because of the increasing importance of inclusive teaching in current classrooms and my strong belief that it is possible to create this environment with the right tools, resources, and support. As a teacher candidate, I do not feel prepared to provide enough instructional time to students with ASD, or to students with any other special needs. I want to learn some of the effective strategies teachers are currently practicing and how these can complement my overall approach to inclusive education. As a student, I noticed classrooms where some of my teachers included students with learning disabilities within the “regular” classroom setting, and others where students were segregated. I realized that teachers who were prepared to apply inclusive teaching strategies were knowledgeable about the particular learning disability and introduced effective ways for these students to interact normally with the rest of their peers. On the other hand, I also noticed that teachers with less experience, or new to the school, often sent these students out to special needs classrooms where they could get the help the former teachers could not provide.

During my preliminary search about this topic, I noticed researchers were increasingly showing that including ASD children in mainstream classrooms is beneficial for them socially and academically. The Ontario Ministry of Education has put particular emphasis, in several documents released, on creating appropriate special education programs in schools. It is rather unusual now to find schools that do not promote the ideal of creating caring and inclusive classrooms. The discrepancies in applying this may partly fall in the lack of resources available
to create and apply inclusive instructional strategies and teachers’ superficial knowledge and stagnant attitudes about some learning disabilities.

I think this topic is important for the education community because many teachers are often anxious about having students with disabilities in their classrooms and this is due to several reasons. One of them is that they are afraid of not meeting those students’ learning needs. Another one includes the lack of resources and support to address those specific learning needs. One reason, more particular to this study, is educators’ lack of knowledge and practice of effective and inclusive teaching strategies for students with ASD.

1.5 Overview

To respond to the research questions I will be conducting a qualitative research study using purposeful sampling to interview 2 educators about their teaching strategies and attitudes towards meaningfully integrating students with Autism Spectrum Disorder in mainstream classrooms. Chapter 1 includes the introduction and purpose of the study, the research questions, as well as how I came to be involved in this topic and study. Chapter 2 contains a review of the literature in the areas of inclusive education in mainstream classrooms and including students with ASD in those settings. Chapter 3 provides the methodology and procedure used in this study including information about the sample participants and data collection instruments. Chapter 4 identifies the findings recorded from the participants in the study and describes the data as it addresses the research question. Chapter 5 includes limitations of the study, conclusions, recommendations for practice, and further reading and study. References and a list of appendixes follow at the end.
CHAPTER 2: REVIEW OF THE LITERATURE

2.0 Introduction to the chapter

In this chapter, I review the literature in the areas of inclusion of students with Autism Spectrum Disorder (ASD) in mainstream classrooms, teachers’ beliefs about inclusion, challenges encountered, and their role in facilitating it. More specifically, I review themes related to effective instructional strategies used with primary students with ASD and the interactions between general education teachers and these students. I start by describing a few social and behavioral characteristics of children with ASD, across the spectrum, and then I proceed to reviewing the literature in the areas of inclusion of special needs students in mainstream classrooms, and I focus on a few prominent researchers who have investigated the inclusion of students with ASD in particular. Next, I review research on teachers’ beliefs about inclusion, as a general teaching philosophy, and teachers’ attitudes towards instruction of students with special learning needs. I also consider research which has reported on general education teachers’ interactions and relationships with their ASD students. From there, I review research on teachers’ role in inclusion and the challenges they face when working with students with ASD. In particular, I consider their role in practicing differentiated instruction, accessing and developing resources for special needs students, and collaborating with colleagues, educational assistants, and special needs teachers. I also consider the voice of researchers who have indicated that segregated classroom settings work more effectively for some students across the spectrum. Finally, I present key ideas and areas of contribution my study can offer to the literature around inclusion of students with ASD in junior and intermediate classrooms in Ontario.
2.1 Characteristics of Autism and Implications in the Classroom

Before I can investigate how a small sample of junior and intermediate teachers instructionally respond to the needs of their students with ASD, it is important to understand key characteristics that children with ASD will display in the classroom; keeping in mind that these will vary across the spectrum. Autism Spectrum Disorder is one of the most common childhood neurological disorders affecting children and one of the most common developmental disabilities affecting Canadians in general (Autism Society Canada, 2010). Research suggests that 1 in 94 Canadian children are diagnosed with ASD, and it is diagnosed four times more in boys than in girls (Autism Society Canada; Hundert, 2009). Autism is characterized by impairments in socialization (i.e., lack of development of peer relationships and non-verbal behavior), communication (i.e., delay or lack of language development), and behavior (i.e., resistance to change in routine) (American Psychiatric Association, 2012; Hundert, 2009; Bryan and Gast, 2000; Koegel and Koegel, 1995). Generally, students with ASD depend on adults to complete school-related activities and to stay on task throughout the process (Bryan and Gast, 2000). However, this disorder is highly heterogeneous and each student will display varying degrees of these characteristics. Some individuals will display mild symptoms and others more severe. There is not a single treatment for ASD, but a combination of treatments will typically address behavioral and learning skills (American Psychiatric Association, 2102). Applied Behavior Analysis (ABA) is used by therapists and teachers for intensive skill-building sessions. The “Diagnostic and Statistical Manual of Mental Disorders” (DSM-5) is used to diagnose ASD, and, under this criteria, individuals must show symptoms of ASD in early childhood. Children can be diagnosed with four separate disorders: autistic disorder, Asperger’s disorder, childhood
disintegrative disorder, or pervasive developmental disorder (American Psychiatric Association, 2012).

The research articles I encountered discussed inclusion in mainstream classrooms of students with ASD across the spectrum. Some studies mentioned the challenges of working with students with Asperger’s disorder and low-functioning autism disorder in particular (Lindsay et al., 2013; Lindsay, Proulx, Scott and Thomson, 2014). Autistic children with impaired social abilities have difficulty self-regulating social communication, such as maintaining eye contact and using gestures. Some children will also have difficulty interacting with their peers, initiating a conversation and expressing their thoughts (Hundert, 2009). Some display repetitive behavior or actions and need to follow particular routines throughout the school day. With this brief description of some characteristics displayed by children with ASD, across the spectrum, it is important and beneficial for them to be included in mainstream classrooms where they can interact with their peers and have opportunities to develop their social skills on multiple levels; particularly by observing and imitating their peers’ behaviors (American Psychiatric Association, 2012). Furthermore, it is important for teachers to develop different strategies to facilitate and gradually develop independence of ASD students in completing their activities (Bryan and Gast, 2000).

2.2 Inclusion in Mainstream Classrooms

Over the last two decades the inclusion of children with autism, and other disabilities, has been a controversial topic because of divergent opinions on how to support them, and to what extent it is feasible for teachers, in mainstream learning setting (Harrower, 1999; Kauffman and Hallahan, 1995). In the past, these students have been placed in segregated classes at school and in other social settings (Harrower and Dunlap, 2001). In the last few years, the Ontario Ministry
of Education “has identified the inclusion of students with ASD in school environments as an area of priority for action” (Lindsay et al., 2013; p. 348; Minister’s ASD Reference Group, 2007). The Ministry’s Education Act on Special Education (2012) supports inclusive pedagogy and is committed to supporting children with disabilities within the school curriculum (Lindsay et al., 2013). One of the main goals of inclusion is to facilitate interaction between students in the classroom. The term inclusion implies that students with special needs are placed in a general education classroom, and that is considered their “home base”; not somewhere where they are sometimes present (Mesibov and Shea, 1996). On the other hand, there is a general opinion among some teachers that inclusion of special needs students is not always practical and can often detract from teachers’ instructional time with other students (Jordan et al., 2009). Others argue that it can be harmful for students with special needs because they no longer receive the same level of individualized support, and their learning needs can get lost amidst the broad number of students and everyday classroom bustle (Jordan et al., 2009). There are benefits and limitations to practicing inclusion in a mainstream classroom. As mentioned previously, the research question of this study revolves around teachers effectively creating an inclusive classroom environment for students with ASD. In this case, it is important to know the benefits of inclusion and what teaching strategies have worked to successfully include these students in primary classrooms.

2.2.1 Effective Teaching Strategies for Students with ASD

For inclusion to be successful teachers must know and practice instructional strategies that will assist them throughout the whole experience (Harrower and Dunlap, 2001). This section will review literature available on effective teaching strategies in primary classes as there is very little research that has been conducted in junior, intermediate, and senior classroom settings. The
present study will attempt to cover some ground in the latter direction. Research has shown that visual prompts have enhanced the communication process in students with ASD (Schopler, Mesibov, and Hearsey, 1995; Bryan and Gast, 2000; Harrower and Dunlap, 2001). In one study, conducted by Pierce and Schreibman (1994), researchers taught daily living skills using pictorial self-management to three non-verbal boys with autism (Harrower and Dunlap, 2001). Visual prompts and photographs have also been successfully used to help students with disabilities, in a full inclusion classroom, to follow a schedule of activities (Bryan and Gast, 2000).

Another instructional strategy which has been successful, in an inclusive learning environment, is assigning students with autism peers in the classroom to support them in various situations. This allows students to be more autonomous as they do not require continuous one-on-one adult assistance (Harrower and Dunlap, 2001). This method has also improved cooperative learning in the classroom, which is at the core of inclusion, because students with ASD learn to model behaviors and communicate more effectively with their peers. Additionally, children with special education needs exhibit increasing levels of play when they are with typically developing children as opposed to being with other children with special needs (Hundert, 2009). Peer-mediated strategies can be very successful with students with autism because they involve interaction between all students. Typically developing students can take on the role of peer-mentors or recess buddies to help and teach students with autism social skills (Fein and Dunn, 1997). On the other hand, a study has shown that some students with severe intellectual and/or behavioral disabilities benefit more from instructional time outside of a regular classroom; where they can have one-on-one time with special education teachers (Sailor, 1996). These students are able to partially participate in an inclusive mainstream classroom.
Visual prompts and cooperative learning are some of the many effective instructional strategies used by general educators in their inclusive class rooms. The next section will look at some of the challenges encountered by teachers who work with ASD students in elementary school settings.

2.2.2 Challenges of Including Students with ASD

Evidence from the studies conducted by Lindsay et al. (2013, 2014) identified the following challenges encountered by their participants: “understanding and managing behavior; socio-structural barriers (i.e., school policy, lack of training and resources); and creating an inclusive environment (i.e, lack of understanding from other teachers, students and parents)” (Lindsay et al., 2013; p. 354). The teacher participants -8 out of 12 of them had taken special education additional qualification (AQ) courses- felt they “lacked adequate information about ASD” (Lindsay et al., 2013; p. 354). Many of them had difficulty working with one child without additional support. Some behaviors of students with ASD may interfere with the teachers’ strategies of creating positive relationships between all classmates (Lindsay et al., 2013). Furthermore, “children [with autism] have difficulty with social interactions, particularly in understanding the nuances of social behavior; indeed, they may give the impression that they are uninterested in interacting with others” (Robertson, Chamberlain and Kasari, 2003; p. 123). Researchers, in the latter study, found that general education teachers usually have “closer and less conflictual relationships […] with students who have fewer behavioral problems” (Robertson, Chamberlain and Kasari, 2003; p. 123). This can explain why special needs educators, or paraprofessionals, usually take the teaching responsibility of children with autism spectrum disorder (Robertson, Chamberlain and Kasari, 2003; Lindsay et al., 2013). Arguably, when a mainstream teacher cannot build a consistent and healthy relationship with their ASD
students, mainly because they cannot spend as much time with them, they will have a more difficult time including them in their classrooms (Jordan et al., 2010).

Another important challenge identified involves socio-structural barriers such as “lack of training, availability of resources and school policies” (Lindsay et al., 2013; p. 355). Some participants felt that, if they did not have additional qualifications in special education, it was difficult for them to apply inclusive teaching strategies in their classrooms; mainly because they did not have the necessary support (Lindsay et al., 2013, 2014). Teachers even indicated that the AQ course in special education should include a specific component about autism where teachers should be exposed to effective teaching methods that work with students with ASD. It is not enough for teachers to have workshops about ASD if they do not find the appropriate resources and support at their school. Many teachers do not have access to educational assistants (EA) nor access to necessary training opportunities (Robertson, Chamberlain and Kasari, 2003; Lindsay et al., 2013, 2014). One teacher even indicated that it was difficult to have access to helpful resources “for children with Asperger’s syndrome or high-functioning autism because most of the resources tend to go towards children with lower-functioning autism” (Lindsay et al., 2013; p. 356). This is an intriguing finding and I would like to see, for the purpose of my study, if this is also the case for junior and intermediate students with ASD.

Parental engagement is another barrier worth mentioning for the purpose of this study. Some parents choose not to identify their child’s condition, do not have an IEP, and cannot qualify to receive resources and support (Lindsay et al., 2013). A teacher participant also indicated that they had to deal with concerns from other parents, and not only with parents of the children with ASD. They had to explain to them that these children have special needs “without break[ing] privacy” (Lindsay et al., 2013; p. 358). Ultimately, the few challenges, mentioned
here, encountered by educators in mainstream classrooms affect their efforts to create inclusive learning settings for ASD students. The next section will look at how teachers’ preconceived attitudes towards students with disabilities affect the way they decide to include them in the classroom.

2.3 Teachers’ Beliefs about Inclusion and Learning Disabilities

Research has shown that students with disabilities are increasingly educated within general education classrooms in North America (Stanovich and Jordan, 2002; Robertson et al., 2003; Loiacono and Valenti, 2010). It is thus imperative to look at teachers’ beliefs and reactions to the inclusion of students with ASD. This was investigated in one study using the “Supporting Effective Teaching” (SET) model whereby teachers’ beliefs about the nature of disability were described in two groups: pathognomonic and interventionist beliefs (Jordan et al., 2010). This study indicated that teachers who have a pathognomonic perspective believe that disability in students is internal. This causes teachers to emphasize the nature of the disability in a student as the reason for underachievement. This may lead them to blame the student for their inability to improve and as a result spend little effort with the included student with a disability in comparison to the rest of the students (Jordan et al., 2010). On the other hand, teachers who hold an interventionist perspective about disabilities believe that a student’s environment may create barriers to accessing learning opportunities (Jordan et al., 2010). Those teachers then take the responsibility and effort to create learning environments where all students can succeed.

In another study, researchers investigated pathognomonic and interventionist beliefs in nine grade three teachers (Jordan et al., 1997). Similar to the SET model study, the results showed that teachers’ beliefs about students with disabilities affect their instruction and interactions with these students. Teachers in the latter group spend more time on instruction and
building meaningful connections with students and spend less time managing their behavior. They can modify and accommodate their lessons according to their students’ learning needs and progress (Jordan et al., 1997). Arguably, there should be a change in teachers’ pathognomonic attitudes about disabilities if inclusion is to be effectively fostered in mainstream classrooms. It is important to mention that the findings of studies discussed above pertain to primary teachers’ general beliefs about learning and/or behavioral disabilities and not necessarily attitudes towards students with ASD. Some subsidiary questions of the present study will try to cover this gap in the literature. Finally, the study conducted by Lindsay et al. (2013), on challenges encountered by educators, indicated that some of their teacher participants believed there was a “lack of awareness and understanding of the disorder amongst staff, students and parents” (Lindsay et al., 2013; p. 358). It was particularly difficult for them to understand the needs of students with ASD and how these can be met in a mainstream classroom when they displayed misperceptions about these children and their symptoms.

**2.3.1 Student-Teacher Interactions**

There is limited research examining the relationship between mainstream teachers and students with autism. I can offer a more general perspective on this theme and present several trends found in the literature about teachers’ interactions with students who have learning and/or behavioral disabilities. Researchers have generally found that teachers have closer and less conflictual and dependent relationships with children who have fewer behavioral problems (Robertson et al., 2003). A general assumption made is that “included children with autism with more behavioral problems in class will also have poorer quality relationships with their teacher” (Robertson et al., p. 123). Arguably, children benefit from having a positive relationship with their teachers as this provides them with the motivation to succeed and a sense of belonging in
the class room; both important factors in fostering inclusion (Robertson et al., 2003). One way of looking at student-teacher relationships is to examine students’ behavior in the classroom. In one study, teachers were provided with the Student-Teacher Relationship Scale and the SNAP-IV Rating Scale which look out for differences in the qualitative features of the student-teacher relationship (Robertson et al., 2003). Researchers found that student-teacher relationships are indeed related to students’ behaviors during instruction time (Robertson et al., 2003). For example, children who exhibited hyperactivity/impulsivity and or opposition/defiance were rated as having a highly conflicted and dependent student-teacher relationship. In the lens of the present study, it is important to understand that a teacher’s relationship and interaction with students can affect the inclusion of a student with autism in a regular class room. It was mentioned earlier that one of the goals of interaction is to facilitate cooperative learning among all members of the class room. In a class room where children with ASD are present, it is important to facilitate these positive interactions between the teacher, typically developing children and children with autism. If students have a conflicted relationship with their teacher they tend to also have difficulty interacting with their peers; resulting in low levels of social inclusion in the class room (Robertson et al., 2003).

Several researchers expected that mainstream teachers take less responsibility for the instruction of students with disabilities if a paraprofessional is consistently present in the class room (Marks et al., 1999; Giangreco et al., 1997). They also presumed the presence of paraprofessionals would interfere in the development of positive interactions between teachers and students because they would spend less time with them during instruction (Robertson et al., 2003). However this presumption was not supported by the results of the study. Researchers found that the presence of paraprofessionals did not affect the relationship between the regular
teacher and students with disabilities (Robertson et al., 2003). In contrast, another study conducted in an elementary school setting found that paraprofessionals’ proximity to included students with disabilities led to regular teachers assuming less responsibility and teaching duties towards those students. Teachers investigated in this study also separated these children from their peers during group work because they assumed the paraprofessional would take on the responsibility of interacting with them (Giangreco et al., 1997; Marks et al., 1999). As mentioned in the previous sections, little research has been done on student-teacher relationships with ASD students and the research that has been conducted is in elementary school settings only. But, a general trend that surfaces is that “young children who have positive relationships with adults are better equipped to attend to their environment” (Eisenhower, 2007, p. 365). In the present study, I will see if this trend is apparent in junior or intermediate school settings, and particularly with ASD students.

2.4 Teachers’ Role in Inclusion

I have previously looked at teachers’ attitudes towards inclusion and children with learning and/or behavioral disabilities. It is also important to understand teachers’ beliefs about their roles in promoting learning in inclusive settings (Jordan et al., 2010). Teachers have the capacity to provide a learning environment where students with ASD can learn how to be independent and build positive relationships with their peers. Teachers who assume the role of facilitating inclusion have the potential of instilling this notion in all their students as well. On the other hand, teachers who do not assume they have a role in promoting inclusion will not necessarily show willingness to include students with ASD in their classroom. Consequently, I see that several studies have examined factors which led to less successful attempts of inclusion of students with ASD. Many of these factors overlap with themes such as teachers’ beliefs and
attitudes about disabilities, and the philosophy of inclusion. In one study I encountered, the researchers argue “that applying best-practice elements of inclusion may be difficult for teachers who are including students with high-functioning autism within their class” (Lindsay et al., 2013; p. 349). In this particular case, it may be more beneficial for these children to spend most of their school time in segregated settings until they can build the necessary social and communication skills to interact with their peers.

2.4.1 Access to Resources

A study conducted in the United States reported that in the last decade educators have been continuously challenged to learn disability-specific teaching skills “to address the learning needs of a statistically higher number of children with autism within the public school systems” (Loiacono and Valenti, 2010; p. 25). This also implies that there is an increasing need to train special education and general education teachers who will work with autistic students (Loiacono and Valenti, 2010). The study also reported that beginning teachers especially do not feel prepared to work with these children nor to effectively create an inclusive classroom environment. They understand the benefits of inclusion but feel like they do not have access to resources which will help them in the process (Loiacono and Valenti, 2010). Furthermore, another study, conducted in the United States, reported that educators are not applying “Applied Behavior Analysis” (ABA) methodologies which should be taught in teacher training programs or during professional development training (Schloss and Smith, 1998). Likewise, a study conducted in Canada presents similar areas of conflict. There is a general opinion that teaching students with special education needs requires teaching skills that many educators lack (Jordan et al., 2009). Evidence reported in several studies indicate the benefits and needs for students with special education needs to be included in general education classrooms (Booth et al., 2000,
Kalambouka et al., 2005, Demeris et al., 2007). In this case, is it necessary for general education teachers to be trained in order to create an effective inclusive environment in their classrooms? Arguably, inclusion can be applied to all students and not just students with special needs. Thus, teachers who are effectively creating an inclusive environment for all the students are more likely to be already skilled in inclusive practices and they can extend those to students with special education needs (Stanovich and Jordan, 1999, 2000, 2002). Additionally, teachers who believe in their role and responsibility in including students with special needs tend to be more successful in their interactions with all their students (Jordan et al., 2009).

In the lens of the present study, we cannot deny that many teachers feel unprepared. When regular teachers accept the responsibility to teach included special education needs students they need to know where and how to get resources. Educators who do not receive resources and adequate support systems build more negative attitudes towards the teaching philosophy of inclusion (Stanovich and Jordan, 2002).

### 2.4.2 Collaboration among Teachers and Educational Assistants

Collaboration among colleagues, special education teachers, and educational assistants can be a powerful tool in facilitating educators’ roles in creating effective inclusive classrooms. Together, educators can create academic and behavioral plans that fit students’ specific needs. But, it seems like the general opinion is that educational assistants should focus on the students with autism and regular teachers should focus on everyone else. Many students with autism may end up working one-on-one with one individual when they should really be working in groups. Cooperating with others gives them a chance to generalize their social skills. The presence of educational assistants in the classroom can serve both ways; on occasions, they can help the student with autism, and at other times, they can respond to other students in the class to give
time to the regular teacher to spend time with the autistic student (Robertson, 2003). Hence, collaboration between the paraprofessional and the regular teacher can develop better relationships with included students with autism. Another study conducted in the United States even reported that educators are willing to co-teach, with other educational assistants, students with special education needs in inclusive settings if there are proper resources and training in place (Downing and Peckham-Hardin, 2007). The educational assistant can also collaborate with the regular teacher to help students with autism create stronger relationships with their peers. For example, they can work with the autistic children in a small group with other students. Overall, educational assistants can work together with educators to help create a sense of community for all students as opposed to working with ASD students in segregation.

2.5 Essential Elements for Inclusion

Lipsky and Gartner (1997) have developed an analytical framework related to seven essential elements of inclusion teachers need to keep in mind in their practice. Their model outlines the following essential elements to be taken into consideration in an inclusive education program: visionary leadership, collaboration, refocused use of assessment, support for staff and students, funding, effective parental involvement, curricular adaptation and effective instructional practices (Lipsky and Gartner, 1997). They argue that this model offers a framework by which inclusion can be achieved in the mainstream classroom (Lindsay et al., 2013). The data that will be collected from this study will be compared against this framework to see to what extent the participants apply these elements which are considered to be essential to fostering inclusion.

2.6 Conclusion

In this literature review I mainly looked at research on inclusion of students with learning and/or behavioral disabilities in mainstream classrooms. The majority of research articles I found
focused on the inclusion of students with autism while many others focused on special education needs in general. This review elucidates the extent that attention has been paid to teachers’ beliefs about inclusion of students with autism in elementary classrooms, particularly from grades 1 to 3. It also raises questions about the level of training and resources available to regular teachers in order to effectively create inclusive learning environments. The literature review points to the need for further research in the areas of inclusive learning settings for students with autism in junior and intermediate grades. There is also little research on the training pre-service teachers receive to help special education needs students nor concerning their beliefs about inclusion. The present study will attempt to contribute to the current literature around inclusion by investigating how a small sample of junior and intermediate teachers instructionally respond to the needs of their students with ASD to create an inclusive classroom learning environment.
CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

This chapter provides an outline of the methodological approaches used in this study. It starts with an overview of the research approach and procedures; namely the rationale behind using qualitative research methods. The interview protocol is outlined in the following section. This is followed by the sampling criteria and procedures used to recruit participants for this study, as well as a short biography for each participant. Next, a summary of the methods used to conduct data analysis as well as their significance is discussed. This is followed by a description of potential ethical issues that come with the qualitative nature of this study as well as measures taken to ensure compliance with ethical review procedures. Finally, methodological strengths and limitations of this study are discussed and a brief overview of key methodological approaches and what is to come in the next chapter is outlined at the end.

3.1 Research Approach and Procedures

This study was qualitative in nature. A qualitative research approach allows researchers to “study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them” (Denzin and Lincoln, 2011, p.3). Unlike quantitative research, qualitative studies acknowledge the subjectivity a researcher brings into their research and finds measures to deal with that limitation. This approach was appropriate for the purpose of this study as there was an identified gap in the literature about inclusion of students with ASD that needs to be explored. There is vast literature on the inclusion of elementary ASD students in mainstream classrooms, but very little on the inclusion of junior, intermediate, and high school students. The circumstances and experiences of the educators who participated in this study addressed the main research problem (Creswell, 2013) and this is a
unique feature of qualitative studies. The research process adopted involves several steps. After reviewing the literature in the field of inclusive education a main research problem was identified which was that many elementary teachers feel unprepared to work with ASD students in main stream classrooms. Because the literature focused on elementary schools it was important for me to explore if similar challenges existed for teachers of junior and intermediate grades. Several research questions were developed to address this problem and an interview protocol was created to answer those research questions through semi-structured interviews with participants.

This study draws on characteristics of a case study approach because of the context—a real-life setting- in which data collection was conducted (Yin, 2009). Case studies allow the researcher to gain a deeper understanding about the participants’ experiences (Creswell, 2013). Additionally, a multiple-case study approach was adopted in the sense that the researcher could gather information from multiple perspectives; particularly from educators working in different schools and with students at different levels on the ASD spectrum. In this case, each participant’s experiences can be summed up in individual case studies. Due to ethical limitations in the MTRP, it was not possible to adopt a complete case study approach as that would have involved interviewing students and conducting observations in the classrooms.

3.2 Instruments of Data Collection

Subjects participated in semi-structured interviews that lasted approximately 45-60 minutes (see Appendix B). This method of data collection was appropriate with the qualitative nature of this study as it allowed the researcher to interact with participants in a more relaxed atmosphere all the while following a certain structure to ensure research questions were being addressed. Interviews are the most common method of data collection used in qualitative studies (DiCinno-Bloom and Crabtree, 2006). In the case of semi-structured interviews, the researcher
can start by building rapport with the participant. Participants will usually give more in-depth answers to questions being asked when they feel more comfortable with the person asking them (Whiting, 2008). On the other hand, structured interviews are often used to collect quantitative data and are presented in the format of closed questions which do not work well for the purpose of data collection in this study. Bernard (2006) indicates that semi-structured interviews allow the researcher to be “fully in control of what you want from an interview but leaves both you and your respondent free to follow new leads” (Bernard, 2006, p.212).

The interview protocol was created in advance, keeping in mind that follow-up questions could be asked to the participants later on via a phone call or e-mail. The topics covered are closely related to the research questions and there was a particular focus on understanding the key instructional strategies the participants used with ASD students. The interviews were conducted face-to-face at a location of the participants’ choosing and recorded using audio-recording software on my laptop. I began the interviews by inquiring into their background information; asking questions such as “For how many years have you been teaching?” As the interview continued questions became more specific in order to have more insight into the participant’s experiences and thoughts about inclusive education.

3.3 Participants

In this section, I review sampling criteria used, provide an outline of how participants were recruited, and a short biography for each participant interviewed.

3.3.1 Sampling criteria

An overarching criteria was for the participants to believe inclusion of students with ASD in mainstream classrooms was beneficial to their development and so their own teaching practices had to reflect that. This criteria would be fulfilled if educators had demonstrated commitment
and/or leadership to integrating students with ASD in mainstream classrooms (e.g. they have facilitated PD in this area for colleagues, studied this in graduate school, contributed to curriculum development in this areas etc.). To be eligible to participate in the study participants had to have a minimum of 5 years of experience teaching students with ASD in mainstream learning settings. This was an important criteria because this study aims to examine the meaningful inclusion of ASD students in mainstream classrooms as opposed to segregated classrooms.

Participants had to be junior or intermediate educators, teachers or educational assistants, in the public or private sector willing to talk about their experiences. Since there was a clear gap in the literature regarding teaching students with ASD in that age range it was important for me to learn more about the key instructional strategies used with ASD students in that group.

3.3.2 Sampling procedures

I located 2 educators through methods of convenience sampling. I informed and discussed my research interests with my associate teachers during teaching placements and they were able to suggest teachers who had experience teaching ASD students and whose teaching practices were informed by inclusive education. I first sent these educators a description of my study and research interests via e-mail and asked if they would be interested in participating in my study. Once I received approval I forwarded the consent letter and we agreed on a date and time to conduct the interview. In qualitative studies, maximum variation sampling is usually a popular approach (Creswell, 2013). In the case of the MTRP, and due to some of limitations -such as the short time constraint to conduct interviews and small scale of the study- convenience, chain, and purposive sampling were found to be the most effective.
3.3.3 Participant Bios

I interviewed two educators who had experience working with ASD students in the mainstream classroom settings. I used the same interview protocol for both participants and started off by asking a few questions about their background in teaching in order to build rapport and assure a more fluid conversation about the questions that followed. Participant A, who I will refer to as Carol, is a grade 8 math and science teacher, as well as the health and physical education teacher for grades 6 and 8, in a middle school in the Peel District School Board in Ontario. In the past, she has taught several subjects from grades 6-8. She has been teaching for 15 years and has worked with ASD students in a mainstream classroom setting since her 3rd year in teaching. Carol did not receive any additional qualifications in special education but has worked with students with special learning and behavioral needs throughout her career. Participant B, who I will refer to as Jasmine, is an Educational Assistant, currently working with a school board in Ontario, who had various experiences working with ASD students in self-contained and mainstream learning settings; from students in JK to adults in community programs. She has Montessori background and has also worked as an ECE and received her specialization in Autism and Behavioral Science. Like Carol, she has been an educator for 15 years.

3.4 Data Analysis

There were two main steps in the data analysis process. Firstly, each participant’s interview was transcribed and examined several times in order to identify themes and patterns. It is suggested, in the literature around qualitative studies, that transcripts be read several times, in their entirety, before trying to code for themes (Agar, 1980, Creswell, 2013). Secondly, after each transcript was reviewed, I identified codes and then grouped them in more general themes. Identifying themes is a starting point in qualitative studies (Bazeley, 2009). A more important
step to understanding those themes is how they helped the researcher make meaning of data collected. I drew on the analytical framework developed by Lipsky and Gartner (1997), regarding the seven essential elements of inclusion, in this process to make meaning of the data. They highlight elements that can guide teachers’, or schools’, approach to inclusive pedagogy. These include: “visionary leadership, collaboration, refocused use of assessment, support for staff and students, funding, effective parental involvement as well as curricular adaptation and effective instructional practices” (Lindsay et al., 2013). Evidence from research showed that applying this approach consistently allows teachers to meet the needs of all students (Ferguson, 1995; Lipsky and Gartner, 1997; Lindsay et al., 2013).

I also coded for null data which referred to any topics the teachers did not speak to. It is important to identify what was anticipated to be a recurring theme, because of the literature around the topic, but which did not actually emerge from the data collected as that may speak to areas not yet explored by the literature. It is mentioned that “themes only attain full significance when they are linked to form a coordinated picture or an explanatory model” (Bazeley, 2009, p.4). It was not sufficient to just identify categories and themes within them; it was more important to interpret why certain themes may have been recurrent while others were not.

3.5 Ethical Review Procedures

This study followed the ethical procedures outlined by the Master of Teaching program. Prior to each interview, participants were provided with a consent letter (see Appendix A) which they were required to read and sign if they agreed to participate in the interview. One copy was given to each participant. Participants had the right to refrain from answering any questions they did not feel comfortable discussing and they were notified beforehand that there were no known risks to participation in this study. They also had the right to withdraw their participation from
the study, even after the interview was conducted. Each participant received a copy of the transcribed interview via e-mail for review before the data was coded and interpreted. It was also important to pay attention to how the data was stored. It is particularly important in qualitative studies to “protect the anonymity of participants” (Creswell, 2013, p. 175); thus each participant was given a pseudonym. Furthermore, all data was stored on a password-protected laptop for the length of this study, and will be for up to 5 years, and was accessible only to myself and the course instructor.

3.6 Methodological Limitations and Strengths

The main limitation in this qualitative study was the sample and the fact that only educators could participate because of limitations in the ethical review procedure outlined by the MTRP. With that in mind, the findings of this study can only inform on the topic and I cannot claim any generalized statements from the data I collected. However, given that the main goal of this study was to examine exemplary teaching practice in inclusive education, the approach taken was suitable. Another limitation was the restricted interview time and restricted amount of questions I could ask during the semi-structured interviews. Another particular limitation to this study was that, due to restrictions from the ethics review, I did not get a chance to see how the participants actively apply what they believe about inclusive education with junior and intermediate ASD students through the use of classroom observations.

The main strength in qualitative studies, and particularly when conducting semi-structured interviews, is that you can you can discuss with participants in a more flexible and relaxed way. Teachers had a chance to share their thoughts about a topic that matters to them and the experiences they bring in are valuable for any teacher who is just starting to work with ASD students. These interviews and the themes that emerged, combined with the analytical framework
chosen, provide a stronger insight in an area not well covered in the current literature around the topic.

3.7 Conclusion

In this chapter, I reviewed the main methodological procedures and the rationale behind using them. This study used qualitative research methods that draw on characteristics of the case study approach and semi-structured interviews in order to gain more insight into effective instructional strategies when seeking to include junior and intermediate students with ASD in mainstream classrooms. In the following chapter, I report the research findings.
CHAPTER 4: RESEARCH FINDINGS

4.0 Introduction to the chapter

In this chapter, I report and discuss the research findings which were gathered from an open-ended interview with each of my participants, Carol and Jasmine. This was followed by an analysis of the data and the emergence of five apparent themes which are shared in a sequence that reflects the process an educator could experience when working with ASD students. I start off with educators’ beliefs about inclusion and then I move on to share the findings around support and resources needed by educators to foster inclusion, in general and with ASD students, in mainstream classroom settings. This is followed by a discussion of the challenges encountered by the participants in their efforts to support inclusion and how this has informed the instructional strategies they practice. Lastly, I discuss the responses of students with ASD to the instructional strategies used by participants as well as responses from their peers in the mainstream classroom. I will expand on these themes by addressing how the participants’ general beliefs about the inclusive classroom affected more specific practices towards the inclusion of ASD students, all the while referring back to the analytical framework presented by Lipsky and Gartner (1997) about the seven essential elements of inclusion. I will further examine the themes by referring back to key findings from the literature review in chapter 2. I will elaborate throughout this chapter on my initial reactions, learnings, and surprises. In conclusion, I will summarize the key findings in preparation for chapter 5.

4.1 Theme 1: Beliefs about inclusion

Educators’ beliefs about inclusion was a theme that was apparent in both interviews conducted. It is also an aspect thoroughly discussed in the literature. In general, teachers who have positive beliefs about inclusion of students with special needs, in the mainstream
classroom, practice more meaningful inclusive practices as opposed to teachers who are less supportive of this approach (Jordan et al., 1997; Jordan et al., 2010). Furthermore, educators’ understanding of the term “inclusion” affects their practices. There are many classrooms in the general education system that promote “the delusion of inclusion” (Lupart, 2008) which is often defined as simply placing a student with special needs in a mainstream placement (Lynch and Irvine, 2009) so that they have proximity to other mainstream students. However, it does not necessarily mean that teachers practice or foster meaningful inclusion. The findings for this study indicated that both participants had general beliefs about inclusion of students with special needs which affected the way they interacted with ASD students. The findings grouped under this theme were not surprising and many of them were echoed in the literature outlined in chapter 2. A similar belief mentioned by both participants was that having an open mindset and being ready to try different methods can go a long way when working with autistic students across the spectrum, and with any student in general. This general belief trickled down to more specific strategies which I will discuss in the section about instructional strategies that foster inclusion.

4.1.1 General beliefs

Carol, who only has teaching experience in mainstream classroom settings, defined inclusion in her junior and intermediate classrooms as a way of meeting most of her students’ needs. More specifically, she mentions that “I have to have the kids in the classroom think that they’re in a safe environment […] because if I want those kids to be included in an inclusive classroom then I need to make sure that they don’t think taking a risk is going to cause them problems”. She also indicated that it was not possible for her, in a mainstream classroom, to meet all the needs of her students but that she works towards knowing her students well so that she can use their strengths to her advantage. This goes along with one of the seven essential elements of
inclusion developed by Lipsky and Gartner (1997); curricular adaptation and effective instructional practices. The researchers described that teachers who successfully apply this element will “accommodate the unique needs of the learner and maximise his/her ability to be an equal participant in the inclusive classroom” (Lynch and Irvine, 2009, p. 847). In this case, Carol’s belief that each student has strengths, that she can use to make the learning more meaningful, is a way for her to foster authentic inclusion. Similar to Carol, Jasmine believed that some essential considerations when fostering an inclusive classroom environment included building trust in children and making sure they are aware that they can rely on the adult in that room. Likewise, she believed that having a positive approach and mindset is key for any efforts towards meaningful inclusion to be successful.

4.1.2 Beliefs about inclusion of ASD students

Jasmine had several experiences working one-on-one with ASD students, both low and high functioning, Asperger, and children with Self-Injurious Behavior (SIB). She also mentioned several examples and situations that showed she was an advocate for ASD awareness, in particular, and special education in general. One example of this is when she mentioned that she had been “advocating for awareness and appreciating children with special needs […] within the GTA, and even back home in Tanzania”. Jasmine’s beliefs about meaningful inclusion, in any learning setting, had a direct impact on the practices she adopted in her teaching and support of students with ASD. As opposed to Carol, Jasmine has had experiences in self-contained and mainstream classroom settings and she attempted to see meaningful inclusion in a more balanced manner. She believed that to the best of every school or centre’s ability, students with ASD, from JK, should be integrated with their mainstream peers but that a parallel curriculum, which will be discussed in the section about support and resources, should definitely be available to these
children for their learning experiences to be as authentic and beneficial as possible. Carol echoed a similar belief when she mentioned that she does not think it is possible to meet all the needs of ASD students within the classroom setting. At the same time, she does not feel like the pull-out or self-contained model are the right options or placements for these children either. Again, it is the idea of finding a balance that will provide ASD students with the most authentic experiences of inclusion in the learning setting they are participating in.

4.1.3 Significance

Some of the findings grouped under the theme of “beliefs about inclusion” were discussed in the literature around inclusive education as well. Teachers’ beliefs about students with special learning needs and their understanding about these needs has a direct impact on what they do in inclusive settings (Jordan et al. 1997; Jordan et al., 2010). Both participants in this study believed in their role in promoting inclusion and believed that ASD students could thrive in an environment where authentic inclusion was promoted. Jordan et al. (2010) have shown in their research that teachers who assume and believe in their role as facilitators of inclusion will end up instilling this notion in all their students as well. On the other hand, teachers who do not believe it will be less successful in building positive and meaningful relationships with their mainstream and ASD students (Jordan et al., 1997; Robertson et al., 2003). Jasmine mentioned this aspect when I asked her about what meaningful inclusion meant to her. Again, she emphasized the positive mindset that “I want to be the difference in any small way. The vibes will manifest in the children”. Likewise, Carol mentioned that it was important for her ASD student to know that “he wasn’t just an ASD student but has a lot to offer”. This positive mindset affected the way participants perceived challenges faced as well as how they described support and resources they had access to.
4.2 Theme 2: Support and resources needed to foster inclusion

The access and availability of resources are crucial for any educator who works with students who have special learning and/or behavioral needs. The ones mentioned by the participants included assistance from support staff, collaboration between colleagues, on-going professional development in special needs, support from administration and parents, and other resources specific to supporting students with ASD. Four of Lipsky and Gartner’s (1997) essential elements for fostering inclusion actually revolved around support and resources (Lynch and Irvine, 2009). Another model developed by Dawson and Osterling (1997), which looked at best practices for working with students with ASD, also emphasized the importance of support and resources. Most of the findings outlined in this section did not come as a surprise because it was an aspect vastly discussed in the literature around inclusive and special education. Researchers have indicated that beginning teachers do not feel like they have access to the necessary tools to work with students with special needs, let alone students who are autistic (Loiacono and Valenti, 2010). A teacher who does not feel prepared or well-equipped will also have less success in creating an inclusive classroom environment (Loiacono and Valenti, 2010). The participants in this study did mention a few aspects that presented new learnings for me regarding this theme, particularly in the junior and intermediate grades, which was an area not well discussed in the literature.

4.2.1 Common resources

Carol indicated that it was important to work with support staff, such as ISPP teachers, TAs, guidance counsellors, and school psychologist, when she had autistic students who were fully integrated in her intermediate classrooms. She had not received any training in special education and she did not feel like she needed to take any Additional Qualifications courses
because she relied on her experiences and support from colleagues. One example of how she collaborated with another colleague, in order to include one of her autistic students more meaningfully, was that she talked with the student’s previous teacher to know a little bit more about his strengths and interests. This way, she was able to build rapport with the student right from the beginning because she made the extra effort to know more about him. Another resource that was available to Carol was someone from the school board who could help her with more specific situations she encountered with her ASD students. If a challenge came up and she was not sure how to approach it properly then she could have access to that extra support staff. Interestingly, Carol explained that the professional development sessions that were available through her school board were not necessarily geared towards teachers who work with ASD students in a mainstream setting; which is one of the reasons why she relied particularly on her colleagues for support and guidance. Similar to Carol, Jasmine explained that having a supportive assistant in the room, and supportive colleagues in general, was a great resource. She said that “positive communication between the two will result in a phenomenal ripple effect”. It made a difference for the children she worked with when the adults in the room were both supportive. This positive communication and relationship between staff also impacted the positive inclusion they aimed to foster for the children in that particular learning setting. Furthermore, Jasmine had positive experiences with administration who provided support and guidance throughout her work with ASD children. Constructive feedback from administrators was also beneficial to her reflexive practices and commitment to ongoing professional development.
4.2.2 Specific resources used with ASD students

Jasmine had more training in special education through her studies in the Autism and Behavioral Science program, as well as the self-directed professional development she was invested in. Her work as an Educational Assistant, in different centers, self-contained and mainstream settings, exposed her to several resources and tools specific to supporting children with ASD. One of the first resources mentioned by Jasmine, and briefly mentioned by Carol as well, was parental involvement and support. She explained that parents can help teachers by releasing information about the condition of their child as well as sharing helpful tips. Parental involvement is also an essential element to inclusion developed by Lipsky and Gartner (1997) as well as one of the best practices for ASD students put together by Dawson and Osterling (1997). The researchers indicated that parental involvement was an important resource for educators to ensure effective intervention (Lynch and Irvine, 2009). Parental involvement was also perceived as one of the challenges towards including ASD students in mainstream and this will be discussed in the next section.

Other resources more specific to working with ASD students, that have greatly supported Jasmine’s teaching practices, is the ABA approach merged with the Antecedent, Behavior, Consequence (ABC) mindset. She witnessed how this approach has created a “harmonious environment” in the learning settings she had worked in. Jasmine emphasized, more than Carol did, the importance she felt with keeping par with recent research and various electronic resources. She explained that “it is good to be aware of what is available”, referring to the idea of being resourceful which was also echoed by Carol. One of the assessment tools which was also helpful to Jasmine, when she worked with a grade 6 girl integrated in mainstream, was the “Assessment of Functional and Living Skills” (AFLS). This helped her and her colleague
develop a program that was supportive to the student’s needs within the learning setting she was included in.

4.2.3 Significance

Looking back at the literature around access to resources, which supported educators’ efforts in inclusive education of special needs students, researchers indicated that it was important for teachers to receive the proper training, such as in ABA methodologies (Schloss and Smith, 1998; Loiacono and Valenti, 2010). Jasmine also indicated that proper training exposed teachers to an array of strategies and resources they could use. Working with students with special needs, particularly autistic students across the spectrum, does require teaching skills that many mainstream educators lack (Jordan et al., 2009). However, as discussed earlier, ASD children are increasingly being included in classrooms where teachers are not necessarily trained in special education. To ensure ASD students received the most authentic experience of inclusion, both Jasmine and Carol suggested that mainstream teachers should have access to an educational assistant, or other support staff, throughout the school day. Jasmine further suggested that there is an advantage to having a balanced program for ASD students that includes meaningful integration in the classroom as well as access to an Intensive Behavior Intervention (IBI) program. On the other hand, Carol, as a mainstream educator, did not have access to an assistant who could provide and support such a program throughout the day, which is one of the reasons why she relied on support from her colleagues who also had experiences working with ASD students. The literature outlined in chapter 2 also indicated that collaboration among colleagues and other paraprofessionals was a powerful tool for educators in their efforts of creating authentic inclusive learning environments (Robertson et al., 2003). The findings related to the theme of support and resources needed to foster inclusion are significant because both
participants, and several researchers, indicated that accessible resources and support encouraged teachers to have more positive attitudes about inclusion. This also refers back to the importance of a positive mindset both participants had about fostering inclusivity of students with ASD. These positive attitudes, and beliefs elaborated in theme 1, also impacted the way the participants addressed challenges they faced in their work.

4.3 Theme 3: Roadblocks to inclusion in mainstream settings

The fact that educators encounter challenges when fostering inclusion in a mainstream setting does not come as a surprise. The concerns the participants presented did not come as a surprise either because this is an area in the literature about inclusive education that is well researched. Participants mentioned aspects that were perceived as challenges to fostering inclusion in general as well as the ones that were more specific to inclusion of students with ASD. The main roadblocks mentioned revolved around lack of training, parental support, and resources as well as high student to teacher ratios in mainstream classrooms. Both participants’ beliefs about inclusion impacted and provided new learnings into how they perceived and dealt with challenges faced in the inclusive learning settings they fostered.

4.3.1 Common challenges in inclusion of ASD students

The first general challenge mentioned by Carol was the number of students in the classroom. She described that having 27 students and just one of her was “the biggest problem” to inclusion especially because they required different teaching and assessment methods. She explained that she not only had to work with one ASD student but also had ELL students integrated in her classroom and other students with IEPs. She had to meet the learning needs of all of these students in one mainstream setting. This concern was also mentioned by Jasmine when we discussed some of the suggestions she had to overcoming roadblocks to inclusion. She
explained that “it would be worthwhile to revisit the current ratio”, referring to ECE classrooms, and that the increasing number of students in one room can be overwhelming for an educator.

An additional challenge, which I did not encounter in the literature, was the presence of ASD students, in Carol’s classroom, who were also learning English as a second language. She found it difficult to include these students because she could not communicate with them effectively. However, because Carol had a positive, and proactive, mindset about inclusion she showed persistence in working around those challenges. She also had access to an ELL teacher or an EA who could help her in those situations, which again emphasizes the importance she put on collaboration with colleagues to overcome many challenges in the inclusive classroom. In general, Carol was satisfied with the resources available to her and was usually able to find the support she needed to work around difficult situations. Jasmine echoed similar thoughts about availability of resources but also indicated that a lack thereof could definitely be a challenge, which was something also encountered in the literature (Robertson, Chamberlain and Kasari, 2003; Lindsay et al., 2013, 2014).

The first common challenge mentioned by Jasmine was lack of specific skills and strategies in teachers. She explained that “most educators mean well and want to support these individuals” but have limited information. This was also indicated in the literature as a challenge teachers faced because when they lacked the appropriate training and information about ASD then they could not respond to students’ learning and social needs as effectively (Robertson, Chamberlain and Kasari, 2003; Lindsay et al., 2013). More specifically, Jasmine indicated that the learning experience of ASD students could be hindered if educators did not use available resources appropriately. An example she gave was with an available technology called “Proloquo-to-go” which is used with autistic students who are non-verbal. It is an expensive tool
to acquire and educators could run into the risk of becoming too reliant on it, which ultimately takes away from the experience of interacting with others.

Lack of support from administration and parents was also a common challenge outlined by Jasmine. Both models developed by Lipsky and Gartner (1997) and Dawson and Osterling (1997) indicated that parental, or family, involvement was an integral component of students’ success in learning settings they participated in (Lynch and Irvine, 2009). From Jasmine’s personal experiences, she said that positive communication with the parents of ASD children “made the challenge conquerable” and significantly alleviated teachers’ anxiety. Carol also indicated that having a positive relationship with the parents had a similar impact on her ASD students and this could elucidate back to the cues children pick up when interacting with adults and how that affects their learning experiences.

**4.3.2 Specific challenges in junior/intermediate classrooms**

Jasmine explained that some parents, she had worked with, were supportive of the idea of inclusion for their ASD children from JK to grade 5 but that in upper grades they experienced social challenges such as isolation and bullying. Because of that, they preferred that their children be pulled out into a self-contained environment or for the school to offer a program that was balanced between integration and pull-out. This becomes a challenge when the school cannot provide such options. This parental concern was also mentioned by Lynch and Irvine (2009) where they indicated that “parents tended to believe that their children’s needs could not be met in a full-time inclusive setting” (p. 851). It is significant to mention here that, because of the gap in the literature around inclusion of ASD students in junior and intermediate grades, I cannot say for sure if ASD students in upper grades do encounter social challenges in mainstream, as indicated by Jasmine.
Carol also experienced a few situations, in her intermediate classrooms, where her autistic students refused to do an activity with the rest of the class because it was too overwhelming. In those instances, the student had to do the same or modified work outside of the classroom with a TA. Carol did not feel like she was practicing meaningful inclusion in those cases because, due to several constraints, mainly number of students in the class, she was not able to prepare the classroom or lesson to meet the student’s needs inside the regular classroom. Research conducted by Andrews and Lupart (2000) indicated that, due to several reasons, educators were practicing “mainstreaming” as opposed to integration because they were often only preparing the ASD student to function in a mainstream classroom as opposed to creating learning experiences that were meaningful to him or her.

Jasmine clearly believed that very few challenges emerged if the right programs were planned out and executed for ASD students. Some challenges she did encounter though differed from the ones outlined by Carol because of the nature of her work as an EA. She mentioned challenges such as working with ASD students who had violent behavior and where it was more difficult to integrate in mainstream. During a 6 weeks pilot program, as part of her Autism and Behavioral Science program, Jasmine worked with a junior student, in grade 6, integrated in mainstream. The challenge she encountered there was that the student was anxious and lacked confidence in herself and this took away from her experience in the mainstream setting. Jasmine was successful in practicing a few intervention methods which will be discussed in the next theme.

A significant aspect she mentioned as well was the lack of communication between the mainstream teacher and the Educational Assistant in the room. Jasmine felt it was more difficult to bring something to a teacher’s attention if she was the co-teacher in the room. She explained,
in a certain scenario, “how do I draw my colleague’s attention without demeaning her position?”, particularly if she was working in classroom where the teacher did not have extensive training and information about autism. This is a significant learning because we indicated, in the previous section, that working with paraprofessionals and colleagues was usually a great resource. But, it is also important to indicate that it could be a hindrance to the inclusive classroom model if both educators do not agree on certain methods or ways to approach the ASD students.

4.3.3 Significance

Many of the roadblocks indicated by participants were described as being common in any learning setting. Other challenges were more particular to junior and intermediate ASD students integrated in mainstream. It is worth mentioning that the literature alluded to a challenge not discussed by the participants which is the response from the parents of non-ASD students to the presence of ASD children in the classroom (Lindsay et al., 2013). It is significant to mention, as was indicated in previous themes, that both participants’ beliefs about inclusion played a factor in helping them overcome many of the challenges they faced. This belief and advocacy for inclusive education, paired with support and resources, have helped the participants of this study in their work towards authentic inclusion.

4.4 Theme 4: Instructional strategies that foster inclusion

Instructional strategies educators adopt are greatly influenced by their beliefs about inclusive education, among other factors. Research indicated that for successful and authentic inclusion to be fostered for all students, educators must adopt instructional strategies that will address all aspects of the learning experience in inclusive settings (Harrower and Dunlap, 2001; Lindsay et al., 2013). Some of the main teaching strategies grouped under this theme included
general practices adopted by the participants as well as specific ones that are beneficial for ASD students.

4.4.1 General inclusive practices

Carol indicated that it was important to be flexible when working with all types of learners. She alluded to practices that can be described under the umbrella of universal design because, although they were targeted to help the ASD student in her classroom, they were also beneficial to the rest of students. For example, accommodating her assessment methods for all students and not just for the ASD student or for other students with special needs. Another general practice was getting to know her students, their strengths, needs, and interests from the beginning of the year so that she could foster that safe and accepting environment. This was also a way for her to see what she needed to do to differentiate for her students and how she needed to modify her lessons in order to meet their learning needs as much as she could. The first practice Jasmine mentioned was more of a self-reflective one. She explained that it was important to remain objective, and avoid any preconceived notions, when working with children in general and those with special needs in particular. This belief, or attitude, translated into her practice because she strived to instill this mindset in her students as well. Similar to Carol, she valued the importance of creating a safe environment and one way she achieved that in a mainstream classroom was to discuss with the students “that each one of us is challenged in one way or the other”. She further gave them the example of wearing glasses and how this was a challenge accommodated by society. Likewise, she wanted the students to be accepting and accommodating of those with special needs. Both participants agreed that a lot could be achieved in the mainstream classroom if a platform for empathy, collaboration, and acceptance was established.
A significant learning I encountered was that both participants mentioned that inclusive practices would be successful if teachers were understanding of their students’ needs. Jasmine explained that “we also need to be realistic. […] if there is a dual diagnosis which includes physical aggression, then total mainstream integration will require scrutiny and retrospection”. Carol also indicated that some ASD students do not always benefit from a full day inclusion program; an aspect also addressed in the literature. Although this study aims to look into inclusive strategies that have been successful for ASD students, this notion that teachers “need to be realistic” showed that the participants were aware of all the efforts and practices they could implement and that it was sometimes better to work towards a balanced program if the need of students required that. Referring back to the analytical framework developed by Lipsky and Gartner (1997) and the model presented by Dawson and Osterling (1997), both indicated that “detailed generalization strategies” and “curricular adaptation and effective instructional practices” were essential components of promoting inclusion. Lipsky and Gartner (1997) defined “effective instructional strategies” as a teacher being able to design, or modify instruction, “to accommodate the unique needs of the learner and maximise his/her ability to be an equal participant in the inclusive classroom” (Lynch and Irvine, 2009, p. 847). The next section will outline a few strategies used by the participants that reflect this essential element for authentic inclusion.

### 4.4.2 Specific strategies used with ASD students

Jasmine mentioned the value of positive imitation among children and noted that it is something she promoted in her classroom in terms of day-to-day conversations and basic social skills. She also highlighted that her Montessori background had proven beneficial in her practice with ASD students, particularly in terms of using a soft tone of voice and gentle teaching.
practices. One of these gentle techniques is simply coming down to a child’s level when talking to him or her, or quietly whispering “I love the way you’re working today” when passing by. Jasmine also discussed her experience with a grade 6 girl integrated in mainstream and highlighted some of her most successful strategies; such as using a “token economy” system to keep her own track while doing work. If, for example, she accumulated 10 stickers or tokens, by a certain time during the school day, she would be rewarded with a special activity. She also mentioned that because the homeroom teacher was open to suggestions she was able to show her colleague the importance of recognizing the efforts of every child in the room, particularly the autistic girl. These simple, but genuine, praises were a great motivation for the student. Another successful practice adopted by Jasmine, which was also mentioned in the literature (Harrower and Dunlap, 2001), was to pair the grade 6 girl with a buddy in the classroom. Not only did this develop stronger interactions between peers in the mainstream setting, but it also encouraged the young girl to be less dependent on an adult. Establishing peer mentors has shown to be a successful strategy to apply in inclusive learning environments (Harrower and Dunlap, 2001).

Some strategies she used were also successful because of the tools and resources she had access to like the VB-MAPP\(^1\) and ABLLS-R\(^2\), which are both assessment tools used to measure learning and language skills in ASD students. Ultimately, many of Jasmine’s teaching strategies with ASD students were successful when she had sufficient time with them to create rapport.

Carol had relatively positive experiences with her ASD students. In one situation, she described that the learning environment became too overwhelming for one of her ASD students. This was during a basketball unit in the gym so she decided to take the student to the side, on the stage where there was less noise, and was able to continue the lesson with the student there.

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\(^1\) Verbal Behavior Milestones Assessment and Placement Program

\(^2\) Assessment of Basic Language and Learning Skills
Although she had to separate him from the rest of the group, in order to calm down, she was still able to stay in the gym and quickly thought of a strategy that could help him continue to play as opposed to sending him off to a TA or other support staff. A successful practice, following the description in Lipsky and Gartner’s (1997) model mentioned earlier, was modifying the learning circumstances in the mainstream classroom in order to benefit a grade 8 ASD boy in her science class. Carol knew that the student was a strong oral speaker so she set up a classroom debate purposefully so that he could be motivated and excel in front of his classmates. She gave him the opportunity to prepare beforehand and as a result did really well. In this case, Carol looked at the situation at hand and adapted her instructional strategies to benefit the ASD student in an inclusive learning setting. Carol also mentioned that having a schedule in the front of the classroom, making sure she did not suddenly change something on the schedule, and having alternative seating options were all helpful tips she kept in mind.

4.4.3 Significance

In comparison, both participants applied various strategies that resulted in positive learning experiences for their integrated ASD students. It is definitely not an easy process and one that requires time and planning (Carpenter, 2007). A significant aspect from the literature, also mentioned by both participants, which came as a surprise to me in the inclusive setting, was that presenting ASD-specific educational supports may actually provide all students with the necessary level of support needed to ensure a positive and inclusive learning environment (Lynch and Irvine, 2009). Furthermore, several strategies mentioned by the participants, such as one-on-one assistance, purposeful planning, student peer-mentors, and co-teaching with an EA, have resulted in successful experiences of authentic inclusion in North American classrooms (Lynch and Irvine, 2009; Kilanowski-Press et al., 2010). The upcoming section will bring more
context to the strategies used as I will discuss the findings around the responses of ASD and non-ASD students to the instructional strategies adopted by the participants.

4.5 Theme 5: Students’ responses to instructional strategies

The findings grouped under this theme were looked at in terms of responses participants received from their ASD and non-ASD students vis-à-vis their instructional strategies as well as the response of non-ASD peers to the presence of ASD students in the classroom. Although it is important to have the right mindset, tools, and strategies to foster inclusive learning experiences for students, it is more important for students to respond effectively.

4.5.1 Response from ASD students to strategies

Carol described relatively positive responses from her ASD students to her instructional strategies. Since she was committed to building rapport with her students, early on in the school year, students felt comfortable approaching her if they had a specific concern. The ASD student she currently has in her classroom actually requested for them to develop a sign that would help him focus in class. She explained that “he recognized that he is often times his mind wonders so he was actually a big advocate for doing it”; which was two words that would bring his focus back. She indicated that this strategy did not always work and that it may not be as effective in a few months but that she was open to trying something else with him, such as tapping the desk, if that happened. Referring back to the grade 8 ASD student she had when she organized class debates, she described his reaction to her strategy as positive and that it was a great experience for him. His mother even noticed that he was very excited about the activity. Jasmine also described a positive response from the grade 6 student she worked with in a mainstream setting. She explained that the young girl responded really well to “Token Economy System” because her preferred reward after gathering enough tokens was putting on her headphones and listening
to audio books. More importantly, the outcome of the program Jasmine developed for this student was that she gained confidence in herself, and after two years, she started to join her peers for snack and lunch in the classroom whereas before she used to be sent off to the office. A surprising finding here is that the grade 6 girl was also concerned with her family’s reaction; more specifically her grandfather. She used to ask if her actions “would make grandpa happy” and acted upon them with that in mind. Another significant finding for this section is that Jasmine indicated that the few times ASD students had not responded to her strategies was during short-term work time with them, and mostly in self-contained settings. One of the articles in the literature indicated that autistic students usually responded well to inclusive practices (Harrower and Dunlap, 2001), and this was found from the participants’ responses as well. Furthermore, positive relationships among peers, which occurs at a higher frequency in inclusive rather than segregated settings (Lynch and Irvine, 2009), encourage ASD students to respond more positively to their learning environment. A few findings in the next section have indicated this as well.

4.5.2 Response from peers to inclusion of ASD students in the classroom

Carol indicated that her students are generally very positive about the presence of an ASD peer in the classroom but that her current students are sometimes irritated by the actions of their autistic peer but only “when he pushes his limits”. However, Carol was usually able to control the situation and the students were pleased that she did not treat him differently because of his special needs. Other than those instances where she described the ASD student “as pushing his boundaries” the others ones were positive about his presence and the way teachers interacted with him. During the classroom debate described earlier, Carol said all students were taken aback when their ASD peer got up to present because they did not think he could do it. She still
remembered that “one boy in particular who was like very shocked that he was able to do it all”. Jasmine described similar positive responses from other students as well. In the particular example about the grade 6 girl, she described that a few peers came up to her to say that they wanted to be supportive but were not sure how and what reaction they would get. Jasmine had a conversation with a few of the girl’s peers and guided them to certain things they could do. One of the friends became very helpful and would encourage the young girl to ask questions if she was unclear about a concept and to ask permission when she felt she needed to step out of the classroom because of noise level. Overall, the literature in inclusive education has indicated that social interactions in the inclusive classroom have been positive ones (Lynch and Irvine, 2009). Parents have also identified the social benefits of inclusion for their children which has encouraged them to be more supportive of this model (Lynch and Irvine, 2009). All children participating in inclusive classrooms will benefit when educators are able to model and act upon these positive relationships.

4.6 Conclusion

In this chapter I reported the research findings and supporting quotes from the research participants. The themes that emerged were closely correlated and I used a certain sequence to represent how a teacher may encounter them in the classroom. I started off with reporting on participants’ beliefs about inclusion because the positive mindset participants had impacted the way they utilized resources, how they worked around challenges, the type and variety of instructional strategies they used, and their reflective practices vis-à-vis their students’ responses to teaching strategies. I decided to present the theme about students’ responses at the end to showcase how all the other factors presented impacted one of the most important aspects of
inclusive education. Ultimately, if students do not respond effectively or positively, within a given time frame, the inclusive learning experience will not be as meaningful. This was indicated in some sections of the literature as well as from the participants.

I anticipated that some of the findings gathered from my two participants would be different for some themes because of their differing roles as educators. Jasmine has had experiences working with ASD individuals from JK children to adults and in a variety of learning settings so her answers reflected these experiences. Carol’s experiences have been with junior and intermediate students in mainstream classrooms; which was my main focus coming into this study. Some of the significant learnings that emerged from the themes came from the experiences these two participants had with junior and intermediate students because this was an underdeveloped area in the research. Finally, the findings showed that the participants were applying and referring to several essential elements for meaningful inclusion that were in common between Lipsky and Gartner’s (1997) analytical framework and Dawson and Osterling’s (1997) model for best practices with ASD students; including support and resources, collaboration between colleagues and other paraprofessionals, and parental involvement.

Next, in chapter 5, I discuss the significance of these findings in the context of the literature I reviewed in chapter 2. I elucidate how the findings contribute to this existing body of research. I also discuss the significance of the findings for me as a beginning teacher and novice educational research scholar. I articulate recommendations for various stakeholders of the education system, and I identify areas for further research.
CHAPTER 5: IMPLICATIONS

5.0 Introduction to the chapter

I first started my research about experiences of autistic students in different learning settings because of my interest in special education. Early on in this program, I also started to develop my teaching philosophy around meaningful inclusive education. I really thought this would be the best solution to engage any student in any learning setting. I believed, and still do, that a classroom has the potential to ignite positive change in the learning experiences of all students and ASD students in particular (Koenig et al., 2009). With these two interests in mind, I decided to look into the experiences of autistic children in mainstream classrooms in the public education system. The purpose of this study was then to find and describe how educators responded to the learning and social needs of their ASD students to create an inclusive learning environment for them in that particular learning setting.

I decided to focus on the experiences of junior/intermediate educators and students because that was an area of the literature I found was lacking. What I discovered from the semi-structured interviews I conducted with my two participants, as well as confirmed what I encountered in the literature, was that teachers’ beliefs around inclusive education for special needs students have a great impact on the way they respond to their social and learning needs, among many other factors reported in the previous chapter. Another finding that emerged, mostly from self-reflection after reporting my research findings, was that inclusive education is not always the best solution for ASD students. Many of them have particular needs that a mainstream teacher, who may lack the necessary training, cannot address. My perspective was thus shifted to a learning setting that would offer a balance between full and meaningful inclusion in a classroom and the required individual support. I also realized that meaningful inclusion does not only have
to happen in a mainstream classroom; it can be achieved in many other learning settings. The strategies applied by my participants provided me with a starting point on what I can do in my future practice. I will list the most significant findings in the next section.

5.1 Overview of key findings and their significance

The research findings reported in chapter 4 were grouped into five themes. Some of the most significant findings will be discussed in the next sections in terms of implications. An overarching finding throughout all five themes was that teachers’ beliefs about inclusion affected the way they supported ASD students in their classrooms, how they perceived and tackled challenges, as well as how ASD and other students responded to their strategies. The findings were also related back to the seven essential elements of inclusion outlined by Lipsky and Gartner (1997) in order to see which findings were in line with this framework and which were not. With my research question, I really wanted to get to the practical strategies participants used to meaningfully include junior/intermediate ASD students and I was introduced to several that have worked in their classrooms.

Lipsky and Gartner (1997) clearly indicated that teachers’ beliefs affect the instructional strategies they use with all their students. An overarching understanding from the first theme identified was that participants’ positive approaches and open mindset helped them promote a learning environment of meaningful inclusion. Both believed in their agency in promoting inclusion (Jordan et al., 2010). On the other hand, it was indicated in the literature that teachers who did not hold this belief, or who had negative beliefs about working with special needs students, were less successful in creating and sustaining an inclusive learning environment (Jordan et al., 1997; Robertson et al., 2003). This same overarching understanding was evident in
the rest of the themes. Being resourceful, seeking assistance from colleagues, participating in specialized training, among many other factors mentioned in the second theme, are results of the participants’ commitment to helping ASD students succeed in the learning setting they were working in. On the other hand, it was also meaningful to address that there are several roadblocks that can hinder the experience of ASD students in a mainstream classroom such as lack of resources and training (Robertson, Chamberlain and Kasari, 2003; Lindsay et al., 2013) and these were also factors mentioned by the participants. In regards to the overarching finding that emerged from this research, it was indicated that working on ASD students’ strengths and interests provided a foundation for many effective strategies that have fostered inclusion in their classrooms. A successful inclusion model mentioned in the literature, called the “ASD Nest Program”, outlined several successful inclusive strategies to use with autistic children in a classroom setting where they interact with mainstream peers. These included catching students when they are good and paying attention to their interests (Koenig et al., 2009). Along with that, both Carol and Jasmine mentioned they generally received positive responses from their ASD students and other peers in the classroom when everyone’s strengths were highlighted.

In the next section, I will discuss the implications with regards to the findings mentioned above. I will discuss these in two categories; broad implications in relation to the educational and research communities and narrow implications that are significant to my future practice as a teacher.

5.2 Implications

The implications of this study highlight the importance of having a positive mindset and beliefs about inclusion in order to foster meaningful learning opportunities for ASD students in
mainstream classrooms. At the same time, this research proves that there are many roadblocks that hinder the meaningful inclusion experience for teachers, ASD students, and other peers in the classroom. It is important for stakeholders who promote special and inclusive education to address these challenges. In the first section, I will discuss the implications of the key findings in relation to primary stakeholders in the education community, primarily the students, followed by teachers, parents, and administration at the school and board levels. In the second section, I will discuss what these implications mean to me as an aspiring teacher and novice educational researcher.

5.2.1 Broad: The Educational Research Community

The significance of the findings from the first theme, related to beliefs about inclusion, have implications for all the stakeholders, but primarily for students. The main implication is that educators who present positive beliefs and attitudes about the inclusion of ASD students in particular, and all students in general, will instill this mindset in their students as well. They will start to embody acceptance and respect when they see that this is what their teachers foster. Both Carol and Jasmine mentioned that students are very good at picking up cues from their teachers and generally have a good understanding of class dynamics so it is important to realize that attitudes teachers portray in the classroom will also affect their students. Moreover, when all teachers working in a school have a similar vision about including ASD students in learning settings with other peers then they will be able to apply inclusive strategies in a more meaningful way. This was reflected in frameworks outlined by Lipsky and Gartner (1997) and Dawson and Osterling (1997) in which they have indicated that teachers’ beliefs plays an essential role in promoting inclusion in any learning setting. A school that adopts this mindset, such as the “ASD Nest Program”, in place in New York City community schools (Koenig et al., 2009), will also
get the support from parents who will see the benefits of having all types of learners working together (Lynch and Irvine, 2009).

The significance of findings from the second theme also primarily have implications on students. The main one is the implications that can result from an ill-equipped teacher and how that can become a hindrance to the experience of inclusion for students. A teacher who is not aware of available resources, or who does not have access to required support and resources, can become overwhelmed and start to feel resentment towards the presence of ASD students in their classrooms who they cannot help. Jasmine explained that being resourceful in this area comes from appropriate training and exposure to resources during Professional Development workshops and this implies that teachers need to have access to these and be trained to use them appropriately in their classrooms. It is important to highlight again that one of the essential elements for inclusion is access to support and resources (Lipsky and Gartner, 1997) and this will definitely impact students’ experiences in the inclusive classroom.

Parents are also an important stakeholder in this case. Both participants mentioned that parental support was important and this is also an essential element of inclusion mentioned by Lipsky and Gartner (1997). There are negative implications on the inclusive classroom model when parents of ASD children are not on board in terms of the support offered at the school, if they feel like the mainstream teacher is not trained to be supporting their child or if they want to take them out from the mainstream classroom setting altogether. There are also parents of peers who may not be comfortable with having their children around ASD students or who may not believe in the inclusive classroom philosophy, and all of this puts pressure on teachers and administration to find solutions that would work for all parties. Along with that, schools’
administration that do not support teachers who integrate ASD students in mainstream settings, and who do not provide them with essential support and resources, will also hinder the meaningful inclusive experience for rest of stakeholders (Lynch and Irvine, 2009).

There are also negative implications on students when the resources teachers have access to are not used appropriately or effectively used in the classroom (Robertson, Chamberlain and Kasari, 2003; Lindsay et al., 2013). This proves to be a challenge for everyone in the classroom and can create a negative relationship between teachers and students; especially because both participants and the literature have indicated that teachers who lack training in certain ASD instructional methods will be less successful in providing them with meaningful learning experiences (Lindsay et al., 2013). On the other hand, a positive mindset has the potential of creating positive relationships and can help teachers feel like the challenges they face are conquerable, as was mentioned by both participants. This is also significant for principals, and other members of administration, because they are able to provide support that can alleviate teacher anxiety that comes from working in mainstream classrooms that integrate ASD students and also from lack of training. Principals also have the responsibility to make sure their teachers have sufficient training and support to be working in these classroom settings; as was mentioned earlier, an ill-equipped teacher can have damaging effects on the inclusive classroom model.

In terms of implications in relation to instructional strategies used to foster inclusion for ASD students, as well as their response vis-à-vis these strategies, both participants mentioned that their ASD students usually responded well; whereby they noticed that they benefited from the learning in the classroom and interacted well with others. These positive responses have a positive impact on the teacher-student relationship and also motivate teachers in their
commitment to inclusive education. Instructional strategies used with ASD students could also have negative implications on students if the teacher does not feel like a student should be placed in a full-time mainstream classroom or if the school is not able to provide them with an appropriate program for their learning and social needs. Overall, instructional strategies have the potential to promote meaningful inclusion when appropriately used by teachers.

5.2.2 Narrow: Your Professional Identity and Practice

As a future educator, the implications which emerged from my research findings reinforced by belief in the inclusive classroom model as a mechanism for positive change in the learning experiences of ASD students. Here again I want to emphasize that inclusion does not only happen in mainstream classroom settings. I would say this was the main shift in my thinking and understanding of inclusive education. The implications outlined above have an impact on my future teaching practices because they have introduced me to different challenges, strategies, and tips. In order for me to support students with ASD, in inclusive learning settings I hope to facilitate, I need to make sure I have the proper training, resources, and support system from administration, colleagues, and parents, to do so effectively. Most importantly, this research has confirmed my belief that inclusive education can go a long way for all students, particularly those with special needs, when educators have a positive mindset. This research has also introduced a new way for me to think about inclusive education which is inspired from the “ASD Nest Program”, which I will refer to in more details in the next section about recommendations. At the same time, I now have a more realistic picture of what it means to work with ASD students, outside of self-contained classrooms, and realize that there are several factors that need to come together before I can actually facilitate meaningful inclusion.
In terms of a novice educational researcher, I believe that observing teachers in a learning setting where ASD and mainstream students are integrated would have been very beneficial. It would have been valuable to see participants’ beliefs about inclusion put into practice through the varied instructional strategies they mentioned. It was interesting for me to interview participants with very different educational backgrounds as that introduced me to perspectives from the mainstream and self-contained learning environments. I was able to analyze the benefits and drawbacks from both settings and I believe that was an asset to my research.

5.3 Recommendations

There are several recommendations for various stakeholders in the educational community that emerge from the findings of this research. Firstly, I believe teacher education programs have an important role to play in preparing teacher candidates to work with special needs students in general. They should receive more practical training in special education and should also have a chance to participate in a special education placement so that they can at least have a glimpse of what it is like to work in self-contained or integrated settings. Secondly, at the school and board levels, administration, and other specialized support staff from school boards, should work with teachers to assure that ASD students are being placed in the right setting for their learning and social needs. Along with that, school administration should provide teachers with opportunities to receive additional training and on-going support, particularly to those who take on the responsibility of working with ASD students in integrated learning settings. Thirdly, from the feedback received from participants, it is very beneficial for a mainstream teacher to work with a full-time Educational Assistant, Behaviour Therapist or special education teacher on a consistent basis. It has proven to be very beneficial for the extra support staff to be present in the room, especially if both colleagues are able to work together to facilitate inclusion. Along with that,
there should be funding from school boards, and ultimately from Ministry of Education, to make sure enough support staff are available in more schools. This would provide ASD students with more opportunities to work with their mainstream peers throughout their schooling. It would also give more communities access to these integrated learning settings if more schools in a certain board are provided with this funding. A further recommendation at the board level would be to consider the student to teacher ratio and how lower ratios can help alleviate teacher anxiety and provide teachers with more time to address individual student needs. The “ASD Nest program”, which is in place in several community schools in New York, has had a ratio of 12:1; 8 mainstream students and 4 ASD students working together in a fully integrated learning setting, and it has proven to be a successful experience for teachers and students (Koenig et al., 2009). It would be beneficial for principals, and other administrators, to work with teachers to implement programs such as the nest program in different schools. Finally, a recommendation for teachers would be to see that the supports put in place to help ASD students can be beneficial to rest of students as well; such as using visual cues, classroom environmental modifications, relaxation training, etc. (Koenig et al., 2009).

5.4 Areas for further research

Due to methodology limitations mentioned in Chapter 3, there remains several questions that are potential for further research in the field of special and inclusive education. Firstly, I think it would be beneficial for more research to be conducted with intermediate and high school educators who work with ASD students, particularly because there is more focus on elementary teachers in the literature. Secondly, I still wonder how realistic it would be to integrate lower-functioning ASD in the mainstream classroom if the required support and training is not provided. My participants’ students integrated in mainstream classrooms were, in majority, high-
functioning autistic children. It would then be interesting to see the experiences of lower-functioning students with the inclusive learning model and further research is required here. It would also be beneficial to conduct further research in inclusive learning settings for ASD students outside the public school system. It would be important to assess the benefits and drawbacks, over period of time, of these alternative learning systems as well. Finally, the participants in my study have had relatively positive experiences with ASD students in their classrooms. It would be beneficial to extend research on experiences in inclusive classrooms that were not so successful in order to see where the system fell short.

5.5 Concluding comments

When I first started this research I wanted to see what educators, who believed and promoted inclusion, did to meaningfully include ASD students in their classrooms. What I discovered was that I was limiting my perspective by thinking that placement in mainstream classrooms was the only way for ASD students to experience inclusion. My lack of experience in special education and my growing interest in working with special needs students also continuously motivated me to conduct this research. My participants’ experiences, alongside with the existing literature around this topic, exposed me to different ways of thinking about inclusion.

This research is significant because educators are increasingly working with students with various learning and social needs and the literature is increasingly showing that inclusive learning environments have the potential of promoting heightened levels of student engagement. Why not then provide the same opportunities for special needs students? From the findings listed in this research paper it is evident that these opportunities are possible with the right mindset, support, and training.
If I could choose three people to read this research paper, I would include educators, board representatives, and teacher education programs coordinators. I believe it is important for educators to take the time to be up to date with direction that education is moving in, and for many Ontario schools, it is towards inclusive education. Every teacher works with students who have particular academic, social, and emotional needs, and it is important for them to be resourceful so they can help all of them, at least the majority, reach their full potential.

It is also important for stakeholders who work at the board level to read this research because the main challenges that came up in this study were from lack of resources, support, and training. Teachers cannot be expected to be successful facilitators of inclusion if schools do not provide them with appropriate tools. With these in hand, teachers have the potential to create and apply instructional strategies that can be beneficial to all learning needs of students. In that case, boards, and ultimately the Ministry of Education, should direct more funding towards the successful implementation of inclusive classroom models in as many schools as possible.

Finally, I would want teaching programs coordinators in this province to read this research because there is a clear lack of training for teacher candidates in special education. Since the presence of students on IEP, students with particular social and emotional needs, students with development disabilities, is increasing in our classrooms, teacher candidates must come out more prepared in this domain. Minimally, they should be aware of the resources available to them, and the challenges they will face, as they start to navigate their way through the system.

Inclusive learning settings for ASD students, and all students, have the potential to create environments where students feel safe, where they learn to be caring and respectful of differences, and where they can learn from each other. There remains many barriers that can
hinder the implementation of such learning environments but it is possible with the appropriate mindset, on-going training, and support.
References


Appendix A: Letter of Signed Consent

Date: August 12, 2015

Dear ___________________,

I am a graduate student at OISE, University of Toronto, and am currently enrolled as a Master of Teaching candidate. I am studying the meaningful integration of students with Autism Spectrum Disorder in mainstream classrooms for the purposes of investigating an educational topic as a major assignment for our program. I think that your knowledge and experience will provide insights into this topic.

I am writing a report on this study as a requirement of the Master of Teaching Program. My course instructor who is providing support for the process this year is Dr. Eloise Tan. The purpose of this requirement is to allow us to become familiar with a variety of ways to do research. My data collection consists of a 45-60 minute interview that will be audio-recorded. I would be grateful if you would allow me to interview you at a place and time convenient to you.

The contents of this interview will be used for my assignment, which will include a final paper, as well as informal presentations to my classmates and/or potentially at a conference or publication. I will not use your name or anything else that might identify you in my written work, oral presentations, or publications. This information remains confidential. The only people who will have access to my assignment work will be my course instructor and her teaching assistant. You are free to change your mind at any time, and to withdraw even after you have consented to participate. You may decline to answer any specific questions. I will destroy the audio recording after the paper has been presented and/or published which may take up to five years after the data has been collected. There are no known risks or benefits to you for assisting in the project, and I will share with you a copy of my notes to ensure accuracy.

Please sign the attached form, if you agree to be interviewed. The second copy is for your records. Thank you very much for your help.

Sincerely,

Zahra Rahal
zahra.rahal@mail.utoronto.ca

Instructor’s Name: Dr. Eloise Tan
Email: Eloise.tan@utoronto.ca
Consent form

I acknowledge that the topic of this interview has been explained to me and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw at any time without penalty.

I have read the letter provided to me by Zahra Rahal and agree to participate in an interview for the purposes described. I agree to have the interview audio-recorded.

Signature: ______________________________________

Name (printed): __________________________________

Date: ______________________
Appendix B: Interview Protocol

Thank you for participating in this interview. Your experience as a teacher who works with students with ASD will bring valuable insight into my research. The aim of this research is to learn about key strategies educators are using to create an inclusive learning environment for junior and intermediate students with ASD who spend the majority of their school day in mainstream classrooms. The interview should take approximately 45-60 minutes. I will ask you a series of 21 questions focused on learning more about your beliefs around inclusive education, the challenges you encounter, and some key instructional strategies you have used to meaningfully include ASD students. I want to remind you of your right to choose not to answer any question; please let me know at any time during the interview if you do not feel comfortable answering a particular question. Do you have any questions before we begin?

A. Background Information:

1. What grades and subject areas do you currently teach? Which have you taught in the past? [If applicable], what are you teachable subjects?
   - For how many years have you been teaching?
   - Can you tell me more about the school you teach in? (size, demographics, program priorities)
   - In addition to classroom teacher, do you fulfill any other roles in the school? (advisor, coach, counsellor, support worker, resource teacher)

2. As you know, I am interested in learning how teachers support the meaningful integration of students with ASD. Can you tell me more about what personal, professional, and educational experiences contributed to developing your interest in this area and helped prepare you for this work?
   - Probe: Did you receive any training in special education? (e.g.: took AQ courses in special education?)

3. How common is it for you to have students with ASD in your classroom?

4. What type of students have you worked with? (i.e.: Students with low or high functioning ASD, etc.)

B. Beliefs/Values:

5. What does an inclusive classroom mean to you?

6. What do you believe are some essential considerations when fostering an inclusive classroom?

7. What does meaningful inclusion mean to you?

8. What do you believe are the strengths of the inclusive classroom model? (versus the pull-out model)

9. In your experience, what are some of the common challenges teachers experience in their efforts to create an inclusive classroom?
   - How do you think those challenges can be met?

10. More specifically now, what do you believe students with ASD gain by being integrated into mainstream classrooms?
11. Do you believe it is possible to meet the needs of students with ASD in a mainstream classroom environment? Why/why not?

C. Teacher Practices:

12. Can you please tell me about some general practices you use to achieve an inclusive learning environment in your classroom?
13. More specifically now, can you tell me about instructional practices and approaches you have taken to include students with ASD in your classrooms? Why do you use these approaches? In your experience, why have these been effective?
-Probe: How has whether or not your students are high or low functioning affected the ways you instructionally respond to their needs?
14. From your experiences, how have students with ASD responded to your inclusive instructional strategies?
-Probe: Have you encountered any different reactions while working with students on different levels of the ASD spectrum?
15. How do other students perceive and respond to the presence of ASD peers in their class?
-Probe: How does this impact the learning environment in your classroom?
16. Can you give me an example of how you have meaningfully integrated a student with ASD in your classroom?
   - Who was this student? (low functioning/high functioning; grade; subject)
   - What were you goals for integrating this student?
   - What practices and/or approaches did you take?
   - How did this student respond?
   - How did other students respond?

17. What resources support you in your commitment to meaningfully integrate students with ASD? (e.g. space, PD/training, funds for resources/books/videos; support workers)

D. Influencing Factors:

18. What challenges have you faced when working to meaningfully integrate students with ASD students in a mainstream classroom setting? How do you respond to these challenges?
-Probe: What additional resources could help you meet those challenges?
19. Have you received any feedback from administration or colleagues about your inclusive practices? If so, what kind of feedback?

E. Next Steps:

20. What changes would you like to see happening in the field of inclusive education for students with special needs?
   - What recommendations do you have for the education system in terms of how it can further support and prepare teachers to meaningfully integrate students with special needs into mainstream classrooms?
21. What advice, if any, do you have for beginning teachers who are committed to inclusive education and to meaningfully integrating students with ASD into their mainstream classrooms, but who have little experience in this area?

Thank you for your time and participation in this interview. I will send you a transcript of this interview via e-mail for you to review before I use any of the data in my research.