“How am I Prepping for All of That and Still Fitting Sleep into My Day?”:
The Tale of Two Teachers Seeking to Include Students with Autism Spectrum Disorder
in the Secondary Mainstream Classroom

By

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Abstract

This research project sought to further understand of the current state of inclusion for students with Autism Spectrum Disorders (ASD) in the mainstream, secondary classroom. Academic and popular literature would suggest that the current state of affairs is ineffective or inconsistent at best, and that teachers need better training to support these students. During two in-depth, semi-structured interviews, teachers shared their experiences of inclusion of ASD students in their classrooms. The findings point to the importance of professional development and collaboration with colleagues and administrators as a means to increase confidence and perceptions of effectiveness. Teachers also commented on the importance of differentiated pedagogies, seeking to include all students and not only those with ASD. The use of assistive technologies and alternative spaces as resources for effective instruction were also highlighted. Based on these findings, it would appear that interest in seeking training to include these students is highly dependent on individual experiences and character traits, and may not be the norm for all teachers. Parents may also experience difficulty navigating the diverse and complex services available to their children with ASD. In response, administrators should allocate time and financial resources for mainstream teacher training in order to alleviate teacher workload and increase the limited number of Special Education teachers.

Key words: Autism Spectrum Disorder, secondary mainstream classrooms, mainstream teachers, inclusion, general education, Ontario
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Chapter One: Introduction

1.0 Research Context

A special report (Bennett & Wynne, 2006) prepared for the Ontario Ministry of Education, entitled Special Education Transformation: The Report of the Co-Chairs with Recommendations of the Working Table on Special Education, found that the mainstream classroom should be the first choice of placement for students with special needs. According to the Government of Canada (2015), the prevalence of Autism Spectrum Disorder (ASD) is rising and is currently at 1 in 68 children. ASD is a neurodevelopmental disorder which is characterized by impairments in communication and social skills, and also by ritualistic behaviours, which tend to be unusual or unexpected for the developmental age of the child (Public Health Canada, 2016). ASD is one of many exceptionalities recognized by the Ontario Ministry of Education; an exceptional pupil is one “whose behavioural, communicational, intellectual, physical or multiple exceptionalities are such that he or she is considered to need placement in a special education program....” (2007). As inclusion is the current framework for the Ministry, it is reported that in 2008, approximately 79% of all students (82% secondary) receiving special education services were placed in regular classrooms for more than half of the instructional day; of those receiving these services, approximately 11 719 were identified as having ASD (Ontario Ministry of Education, 2008). Expressed differently, the total amount of students spending more than half the school day in a special education classroom averages out to a mere 2% of all students identified as having an exceptionality.

People for Education publishes annual reports on the current state of Ontario’s publicly funded schools. In 2014, the group reported that the budget that the Government of Ontario
allotted for special education was $2.72 billion. Despite the fact that this amount represents more than 10% of the total public education system budget, an overwhelming 79% of provincial school boards exceed their allotment and still struggle to provide their students with the services they need to succeed in the public education system (Gallagher-Mackay & Kidder, 2014).

In terms of assistive technology, Gallagher-Mackay and Kidder (2014) found that 44% of elementary schools and 33% of secondary schools are unable to satisfy all of their students’ technology recommendations as issued by their Individual Education Plans (IEPs) or by external psychological assessment. These technologies are important as they aid students in the learning process and in assessment. Common examples of these assistive technologies are iPads, speech-to-text software, screen readers, and other communications software among others. Principals interviewed by Gallagher-Mackay and Kidder noted that lack of training for teachers and Educational Assistants (EAs), costs, and limits of equipment and bandwidth were considerable obstacles to the full integration of specialized equipment for students who needed it.

The Ontario Ministry of Education (2014a) has a special fund allotted for specialized equipment for Special Education programmes, where this equipment has been recommended by a qualified professional. This Special Equipment Amount (SEA) is for the specific purpose of facilitating students’ access to the curriculum, whether that denotes participating in regular or alternative programming, or facilitating school attendance, especially in the case of severe physical impairments.

It is worth noting that this funding is general to all Special Education classes, and not only for students with ASD. Also worth highlighting here is the fact that students do not need to be identified as exceptional, or have an Individual Education Plan (IEP) as recommended by the
Identification, Placement, and Review Committee (IPRC). In these cases, a recommendation of equipment as given by a qualified professional would suffice as due reason for the purchase. This important step should ease access to these funds for students who need it. However, the SEA will not be used to hire full-time staff to assist the teacher. The SEA will not cover building modifications such as to render a classroom more physically accessible, such as stair climbers or lifts. A classroom’s physical structure will not be changed, so as to build in sound systems or noise-reducing systems (i.e. specialized ceiling tiles, carpets, etc.). Curriculum materials, including computer hardware, and assessments for specialized equipment will not be covered.

In terms of professional development, principals in Gallagher-Mackay and Kidder’s study (2014) also noted considerable difficulty in coordinating therapeutic sessions with external professionals, such as speech-language pathologists, who have very limited availability to service school boards. They also observed that teachers are not trained to meet the diversity of needs of students in their school, and called for more and better trained EAs. Indeed, parents who jointly decide with school administration to withdraw their children from school are reportedly concerned about the seeming lack of resources available to facilitate their child’s participation. Unfortunately, complete lack of access of to a psychologist was reported by 12% of elementary and secondary schools, and 53% of secondary schools report strict limits on the number of assessments they can have at their school in a given year. The Ontario Ministry of Education’s (2014b) new budget reveals that professional supports such as psychologists, speech pathologists, and occupational therapists, and para-professional supports i.e., Educational Assistants, will be funded out of a total grant of over $10.5 billion which also funds classroom teachers’ wages and curriculum and classroom materials. It remains unclear how these funds will be distributed among these vastly diverse categories.
Given all this information, it should be of no surprise that principals across Ontario have expressed mixed opinions regarding inclusion: some report great success, while others emphasize the challenges of having varying exceptionalities in the mainstream classroom (Gallagher-Mackay & Kidder, 2014). The latest survey from People for Education (2015) revealed that almost one-fifth of Ontario secondary schools report that not all students who have identified needs receive the supports they require.

1.1 Research Problem

Despite the increase of funds for students with special needs, parents of students in Ontario public schools note a lack of adequately trained staff, poor access to professional services such as psychologists, and poor accountability on behalf of the government to ensure adequate services for their children (Rushowy, 2014). Parents and professionals within the Toronto District School Board (TDSB) suffer due to inadequate special education services and resources available to needing students (Rushowy, 2014). One study reported that only 33% of parents who have children with ASD in public secondary schools are satisfied with their level of education (Starr & Foy, 2012). On the same contingent, teachers have reported not having the necessary training to effectively engage Special Education students in the mainstream classroom (Breitenbach, Armstrong, & Bryson, 2013; Lindsay et al., 2014).

Given that these changes in policy and funding are so recent, it is difficult to find relevant academic literature which investigates the current Ontarian context. Nevertheless, the inclusion of students with ASD in the mainstream classroom is at a point of crucial development in terms of legislation and practice, and more research is needed in order to adequately monitor and report on the successes and failures of Ontario’s current system. Teachers, of all parties involved, are
the front-line implementers of Ministry policy and would be the agents directly impacted by the decisions of governing bodies in their abilities to fulfill these new mandates. Students with ASD are of particular interest to the researcher due to personal experiences living and working with individuals with ASD. The secondary school level population is of interest for this project given that these students would leave the high school heading directly into their communities as adults; thus, the academic and social outcomes of these students could be said to have an immediate influence on their adaptability to an adult life outside of the education system. Therefore, this research project seeks to fill a gap in the ASD-inclusion literature and be a forerunner on this ever-developing, ever-important topic of special education in Ontario.

1.2 Purpose of the Study

The purpose of this study was to explore how Ontario secondary teachers are working to include students with Autism Spectrum Disorders in mainstream classrooms. For the purpose of this study, I interviewed a sample of these teachers about: their reported inclusive teaching methods and perceived outcomes of these methods; the perceived influence of peers and educational assistants and/or other staffing aids on the successful inclusion of students with ASD in the mainstream classroom; and the perceived influence of technological and/or other tangible resources.

The themes which arose from these interviews have brought further insight into how students with ASD are being integrated into the mainstream classroom. Teachers can inform themselves on the practices of fellow colleagues and deepen their understanding on this topic. Researchers could further their understanding on the role of policy and of the perceived effectiveness of policy on practical outcomes for students with ASD.
1.3 Research Questions

The central question guiding this study is: how are Ontario secondary teachers in mainstream (non-Special Education) classrooms working to include students with Autism Spectrum Disorder? Further sub-questions to help guide this study are the following:

- What instructional methods do teachers use in order to include students with ASD in the mainstream classroom, and what is their perceived outcome?
- What is the perceived influence of peers on the successful inclusion of students with ASD in the mainstream classroom?
- What is the perceived influence of Educational Assistants on the successful inclusion of students with ASD in the mainstream classroom?
- What is the perceived influence of technological and/or other tangible resources on the successful inclusion of students with ASD in the mainstream classroom?

1.4 Researcher Positioning Statement

I am the older brother of an autistic adult. My experience in the public education system was heart-breaking. My younger brother’s behavior became unmanageable and he had to live in a separate home since his teens despite having been in a Special Education classroom his entire academic career up to and beyond that point. As a lower-middle class individual living in a densely populated urban area, I experienced second-hand how socio-economic status was a great barrier for my brother to receive essential specialized teaching. This teaching could have rendered a huge improvement in his functionality and independence. I have also worked as a Junior Facilitator at a private children’s school for developmentally delayed children, so I have first-hand experience how difficult it can be to work with and teach this population of children.
Intensive Behavioural Intervention (IBI)—which is offered at this private school—is highly expensive and thus many families are not able to afford it; due to volume, only a select few receive government funding.

These experiences have made the topic of ASD inclusion in the classroom of great importance to me as the government is now providing a greater amount of funding to keep these students in the mainstream classroom. Because I am aware of common challenges in working with these students, I was able to relate to and understand my participants’ respondents all the better, allowing for richer data analysis. Conversely, I was careful not to bias my questions due to my experiences in such a way to incur confirmation bias. I believe certain biasing wording choices or comments of a judgemental nature can spontaneously occur in free-flowing conversation due to the deeply personal nature of this topic. However, the role of any and every researcher is to carefully prepare and account for any possible bias which could unduly skew the interview process.

1.5 Overview of the MTRP

In order to study how mainstream classroom teachers are working to include students with ASD, I conducted a qualitative research study to interview three teachers about their teaching methods and the perceived impact of peers and professional supports. In Chapter 2, I review the literature regarding the inclusion of students with ASD in the mainstream classroom. In Chapter 3, I describe my research design in detail. I outline my findings in Chapter 4 and analyze how they fit in with the existing research literature, to ultimately in Chapter 5 place my research in the broader context of informing the educational community.
Chapter Two: Literature Review

2.0 Introduction

In this chapter, I review the literature pertaining to the inclusion of students with ASD (Autism Spectrum Disorders) in the mainstream classroom. I begin by considering inclusion as it has been conceptualized in its earliest research, then current teacher practices and concerns. A section on the importance of collaboration with parents and other professionals will follow, with a short section on Educational Assistants (EAs) to conclude. Then, I look at the research regarding assistive technologies in the education of students with ASD, including benefits and challenges associated with their use. Next, I briefly survey the literature as it pertains to the social and also academic outcomes of students with ASD in mainstream classrooms. Finally, I look at future directions and recommendations that the literature has to offer the educational community, and the place of the current study in the literature reviewed.

2.1 Current Conceptions of Inclusion

There is no formal definition, either in Canadian or Ontarian legislation, nor in academic literature, as to what inclusion really means (DeLuca, 2013). DeLuca highlights the fact that inclusion has gained great momentum and popularity in educational systems around the world, due in part to the many sub-disciplines of education that have historically tried to understand it. He mentions in particular special education studies, feminist research, and multicultural and anti-racism studies.

It therefore follows that different researchers will present different conceptualizations of inclusion in their works. For example, while Reed, Osborne, and Waddington (2012) broadly
describe inclusion as the placing of students in mainstream classes who would otherwise be in Special Education programmes, Lindsay, Proulx, Scott, and Thomson (2014) make the important distinction that these students become an esteemed member of the class, and not an isolated addition. Katz (2013) presents a dualistic view, that of academic inclusion—wherein exceptional students participate in the same curriculum as and with their typically-developed peers—and social inclusion, wherein students have the opportunity to interact in a general classroom setting, thereby fostering a sense of community. Evidently the lack of operationalization of this important term can lead to a diversity of practices, as will be examined in the rest of this review.

2.2 Teachers’ Experiences with the Inclusion of Students with ASD

Even when a teacher was informed and caring towards the students, both teachers and parents have noted it difficult to completely create an inclusive environment in the classroom when other parents, students, and staff were not well-informed on the topic of ASD (Breitenbach et al., 2013; Starr & Foy, 2012). For example, Starr and Foy observed that some parents of other students without ASD would become resentful, and complain to teachers and principals that their child would not receive enough attention due to the child with ASD being in the same class as their own child. In Brewin, Renwick, and Schormans’ (2008) study, parents reported that the most successful cases of inclusion for their children were those in which all groups of people implicated not only knew of the diagnosis but understood the diagnosis, and in which staff and students were patient and understanding of disruptive and abnormal behaviours, and would even play a role in extinguishing them.

Teachers interviewed by Lindsay et al. (2014) complained that resources are hard to come by: the training they needed was expensive, and oftentimes required supplementary
Curricular materials were bought from teachers’ personal funds and found through colleagues outside of their school. These teachers reported informally meeting with colleagues for quick, mini-workshops or to observe their classroom during a free period. Varied and detailed lesson plans and activities are perceived as crucial elements of pedagogical practice, so students with ASD can have as many opportunities to actively participate as possible (Breitenbach et al., 2013; Lindsay et al., 2014).

Teachers reported that Additional Qualification courses on Special Education were generic and short, and did not adequately prepare them for teaching students with ASD; similar observations were made regarding professional development workshops (Lindsay et al., 2013). This sentiment was also echoed by parents who felt teachers were not consistently trained on the specifics of their child’s condition so as to most effectively instruct them (Brewin et al., 2008; Osborne & Reed, 2011). Consistency has been found to be of utmost importance when working with children with ASD as it seems most individuals diagnosed with ASD need structure in their education in order to learn best (Breitenbach et al., 2013; Lindsay et al., 2013).

Leblanc, Richardson, and Burns’ (2009) study shows the importance of teacher training. After 3 hours and 20 minutes of training on supporting studies with ASD, teacher candidates showed more favourable attitudes towards working with students with ASD, and greater technical knowledge of ASD and effective teaching strategies. This finding is significant as teachers often perceive themselves to be incompetent due to lack of training of how to effectively integrate students with ASD in their mainstream classroom (Humphrey & Lewis, 2008; Lindsay, Proulx, Thomson, & Scott 2013). Therefore, Leblanc et al.’s (2009) study is significant in that relatively little time is needed to make a difference for teachers seeking to be more inclusive. Indeed, Osborne and Reed (2011) observed that the perception of teachers on
their own training for inclusion made them more motivated and seemingly more effective at differentiating their lessons so as to better include students with ASD.

Those teachers who perceived themselves to be effective in including students with ASD were those who used strategies that were inclusive of all students in their classrooms, without being focussed exclusively on ASD (Lindsay et al., 2014). This finding provides support for DeLuca’s (2013) and Katz’s (2013) argument that inclusion must be viewed as a holistic approach to teaching in general, and that students with ASD and other special needs will naturally be included when such an approach is taken.

2.3 Collaboration of Teachers with School and Community Members

In the following section, I consider the research that is currently available on the collaboration of teachers with school and community members. When considering the inclusion of students with ASD, it is important to note that teachers cannot act as individuals, but rather, as one of many members of a team of stakeholders. Namely, there can be social workers, occupational therapists, and psychologists all involved in the case of any one child diagnosed with ASD. Educational Assistants are given special consideration in the current study as they are the only professional working immediately in the classroom alongside the teacher.

2.3.1 Collaboration of teachers with parents and other professionals

Collaboration with teachers and other professionals has been found to be key for successful inclusion for students with ASD, by teachers, administration, and parents alike (Breitenbach et al., 2013; Lindsay et al., 2014; Starr & Foy, 2012). Leblanc et al. (2009) reported that simply knowing how to access professional support and resources significantly ameliorated
teacher candidates’ perceptions of teaching a student with ASD in their mainstream classroom. Furthermore, current teachers recognized the need for collaboration with other professionals, such as educational assistants, occupational therapists, and resource teachers, in order to truly help include students with ASD (Lindsay, et al., 2014). Many teachers also reportedly collaborate with other teachers who have the same students with ASD so as to standardize protocol. This collaboration was observed in Breitenbach et al.’s (2013) inspirational case study of a child with ASD who was carefully supported throughout several years in the same class, even if by different teachers, because they all collaborated consistently throughout his school career.

However, in a study of parents’ experiences of their children with ASD being included in the mainstream classroom, Starr and Foy (2012) found that parents had mixed experiences when collaborating with educational staff across various levels of authority. While some reported very positive and caring staff and administrators who would make integrating their child at school a positive experience, others noted that teachers were often inadequately trained and were confrontational with them and with their children. Parents in several studies greatly stressed the importance of being able to collaborate effectively with teachers (Brewin et al., 2008; Starr & Foy, 2012). The consequences of poor collaboration will be further examined in a subsequent section of this review in terms of social outcomes of these students.

2.3.2 The influence of educational assistants

Educational Assistants (EAs) in the classroom is a debated issue within the literature (Humphrey & Lewis, 2008; Lindsay et al., 2013; Osborne & Reed, 2011; Starr & Foy, 2012). One study regarding the experiences of students with cerebral palsy found that EAs could be
influenced by the main teachers’ attitudes regarding inclusion, leading to either very positive, or very negative experiences (Lindsay & McPherson, 2012). Furthermore, EAs may be a factor which causes students with special needs to be socially isolated, as students with ASD specifically note that the mere presence of EAs would impede social interaction with peers, and would distance the relationship between pupils and teachers (Humphrey & Lewis, 2008). Another similar study found that EAs would help students regulate themselves emotionally and behaviourally, but would impede social interactions (Osborne & Reed, 2011). However, some parents have reported positive effects of the addition of an EA in the classroom (Brewin et al., 2008): “[the EA] possesses many skills and personality traits that are complementary to Kim’s [the child’s] circle of care and learning” (Starr & Foy, 2012, pg. 212). Also, teachers have reported wanting an EA in order to help manage the class and effectively include their students with ASD (Lindsay et al., 2014).

After interviewing youth with ASD, Humphrey and Lewis (2008) recommended that EAs be present to support all students, regardless of their need, so as to avoid stigmatizing the student with ASD, and implement the main teacher’s strategies and activities so the child can participate as a member of the class and not as an isolated individual.

It is evident in the literature reviewed that effective professional collaboration can be difficult to attain. Depending on the particular attitudes and training of the professionals involved, stakeholder collaboration shows mixed results, which either alleviate or exacerbate the challenges involved with including children with ASD in the mainstream classroom. It is now useful to consider more objective sources of pedagogical aid, assistive technology.
2.4 Assistive Technology in the Inclusive Classroom

The literature on assistive technology to serve students with special needs appears to be quite uniform, generally reporting positive results. Assistive technology helps students with special needs access curriculum in a way they would not have been able to without the technology (Ennis-Cole & Smith, 2011; Judge, 2001). Individuals with ASD have been reported by parents and professional practitioners to be enthralled with technology (Goldsmith & LeBlanc, 2004). Furthermore, students tend to be less engaged the longer they stay in school (Katz, 2013) which is a significant factor when considering secondary teachers’ experiences including students with ASD, as they would have already passed through many years of grade schooling. It is for these reasons that technology can play such a crucial role in the effective instructional inclusion of students with ASD.

The literature suggests that the use of assistive technology is crucial as it is an effective tool of engagement and, consequently, learning (Bryan & Gast, 2000). Gentry, Wallace, Kvarfordt, and Lynch (2010) observed that when secondary students with ASD were trained to use Personal Digital Assistants, they reported greater satisfaction with their time management and used the device daily for eight consecutive weeks without prompting. Now, iPads are becoming increasingly popular in special needs education due to their complex educational applications and the easy use of camera and video (Neely, Rispoli, Camargo, Davis, Boles, 2013). Meister and Salls (2015) reported that students who would watch short videos modelling functional behaviours (organizing papers, washing hands, etc.) quickly mastered the displayed skills up to 80% accuracy after only 4.6 sessions; said differently, students improved on these skills by more than 50% in the 6-week time period of the study. Charlop-Christy, Le, and Freeman (2000) noted that students who learned through video modelling not only learned faster,
but were able to generalize the desired behaviour to different physical contexts and with different persons, unlike their counterparts who only learned through live modelling. This last finding is vital as researchers, practitioners, and parents agree that one of the main goals of any form of education for students with ASD is to facilitate independence (Goldsmith & LeBlanc, 2004; Starr & Foy, 2012) Even simpler forms of communication technologies can be effective, as Bryan and Gast (2000) reported that teaching young students with ASD how to follow picture schedules resulted in significant increases in on-task and on-schedule behaviour.

In spite of the reported positive impacts of assistive technology, Williams, Wright, Callaghan, and Coughlan (2002) found that teachers were often hesitant in using technology. In their study, teachers were concerned that continually repeating a limited selection of videos would become tedious for the students, and thus commitment to the videos was a source of tension in this study. However, Ennis-Cole and Cole (2011) reported that librarians who were properly trained and confident in their skills were enthusiastic and effective in differentiating lessons to include students with ASD with the technology available in their schools. Thus we see the same theme repeated: that effective teacher training can have significant impacts on effective inclusive practices for students with ASD in mainstream classrooms, including the use of assistive technology (Lindsay et al., 2014).

2.5 Social Outcomes of Students with ASD in Mainstream Classrooms

Given that social difficulty is one of the defining characteristics of ASD, it is of considerable interest to understand how mainstreaming can ameliorate social outcomes of students. I will consider both positive and negative findings in an effort to provide a balanced
Katz (2013) posits that social inclusion is essential to healthy student development: mental health, sense of citizenship, and resiliency are positive outcomes directly tied to emotional and social well-being. Many students with ASD with high levels of emotional and behavioural problems showed improvement in these self-regulatory domains over the course of the school year, despite the fact that these levels remained high (Katz, 2013). Being with typically developed peers seemed to improve social behaviours while being with other students with special needs did not (Osborne & Reed, 2011). However, researchers, teachers, and parents alike understand that merely having students with ASD in the mainstream classroom is not enough; teachers need to actively facilitate social interactions between students so that mainstream inclusion can truly bring about perceivable positive outcomes for the student (Breitenbach et al., 2013; Brewin et al., 2008; Lindsay et al., 2014). Osborne and Reed (2011), while investigating important factors of consideration for mainstreaming students with ASD, found that the number of students with special needs in the school correlated positively with progress in students with ASD. Although there can be no causal link established, this finding provides a great hope that inclusion can work as a positive feedback loop, in that the more it is implemented, the more and better results will ensue.

Yet, there is some evidence to suggest that the supposed social benefits of inclusion may not be as great as originally hypothesized by the educational community. Brewin et al. (2008) note that “without proper supports in place, social isolation, anxiety, depression, and loneliness are commonly reported for children and young adults with AS[D]” (p. 242). Where inclusion has been unsuccessful and students with ASD are isolated, typically developed students are reported
to not have been taught empathy nor to value diversity (Lindsay et al., 2014). In fact, some parents have observed that when the teacher him or herself does not genuinely embrace inclusion, as noted in parent-teacher interactions, they do not adequately provide opportunities for the child with ASD to participate actively in the classroom (Starr & Foy, 2012). This could lead to the child being more estranged from classmates and could provoke unwanted behavioural outbursts.

A British study found that students with ASD who are segregated from typically developed peers often show greater improvement in their behavioural problems and the same level of improvement in socialisation, when compared to those in mainstream classrooms (Reed et al., 2012). The study mentions the possibility for negative social comparison especially among older individuals, which would be pertinent to the secondary school context being explored in the current study. Humphrey and Lewis (2008) reported that students with ASD in high school are often regularly bullied, causing significant mental and emotional distress. This study also noted the fact that teachers and students who knew of their condition would treat them worse because of it, corroborating the findings of other researchers (Breitenbach et al., 2013; Starr & Foy, 2012). However, students with ASD in Humphrey and Lewis’ (2008) study reported that having an EA present would provide protection from such harassment.

This area of social outcomes for mainstreamed youth with ASD requires further investigation by the academic community, as currently, results are mixed. Several studies have found improvements in social outcomes, such as resiliency and behavioural regulation; however, alternate studies have contradicted these findings. Most studies seem to agree on the fact that inclusion can have very negative outcomes, such as bullying and social isolation, if not facilitated effectively by the classroom teacher.
2.6 Academic Outcomes of Students with ASD in Mainstream Classrooms

It is incredibly uplifting to note that, when matched to students with the same level of disability in segregated settings, students with ASD in mainstream classrooms demonstrate higher academic outcomes, including general knowledge, numeracy, and literacy (Katz, 2013). Furthermore, Kurth and Mastergeorge (2010) report that in the domains of academic and vocational competence and life skills, special needs students surpassed their counterparts in segregated classrooms. Students with ASD often have variable levels of capacity in different domains; they may be in Advanced Placement Physics with typically developed students at the high school level, but have difficulty organizing their thoughts for an essay (Church, Alisanski, & Amanullah, 2000). This variability has been observed by teachers for many years (Eaves & Ho, 1997). Eaves and Ho further noted that older students with ASD tended to be more likely to be placed in segregated special education courses than their younger counterparts who demonstrated the same level of IQ. This finding raises important questions regarding systemic flaws in secondary school systems which may underestimate the ability of students with ASD.

Panerai et al. (2009) make the important observation in their research that effective teaching strategies can lead to positive outcomes. They conducted a 3-year study where they compared a school exclusively for children with special needs, a mainstream school who adopted the specialist school’s teaching strategies and protocols, and a mainstream classroom with general modifications for students with ASD and special needs. They found minimal differences between academic and social outcomes for students in the specialized school and the mainstream school who adopted their practice.
However, several studies have shown that mainstreamed students with ASD do not flourish academically as expected (Ashburner, Ziviani, & Rodger, 2010; Osborne & Reed, 2011; Reed et al., 2012). Reed et al. (2012) reported no enhanced academic achievement for these students in mainstream settings. Also important to note is that the strain on social development in mainstream settings may hinder academic achievement (Osborne & Reed, 2011). Ashburner et al. (2010) compared 28 mainstreamed students with ASD with 51 typically developed at the elementary school level and found that 54% of students with ASD were underachieving compared to only 8% of typically developed students. This finding arose in spite of the fact that the students with ASD regularly had several resources in place, such as assistive technology, EAs, and speech therapists. The literature is thus quite mixed regarding this aspect of mainstream inclusion of students with ASD.

2.7 Conclusion

The literature reviewed offers certain insight into how inclusion is currently being implemented in secondary schools for students with ASD. The literature notes that there is no standard definition or understanding of how inclusion should be implemented, and this ambiguity reflects itself in the positive and negative experiences had by educators and other community stakeholders, especially parents. Of all stakeholders, the literature is uniform on the exacerbating effect of EAs, namely that they reinforce the attitudes and pedagogy of the teacher, whether for the betterment or detriment of the ASD student’s inclusion. The literature generally notes that assistive technology is an effective pedagogical tool, for engagement purposes and for learning. All of the aforementioned factors combined have unfortunately only led to mixed reports on social and academic outcomes; there is no consensus in the literature as to the effectiveness of this inclusion model.
It is of great importance to see how future research in Canada and Ontario would report on the effectiveness of current political change in the domain of inclusion of students with ASD. The literature was very scant as to the Canadian, and more specifically Ontarian, context of policy and expected practice. Furthermore, given that Ontarian policy is relatively recent, it is expected that studies would emerge in greater number as local school boards stabilize in their implementation. This current study aims to provide insight into local experiences of mainstream educators including students with ASD in Ontario.
Chapter Three: Methodology

3.0 Introduction

This third chapter outlines the methodology implemented in this study. First, a general overview of qualitative research is given, describing in further detail the nature of the qualitative interview as the principal method of data collection. Next, I provide a biographical sketch of each participant, followed by the sampling criteria and procedures which I used to select them. Then, I describe the data analysis used in the study, and consider the ethical concerns regarding qualitative interviewing. An overview of the strengths and limitations of qualitative interviewing is offered as a conclusion.

3.1 Research Approach and Procedures

In its broadest sense, qualitative research is a research approach used to study social phenomena as they occur in their natural settings (Flick, 2009). According to Denzin and Lincoln (2011), the goal is to “[interpret] phenomena in terms of the meanings people bring to them” (p. 3). Unlike quantitative research which begins with an established hypothesis from which to deduce specific findings to support or refute it, qualitative research begins with a theoretical framework based on which the researcher will choose the most appropriate among multiple methodologies to inductively find data to be interpreted (Flick, 2009). The data derived from this research is typically verbal in nature, but can also include photographs, memos to the self, recordings, and field notes (Denzin & Lincoln, 2011). Most researchers agree that postulating a single, definitive definition for qualitative research is incredibly difficult given the variations that currently exist and are practiced, and given the ever-changing social milieus which inevitably shape the research paradigm (Creswell, 2012; Rossman & Rallis, 2011; Snape & Spencer, 2003).
However, some key characteristics are held in common across definitions of qualitative research, such as the use of multiple methods with a great focus on context in the natural world, being therefore emergent and flexible and not pre-determined, and being ultimately an interpretive endeavour (Rossman & Rallis, 2011). Ritchie, Lewis, Nicholls, and Ormston (2013) contend that qualitative research is in-depth, delving into the histories, experiences, circumstances and perspectives of a small, carefully selected group of individuals, and rendering rich data which are analysed to identify patterns and themes which are then interpreted for their significance.

Qualitative research is incredibly context-driven; that is, the researcher recognizes the importance of studying a phenomenon in its full realization, not in an artificial setting where it is dissected and manipulated. The qualitative research approach recognizes that social phenomena occur as whole entities which would lose their essence if isolated in an environment outside of their own (Rossman & Rallis, 2011). Therefore, by engaging in qualitative research for my topic, I took into consideration the fact that teaching unfolds within a complex social and legal system. There are many local, small-scale factors that can affect teaching on a daily basis, such as: students and their variable mental and physical states, special school events which disrupt class time, collegial tensions, administration style, and personal problems. On the other hand, there are many external, large-scale factors that also have a major influence on daily teaching practice: government policies and mandates, teacher unions, parents, and the greater school community with its variable political, ideological, and cultural standings (Rossman & Rallis, 2011). As seen in the preceding chapter, given the wide variety of realities experienced by teachers with students with ASD in the mainstream classroom, it was fitting that only temporally and regionally specific cases are studied to investigate the research problem; broad generalizations would inadequately address this topic.
3.2 Instruments of Data Collection

Ritchie et al. (2013) list some key features of the qualitative interview: it is both structured in having pre-determined themes but flexible to its inherent unpredictable social factors; it uses a range of question types in order to elicit comprehensive, fully developed answers; both the researcher and participant may lead the other in new directions of thought as a natural result of the interaction; and it is almost always conducted face-to-face.

Qualitative interviewing produces data socially as the result of the interaction between the interviewer and interviewee (Kvale & Brinkmann, 2009; Silverman, 2016). The quality of the interview depends largely on the competence of the interviewer; a solid knowledge base and practiced questioning skills will make for a highly productive interview (Kvale & Brinkmann, 2009). Kvale and Brinkmann also note that the “research interview is not an open everyday conversation between equal partners” (p. 33). Indeed, interviews can range between two extremes of structures, such as survey interviews, which strictly follow a guide of questions and do not allow for naturalistic follow up to answers, and the open-ended, unstructured interview, which touches on main themes chosen by the interviewer but can be led in any direction from that point (Hancock, Ockleford, & Windridge, 1998). However, Hancock et al. conclude that most qualitative interviews are semi-structured; a general topic guide with questions and prompts is created, but both parties have the freedom to further explore points of interest which may arise spontaneously from conversation which may not be necessarily represented in the guide but are pertinent to the research topic.

In my interview guide, I had four main sections which are representative of my research objects and introductory questions to build rapport with my interviewees: teacher background,
pedagogy, influence of peers and professionals inside and outside of the classroom, and influence of technologies. By engaging in semi-structured interviews as previously described, I gained an insider’s perspective on how teachers face the reality of having students with ASD in their mainstream classrooms. I allowed them the freedom to express points which they deemed relevant while ensuring I collected enough data for the specific research objects in which I am interested in researching. For example, I asked: “Please describe how you would typically use technological resources [in its broadest sense] to support inclusion of students with ASD in your classroom” in order to find out just how accessible and attainable recommended resources reportedly are and if they are being put to effective use as recommended in the literature reviewed in the preceding chapter. Although this question could easily lend itself to becoming a critique of the local or regional administration if there were no such resources, this question did shed some light on the importance of further studying the relationship between teachers and administration as a significant factor impacting the successful inclusion of students with ASD; although reviewed in the literature, this is not a discrete research object of the current study. Also, I asked: “What does the inclusion of student(s) with ASD look like in your classroom?” This question permitted me to understand how the participant conceptualizes ‘inclusion’ and allowed me to gain an insider perspective that validates participants’ pedagogical and methodological choices.

3.3 Participants

In this section, I describe the sampling criteria and method used to select participants. I also provide a brief biographical sketch of each participant.
3.3.1 Sampling criteria

In order to be an appropriate participant for this study, secondary teachers must have had at least one student with ASD in a mainstream course they taught within the last two school years, for at least one entire semester in a semastered school or for one full school year in a non-semestered school. They must also have had at least five years’ experience. This criterion would be a safeguard to ensure that the teacher has had a significant number of years to gain a sense of effective pedagogy. Given the added complexities of teaching a student with ASD, I ensured that I interviewed teachers with enough experience to add credibility to their recounts. This criterion is given in light of the fact that memory can fade over time, and it is also only fitting that pedagogy and accommodations be considered when practiced over an extended period of time in order to gain a more complete understanding of this research problem.

3.3.2 Sampling procedures

Qualitative sampling methods, in opposition to quantitative sampling methods, do not seek to randomize participants in order to gain generalizability; rather, each individual social context is respected as a whole entity, therefore all knowledge attained is local and is not meant to be generalized (Rossman & Rallis, 2011). Thus, these methods can take many different forms. (Creswell, 2012; Hancock, et al., 1998). Generally, these sampling methods are considered purposive, or strategic, in that participants are intentionally chosen based on the purposes of the research project (Hancock, et al., 1998). Ritchie et al. (2013) categorize these methods as follows: purposive sampling, which describes a wide range of approaches such as intentionally seeking deviant or typical cases, homogeneous or heterogeneous samples, among other approaches; theoretical sampling, specifically used to develop grounded theory in which case the
researcher cycles through groups of participants, further refining criteria as the theory emerges; and convenience sampling, based solely on the ease of access to participants; and snowball sampling where the researcher relies on their participants’ social networks for prospective participants. Key common features of all qualitative sampling methods are that they use predetermined selection criteria, garner relatively small sample sizes, and are flexible to add participants or modify criteria as the research develops (Ritchie et al., 2013).

In order to attain participants for the current study, I used a combination of purposive sampling, snowball sampling, and convenience sampling. In order to effectively sample for this study, it is important to note the small scope allotted for this research project: a total of two teachers were interviewed. As this is the case, I only recruited participants who match my above criteria. Although deviant cases would also provide meaningful data, this project is too constrained to allow for a wide range of cases to be fully investigated. It is reasonable to assume most respondents would have interest in the topic and would have meaningful experiences to share.

I interviewed teachers across Southern Ontario, who were recruited through convenience sampling. Participants were contacted through my personal network of colleagues, either from schools where I had previously completed practica or where I had previously attended.

3.3.3 Participant Biographies

The first participant interviewed was Ahmed. He is a veteran secondary teacher of 20 years teaching primarily French as a Second Language in the GTA. Having taught applied and academic courses, he has gained experience working with students with Special Needs, including those with ASD. Given that Ahmed’s observations were often generalized to the broader
community of students with Special Needs, certain findings had to be correspondingly broadened in scope as well. **Fabiola** is a secondary teacher of almost 15 years and specializes in literature and dramatic arts. Due to dramatic arts being open courses, Fabiola has had a wide range of experience having multiple students with ASD and other exceptionalities in any one class, with varying degrees of cognitive and behavioural difficulties.

### 3.4 Data Analysis

Hancock et al. (1998) describe many different types of data analysis approaches used in qualitative research. These include: discourse analysis, which focusses on how people construct their world and experiences in language; narrative analysis, which involves detailed narratives about someone’s chronological life experiences; and finally content analysis, which comprises counting the frequency of a word or a set of words in order to identify recurring themes in the data. Due to the limited nature of this current work, I implemented a subset of content analysis, which is inductive coding, which describes the process of categorizing raw data into identifiable thematic categories (Ritchie et al., 2013). Having transcribed both of my interviews, I noted recurrent and/or significant phrases and ideas; some of these were: “importance of professional development”, “caring student community”, and “EAs in the classroom’. Codes were grouped together into broader categories, and then an argument was made for the significance of the category in relation to the research questions. These arguments, called themes, are elaborated in the findings chapter of this study.

### 3.5 Ethical Review Procedures

The combined issues of confidentiality and sensitivity are always incredibly pertinent and present. Interviews may often involve topics or themes which participants may feel
uncomfortable sharing, as it may put them or others in a bad light (Ritchie et al., 2013). In the current study, it is very probable that teacher-participants feared giving negative reports about their local and/or regional administration not providing enough support for them, or about themselves not knowing how to best accommodate these students with ASD in their classroom. One straightforward way to mitigate this issue is to completely anonymize participants and locations by using aliases for all proper names; furthermore, by compounding participant profiles and their stories, it will effectively eliminate the ability of an outsider to positively identify them (Creswell, 2012). Also, I ensured that the terms of consent and disclosure were clear with the participants, specifying that they had the right to know the nature of the research project, that they would be a part of that project, and that they could withdraw at any time in the process of data collection, be it at the beginning, in the middle, or at the end (Silverman, 2016).

There is always the concern that we as researchers will influence our participants’ responses. A factor that is inherently present in interviews is an unequal power dynamic, where the researcher could tend to becoming exploitative for the sake of the research and thus inadvertently abuse their power (Darra, 2008). Silverman (2016) makes an interesting recommendation to consider that stories told during interviews are produced with the researcher rather than simply by the participant, therefore directly implicating the researcher in the data, which would greatly diminish the power imbalance between these two and would lower the probability of the information to be used in an inconsiderate, exploitative manner. A general practice is to consciously not disclose personal information during interviews and to use open, non-leading questions at all times (Ritchie et al., 2013). This recommendation was difficult for me to follow as I am incredibly invested in this research topic as expressed in my positioning statement. However, the recommendation of reflexivity was of help, as I would reflect on the
interview as a direct manner of holding myself accountable for mitigating any bias (Ritchie et al., 2013). Another way to consciously avoid biasing findings is to consciously report on contrary findings, focussing on the multiplicity of responses which emerged during one’s research experience (Creswell, 2012).

3.6 Methodological Strengths and Limitations

The greatest asset of qualitative interviewing is that researchers are able to understand phenomena with the meaning that participants ascribe to them (Denzin & Lincoln, 2011). Edwards and Holland (2013) further describe that qualitative interviewing allows researchers to understand the complex interweaving of social systems and participants’ understandings of these systems and of their experiences within them. In essence, I gained invaluable insiders’ perspectives of what it really means to carry out Ministry policies into practice. The literature reviewed in the preceding chapter has shown mixed results of inclusion in different countries, and it is only fitting that in-depth knowledge and experience of those putting policy into practice be used to fully understand the phenomenon of inclusion for students with ASD. More than what an anonymous survey or written responses would tell me, the full experience of sitting face-to-face with these educators has given me access to verbal and non-verbal information to inform my research topic.

While semi-structured interviews can be incredibly useful for gathering rich, insider perspectives on social phenomena, there are also many associated problems (Myers & Newman, 2007). Myers and Newman specify that these interviews are often artificial—it is a constrained, social environment where strangers are talking and giving and receiving information under time pressure, where there is often a lack of trust due to the power asymmetry between the
interlocutors (Kvale & Brinkmann, 2009), and where the researcher is inevitably impacting and shaping the knowledge produced in an interview (Rossman & Rallis, 2011). Webb, Campbell, Schwartz, and Sechrest (1999) rightly observe that:

> interviews ... intrude as a foreign element into the social setting they would describe ... [; they] create as well as measure ... [; they] elicit atypical roles and responses ... [; they] are limited to those who are accessible and will cooperate, and the responses obtained are produced in part by dimensions of individual differences irrelevant to the topic at hand. (p. 1)

There is a concern in the current study that participants may be dishonest and will omit parts of their experience which they do not wish to share as they may fear judgement. The care of those with special needs being such a pressing mandate from the Ontario Ministry of Education, it is reasonable to believe that participants would feel pressure to present themselves and their local and regional administration favourably. Unfortunately, without personal insider information of that local context, it would be impossible to comprehensively verify the information presented.

**3.7 Conclusion**

This chapter described the qualitative methodology to be used in the study of the inclusion of students with ASD in the mainstream classroom. I offered a description of the qualitative research paradigm, what it is and is not in comparison to its rivalling quantitative research paradigm, and why it is the most appropriate paradigm for this study. Then, I described qualitative interviewing and described how this method had shaped my interview guide. I then provided a description and rationale for the sampling criteria and methods used to obtain the participants for this study, followed by brief biographical sketches of each participant. Next, I
went on to describe the data analysis approached implemented in this study. Then, I gave an overview of the ethical concerns inherent to qualitative interviews, and engaged in meaningful reflection as to how to mitigate these risks. This section then concluded with a general description of the strengths and limitations of qualitative interviews in general. In the following section, I will be presenting the data retrieved and describing the process of analysis.
Chapter Four: Research Findings

4.0 Chapter Introduction

This study seeks to answer the following research question: “how are Ontario secondary teachers in mainstream (non-Special Education) classrooms working to include students with Autism Spectrum Disorder?” In Chapter 1, I provided background information on the current state of inclusion in Ontario. In Chapter 2, I considered the existing literature regarding the different factors that are significant to including students with ASD, such as teachers’ attitudes, professional development, and collaboration among professionals. In Chapter 3, I provided an argument as to the suitability of qualitative interviews for this study. In this chapter, I will present the principal themes which emerged from these two semi-structured interviews with non-Special Education teachers who taught at least one student with ASD within the past two years. My findings are organized into the following themes:

1. Non-teacher support staff as indispensable supports
2. Teacher training as a primer for inclusive pedagogy
3. The importance of differentiated pedagogical considerations
4. Perceived positive social and academic outcomes

For each of these themes, I will first describe it, then support it with data from my interviews, before finally comparing it with the literature reviewed earlier in this study. I will then summarize my findings and transition to the final chapter wherein I conclude this study by making recommendations for future research and implications.
4.1 Non-Teacher Support Staff as Indispensable Supports

For both participants, professionals, other than teachers, play multiple, important roles in facilitating the inclusion of children with ASD in the mainstream classroom. For Ahmed, the way in which his student ‘Elizabeth’s’ youth worker helped include her in curriculum activities was by speaking to him regarding her social anxieties, and generally how to accommodate her in the classroom setting. Ahmed described how Elizabeth would see a youth worker, ‘Sarah’, outside of school for reasons undisclosed to him, but he was able to have a conversation with Sarah during which she discussed Elizabeth’s triggers; therefore, her contribution to Elizabeth’s integration was indirect.

Although Ahmed never had Sarah enter the classroom space, this conversation had some important implications for an upcoming school trip which Elizabeth did not want to attend. He noted that she was not handing in her money, nor her consent form. When confronted, it came to light that she was afraid of being in a new social situation, particularly in a foreign language context. Fortunately, it would appear that Ahmed’s conversation with Sarah sensitized him to Elizabeth’s unique needs: “it didn’t take a lot of convincing, but it was just, you know, being gentle [emphasis mine], you know, ‘you’ll be fine, and your friends are going, and you can sit with them’ and uh she did have a good time.” Because Ahmed was sensitized to Elizabeth’s needs, he was able to address her refusal of participation effectively, getting her to participate in the activity and reporting that she seemed to enjoy herself. Although some non-teacher professionals never enter the classroom, it is evident they can indirectly impact students’ inclusion by emotionally and mentally preparing teachers regarding the specific strengths and challenges of the students in questions. Ahmed was reportedly able to successfully include
Elizabeth in a curricular excursion, where participation in these is a significant factor in creating amicable bonds between students and thus facilitating inclusion.

For Fabiola, her Educational Assistants would often give her pedagogical advice, typically regarding the use of visuals to accompany speech, as well as explaining and grouping concepts differently. They would provide advice for alternative assignments for students with ASD and would participate in class activities as well. By collaborating with all students, they attempted to reduce attention directed towards the child with ASD and helped facilitate an inclusive classroom experience for all.

Indirect involvement also came about for both participants through the furnishing of supporting documentation to help the teacher learn about and thus accommodate the child effectively. For both participants, they received written documents (other than Individual Education Plans or Ontario Student Records) provided by either a youth worker or an elementary school guidance counsellor who previously had their students, as to common triggers and other information pertinent to their successful inclusion in the mainstream classroom. These documents had information particularly regarding common triggers for teachers to avoid, such as a particular song or common symbol, and in general how best to accommodate the student. Without these support staff, both participants would reportedly not have received these concise and precise documents and instructions, and would have been left to read through the many pages of IEPs and OSRs, which is simply not feasible for a mainstream teacher with a typically large classroom, and thus it would have been highly unlikely that they would have been able to include these students as effectively.
According to a study conducted by Lindsay et al. (2014), current teachers recognize the need for collaboration with other professionals, such as resource teachers, occupational therapists, and educational assistants, in order to truly help include students with ASD. In the current study, similar to the aforementioned study, teachers were compliant and reportedly worked well with supporting staff in order to learn from them and more effectively include students with ASD in their classroom. Both participants were very cognizant of the burden of government documentation, and expressed satisfaction at being able to have concise information given by a professional who had previously worked with the student.

In spite of the reported impact of these support staff, it is also very important that teachers themselves are educated as to common triggers and effective strategies for including students with ASD. As the leaders of their classes, they are liable to the government for ensuring that all students entrusted to their care are meeting curriculum expectations, and supporting their journey there. It is therefore fitting to now turn our attention to how these teachers personally engaged in Professional Development in order to gain knowledge of how to effectively include students with ASD.

4.2 Professional Development as a Primer for Inclusive Pedagogy

These teachers believe that personally seeking and receiving professional development, from a variety of sources, is a pivotal exercise which helps them facilitate the inclusion of students with ASD. Both participants, though not having taken the Additional Qualification course on Special Education, as such a course particular to ASD is not available at this time, reportedly take the necessary, self-initiated steps to ensure they are able to include children with ASD in the classrooms.
Both participants have a personal investment in ASD, which is significant to their care for this topic. Ahmed has a family member who actively works with students with Special Needs, and Fabiola has a family member diagnosed with ASD. As such, both participants have a closer degree of contact with up-to-date information regarding the inclusion of these students, and note that this personal contact with ASD motivates them to be compassionate and informed on the topic as it pertains to pedagogy. Fabiola, for example, attended a workshop at a community agency in the Greater Toronto Area focused solely on helping family members with ASD. Ahmed reflected on his own teaching practices and past experiences, becoming more sensitive to the nuances of working with children with ASD, and considering how he could have handled certain situations differently, thus preparing him to be more effective in the future. He noted, for example, that in the beginning of his career, he would not actively differentiate his pedagogy as much as he does now, and recognized how rigid methods could have disadvantaged his students’ learning, especially those with ASD.

Both participants confirmed they have attended Professional Development sessions at their school regarding the inclusion of students with Special Needs, including ASD. For Ahmed, this PD took the form of an online workshop from the Board which was specifically targeted towards including students with ASD. For Fabiola, her school’s Head of Special Education takes the initiative to ensure her colleagues are up-to-date on their knowledge of best practices, either through regular PD sessions with class, or letting mainstream staff know she is available for consulting and offering moral support. Fabiola noted that her school’s Head of Special Education does not make explicit mention of the source of the information i.e., whether from the Ministry of Education, regional Board, or School, when offering PD sessions, so it is difficult to assess in this study to what extent Ministry policy specifically propels ASD mainstream inclusion.
Both participants also described informally speaking to other colleagues as a means to get some quick tips or information. This occurrence did not spring up only to help support the student with ASD, but as a natural part of an ongoing staff collegiality. Fabiola takes this a little further and describes: “I deliberately ... visit the social, the ASD social skills class on my prep so that I could reinforce some of their routines, and some of their patterns and some of their language in my room”. To consider that Fabiola would take her free period as a time of learning how to include students with ASD in the classroom is a testament to her dedication and the importance she ascribes to Professional Development.

These findings greatly converge with what has already been found in the literature. According to several studies (Breitenbach et al., 2013; Lindsay et al., 2014), it is very common for teachers to have informal discussions with their colleagues concerning students with Special Needs, or visit another classroom during their prep period, as Fabiola did when wanting to reinforce routines and language taught in the social skills class. A study found that after a mere three hours of training, in comparison to the amount of prep time provided in a school year, teacher candidates demonstrated greater knowledge of effective strategies and generally more favourable attitudes towards including students with ASD (Leblanc et al., 2009). Similarly, Ahmed completed a module which caused him to reflect on past experiences and how he could have more effectively included his students with ASD. Avramidis, Bayliss, and Burden (2000) found that teachers’ attitudes towards inclusion, as well as their perceived effectiveness, generally became more positive the more they experienced inclusion and had students with ASD in their classrooms, a finding corroborated by the experiences of both participants of this study.

Both participants were heavily invested in learning more about ASD: from attending workshops with community agencies, to taking free time to sit in on a class, both teachers
showed their dedication to their students and to their profession. It is essential to now consider how the theoretical knowledge they acquired was implemented in practice.

4.3 The Importance of Differentiated Pedagogical Considerations for All Students

This section considers how these teachers reportedly seek to include students with ASD in practice. First, I will describe the various teaching strategies implemented by these teachers, and then conclude with a brief description of the use of technology and physical spaces as part of teachers’ pedagogical considerations for these students.

4.3.1 The use of differentiated teaching strategies

As part of including students with ASD in the general classroom, teachers used pedagogical strategies that were seen to be effective for all students, and not just exclusively those with ASD. For example, Fabiola’s general approach to teaching is highly individualized, so that each student is considered to be on their own unique learning path. She describes her pedagogy in the following manner: “a lot of the work is tailored to your individual growth as opposed to being compared to other people … like how far have you come in your own journey as an artist[?]” By taking such an approach, she tries to eliminate the extra burden of having to make “huge sweeping accommodations” for students with Special Needs as these are reportedly naturally present in her lessons. She would, when necessary, allow for frequent breaks, allow for extensions, and provide extra help at lunch when needed for students with ASD and students with Special Needs in general. Similarly, Ahmed makes accommodations for all his students, such as allowing extra time for tests, using many visuals, and ensuring to write on the chalkboard as he spoke.
Furthermore, both teachers are conscientious in making sure their activities were engaging and accessible to all different levels of students across their different subject areas. They work towards this goal by individualizing activities to different achievement levels. For example, Ahmed will ask his strong students to “[re]tell the story [just shared by him in French] right from scratch [with as many details as possible, not just a general summary]” as other students listen. However, to stay equitable and inclusive, he will also ask his ‘weaker’ students, including some of his students with ASD, to retell the story to ensure they are following along with the lesson. He will also distribute a range of roles, varying in level of curriculum difficulty, to his students to re-enact the story, to ensure all can participate cohesively. He also uses a “High 5” system whereby all students in the class visually show the teacher their level of understanding by the number of fingers they choose to stick up, with 5 showing maximal understanding. He will explicitly use his weaker students as barometers by which he can judge whether or not he can proceed with the lesson or needs to recap what was just covered. Similarly, Fabiola tries to always find a way to include students with ASD in her regular class activities. In one particular case, she made “space for stimming [self-stimulatory behaviour characteristic of ASD]… [and would] find a way to work that into a character” for a drama presentation. We can see through these examples, which span grade levels and subject areas, that differentiating instruction in view of students’ abilities and challenges was integral to their inclusion experience in the mainstream classroom.

Both participants noted the importance of constantly differentiating instructional strategies and assignments due to the wide variety of student needs in the classrooms. For example, Ahmed has a student in his class who “can’t see the board even from close-up” due to
vision impairment. He ensures she has a spot in the front of the class and is conscientious of the size of his writing. Fabiola describes her workload using numbers:

Sometimes one kid will be an extra 20, 30 minutes of prep a day… [and] I’ve got 140 students this year, which is less than last year… up to 180 students and it’s not uncommon for me to have 40 or 50 IEPs [Individual Education Plans]… how am I prepping for all of that and still fitting sleep into my day?

Ahmed also described that he will also have a few dozen IEPs to read through per semester, often resulting in a combination of diverse needs in one single classroom; Fabiola has had single classes with up to 8 students with ASD at a time, not including students with recognized behavioural difficulties.

The pedagogies reportedly implemented by these teachers align well with what other studies have found about teachers who perceive themselves to be effective inclusive educators, namely that they use strategies that are inclusive of all students in their classrooms, without being focussed exclusively on ASD (Lindsay et al., 2014). For example, in Lindsay et al.’s study on teachers’ experiences and strategies for inclusion, one teacher reported: “I have taught a range of… disabilities. Like students who don’t have any disabilities, I treat them as individuals… [I] try to address as many learning styles as often as possible” (p. 111). Given that both participants have similarly engaged with many different learning needs within their classrooms, in addition to their ASD students, differentiated teaching strategies are essential. When both participants sought to include these students by carefully thinking through and varying lesson plans, they engaged in what several studies report to be effective inclusive instruction (Breitenbach et al., 2013; Humphrey & Lewis, 2008; Lindsay et al., 2014). Furthermore, by being explicit in
describing the wide variety of student needs that they service, these participants provide further support for findings (DeLuca, 2013; Katz, 2013) that inclusion must be viewed as a holistic approach to teaching in general, and that, in taking such an approach, students with ASD and other special needs will naturally be included.

As much as teachers can seek to use various teaching strategies, certain needs are such that students require technological assistance to complete tasks in a timely and effective manner, or simply need to be out of the larger classroom and in a quiet space in order to continue to function. I will now discuss how these teachers reportedly make technological and space-related accommodations.

4.3.2 Technological and space-related accommodations

Both participants found technology and the appropriate use of physical space to be an important pedagogical consideration in the inclusion of students with ASD. Although they noted a lack of technology permanently affixed to their classrooms over the years, both schools had resource rooms which students could readily access. Fabiola offered a description of her school’s specialized resource room: “they have all manner of different kinds of computer programs: Dragon and all the other ones… it’s usually staffed with a teacher and an ed assistant”. Furthermore, she observed that this resource lab would be most occupied at the end of the school year, when students’ final assignments were due for their courses. Ahmed has been fortunate, at times, to borrow his colleague’s room, wherein he uses her smartboard as a means of more effectively engaging all students into his lesson. Also, when he finally did get computers in his own room, he was conscious to give his students with ASD priority access to these. Although both participants’ resource rooms and other classroom technologies were accessible to all
students, both made it clear that priority would unquestionably be given to students with Special Needs i.e. those formally identified with an IEP, including those with ASD.

As for the use of space, both teachers made conscious efforts to consider the use of the physical space when including students with ASD. For example, Ahmed retells how he sat a student in the front row of the class in order to limit her distractedness, which he perceived to be a symptom of her ASD. Both participants showed acute awareness of the sensorial sensitivity often experienced by individuals with ASD. Fabiola’s drama room is “big, ... concrete, ... an old [wood] shop, and so it can be really loud” so she describes that she tends “to manage the space in a way that it helps them [students with ASD] too… in terms of proximity to the teacher”. Ahmed, with the same regard to sensory overload, allows his special needs students to access the resource room in order to write tests if needed.

Although the use of physical space is present in the literature as part of general classroom management in terms of minimizing distractions (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008), there seems to be a gap as to the use of physical space specifically in regards to students with ASD. Yet, it is clear that these participants, through consideration of sensorial hypersensitivity, were flexible in allowing students to access spaces that were quieter and thus more conducive to their work. Regarding assistive technology, however, the literature is quite detailed as to its use in the successful inclusion and academic success of students with ASD. Generally, assistive technology helps students with ASD access curriculum in a way they may not have been able to without the technology (Ennis-Cole & Smith, 2011; Judge, 2001). Given that individuals with ASD are often fascinated by technology (Goldsmith & LeBlanc, 2004), it logically follows that it is considered an effective tool for engaging and teaching students (Bryan...
& Gast, 2000). Similarly, these participants described assistive technologies as tools of ensuring academic success by helping complete classwork and major assignments.

I have now described all the tools available to mainstream teachers to help include students with ASD: from the help of support staff, to Professional Development, to assistive technologies and the use of alternate spaces. Following their hard work to effectively include these students, it is every stakeholders’ (Ministry, parents, siblings, teachers, administrators, and school community) greatest concern to inform themselves as to teachers’ reports on the perceived social and academic outcomes for these students with ASD participating in the inclusion model.

4.4. Perceived Positive Social and Academic Outcomes

Both participants expressed that their students with ASD who participated in the full inclusion model generally did well on a social and academic level. They reported their schools generally to have a very empathetic student body, in spite of the ensuing difficulties experienced by inner-city neighbourhoods. Staff and students reportedly get along very well, and this sense of school-wide community, expressed by both teachers, embraces ASD students in the mainstream classroom. In fact, Fabiola reported that: “one young woman… was so worried with [her autistic twin] coming to [my] school, how he would get treated, and she's said over and over again ‘it's amazing, like the grade 12s are always helping him out’… the other students in our class adapt very quickly.” This testimonial provides insight into reports of positive experiences in the school community, which the researcher evidently could not directly observe due to the nature of the study.
Teachers reported enforcing strict anti-bullying rules in their classrooms. For example, participants admitted that while their students with ASD were not always the most popular, they were shown respect by other students when performing presentations. This type of activity in particular could easily lend itself to negative outbursts by other students, such as laughing with friends, or being obnoxious in displaying their boredom with the speaker. Given that students with ASD experience difficulty in social skills, presentations are even more nerve-wracking when compared to a typical student. Ahmed, as second language instructor, made a point in referring to students’ friends when coaxing them into participating in socially-triggering activities like fieldtrips or presentations in an effort to soothe their stress. For Fabiola, social inclusion manifests itself through a Best Buddies programme, where neuro-typical students and students with ASD engage in fun activities throughout the lunch hour. It also manifests through the class staying calm during a disruptive behavioural episode and not retaliating at offensive comments made by students with more severe ASD.

In regards to academic success, both participants reported that their accommodations were such that all students with ASD passed their courses, if not did well. Both participants recognized that there are often differences in accommodations and success across subject areas, with both participants explicitly referring to drama as more easily differentiated due to its self-expressive nature, as opposed to more structured, content-heavy courses as such Languages. However, all assignments were successfully completed to a satisfactory level. As mentioned previously, Fabiola used an ASD student’s stimming as part of the character he was dramatizing so he could successfully complete the assignment. Also, Ahmed noted that his students with ASD were often nervous or hesitant to present in front of their classmates, but with a little
encouragement, they were able to perform; B even reported that one of her very anxious ASD students completed her English course within the 90th percentile.

The literature in regards to social and academic outcomes is divided. Although Humphrey and Lewis (2008) reported that high school ASD students are often bullied, this was not the reported data in this current study. Contrary to findings by Breitenbach et al. (2013) and Starr and Foy (2012), teachers and students in participants’ schools who knew of a student’s condition would treat them with greater empathy because of it, seen when students would respectfully watch a presentation or bear insults in the classroom without retaliation. The teachers in the current study report meaningfully encouraging interactions with peers which resulted in positive reports of peer inclusion; this supports the findings of other studies (Breitenbach et al., 2013; Brewin et al., 2008; Lindsay et al., 2014). Similar to what B found in the case of the highly exceptional ASD English student, Church et al. (2000) found that students with ASD tend to be weak in certain academic subjects, but incredibly gifted in others.

4.5 Conclusion

In this chapter, I presented and discussed four major themes which emerged from my analysis of the interviews conducted with mainstream educators of students with ASD. First, I discussed the importance of support staff, first in sensitizing mainstream teachers to the needs of students with ASD through conversation and providing pedagogical advice, and as well as providing concise and precise documentation for the teacher to read through, as a means of ensuring the most vital information needed for successful inclusion is communicated effectively. Second, I discussed how teachers themselves seek to gain knowledge about ASD and effective strategies in the classroom, having described the various sources through which teachers can
inform themselves. Thirdly, I considered how their acquired theory reportedly played out in practice, considering the various instructional strategies used, as well as the role of technology and physical space in helping accommodate these students. Lastly, I examined teachers’ perceptions of the social and academic outcomes of these students, with reference to how they construct their understanding of their workplace.

From these findings, I would argue that these teachers are effectively following through with the Ministry’s mandate to include students with ASD in the mainstream classroom. In my view, these teachers are compassionate and care for all their students, not only those with Special Needs. They ensure to create safe communities of students to support them and share with them, whether through positive or negative experiences.

In the subsequent and final chapter, I first will discuss implications of these findings for the educational community, particularly those mainstream teachers whose experiences do not reflect the Ministry’s mandate of inclusion, as well as for me as an aspiring teacher who is personally invested in the inclusion of ASD students in the mainstream classroom. I will give recommendations to different stakeholders as to best practices to include these students and how to increase access to professional development. Lastly, I will indicate potential areas of further research, such as more comparative studies so as to provide further evidence as to whether or not outcomes for students with ASD are enhanced in the inclusion model or not.
Chapter Five: Conclusion

5.0 Introduction

In this chapter, I will provide a summary on the major findings of this study, followed by consequent implications for the broad educational community and my own personal
development as a teacher-researcher. I will then proceed to provide certain recommendations that
could result in positive change in local school communities looking to meaningfully engage
students with ASD in the mainstream classroom. Then, after considering areas for future
educational research, I will conclude this study with some final remarks and reflection.

5.1 Overview of Key Findings

In this study, I interviewed two mainstream teachers regarding their experiences of
including students with ASD in their mainstream (i.e. non Special Education) classroom. Four
major themes emerged from my data.

Firstly, it was evident that support staff played a crucial role in the teachers’ perceived
ability to successfully include students with ASD. Both teachers interacted with either social
workers or educational assistants, who provided invaluable information regarding their students’
triggers and best pedagogical practices. These supports also provided important summary
documentation to participants. This documentation alleviated the participants’ need to read
through many complex IEPs immediately at the beginning of a semester.

Secondly, participants noted the importance of professional development as an important
step towards being building confidence in inclusive pedagogy. Neither participants partook in the
province’s Special Education Additional Qualification course, but reported taking personal steps
for development. For instance, both participants have a personal connection to the topic, learning about ASD through family members. They also reported participating in local sessions provided by their local Board of Education or by their local department of Special Education. They would also informally discuss with their colleagues how to best include these students in their classrooms.

Thirdly, I discussed the relevance of differentiated teaching instruction. Both teachers described the use of multi-modal resources and of individualizing curriculum, so every student would feel challenged on a personal level, as opposed to creating a rigid and seemingly exclusionary standard for all students. Teachers reported that students with ASD had access to exclusive resource rooms, where they could benefit from assistive technologies which would help them complete assigned curriculum tasks more efficiently.

Finally, I discussed reported social and academic outcomes for these students. According to both participants, the combination of their teaching methods, support staff, and assistive technologies created an environment conducive to learning and social cohesion. Students with ASD were able to access the curriculum and produce quality work alongside their peers without need for modification of curriculum expectations. Peers were described as being understanding, playing an important role in facilitating a socially desirable environment for students with ASD.

5.2 Implications

In this next section, I will discuss implications of the study. Based on the evidence given, I will discuss the significance of these results to the broader educational community, outlining concerns for parents and staff. Then, I will consider how the study has affected my
understanding of the inclusion of students with ASD in the classroom, with consideration given to my own future practice.

5.2.1 Broad: The educational community

Parents may not understand the complexity of services available to their children with ASD by different levels of educational governance. Given that participants described so many different types and authority levels of persons involved in any single child’s case, ranging from Educational Assistants to Principals to Social Workers, each with their own unique roles and levels of influence, parents could easily forego many great opportunities to get their child services they need by limiting the groups of professionals with whom they engage. Or, it may be the case for some parents that they inadvertently delay the process of their child getting services due to not knowing which human resource to access, especially when educational professionals and professionals from other fields (such as speech pathologists, social workers, psychologists, etc.) do not work cohesively. This lack of cohesion could be detrimental to a teacher’s ability to fully include students with ASD as per their unique needs, and would add a burden of interpersonal friction to an already complex issue.

Special Education teachers, and other support staff such as Educational Assistants, Student Success/Resource Teachers, and Guidance Counsellors, may find it difficult to support all of the mainstream teachers in their schools. Given that this subset of staff is typically greatly outnumbered by mainstream teachers, as noted by both participants, they may find it difficult to provide adequate support to all mainstream teachers in need of support while being in charge of their own curriculum programmes during the school day. This uneven ratio would also understandably pose a problem for administrators who must decide to which departments or
It appears that personal experience with ASD is a great contributing factor to mainstream teachers’ interest in pursuing relevant Professional Development opportunities, as noted with both participants. This finding raises concern over the population of mainstream teachers who may not have any personal attachment to or interest in effectively servicing students with ASD, whether through lack of exposure to this population or general apathy, and would thus not aim to pursue Professional Development specific to this disorder. Indeed, both participants refused to take the Additional Qualification course for Special Education as they felt their employers would force them to teach Special Education due to the great shortage of these teachers, whereas Additional Qualification courses should be taken out of interest without concern of employment constraints for the sake of the students’ quality of educational experience. Of greater concern would be those teachers who, much unlike my participants, have little to no passion for the teaching profession in general, and would thus be even less likely to seek Professional Development in this area or regarding best pedagogical practices that would generally serve all students. New teachers, particularly, would be at a more distressing disadvantage as they would be gaining all manner of preliminary experience in contrast to seasoned, experienced teachers, who would be relatively better positioned to serve this population, but who nonetheless still find themselves overworked with the great number and diversity of needs in their classrooms.
5.2.2 Narrow: My own professional identity and practice

As a future mainstream teacher, this research has surfaced many of the difficulties associated with catering to such a diverse population in the general classroom. This research has confirmed that the struggles faced in my own home, when participating in my brother’s case, are not unique to me. I have also gained a deeper understanding of the consequences of inclusion at different levels of the child’s life, such as familial relations, academics, and peer groups. It is evident to me that teachers play multiple roles, which become even more pronounced when working with students with ASD: they are pedagogues, counsellors, advocates, and so much more. These various roles illustrate for me that schooling concerns much more than any one course’s subject matter, but rather about a holistic care of students as precious, unique individuals who each deserve to receive the best care possible.

In my personal practice, I will ensure to take the time to read through the Individual Education Plans of students and follow up with other teachers who may have previously had that student to inquire regarding best practices or common triggers. Another important component of my practice which my research has informed would be to intentionally engage with parents to inform them about the diversity of services available to their children and motivating them to speak to the Special Education department, community agencies, and school administration. An essential skill which I would need to continue to develop in order to be continually effective in my practice would be prioritization, or knowing which job duties take precedence over others at a given time. Where cognitive, behavioural, and social abilities can vary so widely as in the mainstream classroom, it is crucial to know how to allocate one’s personal resources (i.e., time and energy) in order to most effectively reach as many students as possible.
5.3 Recommendations

In order to better serve students with ASD in the mainstream classroom, I believe it is necessary for all educators, but especially Special Education teachers and administration, to engage the school culture and raise awareness about ASD and similar developmental disorders. Having assemblies, organizing symposiums with guests speakers, and having Special and non-Special Education students collaborate on joint presentations are few of various ways in which schools can acclimatize their communities to the diverse needs of students with ASD. These presentations would also benefit from getting students, staff, administrators, and the broader school community familiar with the findings of documents such as *Special Education Transformation: The Report of the Co-Chairs with Recommendations of the Working Table on Special Education* (Bennett & Wynne, 2006) and *Special Education: A People for Education Report* (Gallagher-Mackay & Kidder, 2014). These publicly available resources include many facts and figures regarding Ontario’s context on Special Education services that would be both informative and provocative in spurring further development for these students’ services. Such initiatives would also easily cohere with those related more broadly to other exceptionalities and mental health, and can be immediately implemented by local school extracurricular groups.

In regards to policy-makers, I would recommend that legislation be enacted that prevents teachers from being or feeling forced to teach Special Education if they have the Special Education Additional Qualification course. Fear of constrained employment was an issue for both of my participants (though they pursued Professional Development on a personal-basis), and students with ASD should not be even more disadvantaged by having to be taught by professionals with limited knowledge of best practices and characteristics of the disorder due to this fear. Local administrators should also continually engage with their teachers to ensure
reliable and efficient access to human and monetary resources that would support their teaching of students with ASD. Legislative and administrative changes would most reasonably occur in the long-term.

Specialized teachers should continue the work they are doing. Special Education teachers should continue to be patient, informative, and diligent in supporting students with ASD, and more broadly, students in the school with all types of recognized exceptionalities. Their service requires follow-up with students on a regular basis but should extend itself as much as possible to regular communication with their students’ mainstream teachers, to ensure effective social and academic inclusion. Although this recommendation may require long-term significant infrastructure and culture change in certain schools, Special Education teachers can immediately begin to meaningfully engage with students and mainstream teachers.

5.4 Areas for Future Research

An important area of research which requires a much stronger presence in the literature is that of the personal experiences of students with ASD. It is necessary for these students to be given a voice to inform the research community of what they, as those affected directly by policies, theories, and practice, experience on a daily and long-term basis. This current study, and most of the literature reviewed, did not consider the various points of intersectionality that can impact the practice of teachers towards students with ASD, namely considering gender, class, race, among other factors which we through professional experience in the classroom can act as determinants of quality of education and experiences within the educational system.

I believe future research should consider factors which are most influential in motivating a teacher to pursue Professional Development for learning about servicing children with ASD
and Special Needs more broadly. Given that attitude and personal experiences can play such a major role in the social and academic outcomes of students, it is crucial to understand how they are shaped by various factors pertinent to a teacher’s positioning to the topic, and how these factors may intersect and affect each other.

5.5 Concluding Comments

Children with ASD, and with other exceptionalities, will continue to form a relatively small, but not ignorable, population within all communities. Because of the prevalence and increased awareness that is being brought to this subject, it is important for general education teachers to understand the impact of their practice as they seek to serve such a diverse population of students. It is crucial to understand that although similarities exist between cases of children with ASD, the differences case-to-case can be staggering, especially when considering the linguistic, cognitive, and social abilities of each student, a phenomenon which I lived first-hand during my time as a Special Needs worker, and as an older brother to an autistic adult. With the Ontario Ministry of Education actively promoting mainstream inclusion, it is time for all educators to recognize and fully play out their role. It is my wish that this study will have shed some light on the pivotal role of teachers as educators but also caregivers and advocates for such a special population as students with ASD.
References


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Appendix A: Informed Consent Letter

Date:

Dear Participant,

My name is Jeremy Zuniga and I am a student in the Master of Teaching program at the Ontario Institute for Studies in Education at the University of Toronto (OISE/UT). A component of this degree program involves conducting a small-scale qualitative research study. My research will focus on the mainstream inclusion of students with Autism Spectrum Disorders (ASD) in the mainstream (non-Special Education) classroom. I am interested in interviewing secondary teachers who have taught at least one student with ASD within the last two years for at least 1 full year in a non-semestered school or 1 full semester in a semestered school. I think that your knowledge and experience will provide insights into this topic.

Your participation in this research will involve one 60 minute interview, which will be transcribed and audio-recorded. I would be grateful if you would allow me to interview you at a place and time convenient for you, outside of school time. The contents of this interview will be used for my research project, which will include a final paper, as well as informal presentations to my classmates. I may also present my research findings via conference presentations and/or through publication. You will be assigned a pseudonym to maintain your anonymity and I will not use your name or any other content that might identify you in my written work, oral presentations, or publications. This information will remain confidential. Any information that identifies your school or students will also be excluded. The interview data will be stored on my password-protected computer and the only person who will have access to the research data will be my course instructor Lee Airton. You are free to change your mind about your participation at any time, and to withdraw even after you have consented to participate. You may also choose to decline to answer any specific question during the interview. I will destroy the audio recording after the paper has been presented and/or published, which may take up to a maximum of five years after the data has been collected..

Please sign this consent form, if you agree to be interviewed. The second copy is for your records. I am very grateful for your participation.

Sincerely,
Jeremy A. Zuniga R.
Appendix B: Interview Guide

Principal Researcher: Jeremy Zuniga
Opening Script

Hello, my name is Jeremy Zuniga and I am a first-year student of the Master of Teaching Programme at OISE. I am conducting a qualitative research project on the topic of the mainstream inclusion of students with Autism Spectrum Disorders. I am hoping to learn more about the resources available to educators such as yourself in order to understand teachers’ experiences of including these students in the classroom. I am also seeking to inform myself on different teaching methods you have employed in an effort to include these students.

This interview will last approximately 60 minutes. I want to remind you that you may refrain from answering any question, and you have the right to withdraw your participation from the study at any time. As I explained in the consent letter, this interview will be audio-recorded. Do you have any questions before we begin?

BEFORE STARTING:
- Have 2 copies of consent form
- Test audio recorder, having charger ready
- ***Start recording HERE***
- State date and time of interview – JUMP IN

A. Background Information
1) Could you please describe your current job title and responsibilities in your current position?
2) Could you describe for me your formal training—where and when you got your degrees, and how long ago you completed your schooling?
3) How many years’ experience do you have teaching as a full-time teacher in Ontario?
4) Which course subjects and grade levels have you taught throughout your career?
5) In brief terms, what motivated you to choose education as your profession?

B. School Context
We would like to get a feel for the current school you’re working in.

1) How would you describe your school to a new family that may be enrolling their child there next year? (demographics, academic focus, neighbourhood, etc.)
2) Is there anything about this school that you feel makes it different from other schools or places you’ve worked?
3) Could you list some of the core values of this school community?
4) What do you enjoy about working at this school? What are some challenges about working at this school?
SEGUE: As you know, you were asked to participate in this study because you have specific experience working with youth with Autism Spectrum Disorders (from here on out, ASD). For the purposes of this study, we are using this term to describe any child who has been medically diagnosed with this condition and/or who has been identified by the Identification, Placement, and Review Committee as having this exceptionality. A quick refresher that ASD’s 3 main characteristics are that the individual demonstrates impaired social and communication skills for their age, and also display repetitive, and most unusual, behaviours.

C. Attitudes, Pedagogy and Professional Development

1) How would you describe your knowledge of ASD?
   a. Pertinent AQs? Volunteer work? Personal connections?

2) During your career, can you estimate how many children you have worked directly who were formally identified as having ASD?
   a. You can choose to focus on one case or talk about multiple cases as you best see fit for the following questions

3) How recently have you worked with an ASD student?

4) What was your initial reaction when you learned you were going to have a student with ASD in your classroom? Please be as honest as possible

5) What is your understanding of the Ministry’s mandate to include children with ASD in the mainstream classroom?

6) What did including that student with ASD look like in your classroom?
   a. What did accommodating the needs of this student look like in your classroom, in terms of your personal teaching methods?
   b. Which technological resources were readily available to you to support you as you included that student with ASD?
      - Smart board, pictograms, iPads, other specialized equipment
      - If none, ask regarding typical technology: books, pencils, crayons and colouring materials

7) Could you describe how you typically used technological resources to support the inclusion of that student with ASD in your classroom?
   - If none available, which technological resources would you have considered most effective in helping you achieve your understanding of including students with ASD?

8) Did you have access to other professionals to help you inside or outside of the classroom, such as Educational Assistants, Therapists, or Case workers, to name a few?
   a. Follow-up: Please describe a situation where you the presence (or lack of) these professionals affected your perceived ability to fulfill your understanding of inclusion of these students

9) Did you have access to AQs or professional development workshops, local or regional training sessions to help you include this student in your classroom?
a. Follow-up: Please describe a situation where you the presence (or lack of) these training opportunities affected your perceived ability to fulfill your understanding of inclusion of these students.

10) If you did not access formal Professional Development resources, how did you inform yourself on how to best support your student with ASD?
   a. Colleagues
   b. Google/internet
   c. Other professionals outside of the school
   d. Personal experience

11) Please describe an experience you had that marked you while teaching this student with ASD, an experience where you gained significant growth as an educator handling some of the challenges of teaching a student with ASD:
   a. Calming disruptive behaviour
   b. Curriculum and pedagogical choices
   c. Student responses
   d. Staff responses
   e. Family responses
   f. Access to resources

D. Peers
1) Please describe the role of peers in the inclusion experience of that student with ASD
   - Positive or negative experiences? Why do you perceive their reactions or roles to be as such as you have described?

E. Perceived outcomes and conclusion
It’s clear that we learn through experience and time. As you have described all of these experiences to me:

1) How would you describe the state of inclusion of that student by the end of the semester or school year?
   a. Prompt: Did your understanding of inclusion of that student change over the course of time teaching him/her? If yes, how so?
2) What advice would you give to new teachers such as myself which come to face this same topic as you did?
3) Any final thoughts or questions about the inclusion of students with ASD in the mainstream secondary classroom?

END OF INTERVIEW: (10 minutes)
1) Turn off recorder
2) Explain that you will send them transcript for their review
3) Review consent
4) Thank participant