Strategies for Creating Successful Learning Experiences for Students with Autism Spectrum Disorders

By

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A research paper submitted in conformity with the requirements
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Abstract

Autism Spectrum Disorders (ASD) are becoming increasingly prevalent in children who attend Ontario elementary schools. Teachers need to be able to provide successful learning experiences for students with ASD, in a variety of learning environments. This qualitative research study explores what three teachers, from a variety of classroom settings, know about ASD and what strategies and resources they use in their day to day practice to provide positive learning experiences for students with ASD. A questionnaire and open-ended interview questions were used to gain their thoughts and experiences with students with ASD. A review of the relevant literature and an analysis of the data gathered through participant interviews collectively sheds light on how preservice programs are preparing teachers for educating students with ASD, how to prepare a classroom to support students with ASD, including successful teaching strategies to implement within the classroom.

Keywords: autism spectrum disorders, special education, inclusion, teacher education, classroom environment, teaching strategies
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Strategies for Creating Successful Learning Experiences for Students with Autism Spectrum Disorders

Introduction to the Research Study

This research project will look at strategies and supports educators can use to create successful learning experiences for students with Autism Spectrum Disorders (ASD). The prevalence rate of ASDs has increased 20% over the past two years and it is now reported that 1 in every 68 children are diagnosed with an ASD (Walton, 2014). With such a large number of students with ASD, all teachers need to be knowledgeable on successful strategies in order to help meet the needs of students with ASD in the classroom. This study will examine how teachers are being educated on ASDs, and how they can successfully prepare for and support students with ASD in a variety of learning environments.

Background of the Researcher

My first experience working with children with ASD was in 2010 when I began working as a respite worker at a community agency in Toronto. Throughout my time at the agency I had the opportunity to work with several children with ASD. Over time I have learned what strategies were most effective for each child by working one on one with them, as well as through collaboration with their family and other professionals. This experience taught me that children with ASD are unique, and strategies need to be adapted to their individual needs and levels. The most successful approach is one that is informed by a team of individuals who interact with the child on a regular basis. I have observed in my own teaching experiences that there is limited knowledge related to ASD, and teachers are not always aware of the strategies to use or the tools that are available for them to access. As a new teacher myself, I want to learn how to transfer my skills
from the community setting to a classroom environment. My hope is that this research study will provide teachers with some tools that they can use in their classrooms to provide successful learning experiences for students with ASD.

**Purpose of Research Study**

The main research question for this study is *how do classroom teachers provide successful learning experiences for students with Autism Spectrum Disorders?* The following sub-questions also framed the research study:

- How prepared do educators feel about teaching students with Autism Spectrum Disorders?
- What actions are taken by educators to prepare for students with Autism Spectrum Disorders entering their classroom in order to create a successful learning environment?
- What strategies are used by educators throughout the year to support and teach students with Autism Spectrum Disorders?

By examining strategies and supports teachers use to create successful learning experiences for students with ASD, I hope that teachers can gain a better understanding of how to meet the needs of students with ASD in diverse learning environments. Additionally, I hope to learn how teacher education programs and professional development courses prepare teachers for educating students with ASD in their classrooms.

This study is important to the education community because teachers need to be aware of how to effectively meet the learning needs of students with ASD. Educators are unsure of how to accommodate and modify their classroom program for students with ASD (Foy & Starr, 2012). To ensure student success teachers need to be knowledgeable
on the strategies and supports they can access in order to create successful learning experiences. The goal of this research project is to understand how the education teachers are receiving is impacting the way we are able to teach students with ASD, along with effective ways to establish successful learning experiences for students with ASD in a variety of learning environments.

Overview

Chapter 1 includes the introduction and purpose of the study, the research questions, as well as how I came to be involved in this topic and study. Chapter 2 contains a review of the literature on how to create successful learning experiences for students with ASD. More specifically the literature review examines ASD in Ontario’s public school system, teacher education, collaboration, and effective strategies used in the classroom to support students with ASD. Chapter 3 addresses the methodology of the study, including information about the participants and data collection and analysis. Chapter 4 discusses the findings that emerged from the questionnaire and open-ended interview questions with three participants. Chapter 5 will re-visit some of the literature as it relates to the findings from the participants, and discuss implications, recommendations, and areas for further study. References and appendices can be found at the end of this research paper.
Chapter 2: LITERATURE REVIEW

Over the past two years the number of students with ASD has dramatically increased from 1 in every 88 children being diagnosed, to 1 in every 68 children being diagnosed with an ASD (Walton, 2014). In the 2007-2008 school year, 10,171 students in Ontario’s public school system had a diagnosis of ASD and this number continues to grow (Foy & Starr, 2012). With the number of students with ASD on the rise, teachers need to be equipped with the strategies to create successful learning experiences for this population of students.

DSM-5 Diagnosis and Characteristics of Autism Spectrum Disorders

In May 2013, an updated version of the Diagnostic and Statistical Manual of Mental Disorders, (5th ed.; DSM-5; American Psychiatric Association, 2013) was released which included several changes in the diagnosis and characteristics of ASD. The new DSM-5 broadened the diagnostic criteria for ASD and this may be one of the reasons we have seen an increase in the prevalence rates over the years. In the changes the American Psychiatric Association combined Asperger’s disorder syndrome, autistic disorder, childhood disintegrative disorder (CDD), and pervasive developmental disorders-not otherwise specified (PDD-NOS) to be included under one umbrella of ASD (Johnson & McGuinness, 2013). They are no longer referred to as individual disorders, but instead all fall under the diagnosis of ASD which included social interaction, communication, and fixed interests in repetitive behaviours (Johnson & McGuinness, 2013). However, in the DSM-5 there are now only two areas of focus in terms of impairments: 1) social-communication, and 2) behaviour area which includes fixated and repetitive behaviour (Johnson & McGuinness, 2013, American Psychiatric Association, 2013).
The specific impairments children with ASD experience can vastly differ among individuals, which is why it is referred to as a spectrum disorder (Bowron, Busby, Ingram, Lyons, & Oliver, 2012). In addition to these impairments students with ASD may also exhibit several other behaviours that can make learning in a classroom environment challenging for them. These behaviours may include difficulty with transitions, sensory sensitivities, hyperactivity, impulsivity, short attention span, aggressiveness, and self-injurious behaviours (Brown, Fortain, & von der Embse, 2011).

While the impairments and behaviours associated with ASD can at times make learning challenging for students, with the effective use of strategies by teachers, students have the ability to reach their highest potential in both the classroom and school environments.

**Autism Spectrum Disorders in Ontario Elementary Schools**

Currently in the province of Ontario the Identification, Placement, and Review Committee (IPRC) decides under which of the five categories of exceptionality students fall under. The IPRC also provides a written statement of decision, which shows:

- the students strengths and needs;
- the placement decision;
- recommendations regarding special education programs and services;
- reasons for placing the student in a special education classroom, if that is what the IPRC has decided upon (Elementary Teachers’ Federation of Ontario, 2007).

In the province of Ontario ASD is under the exceptionality category of communication. The Ministry of Education (2007) defines ASD, “...as a severe learning disorder that is characterized by disturbances in:

- rate of educational development;
- ability to relate to the environment;
• mobility;
• perception, speech, and language;
• and a lack of the representational symbolic behaviour that precedes language”

As previously stated, Foy and Starr (2012) determined that in 2008 there were 10,171 students with ASD in the Ontario public school system. The number of students in the 2013-2014 is assumed to be much higher than that, as the rates of ASD have increased over the years. It is now said that the number of children with ASD has increased from 1 in 88 children to 1 in 68 children (Walton, 2014). With this increasing prevalence rate in mind, we need to ensure that teachers are adequately prepared to create successful learning experiences for these students. This can be achieved by making sure teachers are knowledgeable about ASD, including what classroom strategies and valuable resources might best support students with ASD.

**Educational Options for Students with Autism Spectrum Disorders**

Students with ASD, in the province of Ontario, can currently be placed in a number of different learning environments. The IPRC determines the placement of students with exceptionalities, including students with ASD. However, they must first consider the placement of the student within a regular classroom before considering alternative placements. If the committee determines the student with ASD would not be successful in a regular classroom they then consider other educational options (Elementary Teachers’ Federation of Ontario, 2007). According to the *Education Act (2012)*, each school board in the province of Ontario must provide multiple placement options to meet the needs of students with exceptionalities. These placements are as follows:

• regular class with indirect support;
• regular class with resource assistance;
• regular class with withdrawal assistance for less than 50% of the day;
• special education class with partial integration for at least one instructional period;
• special education class full-time;
• self-contained classes.

In a self-contained classroom there can be a maximum of six students with ASD according to Regulation 298/31 of the Education Act (Elementary Teachers' Federation of Ontario, 2007). It is also important to note that in cases where parents of the student do not agree with the decision made by the IPRC they have the following options as stated in Regulation 181-98 of the Education Act:

• fifteen days to request the IPRC to hold a second meeting to discuss their concerns;
• thirty days to file an appeal with the secretary of the board.

If parents do not agree with the decision after a second meeting with the IPRC, they have fifteen days to appeal the decision. Also, if the parent does not agree with the IPRC and does not take any steps to appeal it, the board will instruct the principal of the student to implement the IPRC decision (Ontario Ministry of Education, 2012).

**Teacher Education on Autism Spectrum Disorders**

Initial teacher education programs prepare teachers for what they need to know as teachers of the future. With the high prevalence rate for students with ASD, most teachers should expect to have at least one student in their classroom with an ASD at some point in their career. Therefore, educators need to be knowledgeable in how to provide successful learning experiences for students with ASD.
The Ontario Ministry of Education implemented Policy No.140 in 2007 which states that there will be, “…provincial initiatives for the training of paraprofessionals and support for teachers” (Ontario Ministry of Education, 2007). Support is being offered to teachers from the Ministry of Education, however it seems the many demands on a teacher may be overwhelming and teachers may not carve out the necessary time to seek out and engage in these various supports. The majority of teacher education programs have a mandatory special education component, however this covers a broad range of disabilities, and ASD is only briefly touched upon (Bauserman, Harvey, Merbler, & Yssel, 2010). In a study conducted in 2012 with beginning teachers, there were several challenges named that teachers felt they faced because of a lack of training in ASD (Bowron et al., 2012). Some of the challenges discussed were lack of basic knowledge, lack of confidence in creating Individual Education Plans (IEP), how to manage behaviours, and how to modify the curriculum and classroom environment (Bowron et al., 2012). Similar challenges were found in the research conducted by Foy and Starr (2012) in which parents of students with ASD in a publicly funded school were asked how well they thought their child’s teacher was educated on ASD. Most of the participants were from Ontario; however a small amount resided outside Ontario (but still lived in Canada). Parents reported that they felt fear and resentment from the teachers of their children due to a lack of understanding of ASD. Foy and Starr (2012) also reported that parents believed that teachers did not know how to accommodate or modify their program in an appropriate way for the child. Parents felt there was a lack of professional development specific to ASD for teachers. These studies suggest that teachers are not being provided with the practical knowledge and skills to provide successful learning experiences for students with ASD. There needs to be a meshing of knowledge gained
from their teacher education programs into practice in order to provide a well-rounded education for students with ASD.

**Attitudes of Teachers on Inclusion of Students with Autism Spectrum Disorders**

It has been found that most classroom teachers have positive attitudes towards teaching students with ASD (Ferraioli & Harris, 2011). This is a positive step forward from thirty years ago when teacher’s attitudes were more negative. This can be attributed to the considerable amount of attention and research that has gone into ASD in the past few decades (Chitiyo & Park, 2011). Teacher’s attitudes are improving which indicates they are being educated, which is one positive step forward in the field of education.

**Collaboration with Parents and Other Professionals**

Communication and collaboration with parents and other professionals are two key elements that should be present both prior to a student with ASD entering a classroom, and throughout the duration of the year. A teacher can gain a wealth of knowledge about a child’s diagnosis, but also can become aware of effective strategies that are already in place for the student at home, or in other programs. In a study conducted by Foy and Starr (2012), parents said there was often a lack of communication and collaboration between themselves and teachers. Parents felt they did not know what was going on in the classroom, and did not know how their child was progressing (Foy & Starr, 2012). Parents can be a huge asset to teachers because they know their child best, and can share information that would take a longer period of time for the teacher to observe on their own. Collaboration can be viewed as time-consuming and difficult; however it is an important factor for the successful inclusion of students with an ASD (Bowron et al., 2012).
Effective Strategies for Teaching Students with Autism Spectrum Disorders

Creating successful learning experiences for students with ASD requires that teachers implement a variety of strategies to support a student’s academic and social-emotional development. Discussion of strategies will be discussed across three broad areas: delivery of the curriculum, social inclusion and behaviour management.

Delivery of the Curriculum

There are several supports and strategies available for teachers to use in their classroom, however the problem still lies in the integration of knowledge into practice. Some interventions discussed in the literature that have proven to be effective, and are easy for teachers to implement are cooperative learning groups, a structured classroom, visual schedules, and differentiated learning (Ferraioli & Harris, 2011). Working as a peer group can allow students with ASD to be taught by their peers, and also give a teacher more time to interact one on one with the students who need additional assistance such as those with ASD. A structured classroom assists a child with ASD in so many ways, however in terms of curriculum it allows them to know what they can expect to happen in a day. When there is no structure in the classroom, and events are always changing students with ASD can become frustrated as any change in routine can cause them to feel anxious (Ferraioli & Harris, 2011). Visual or written schedules can also ease the anxiety and trouble with transitions that students with ASD may have. It allows them to understand what they will learn in that day. It is also suggested that a highly preferred lesson should follow a low preference lesson, therefore they have something to strive for and their attention is not lost. Engaging students with ASD in lessons and activities can be a challenge for teachers as students will often go into their ‘own world’. Therefore, using differentiated learning and assessment is strongly encouraged in order to give the
student multiple opportunities to learn and show what they have learned. It is also
couraged that multiple learning styles are incorporated throughout the day, and that
they change frequently (Duffy & Leach, 2009). For example, in the morning for math a
teacher may have the students working independently at their desk, but afterwards for
literacy they may be working in small groups creating a play for a book. Changing the
style of lesson frequently for a student with ASD will keep them engaged for the delivery
of the curriculum (Duffy & Leach, 2009). However, it is still important to remember that
students with ASD are all different and their needs vary from student to student. Teachers
need to take the time to get to know each student and may have to try multiple strategies
before they find one that works. One of the concerns the research addressed surrounding
the delivery of the curriculum was that while teachers had been given the knowledge of
how to teach students with ASD, there is a challenge in how to integrate knowledge into
practice (Bowron et al., 2012). The challenges especially seem to be when it comes to
how to accommodate or modify the curriculum for students with ASD. In order to
eliminate these challenges teachers need to be provided with more access to research and
strategies, and more case and field experiences in their teacher education programs
(Bowron et al., 2012).

Social Inclusion

Boutot (2007) outlines several support strategies for the social inclusion of
students with ASD. This includes having a classroom environment where students work
together such as in co-operative groups, scheduling subtle transitions in and out of the
classroom for the student with ASD, and selecting the “least intrusive supports necessary
for the student to be successful” (p. 159). Careful, appropriate and proactive attention to
preparing typically-developing peers for including a student with ASD in the classroom
can also greatly enhance the successful inclusion of the student with ASD, as well as support the student’s social and academic development (Boutot, 2007). One of the keys to social inclusion is trying to provide a learning environment for the student with ASD where they are similar to their peers. Some strategies to achieve this may be having a support staff for that student not always sitting directly beside them, and perhaps instead circulating the room and assisting all students and when necessary go over to support the student with ASD (Boutot, 2007). Students with ASD may also need to leave the classroom for additional support on occasion, and when they need to do so it is best to include this transition into what would be a natural transition for the rest of the class (Boutot, 2007). Some natural transitions may include coming in from recess or lunch, or when the class transitions to another classroom for a different subject. Friendships for students with ASD also often need to be developed with the facilitation and support of the teacher. Students with ASD can be provided with Social Stories, which can focus on specific social interactions and how the student should act in that situation (Duffy & Leach, 2009). Classroom teachers should also speak with students in the classroom about what ASD is, and what it means for that particular student. This opens up the topic up for discussion in the classroom and school, and gives students an understanding of the strengths and challenges this student may be facing. Peers can also be used as models of good social interaction for students with ASD. When peers initiate conversation with students with ASD their social skills tend to improve (Ferraioli & Harris, 2011). Social interactions and communication is another aspect teachers need to be aware of, however this skill can be improved upon with the help of their peers and teacher guidance. It is important to remember that not all skills have to be learned from the teacher or other professionals, and to be creative in the strategies used to develop skills.
**Behaviour Management**

Brown, Fortain, & von der Embse (2011) provide a framework to help teachers manage the behaviour of students with ASD that includes “preventative, supportive, and corrective strategies” (p. 23). Preventive strategies are used by teachers prior to teaching the content of a lesson (Duffy & Leach, 2009). Examples of these strategies include Social Stories, visual schedules, and environmental arrangements. Social stories and visual schedules were spoken about previously in this chapter however these two tools allow the students to know how to act in specific social situation and know what is expected of them and other individuals involved. The organization of furniture in the classroom can also help the student clearly see the workspaces visually, and eliminate any sensory overload the student with ASD may experience (Duffy & Leach, 2009). This can include making sure the lights are not distracting the student by being too bright, or not having the student sitting next to the door or window where a lot of noise can interfere with the student’s listening. Increasing student engagement can also help prevent challenging behaviour from occurring, and to achieve this in a classroom teachers can provide students with a range of instructional formats such as physical activities, and group participation (Duffy & Leach, 2009). Supportive strategies are also used throughout the school day to improve student learning. Examples of these strategies are setting clear expectations prior to the day and/or lesson, and using graphic organizers during lessons. When behavioral expectations are known to the student they will understand what is expected of them in the classroom environment. Graphic organizers can also allow students with ASD to visually follow along during a lesson which can be helpful for them (Duffy & Leach, 2009). Lastly, corrective strategies are used when behaviours are being exhibited in the classroom. It is important to remember that
preventative and supportive strategies should always be in place, and that corrective strategies are used as a last resort. One strategy that can be used in the classroom is to positively reinforce a student with ASD when they stop exhibiting the undesirable behaviour, or when they do not display it for a certain period of time (Duffy & Leach, 2009). Another strategy suggested by Duffy & Leach (2009) is to provide the student with additional support if they are having difficulty with a task. This can include positively redirecting the student back to the task they are to complete by using verbal prompts, models, or written text (Duffy & Leach, 2009). The effectiveness of these strategies will be different for each student with ASD; however classroom teachers need to be aware of how to implement them correctly. Students with ASD may exhibit undesirable behaviours from time to time but it is always for a reason, and it is important that the teacher finds out what that reason is and how to support the student with ASD.

In conclusion, teachers need to be educated on what ASD is and how they can support those students in their classroom. Knowledge on ASD needs to be put into practice for teachers in order for them to understand the needs of students with ASD. There are many resources and strategies available to teachers, and although their effectiveness will vary depending on the individual, teachers need to collaborate with others in order to ensure successful learning experiences for students with ASD.
Chapter 3: METHODOLOGY

Overview

This research study examines what supports and strategies educators use to create successful learning experiences for students with ASD. The research is qualitative in order to capture the first-hand experiences of teachers, and general themes present in the literature. Throughout this chapter the participants, data collection, analysis, ethical considerations, and the limitations of the study will be addressed.

Participants

The participants in this research study were from publically funded schools in the province of Ontario, and all had experience teaching students with ASD. The goal of the interviews was to obtain information on how teachers feel their teacher education prepared them for working with students with ASDs, and strategies and supports they use to create successful learning experiences for students with ASD. The participants for this study were selected based on the following criteria:

- They must be practicing teachers who are willing to speak about their experiences;
- Collectively they must teach in a variety of classroom settings, with students of varying developmental levels on the Autism spectrum and;
- They must have attended their teacher education program in the province of Ontario.

My first participant was referred to me by an instructor at the Ontario Institute for Studies in Education. She is a teacher in a multiple exceptionalities classroom within a typical school. This participant was chosen due to her wealth of knowledge around ASD, and her experience both inside and outside the classroom environment. My second
participant is a high school teacher that I came to know through a family member. This participant was chosen because she had experience teaching students with ASD in a general education classroom setting. My third participant is a teacher in a self-contained classroom within a special education school for primary and junior students. This participant was chosen due to her wealth of experience and knowledge around educating students with ASD.

Data Collection and Analysis

There is an abundance of research regarding strategies for creating successful learning experiences for students with ASD. I initially conducted a review of the literature, and continuously did so throughout the course of this study. I also conducted three face to face interviews with educators currently teaching students with ASD. The participants were given a questionnaire (see Appendix B), and were asked nine semi-structured interview questions (see Appendix C) relating to their experiences with students with ASD, their teacher education experience, collaboration, and strategies they use within the classroom. All the participants were asked the same questions, and were recorded, with consent, in order to capture their authentic voice. Some example interview questions are as follows:

- What resources are available to you to support students with Autism?
- What collaboration do you engage in to support students with Autism?
- When you have a student with Autism in your classroom, what do you do to create a successful learning environment for that student?

The interviews were then transcribed and analysis of the data began when I read the transcripts multiple times identifying themes across the 3 interviews. The key themes that emerged from the data address teacher education on ASD, positive aspects of teaching
students with ASD, collaboration and communication with others, practical classroom strategies and resources, and teachers’ perspectives on inclusion. An initial step in my analysis involved underlining the key words in my main research question, and sub-questions, and looking for data that might address those questions. When data was found that related to the question, it was underlined and numbered with a code to co-ordinate with the research questions. Afterwards, if codes were present in more than one transcript, and pertained to the research questions, it was grouped based on theme names. Highly relevant information that was directly related to one of the research questions was also added to the findings due to the fact that it was mentioned by all three participants.

Ethical Considerations

The ethical review for this research was granted under the umbrella review for the Master of Teaching Research Project as part of the Master of Teaching program in the Curriculum, Teaching and Learning Department at OISE, University of Toronto. In addition to the formal umbrella approval, careful attention was given to the participants, negotiating both a time and location for the interviews that was at their convenience. Participants were provided with a consent letter ahead of time (see Appendix A) in order to give them ample time to review it. Prior to the interview, the consent was reviewed and signed. One copy of this consent was provided to the participant, and the second copy was kept for the records of this study. The participants were also provided with a copy of the questionnaire (see Appendix B) prior to the interview to be completed, however ample time was also provided before the interview to complete it if necessary. Before beginning each interview the research topic was explained, and the participants were also reminded that they have the right to withdraw from the interview or any individual questions at any time without consequence. Participants were invited to ask any
questions, and were provided with contact information for any follow up questions. No identifiers of the participants will be used at any point in this research project; pseudonyms were used throughout this paper in order to maintain confidentiality. Lastly, once the research project is completed participants will be notified, and will be given a copy upon their request.

**Limitations**

This Master of Teaching Research Project provides the opportunity to gain a wealth of knowledge on how to create successful learning experiences for students with ASD, however throughout the process there were some limitations that are important to recognize. Firstly, while there is a lot of information provided in the literature review (Chapter 2) it only touches the surface on the how to create successful learning experiences for students with ASD in a variety of learning environments. There is an abundance of research and literature in this area, and this is a topic that is still being researched. As more research emerges it is expected that the strategies and supports discussed throughout this study will continue to evolve, both in the literature and in practice.

Another limitation is that there was a small sample size of participants, due to time constraints in the Master of Teaching program. There was other course work, along with field experiences that needed to be completed as requirements of the program which cut down on the time that could be dedicated to this research project. The participants provided insightful information and contributed greatly to this research study. However, due to the small sample size the information may not be as generalized had there been a larger number of participants. As a result of these limitations, the research concentrated
on specific sub-topics and may not have necessarily touched on all the areas of this broad topic.
Chapter 4: FINDINGS

The findings presented in this chapter have been gathered from a questionnaire and an open ended interview with each participant, followed by an analysis of this data and the emergence of five apparent themes. The five themes are shared in a sequence that reflects the process an educator would experience when a student with ASD was entering their classroom, starting with teacher education programs, as well as, ongoing professional development on ASD. Then the chapter moves into discussing the positive aspects of working with a student with ASD, so that educators can work based off of the student’s strengths. The findings then move to look at collaboration and communication with others, which is how many of the participants prepared for a student with ASD entering their classroom. Once a student enters your classroom, a teacher then needs to be informed on classroom strategies which is the next theme that follows. Lastly, teacher’s perspectives on classroom and school inclusion are discussed because integrating students with ASD with their peers needs to occur in order to ensure a positive learning experience.

Teacher Education on Autism Spectrum Disorders

All the participants discussed their teacher education on ASD in terms of their teacher education programs, and professional development they have engaged in since completing their program.

Teacher Education Programs. Participant Donna is a teacher in a multiple exceptionalities classroom who completed her Bachelor of Education (B.Ed.) in 2007. On her questionnaire Donna indicated that a formal special education course was not part of her B.Ed. program, but that other courses, “Mostly dealt with differentiated instruction in the typical classroom setting.” When asked on the questionnaire to rate how well her
B.Ed. program prepared her for working with students with ASD (on a rating scale from 1-10, 1 being not prepared, and 10 being extremely well prepared) she rated herself a 5 because inclusion, differentiated instruction and assessment, various learning strategies, and various teaching strategies were discussed. However, she only rated herself a 5 on preparedness because attention to these areas in her teacher education program was not directly related to a special education setting.

The second participant, Megan, is a high school teacher who completed her B.Ed. in 2008. Megan took a special education course as a part of her B.Ed. program which was one semester (September-January) in length. In terms of learning about exceptionalities during her B.Ed. program. Megan said, “We learned about what they were, the definition, the key characteristics, but they never really got down and taught us how to integrate classroom strategies.” On her questionnaire, she rated herself a 1 in terms of being prepared for working with a student with ASD in the classroom because there was no real-life experience and limited information on how to set up a classroom to meet the needs of students with ASD. Megan stated, “It’s one thing to know the background and definitions but that doesn’t help me when I see a student and I don’t know necessarily how to make the classroom fit for them”

The third participant, Sam, is a kindergarten classroom teacher in a special education school who graduated from her B.Ed. program approximately ten years ago. Sam noted on her questionnaire that she did not have a special education course as part of her B.Ed. program, and she did not receive a lot of special education-related content in other courses. Sam rated herself a 2 when asked about how well her B.Ed. program prepared her for teaching students with ASD because she did not have any courses related to special education. Sam stated that she finds when ASD is discussed in workshops or
courses it is often talked about in a general way, and there is rarely discussion that relates to supporting students on the lower end of the Autism spectrum.

In terms of how to improve special education in B.Ed. programs Megan explained, “[teacher candidates] don’t actually know how to practice the skills you need… you can’t hone skills unless you have practice, so give them confidence in the classroom…they need to practice because textbooks mean nothing when you’re in a classroom” Donna also discussed the lack of hands on experience in terms of creating and looking through essential documents such as Individual Education Plans (IEP) and Ontario Student Records (OSR). She said, “If you do not know how to sit down and look through the OSR…basically all that knowledge that [teachers and other professionals are] writing down on paper is sort of being lost.”

**Ongoing Professional Development.** According to the questionnaires administered, all of the participants have taken special education Additional Qualification (AQ) courses. Donna and Sam have both taken all three special education courses, and Megan has taken the first special education AQ course. Megan explained that she did not find much difference between what she learned in her B.Ed. program with what was being taught in the first special education AQ. Megan stated, “I didn’t learn any specific strategies…what I learned had to come from me seeking out other people, me looking at what the [professional development] opportunities were.”

There are several courses and workshops for professional development teachers can attend to gather information on how to create successful learning experiences for students with ASD. All three participants discussed a teacher induction program which new teachers become a part of when they receive a full time contract with a publicly funded school board. Donna talked about how you have to find a mentor and that for a
new teacher they can be a good person to go to when you have questions, and when you are learning to navigate situations that are not necessarily addressed in teacher education programs. Megan and Sam both discussed how the teacher induction program is a great opportunity to take professional development courses and guide your own learning.

Teachers also have professional development opportunities available through their school boards which can provide them with knowledge on how to create successful learning experiences for students with ASD. The participants talked about some of their experiences in accessing professional development opportunities related to ASD. Megan discussed some of the barriers she has faced when taking professional development courses when looking to gain more information on teaching students with ASD, “When I was in my first year of teaching students with Autism no one recommended to me to take them, it was me seeking out to take them.” She also explained that once you have been teaching for a while, “You have to go to your administrators and say can I take these courses? … then it’s a matter of, do you have coverage, so if they can’t get coverage for you then you have to take them on your own time. And time is something we don’t have a lot of in teaching.”

**Positive Aspects of Teaching a Student with ASD.** The participants were asked an open ended question about the positive aspects of working with students with ASD. The participants in this research study found teaching students with ASD to be a positive experience, even though at times it challenges their abilities as a teacher.

One key theme that emerged was that students with ASD are unique individuals. Sam stated “Every student I’ve known with Autism is always their own little person.” Donna also explained that just because you have taught one student with ASD does not mean they will be similar to the next student who enters your class with ASD. All the
participants described teaching students with ASD as an opportunity to remind yourself that you need to build a relationship with each student, and find what works for them in your classroom. All the participants also saw teaching students with ASD as an opportunity for learning themselves, and developing as an educator because they are constantly learning new strategies, and how to improve their classroom environments to accommodate for all the students’ needs.

All participants also discussed how students with ASD are extremely honest which can be refreshing to a classroom community. Megan stated, “They’re just legitimately who they are and it’s very refreshing.” Sam shared a similar thought, and has observed that students with ASD let you know what kind of day they are having, and are not afraid to show it. She said, “They are who they are through and through.” Students with ASD are not afraid to be who they are and, unlike many people, are not afraid of what others will think. Megan has observed that in the classroom this attribute can make for meaningful discussions, the sharing of interesting ideas, and creativity.

Communication and Collaboration with Others

Bowron et al. (2012) stated in their research that collaboration can be viewed as time-consuming and difficult; however it is an important factor in ensuring that students with ASD have a successful learning experience. All three participants discussed the importance of communication and collaboration with individuals in the students’ life prior to them entering the classroom, and for the duration of the school year. Collaboration and communication is important to engage in with the student, parents and/or guardians of the student, colleagues that are not only in your school but also from your larger community of schools, and other professionals or agencies that are from outside the school community.
**Students.** Positive communication and collaboration is an important step in establishing a positive relationship with students with ASD. All three participants suggested meeting with the student prior to the first day of school. This first interaction allows for the teacher and student to start building a relationship. Megan gave an example that to, “meet the student ahead of time…would be great too, because I know with one student that I had, I had no idea that he didn’t like being around educational assistants, and that made the rest of the year difficult.” When first meeting with the student, it is can also be used as a time to touch base and collaborate with them on some of the strategies that may work for them to ensure a successful learning experience. By meeting with a student prior to the beginning of the school year it can also help the student prepare for this new transition in their life. All three participants discussed the importance of preparing students with ASD for transitions because they often have a hard time with any changes in their routine. Sam suggested that sending home pictures of the classroom environment is a good way for students to prepare for the transition over the summer months, which can help in reducing anxiety on the first day of school. It is important that teachers take the time to communicate with students with ASD so that the student is aware of what to expect, and also if possible, give them the opportunity to communicate what they need in order to have a successful learning experience.

**Parents.** Parents are an important part of ensuring that students with ASD have a successful learning experience because they hold a lot of important information about their child. Therefore, it is important that teachers establish relationships, communicate, and collaborate with parents. All three participants discussed how important communication and collaboration was with the families of students with ASD, and how it can assist you in creating a successful learning experience for them. Sam discussed how
in the first weeks of school communicating and collaborating with parents is of high importance, “I interview them at the beginning of the year, I invite them in, I talk to them all the time…writing notes all the time, in the first couple of weeks I’m calling all the time just so they know what’s happening here and to know more about them.” Donna and Megan also discussed how communication with parents should begin as soon as possible, so that as a teacher you are able to gather the information you need about the student and so that the parent can address any questions and concerns. The participants also discussed how parents carry a wealth of information when it comes to successful strategies for students with ASD. Teachers need to communicate and collaborate with the parents in order to understand what strategies work for the student, and to plan how to successfully implement them in the classroom. Megan describes how she collaborated with a parent to learn successful strategies for one of her students, “I had to learn strategies from what colours to put in front of him, and not in front of him, to how to de-escalate him by talking about Barack Obama, or talking about snakes. So, the parents are your tool for learning what works, what kinds of strategies.” Parents of students with ASD have typically already tried several strategies with their children at home, and when teachers communicate with parents they can know what strategies have proven effective for that student, and what have not. Open communication with parents also allows for teachers to ask parents questions throughout the year, and it also keeps the door open to having conversations about any successes or challenges the student is having in the classroom.

Sam also discussed how having a child with ASD can be challenging for families, and that connecting them with one another can also be very valuable. Sam noted that, “A lot of families can sometimes feel quite isolated… it can be difficult to navigate…help parents connect with each other, and ask, you know, where did you go to the dentist?” As
teachers we have the power to make these connections between families so they can share tools and resources with one another, and this has the potential to expand students learning and development outside of the classroom.

**Colleagues.** Communicating and collaborating with fellow colleagues can create successful learning experiences for students with ASD because as a teacher you can gain a lot of knowledge on the student, as well as, have someone to go to for support and resources when needed. Colleagues can include, but are not limited to, other teachers, educational assistants, vice-principals, and principals. The three participants all discussed how they engage in collaboration with their colleagues not only in their home schools, but also in the community of schools that belong to their school board. The participants discussed how they believe talking to a current or past teacher of students with ASD can provide you with wealth of helpful information. Donna says:

> Talk to the teacher, the current teacher that has the student and try to understand more about that student and about what to expect from the student. Does the student have a lot of anxiety? Does the student need a lot of visual supports? Does the student need physical breaks? So asking different types of questions so that you’re prepared.

Teachers also do not need to necessarily have had direct contact with the student in order to offer you support. Donna discussed a network of multiple exceptionalities teachers within her school board that share ideas and lessons via a common e-mail and during monthly meetings. She says, “It really is about collaboration and working together and helping each other out.” When teachers collaborate and share ideas, and communicate with one another it creates a larger community all working together to make learning experiences successful for students with ASD.
The three participants also discussed the importance of having open and regular communication and collaboration with the educational assistants (EA) whom are working with the student with ASD. Megan stated, “the EA’s you have to have a pretty good relationship with them to learn what they’re doing that’s successful.” As Sam states you also need to make sure everyone in the classroom is on the same page with the student, “Making sure that everyone has the same information about the students and we’re all working for the same goals is the most important.” She also says, “Everyone’s noticing different things throughout the day so you know just put all our knowledge together.” As a teacher you cannot be focused on one student the entire day, so it is important that teachers communicate with all the support staff in the classroom on what they have observed. When everyone working with the student is on the same page, all the participants agree that it makes for a successful learning experience for the student with ASD.

The participants also all agreed that the school administration can be a great source of support for teachers. Sam and Megan both discussed how their administration is a valuable source of information when you are having a hard time with a student with ASD, or if you find a resource that you think will benefit the student they can work with you to access it.

**Outside Professionals and Agencies.** Outside professionals and agencies that specialize in ASD can help support teachers in creating successful learning experiences for students with ASD. Donna and Sam both discussed their use of communication with outside agencies to educate themselves about ASD, and to support them in teaching students with ASD. Donna discussed how she uses agencies such as, Geneva Center for Autism, Holland Bloorview, and Surrey Place to gather resources such as visuals. Sam
explained that Surrey Place supports her, and the wider school community, in providing resources and answering questions for teachers on their classroom programs. Sam stated that Surrey Place is also helpful in terms of supporting teachers to find other resources to help create successful learning experiences for students with ASD. Communication with outside professionals and agencies combined with communication with students, parents, and colleagues can greatly assist in creating successful learning experiences for students with ASD.

**Practical Classroom Strategies and Resources for Students with ASD**

All the participants discussed multiple strategies for creating successful learning experiences for students with ASD. The participants discussed strategies and resources that can be used prior to the students entering the classroom, as well as throughout the school year. However, it is important to remember that these strategies will not work for all students with ASD, and should be considered based on the individual needs of a student.

**Preparation Prior to Students with ASD Entering the Classroom.** Teachers try to gather as much information about their students prior to the school year so they can be aware of how to create a successful learning experience for them, and this includes gathering information about any students they may have in their class with ASD. The three participants discussed how looking at student documentation prior to the student entering the classroom can provide the teacher with important information. Sam stated, “So I’ll look for kind of safety things, anything I need to know medically or health wise…but sometimes I’ll meet them for a couple of weeks and then I’ll look into it in more detail.” When asked why she waits to look at documents until after she meets the student she said, “I feel like sometimes it taints what I am looking at and I like to observe
them and see what they’re doing and where they’re at, and then let that influence me after
I’ve met them.” Megan discussed how she looks at the student’s Individual Education
Plan (IEP) and Ontario Student Record (OSR) before she meets the students because it
gives her an idea of their strengths and weaknesses so she can incorporate that into her
planning. Megan also stated, “Their OSR is also really important because I need to figure
out do they have any red flags.” Donna thought similarly to Megan and said:

Checking the OSR, looking at the previous IEP, checking the report card,
checking any documents such as any therapy reports, you know whether the
student requires assistance with fine motor skills or you know, these are not things
you’re going to tackle all at once but just so you get a well-rounded idea of sort of
what to expect with that student would be helpful.

All the participants read student documentation prior to the student with ASD entering
the classroom in order to inform their teaching, however they all did so in different ways
that they found worked for them and their teaching styles.

The Physical Classroom Environment. Each of the participants discussed aspects of
the physical environment that they have observed as being beneficial for students with
ASD. Donna explained that first and foremost, teachers should be prepared before the
student enters the room with regards to the physical set-up, and having any resources
needed for the day. The three participants also discussed the importance of having a
schedule for students prior to them entering the room, whether it is written or visual, or
both. Donna said, “Having a schedule prepared and having the visual already prepared
for that student so when they walk in they know exactly what their day is going to look
like would really help a student with Autism.” Megan also explained that visuals in a
classroom are vital, and to make sure to incorporate breaks for students, and step-by-step (visual or written) instructions if necessary.

Sam also discussed the importance of teachers being aware of the environmental and sensory needs of individual students with ASD, “Paying attention to the environment and like is it too bright, or is it too dark, but again when you have multiple kids with Autism in your class and everyone likes different things you just try and accommodate for everyone.” Sam also spoke about how a teacher should just try and keep the room as calm as possible, and be aware of all the sensory factors that occur in the room throughout the day. Megan talked about the physical set up of student desks in the classroom, and stated that, “it’s good to be around students that they feel comfortable with, so that they’re a bit more successful.” Donna also mentioned that a student with ASD would benefit from having a ‘buddy’ in the classroom, which they could be seated next to, in order to feel more comfortable.

**Classroom Teaching Strategies.** The participants discussed a wide range of classroom teaching strategies that can create successful learning experiences for students with ASD. Having a schedule (visual or written) is a part of the physical set-up of a classroom, but it can also be an effective teaching strategy as mentioned earlier. As Ferraioli and Harris (2011) stated, when there is no structure in the classroom, and events are always changing, students with ASD can become frustrated as any change in routine can cause them to feel anxious. All three participants spoke to the importance of having a consistent routine for students with ASD. Donna explained, “Often times students with Autism, it is sort of fear of the unknown and of not knowing what to expect In addition to having a schedule for the students, it was suggested by the participants to have some aspects of the day stay routine throughout the week, and if possible the year. The
participants also recognized that there are unexpected things that are going to happen throughout the day, and that teachers just need to be prepared and let students know as soon as possible if there will be a change in their schedule. Megan explained, “Unexpected things do occur and you have to let the student know immediately usually and see how things play out, and that’s where you have to have those intervention strategies planned ahead of time.”

Each of the participants also talked about the value of integrating breaks into the schedule for students with ASD. Megan discussed giving the students independence by having them identify for themselves when they may need a break. She talked about how she uses a code word with her students, so when they say it she is aware of why they are leaving the classroom. Donna discussed how breaks can be reinforcing for students, and can give them that time to relax so that when they come back they are ready to start a new activity. Donna suggested using a first-then board to communicate to the student that they have to complete an activity before they can have a break, or vice versa. Donna also stated that she uses breaks as a reinforcer for students, “If the student has a really hard time completing tasks they understand that first they have to complete the task, and then they can have a drink of water, go for a walk, whatever it is that is reinforcing for them to complete the first part.” Sam suggested a similar strategy by integrating activities they like into their schedule, and explains:

[Students with ASD] have interesting sensory needs so kind of observing what they like, giving them lots of opportunities to try different things and the building in those sensory breaks into their day…it just helps them calm. Everyone has their own ways of regulating and just respecting that we have to build in times to a day for everyone to get their time to do that.
Sam also discussed the importance of giving students the time in the day to release their energy. She explained that a lot of students with ASD often have a lot of energy and that expecting them to sit for long periods of time, especially in the beginning of the year, is not a realistic expectation. In her classroom she does a sitting activity, followed by an energetic activity, then another sitting activity, followed by an energetic activity. She tries to keep this rhythm of activities throughout the day so they can work out that energy. All the participants have their own ways of integrating breaks for students with ASD, and it is very much dependent on the classroom environment they are in with the students.

Donna and Sam both discussed the importance of establishing a successful means of communication with students with ASD. Donna explained that some students with ASD can be verbal and receptive, and others may have low receptive and expressive language. For all students with ASD who have low receptive language skills she discussed how teachers need to be mindful of their processing time, and to not say too many words at once. She stated:

> It is better to use fewer words and to repeat the same words as opposed to changing the terminology. So, if it’s “Sit down”, just say “Sitting time. It’s time to sit down.”, and don’t change it. Repeat the same words... the student is trying to process all these different phrases that you’re using and trying to understand. They’re probably trying to figure out the first phrase and now you’ve moved on to something about a chair, and their thinking ‘What are they talking about?’

Donna and Sam also discussed how visuals can be helpful in supporting what you are trying to communicate with students, and what they are trying to communicate to you. Donna said, “Mostly I found that some type of visual will support the student.” Sam also
explained, “It’s obviously very frustrating not being able to communicate so they’re trying, if it’s using their voice, or using pictures, or using symbols or whatever it is we kind of throw it all at them at the beginning.” By giving students a means of communicating not only with the teacher, but also with other professionals and peers in the classroom, you are setting them up for a successful learning experience.

**Behaviour Strategies.** Sam and Donna both discussed how students with ASD can exhibit challenging behaviours in the classroom from time to time. However, they both discussed how every behaviour displayed has a function and it is important to find out what it is. Sam explained, “If a student becomes upset, trying to kind of narrow it down to figure out what it is exactly that’s making them upset because they’re not upset for no reason obviously.” Donna also talked about some of the possible functions of challenging behaviours in a classroom, “So, a student can be expressing aggressive behaviour because they’re frustrated, because they don’t like what they’re being told to do, because they might have some type of physical need that they’re not able to express to you, and they’re expressing it in that way.” Once the function of the behaviour is understood, then the teacher can move onto how to eliminate the behaviour. Donna discussed how she often will spread out activities that she knows students may find challenging and frustrating. By doing this, she has observed that students are less likely to become frustrated. She also described some of the de-escalation techniques she uses in her classroom if she observes that students are starting to become upset:

Some de-escalation techniques that could be going for a walk, that could be taking a physical break, as far as if it’s possible to go outside to go to the jungle gym for a little bit. Or, we have set up across the room a little trampoline, sometimes bouncing on the trampoline for a few minutes.
Donna also discusses the importance of reinforcing a student with ASD with something positive when they are ready to come back to an activity:

If a student is getting really frustrated with a task sometimes what we’ll do is take a break from that task and give them a task that they know really well so that builds up their confidence again, and they feel happy, and they feel successful, and then they’re ready to start something that’s more challenging.

As stated earlier, Donna and Sam have also found it effective to have a preferred activity follow an activity that a student may try to avoid doing, and continuously reinforce that when they finish they get to do their reinforcing activity. Donna also explained that sometimes students with ASD may present with challenging behaviours, such as hitting an object or a person to gain a sensory input they are not receiving elsewhere. Donna gave a specific example from her own classroom:

For him it was really that he was looking for sensory integration so he was hitting because he really wanted to feel pressure on his hands so we taught him instead of hitting others to smack his hands together so when he learned to do that he didn’t have to hit other people anymore he could just clap his hands, and he was getting the pressure he desired.

There are many different reasons the participants stated that could cause a student with ASD to present with challenging behaviours including frustration, avoidance, hunger, the inability to communicate, and the need for sensory input. It is important for the teacher to understand the function of the behaviour so that they can plan for strategies to eliminate the behaviour in the classroom. When students’ needs are being met they have the opportunity to be successful in their learning environment.
Teachers Perspectives on Inclusion

All the participants explained how they ensure students with ASD are included not only in the classroom environment, but also the school community. When students with ASD feel like they belong in a community and are accepted they are more likely to have a successful learning experience.

Classroom Community. When Megan was asked about her thoughts on classroom inclusion she replied, “I try to treat them as if there any other student, it depends on what their needs are. You do your curriculum content but then it’s also establishing relationships, playing games with the students, sharing, going around the classroom and talking about what superhero they would want to be.” Donna also discussed how she uses peer relationships in her class to build inclusion, for example, “Having them paired up with a buddy that they feel really comfortable with” Donna also talked about how she felt it was important for neurotypical students to understand any exceptionality students may have. Donna explained, “Often times you know kids just have…they’re curious, the more that they can understand then they’re much more accepting of other children.” Donna also explained how to slowly start including students with ASD in larger settings, especially if they are anxious or shy in social situations, which can often be the case:

Participate with one peer for now and then slowly include another peer and maybe small group, before you necessarily introduce something as a whole class setting because you really want to try to set students up for success. You don’t want to set them up for failure. So, recognizing what that student needs and making tiny baby steps to achieve those goals.

In terms of integration with peers Sam also talked about how a main goal in her classroom was inclusion, and shared that you:
Make kind of an environment where they feel like they belong…where they’re working on similar things because I think too often the case is student’s kind of in the corner doing their own thing, and there’s definitely moments where they can do their own thing, and that’s important but I think overall, especially working on some of those social skills is important to have time to see what other people are doing.

Donna and Sam both talked about how including students with ASD into their classrooms is not a challenge often because the students are usually naturally integrated due to the environment they are in. However, Megan discussed some challenges that can present themselves when integrating a student with ASD in a typical classroom setting. Megan talked about how some students with ASD can be bullied in the classroom and she discussed how she addresses these situations:

   Take the students after class and talk to them, so what is going on, you start with not asking why it’s happening, but what is going on, you know from there how do you think that makes that person feel, what are we going to do to make sure this doesn’t happen again, and the just try to de-escalate the situation.

This also connects to what Donna talked about, that students are more accepting when they understand a students’ exceptionalities, and that they could be making fun of what they do not yet understand. When teachers work to include students with ASD in classroom communities using some of the strategies noted above, it can assist in creating a successful learning experience for them.

   School Community. Donna and Megan both discussed different ways of how to include students with ASD in the larger school community. Both participants explained how extra-curricular activities can be one way to include students with ASD in the school
community. Donna discussed how many of her students participate in extra-curricular activities at the school such as ballroom dancing. Megan also discussed how she has had students participate in school clubs. Donna explained how she also tries to engage students in special tasks around the school in order to promote school inclusion:

[Students] will go around the whole school building and they need to ask the teacher, knock on the door, say good morning, and ask the teacher whether he or she has sent their attendance to the office and then mark a tally. So right there we’re working on communication, we’re working on independence, responsibility, and we’re working on math, so they’re working on a variety of skills and they’re being included in the school.

Donna also suggests that students with ASD engage in as many school events as possible, as long as students are comfortable. She explains, “Every child has something that they can be successful at and something that they can do really well. So, if we can find out what that is and really let that shine it would make the student feel amazing, and it really shows in the school community.” Also, as stated above it is very important to ensure that students with ASD are integrated into the larger school community as they feel comfortable; it should never be forced onto them. The strategies mentioned above are just a few of the actions teachers can take to support students with ASD in becoming a part of the school community, and ensuring a successful learning experience.
Chapter 5: DISCUSSION

Introduction

The goal of this research was to answer the question, ‘How do classroom teachers provide successful learning experiences for students with Autism Spectrum Disorders?’ This study also explored sub-questions surrounding teacher education on ASD, how educators prepare for students with ASD entering their classroom, and what strategies educators use to support and teach students with ASD. These questions will be discussed throughout this chapter by looking at how the findings of this study connect with the current literature, implications and recommendations of the findings, and areas of further study that could be explored in the future.

Connection to Literature Review

All the themes reviewed in the findings of Chapter 4 connect in some way to the current literature discussed in Chapter 2. However, there are some key similarities and differences between the literature and findings that warrants further discussion.

In terms of teacher education the literature states that the majority of teacher education programs have a mandatory special education course, and that the course covers a broad range of disabilities; however ASD is only briefly touched upon (Bauserman, Harvey, Merbler, & Yssel, 2010). Megan had a special education course that was a mandatory component of her teacher education program. Donna and Sam did not have a special education course; however exceptionalities were touched upon in their other courses. Even though Megan did have a special education course it did not affect how she rated herself when asked about how well her teacher education program prepared her for educating students with ASD. Megan discussed how she felt that her teacher education program just scratched the surface of the exceptionalities, and did not
provide her with any concrete strategies. The current literature suggests that Megan’s experience with learning about exceptionalities in her teacher education program is similar to that of many Ontario teachers (Bauserman, Harvey, Merbler, & Yssel, 2010). Bowron et.al. (2012) and Foy and Starr (2012) suggest that new teachers found challenges in creating IEPs, managing behaviours, modifying their curriculum and classroom to support students with ASD, and inclusion strategies. There are a lot of similarities in what the participants put forward, and what the current literature states, which can lead us to conclude that teacher education programs need to provide future teachers with the practical tools and knowledge needed to provide successful learning experiences for students with ASD.

The participants and current literature used in this research study had a positive attitude and outlook on educating students with ASD in a variety of learning environments. The participants in this study were all happy to be asked about the positive aspects of teaching students with ASD. They all listed several positive attributes, and believed the experience of educating students with ASD to be a great learning experience where they learned a lot about themselves as teachers. Ferraioli and Harris (2011) also suggested that the majority of teachers have a positive outlook on teaching students with ASD, as well as the inclusion of students with ASD in the classroom and school communities. The attitudes of teachers are a key component in creating a successful learning experience for students with ASD because the students need to feel like they belong in a classroom (Ferraioli & Harris, 2011). With teachers having a positive outlook, it can be assumed that even though there may be very little teacher education on students with ASD there is still a positive outlook on working with this population.
Collaboration and communication were two main themes that were recurrent when speaking with all the participants, especially when it came to gathering information about the students. The participants all discussed the importance of collaborating and communicating with the students, parents, colleagues, and outside agencies and professionals. All the participants discussed the importance of communication and collaboration with parents because they know more about the student than anyone, and can provide the teacher with strategies that they already know work. The participants also discussed the importance of collaborating and communicating with colleagues who have worked with that student before, and to use other teachers as a form of support when they are experiencing challenges. Interestingly enough, Foy and Starr (2012) reported that parents often said there was little to no communication or collaboration between themselves and their child’s teacher. Bowron et al. (2012) suggests this collaboration and communication may not be taking place because it can be perceived by educators as time-consuming, and that it would be easier for them to complete their own observations in the classroom on the student with ASD. One could argue that what is being reported in the current literature is in actuality not happening in practice, due to the participants stating that they engage in quite a bit of collaboration and communication with the parents. Having teachers working closely with parents would be a positive for students with ASD because they would have all their supports working on the same page. However, it is important to remember the limitations of this study because there were only three participants. However, any amount of teacher advocacy for increased collaboration and communication to create successful learning experiences for students with ASD is a step in the right direction.
Based on the results of this research project, it is apparent that all three participants often used similar strategies and resources to assist in creating a successful learning experience for students with ASD. However, the participants altered the strategies and resources to fit the needs of their students and the environment of the classroom. Megan discussed how it can be difficult at times to implement strategies for just one student with ASD when you have a class of twenty-something other students to also be teaching. Sam also discussed how in a typical learning environment, teaching students with ASD could present with some challenges that would not necessarily be experienced in a self-contained classroom. However, in any kind of classroom setting, all participants discussed the importance of establishing and maintaining a routine in the classroom. The literature also suggests that schedules and routines are vital for students with ASD because they thrive on sameness, and any change in routine can cause anxiety for them (Ferraioli & Harris, 2011). Donna and Megan also discussed using a buddy system in typical classrooms. The students with ASD would be paired with a typically developing peer with whom they are comfortable in order to gain some comfort in that learning environment. The literature also suggests the use of this strategy in typical classrooms because it can give students with ASD the opportunity to work on social skills, as well as give them a place to go if they have a question instead of always going to the teacher (Ferraioli & Harris, 2011). There are so many strategies discussed both within current literature, as well as strategies given from the participants in this study. However, as stated at the beginning, educators need to be mindful in the strategies they are implementing because they may not be effective for all students with ASD. Students with ASD are not a one size fit all in terms of strategies and resources, and each student is an individual, and should be treated as such in all aspects of their learning.
Implications and Recommendations

Throughout this research project I learned a great deal regarding teacher education, the importance of collaboration, implementing strategies in a typical classroom vs. a self-contained classroom, and student inclusion. I wanted to understand what would make a successful learning experience for students with ASD, especially at the elementary level in a variety of learning environments. I learned that while some teacher education programs do include information regarding ASD, it is very limited in terms of content on strategies to support students with ASD. I wonder how teacher education will improve in terms of educating new teachers on how to successfully support students with ASD, especially with the new two year Bachelor of Education program coming into effect in Ontario in 2015. I also learned that teacher education courses usually have a focus on students with ASD who are high functioning, and this is hindering educators on becoming knowledgeable on the whole spectrum. An educator may work with students across the Autism spectrum, and therefore I believe it is important for teacher education programs to focus on strategies to support students across the entire spectrum.

From speaking with my participants, I also discovered that taking professional development courses about ASD can be challenging for a variety of reasons such as not knowing the right courses to take, not being aware of what courses are available, and finding the time to take the course. It is not easy to take a professional development course, especially if your school administration is not on board with it. Speaking with other colleagues from your own school or other school communities on helpful courses can be one way to find out which courses would be helpful on learning about how to support students with ASD. However, I am left wondering how educators find the time to
take professional development courses when they are not allotted the time to do so. This is an area that could be considered for further study, which will be discussed later in this chapter.

A second area of learning that influenced my thinking as a teacher was the discussion my participants had around collaboration with students, parents, colleagues, and outside professionals. There are so many people who are often involved in the life of a student with ASD, and it is important that they are all on the same page. I learned that collaboration also consists of having open communication with these individuals at all times because the student is always changing and growing, and progress and challenges need to be communicated as they happen. If collaboration is not used, then there is information that is being lost between people that can be very valuable, such as strategies that are effective for that student. All the individuals in the lives of students with ASD need to be in collaboration with one another because it supports greater consistency across programming and all areas of support. When everyone in a student’s life is contributing to the learning they are experiencing in the classroom it is setting up that student for success.

As mentioned earlier in this chapter, implementing strategies for students with ASD can often present with challenges especially in typical classrooms. In self-contained classrooms students with ASD are often all together, which can make it easier for teachers to implement certain strategies. However, when you are an educator trying to teach a large class of students, to always make sure you are doing the right thing for your student(s) with ASD, as well as all the other students in the room, can be challenging. I think I learned that as long as you are trying to help your students be successful by implementing strategies as you can, you are doing your best as an educator to provide a
successful learning experience. However, I still have questions around how teachers can work to improve this feeling that can occur in their classrooms when teaching students with ASD. My participants acknowledged that it can feel overwhelming to have one or more students with ASD who need a lot of strategies implemented on a consistent basis. I wonder how the education world can work to assist teachers in implementing these strategies in typical classrooms. I think I have learned that the strategies discussed for supporting students with ASD can be very successful; however we need to find a way to help teachers actually practice these skills. This question can be focused back onto teacher education and professional development, and I also think this is an area that can be looked at in future research.

Inclusion was discussed by all of my participants, and they stated that including students with ASD in the classroom community was not always a challenge for them. However, I learned that ensuring inclusion for students with ASD in the larger school community can be difficult at times. In a school where all students have exceptionalities, inclusion often happens naturally as Sam discussed. However, when you are a teacher in a self-contained classroom within a typical school, or only have a few students with ASD in your whole school community, how do you as an educator work to include them? Donna and Megan both discussed the idea of including students with ASD in extra-curricular activities that the school offers. However as already discussed in this study, social-communication is an area that students with ASD have difficulties with. Therefore, I wonder how teachers work to include students with social-communication difficulties into a large group of peers. I learned through this study that teachers can start this process in their own classroom by first having them paired with a peer, then a small group, and work your way up to a larger group. As an educator, we can also involve students in
activities around the school, such as making announcements and collecting classroom attendances if students are comfortable. I think it is important to evaluate each student and their comfort level on an individual basis, and not push students into joining school activities if they are not ready to do so. However, I do believe extra-curricular activities are a way for students with ASD to improve their social skills. I am left wondering how we work to include students within the larger school community with their typically developing peers, and I would consider this another area for future research.

**Further Study**

There were a few limitations in this study as mentioned in the methodology section (Chapter 3). This topic could be further examined with a larger sample of participants in order to gain more information on how to provide successful learning experiences for students with ASD. As previously mentioned in the implications and recommendations section, there are many other questions that have risen out of this research which are areas to consider for further study. Firstly, since the Bachelor of Education program in Ontario is changing to a two year program, it would be interesting to see that changes in educating new teachers not only on ASD, but also on exceptionalities in general. It would be interesting to see if more in-depth or practical experiences were provided to new teachers. Research on ways to improve professional development in the area of ASD, and other exceptionalities is important since so many current teachers want to educate themselves on how to support students with ASD, but are facing barriers to accessing professional development.

Secondly, when teachers are being given the strategies and resources to support students with ASD, it can be a challenge to implement them within their own classrooms. The challenges of implementing strategies are ever present in typical classrooms as stated...
by the participants, because the teacher can often feel overwhelmed when they have such a large class to support. Further study can be conducted on how we can make implementing strategies for teachers easier, and perhaps this could connect back to teacher education programs and professional development.

Lastly, the participants seemed to focus on the inclusion of students with ASD into their own classrooms; however when looking at inclusion in the larger school community it seemed to present with its own challenges. There were suggestions made by the participants on how to achieve this, but we need to make it so that every teacher is aware and feels responsible for the inclusion of students within the larger school community. Further study can be conducted on effective strategies for inclusion in the students’ school community.

Conclusion

Special education and ASDs are my passion in the field of education, as well as child development. I want all educators to have a positive attitude about teaching students with ASD, and be knowledgeable and prepared to give these students the learning experiences they deserve. This paper is about providing teachers with the tools they need to create successful learning experiences for students with ASD, and hopefully it can do so for at least one student. There is so much learning and research that needs to be done around ASD, and this paper is just one more resource that can be added to the world of education. My hope is that the passion I have for educating students with ASD spreads to others, and that the joy I get from working with this population spreads to other teachers so they can learn as much as I have. Each student with ASD is an individual whom we have the responsibility as educators to provide a successful learning experience for, and in turn they teach us about ourselves as teachers which is a very special thing.
References


Appendix A: Letter of Consent for Interview

Date: ___________________

Dear ____________________,

I am a graduate student at OISE, University of Toronto, and am currently enrolled as a Master of Teaching candidate. I am studying strategies for creating successful learning experiences for students with Autism Spectrum Disorders for the purposes of investigating an educational topic as a major assignment for our program. I think that your knowledge and experience will provide insights into this topic.

I am writing a report on this study as a requirement of the Master of Teaching Program. My course instructor who is providing support for the process this year is Susan Schwartz. My research supervisor is Anne Marie Chudleigh. The purpose of this requirement is to allow us to become familiar with a variety of ways to do research. My data collection consists of a 40 minute interview that will be tape-recorded.

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

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

Yours sincerely,

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Consent Form

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

I have read the letter provided to me by Lisa Armstrong and agree to participate in an interview for the purposes described.

Signature: _________________________________

Name (printed): _______________________________

Date: _________________________________
Appendix B: Participant Questionnaire

Teacher Education

Where: ____________________________________________________

When: ____________________________________________________

Degrees: ___________________________________________________

Level/grades certified to teach:

___________________________________________________________

Please list any additional qualification (A.Q.) courses you have taken:

___________________________________________________________

1. What positions have you had in your career as an educator? ________________
   ______________________________________________________________________

2. Did you complete a special education course as a part of your teacher education program? ________________
   a.) If yes, how long was the course? ________________________________________
   b.) If no, did you receive any special education related content that was part of another course? What was the nature of the content? _____________________
   ______________________________________________________________________

3. On a scale from 1-10 (1 being not prepared, and 10 being extremely well prepared) how well do you think your initial teacher education program prepared you for working with students with Autism Spectrum Disorder in a classroom setting? ________________
Appendix C: Interview Questions

Background Information

- In what settings have you had experience working with students with Autism?

Teacher Education

- On your questionnaire you rated yourself a ______ when asked about how well your teacher education program prepared you for working with students with Autism. Can you explain why you rated yourself a _____?
- What resources are available to you to support students with Autism?

Collaboration

- What collaboration do you engage in to support students with Autism?

Interventions / Strategies / Experiences

- What are the positive aspects of working with a student with Autism?
- I am going to present you a case. It is the end of June, and your principal has given you a class list and you have a student coming into your class with Autism. What are some things you might do to prepare?
- When you have a student with Autism in your classroom, what do you do to create a successful learning environment for that student?
- If a student with Autism was in your class, how would you work to include them in your classroom with other peers?
- Are there any other comments or thoughts you would like to share?